

Lummi Island Ferry Report

- Updated Information Relative to the 2003 Report
- Remaining Planning Focus

June 30, 2004

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Status of Lummi Island Ferry 20-Year Plan

Since the completion of the June 3, 2003 Lummi Island Ferry Report, additional data has been collected pertaining to ferry utilization, capacity, and level of service factors; all of which were information gaps in the previous report. Even though additional data gathering was completed, at the time of the June 3, 2003 Report, it was intended to delay work on the policy elements of the 20-Year Ferry Plan until the primary land use work was completed on a Lummi Island Sub-Area Plan. This would ensure that future ferry related demand projections and associated capital facility proposals would be consistent with adopted land use goals and projected population growth.

Completion of the Lummi Island Sub-Area Plan has been delayed until additional study on groundwater is completed. While finalization and adoption of a 20-Year Ferry Plan is not advisable prior to substantial completion of the Sub-Area Plan, continued progress can be made on ferry related policy issues and determination of priorities due to information available at this time.

Information Update - June 3, 2003 Report

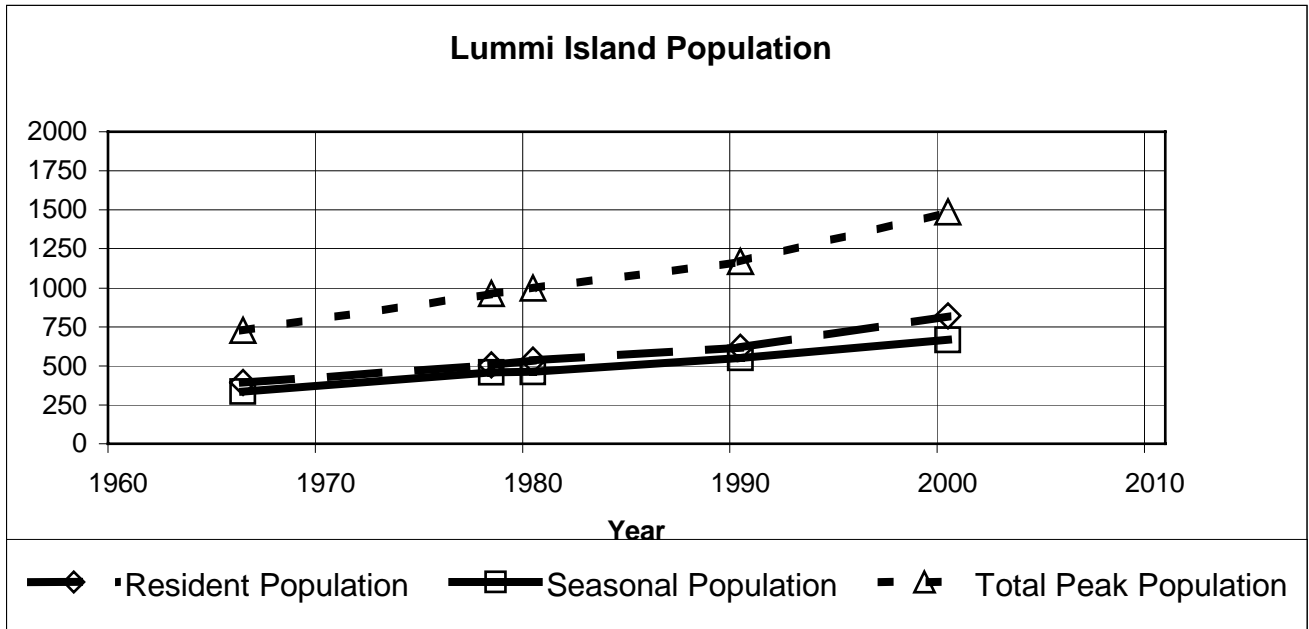
Following is updated or supplemental information to the June 3, 2003 Lummi Island Ferry Report discussion items (copies of the report were previously distributed – additional copies available on request):

Lummi Island Population Trends

The following table and chart summarize the island population growth over the past 30 plus years, with estimated population for recent years. The population data confirms previously reported ferry utilization data that indicated year-round user demand was increasing at a rate faster than seasonal peak demand.

Year	Resident Population	% of Total	Seasonal Population	% of Total	Total Peak Season Pop.	Annual Car & Driver	Annual Ferry Users
1966	392	53.9%	335	46.1%	727		
1978	506	52.5%	458	47.5%	964		
1980	538	53.9%	460	46.1%	998		
1990	620	53.0%	550	47.0%	1170	94915	166944
2000	822	55.3%	665	44.7%	1487	138624	224167
* 2001	846	55.5% est.	678	44.5% est.	1523 est.	139963	223839
* 2002	870	55.7% est.	691	44.3% est.	1560 est.	131312	227524
* 2003	895	56.0% est.	704	44.1% est.	1598 est.	132878	227282

* Assumes population growth per year 2001 - 2003 same as 1990 – 2000



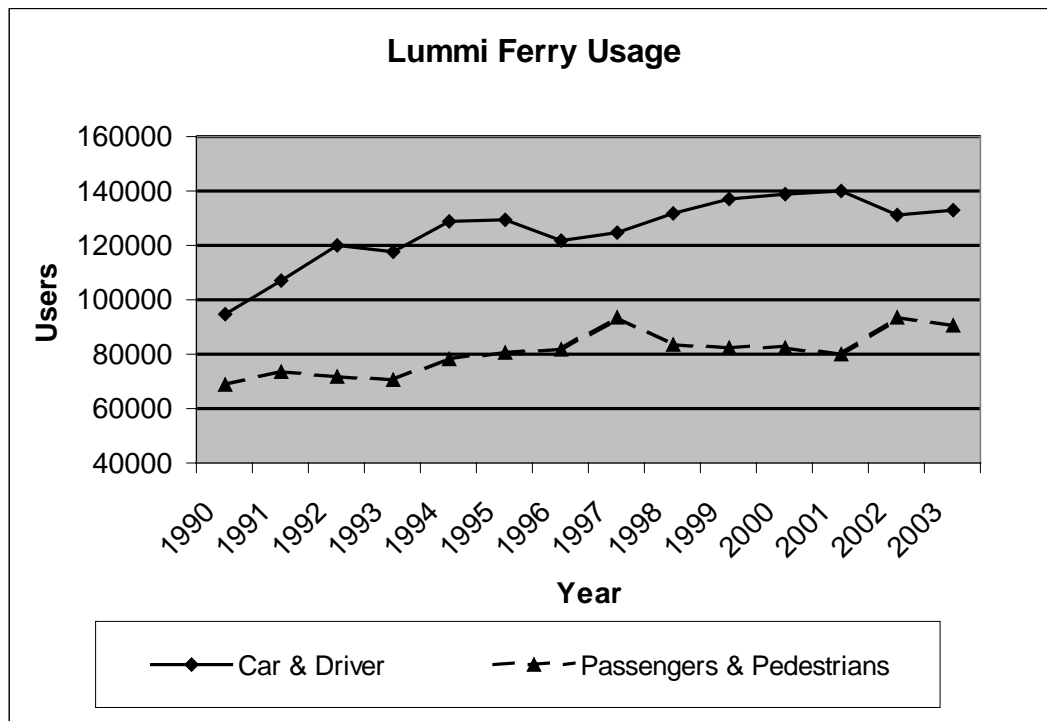
Ferry Usage

The following table is reproduced from the June 3, 2003 Report, with the inclusion of 2003 year-end information:

Full Year Summary – West Bound Travel Only						
Year	total car & driver	Total non-driver passngrs & peds	total bike & motorcycle & rider (*)	total oversized & driver	total trailers	total passngrs
1990	94915	68855	1490	1684	353	166944
1991	107290	73492	1521	1941	359	184244
1992	119775	71639	1915	2365	386	195694
1993	117634	70846	1974	2708	576	193162
1994	128714	78169	2162	3312	656	212357
1995	129618	80309	2190	2661	582	214778
1996	122057	81601	1746	2324	710	207728
1997	124920	93636	1729	2477	726	222762
1998	131628	83816	1639	2819	777	219902
1999	137076	82522	1501	2920	795	224019
2000	138624	82087	1591	1865	779	224167
2001	139963	80236	1516	2124	694	223839
2002	131312	93321	331	2560	870	227524
2003	132878	90841	485	3078	866	227282

(*) – beginning 2002, value only includes motorcycles

Supplementing the table above, the following chart graphically portrays the data pertaining to passenger vehicles and non-driver passengers and pedestrians:



(note: user fare increase went into effect 2002)

Of significant note is that passenger vehicle rate of increase has decreased over the past few years, presumably due to limited boat capacity at times of preferred use (discussed further later in this report) and also at times of fare increases. In recent years there seems to be clearer evidence of a direct relationship between the number of “walk-on” versus “vehicle” users.

Financial Information Through Year End 2003

Following are the reported operating costs associated with the current methodology utilized for fare box boat operation cost recovery calculations described in the Whatcom County Code:

Ferry Related Operating Costs					
Expenditure Category	1999	2000	2001	2002	2003
Labor	\$583,664	\$588,783	\$677,240	\$725,919	\$744,355
Boat Rental Rate (*)	\$156,000	\$156,000	\$198,000	\$288,000	\$288,000
Passenger Vessel	\$27,287	\$28,324	\$48,960	\$27,191	\$23,371
Security	\$2,550	\$2,508	\$32,648	\$53,060	\$54,092
Other	\$125,682	\$133,427	\$189,127	\$141,411	\$138,833
Total Costs	\$895,183	\$909,042	\$1,145,975	\$1,235,581	\$1,248,651

(*) Refer to the following discussion

The “Boat Rental Rate” is a financial methodology to estimate an annual cost for fuel and boat repair, maintenance, and improvements. The actual costs associated with these items for a given year is accounted for in a separate fund, with the boat rental rate applied as a preset fixed budgeted amount at the beginning of each year. Due to significant fluctuations in actual costs for fuel and repair, maintenance, and improvements needed on a given year (such as the difference between a 2-week versus 3-week dry-dock period, rebuilding versus replacing engines, etc.), a rental rate is intended to soften these cost fluctuations. The cumulative difference between budgeted boat rental charges and the actual costs must average zero over a period of a few years.

The table below is a summary of the actual financial status relative to boat rental rates charged versus actual operation costs.

Year	Actual Boat Operation Costs	Boat Rental Rate Charged	Year-End Fund Equity Balance
1997			\$21,937
1998	\$176,868	\$156,132	\$1,201
1999	\$205,498	\$156,132	-\$48,165
2000	\$253,349	\$156,232	-\$145,382
2001	\$276,340	\$198,732	-\$222,990
2002	\$179,510	\$288,876	-\$113,624
2003	\$183,373	\$288,876	-\$8,121

As described in the June 3, 2003 Report, the need for periodic adjustments in ferry user fares is based on the Whatcom County Code (WCC 10.34). With actual costs on any given year becoming more unpredictable, an improvement is needed in the methodology for calculating fare box boat operation cost recovery. Once a new methodology is designed, an amendment to the Whatcom County Code formalizing the definition of operating costs and fare box recovery will be required.

It is preferable to rely on actual costs for purposes of fare revenue analysis. However, it is also advisable to perform fare box recovery rate calculations based on some form of multiple year cost averaging. This will ensure that ferry user rate setting continues to benefit from gradual operating cost changes rather than significant cost fluctuations that occur due unique situations and costs associated with a given year.

The expected future decisions pertaining to investment in ferry system improvements increases the need to refine the accounting methodology and clarity of terminology. Completion of the 20-Year Plan is an opportunity to clearly separate the terminology and financial reporting standards required by the State of Washington versus those required by the Whatcom County Code pertaining to “boat operation cost” and the associated fare box cost recovery calculation.

Parking Facilities

Gooseberry Point - The County and Lummi Commercial Company entered into a lease agreement for 80+ parking spaces at Gooseberry Point for three years (beginning May 2003). Joint efforts are continuing to install security cameras covering the entire boat yard and parking areas. Extending the parking lease for a period of time longer than the current agreement has been proposed, but negotiations are subject to the outcome of the security camera project. Extension of the parking lease will also likely be influenced on progress towards the long-term tideland lease discussed below.

Lummi Island - Preliminary plans were completed for the development of ferry parking lot on Lummi Island, utilizing 1.16-acre property acquired in 1999 near the ferry terminal. Due to ongoing concerns raised by property owners in the vicinity of the parcel owned by the County, renewed efforts were placed on identifying possible alternate locations. As a result, the County is in the final phase of acquiring a 1.71-acre parcel immediately west of the ferry landing and intends to abandon development of any parking on of the previously purchased parcel. Unfortunately, due to the timing of these negotiations construction of expanded parking on Lummi Island won't be completed until summer of 2005.

Ferry Drydock

Due to conflicts with vehicles parking in areas not approved by the Lummi Commercial Company during previous drydock periods, notice was given that the boatyard area would not be available for drydock parking this year. After several months of review and planning for use of an alternate site (requiring the use of shuttle vans due to distance from the ferry landing), agreement was reached to once again allow parking in the boatyard area for 2004. Continued use of the boatyard during drydock beyond this year is uncertain, with work on possible alternate scenarios a priority matter.

Long-Term Lease with Lummi Nation

Contact and discussion with Lummi Nation pertaining to the tideland lease occurs periodically. The current lease agreement expires in 2010, but contains a renewal clause. There continues to be indications that this matter will not be resolved quickly. As in the past, the two most significant factors influencing the timing and scope of negotiations are: (1) the timing of Lummi Nation completing and implementing redevelopment plans for the Gooseberry Point area (which may include relocation of the existing ferry dock); and, (2) ferry related traffic and the associated on-reservation traffic safety concerns. Understanding of and respect for the needs and policies of Lummi Nation provide the basis for negotiation. Short-term completion of a draft 20-year plan will clearly not include factors and conditions that are yet to be quantified through the negotiations. However, it remains a priority for the County to develop a long-term operation plan for ferry service to Lummi Island with Gooseberry Point being a terminus.

Ferry Capacity and Level of Service

Within the guidance of the State's growth management act (GMA), establishing a level of service standard is an exercise where a specific definition is created to measure demand against any unique governmental service. It is most common for transportation services to be measured as a quantitative ratio of user volume to system element capacity, or V/C ratio. An alternate measurement method for certain transportation system elements is an average of or cumulative user travel delay. A signalized roadway intersection is an example where either of these two approaches can be utilized to calculate a quantitative ratio or other metric.

While land use planning under the GMA does not require a level of service standard be established for a ferry service, the County previously chose to include a level of service standard for the ferry in its land use and capital facility plan. In general terms, the current formula compares the total number of times vehicles and individuals utilize the boat to the island's population growth. The resulting calculation establishes an average number of boat uses per year. Since the current calculation does not compare these uses to boat capacity or some other limiting metric, the level of service standard becomes subjective in nature.

When a level of service standard is established under GMA, it is intended to predict when a governmental facility or service is likely to reach or exceed its serviceable limit or capacity. Within a completed GMA based plan, action should be triggered to construct or establish additional service capacity to satisfy service demand associated with population growth. For Objective level of service standards, it is most common during these action phases to create service capacity in increments that provide excess capacity for a period of time rather than simply satisfying service demands for a short time. While subjective level of service standards may be addressed in the same manner, an alternate method that has been applied is to reconsider the reasonableness of the standard and modify the standard rather than pursuing creation of additional service capacity.

Literal ferry capacity can be calculated in a number of different ways. Objective methodologies would compare utilization levels with boat capacity (boat capacity = round-trip capacity X number of runs). To establish a meaningful standard, the time period that utilization is compared against capacity must be set. Possible time periods for comparison for the ferry are:

- Average over entire year
- Highest demand month
- Average month
- Highest demand weekday
- Average weekday
- Highest demand weekend
- Average weekend
- Highest demand time of day
- Average of selected times of day

At the same time, actual boat capacity is obviously influenced by:

- Number and timing of oversized vehicles
- Mixture of vehicles and pedestrians
- Weather and tide conditions
- Repair and maintenance issues

Selection of the period of time the V/C ratio is calculated and applied as a level of service standard can have significant influence over the design of the system and service alternatives. For example, comparing total year use to annual capacity only considers the average boat utilization and ignores peak demand periods. On the other hand, if a limited number of peak demand periods are considered, significant capacity increases would likely be warranted with substantial excess capacity available at all other times.

When considering boat capacity for passenger cars and other vehicles, the two primary limiting factors are boat deck space and round-trip cycle time. In addition to cycle time, when considering boat capacity for passengers, limiting factors include combinations of variables such as cabin space, parking spaces, transit service, pedestrian support facilities, etc.

A key policy action item over the next few months is determination of the basis for calculating capacity and, therefore, the ability to compare to current and future demand.

Ferry Service Demand

When considering the literal maximum capacity available on the current boat, there is substantial amount of capacity remaining. However, it is unlikely that many system users would view the current situation as being satisfactory. This is due to the difference between total capacity and peak period capacity.

Data collected during 2003 indicates the average westbound peak traffic period is distributed over approximately 6 hours (1:00 – 7:00pm), with the greatest demand around 4:00pm +/-, with demand distributed substantially over the entire period, and similar conditions on both weekdays and weekends. In contrast, the average eastbound peak traffic period is distributed over 5 hours (6:00 – 11:00am), with the greatest demand 7:30am +/-, and primarily on weekdays. The distribution is more concentrated around the peak time eastbound (morning demand) than the westbound direction (evening demand) as well. (This data is supported by anecdotal information that morning eastbound travel generates the greatest number of service complaints as well.)

Even though there is clearly an eastbound travel demand timing concentration, the default temporary solution already exercised by many residents both eastbound and westbound is to modify their travel patterns whenever possible to avoid the peak

demand periods. If the trend of year-round resident population increases in comparison to seasonal or part-time residents continues, the concentration of demand will likely increase as well. It is speculated that if a substantial increase in capacity were to occur in the short-term, the morning "off-island" peak would likely re-concentrate to match single boat run capacities.

Possible System Improvements

A number of potential solutions exist to address current and future ferry service demands. Following is a list of potential system elements that individually and/or in various combinations could be implemented and their associated one-time or annual cost (in 2003 dollars):

New Car Ferry

- 20-car ferry = \$2,800,000 (40-year depreciation schedule = \$70,000/yr)
- 30-car ferry = \$4,300,000 (40-year depreciation schedule = \$110,000/yr)
- 40-car ferry = \$6,100,000 (40-year depreciation schedule = \$150,000/yr)

New Passenger Vessel

- 49-Passenger (20-knot design) = \$600,000 (30-year depreciation schedule = \$20,000/yr)
- 149-Passenger (15-knot design) = \$1,500,000 (30-year depreciation schedule = \$50,000/yr)
- 149-Passenger (27-knot design) = \$2,100,000 (30-year depreciation schedule = \$70,000/yr) (minimum design needed to cross Bellingham Bay)

Parking

- Parking stalls = \$5,000 - \$10,000 (each) for land and construction
- 100 stalls = \$500,000 to \$1,000,000 (1% maintenance cost per year = \$5,000 - \$10,000/yr)

Ferry Dock

- Minor upgrades = \$200,000 - \$1,000,000 per side (plus 2% maintenance cost per year = \$4,000 - \$20,000)
- Major upgrades = \$4,000,000 - \$6,000,000 per side (plus 1% maintenance cost per year = \$40,000 - \$60,000)

Other Operational Items (per year costs)

- 3-Person Crew (2nd vessel) = \$750,000 (19-hr. days / 7 days per week)
- Off-Boat Ticketing = \$50,000 - \$150,000
- 1-Security Guard = \$55,000 (10-hr. days / 7 days per week)
- 15-Passenger Shuttle Van = \$115,000 (10-hr. days / 7 days per week)
- Transit Style Bus = \$275,000 (10-hr. days / 7 days per week)
- Stand-By Ferry (moorage and maintenance) = \$90,000 - \$110,000

Proposed Survey Designating Focus of Remaining Planning Effort

Long-term ferry demand projections won't be finalized until the Sub-Area Plan is completed. However, as noted previously work on refining the options and details of capital facility elements can move forward without a final Sub-Area Plan. At the same time, it is highly desirable to limit the time and cost associated with development of detailed service scenarios and alternatives if the community currently has a preference on how to address current and future service demands.

It is proposed to determine the community's preference through distribution of a survey with the following two questions:

- A. Where should the next major financial investment be made (select one)?
1. Whatcom County should appreciably increase vehicle carrying capacity as Island population grows. A larger vessel or another vessel to supplement the Whatcom Chief would be required
 2. Whatcom County should not increase vehicle carrying capacity. More parking and better transit can accommodate projected growth.
 3. Whatcom County should not increase parking or vehicle carrying capacity. As population grows service levels will decrease.
- B. What influenced your selection above to the greatest extent (select one)?
1. Preference of service type(s).
 2. Cost, including impact to the fare structure.
 3. Other _____.

The survey is being proposed for later this summer (prior to dry-dock), as a mailed survey to both Registered Voters and Property Owners. The intention of the survey is to identify the preferred method to satisfy current and future level of service for the various island interests. Since the mailed survey is advisory in nature, the County Executive and County Council will be presented the results and, ultimately, provide the direction for further staff work in system planning.

Even though the survey is intended to provide focus for the remaining ferry system planning, it is important to note that the 2001 community based Charette report (summarize in the June 3, 2003 Report) indicated that:

- (A) All short-term and long-term solutions must include proactive use of Transportation Demand Management techniques (i.e. provision of parking, transit, and other pedestrian friendly facilities and services that reduce current and future "vehicle capacity" demands).

AND

- (B) Begin the exercise to determine whether we should acquire (1) a replacement vessel OR (2) a second vessel supplementing the existing boat.

Creating and maintaining mobility options for ferry system users will continue to be a significant matter for ferry system planning. For example, it remains a priority to complete the parking lot expansion on Lummi Island as well as retain the expanded parking currently in place on Gooseberry Point, with this being true under all three scenarios, A1, A2, and A3.

As noted earlier, it is also intended to renew a tideland lease at Gooseberry Point with Lummi Nation as soon as possible. While the timing of negotiations is not particularly influenced by whether A1, A2, or A3 is selected as being preferred, the scope of the negotiations certainly would be. It is predicted that determining the focus of the remaining ferry system planning will simplify the scope of these negotiations.

Analysis of Alternative Planning Focus

Following is are expanded narrative versions of the intended meanings of the three planning focus statements:

Statement A.1. Whatcom County should appreciably increase vehicle carrying capacity as Island population grows. A larger vessel or another vessel to supplement the Whatcom Chief would be required.

The major cost element relative to Statement A1 is the cost of acquiring a new vessel.

If planning focus were to be applied as Statement A1 suggests, work would focus on increasing the number of vehicles that can be transported, likely through acquisition plans for a vessel having a 30-40 car deck-size, as well as addressing upgrades to meet current vessel standards for both vehicles and pedestrians. A significant part of this planning focus would evaluate vessel size and feature options.

The evaluation would also determine what combination of vessel size and design features would maximize the total number of vehicles capable of being transported per hour without the need for increases in total staffing or crew size or major reconstruction of the docks. (Maximizing vehicle capacity is a comparing the number of vehicles that can be transported on each trip with time it takes to load, traverse the channel, and unload for a given vessel size and configuration.)

Acquisition of a replacement vessel would also create the opportunity to retain the Whatcom Chief for emergency backup and drydock relief purposes.

Although the Whatcom Chief is 40+ year-old vessel, there are no known major mechanical or general condition problems. However, it does not meet current vessel design standards for vehicle lane width or passenger accommodations, and the vessel's 16-20 passenger vehicle deck capacity is routinely inadequate

to carry the number of vehicles and drivers desiring service during peak demand periods. Due to the functional issues existing with the Whatcom Chief, there are operational and regulatory reasons that replacement of the vessel is warranted whether or not there are mechanical reasons.

An alternate method of increasing vehicle capacity would be the acquisition of a second vessel that could operate in tandem with the Whatcom Chief. While this represents the greatest potential increase in overall vehicle carrying capacity, it also represents at least a doubling in operational costs (two full crews rather than one) compared to simply replacing the existing vessel. While this "two-vessel" alternative will be considered, it is very unlikely to receive much detailed attention or analysis.

Statement A.2. Whatcom County should not increase vehicle carrying capacity. More parking and better transit can accommodate projected growth.

The major cost elements relative to Statement A2 are the costs associated with acquisition of additional parking space and the costs to shuttle ferry users between the ferry landing and established parking areas, or alternately their ultimate destinations.

If planning focus were to be applied as Statement A2 suggests, work would focus on increasing the total number of people that can be transported. This would likely be accomplished through a combination of parking (in addition to what is now in place or already planned), bus and/or small shuttle services, expansion of pedestrian facilities and support amenities, and other similar system features. Specific services and the timing of their implementation would need to be determined to maximize the total number of people than can be accommodated per hour, including providing as many transportation mode alternatives as possible to address peak versus off-peak demands.

Due to the space limitation at Gooseberry Point, it is expected that expansion of parking on the mainland side would need to be at a location requiring a shuttle service. As a part of this planning focus, alternate parking locations and the associated utilization projections (travel time and location versus willingness to use) would need to be evaluated. This evaluation needs to consider both potential parking lot destinations as well as improved connection sites with the Whatcom Transit Authority. A similar exercise would need to occur for the Island side as well.

Even though this planning focus does not include short-term replacement of the Whatcom Chief, it does include recognition that the vessel must be replaced at some point in time, but at a later date than contemplated under Statement A1. Statement A2 also presumes that while a future vessel replacement would address all design standard issues, the replacement would be of a similar size and carrying capacity to that of the Whatcom Chief.

An alternate method of increasing capacity for transporting people is the acquisition of a passenger-only vessel that could operate in tandem with the Whatcom Chief. While this represents the greatest potential increase in overall carrying capacity, it also represents at least a doubling in operational costs (two full crews rather than one). This "two-vessel" alternative is therefore unlikely to receive much more attention or analysis except for exploration of a private vendor interested in providing service for peak times of day or seasonal services that could be financially sustained through fares.

Statement A.3. Whatcom County should not increase parking or vehicle carrying capacity. As population grows service levels will decrease.

If planning focus were to be applied as Statement A3 suggests, work would focus simply on maintaining the current system as long as possible with minimal enhancements or service level changes. System enhancements would include completion of the parking planned for construction on Lummi Island as well as retention of the parking currently on Gooseberry Point.

The most significant part of the planning focus of Statement A3 would be determining the most likely timing for replacement of the Whatcom Chief. Similar to Statement A2, Statement A3 presumes that while a future vessel replacement would address all design standard issues, the replacement would be of a size and carrying capacity to that of the Whatcom Chief.

No other significant investments would be made to address system issues under this scenario.

Financial Factors

As noted above, under the current Whatcom County Code, only boat operation costs are considered during fare rate setting analysis. While not specifically stated, major capital investments are addressed through separate financial planning for the initial acquisition. However, as with any capital investment, the cost of maintenance and depreciation of a newly acquired asset normally becomes a part of the costs associated with operations.

The current fare structure generates approximately \$650,000 per year and current operating costs (associated with fare box recovery calculations) are approximately \$1,200,000 per year. This represents between a 54% and 55% fare box recovery rate. For reference, following is an example of the magnitude of additional revenue that could be generated through fare adjustment:

Each 25% increase in existing fares would generate approximately \$160,000 per year. An increase of this amount would be adequate to cover the 55% share of a \$290,000 operation cost increase.

Providing detailed financial information at this time for specific options is difficult. Detailed analysis within focused planning would be able to address:

- Unknown final design features and services included in a preferred alternative
- Unknown extent of regulatory requirements
- Unknown availability of state and federal financial support (capital costs)
- Unknown influence from a Gooseberry Point ferry dock "lease" renewal
- Unknown inflation factors and other economic influences

While it is also difficult to provide firm comparative financial information, as noted previously there is adequate information to provide comparative values for general scenarios. The following comparative example scenarios are based on the following assumptions:

- Current fare structure is adequate (\$650,000 per year) to continue operations if maintained at the existing level (\$1,200,000 per year)
- Specific fare increases, including potential revenue shifts between user classifications as a result of specific service changes, are policy matters that are not considered at this time
- All financial values only include increases in costs over existing levels (in 2003 dollars), ignoring inflation factors over time.
- Dock reconstruction needs are considered similar in all scenarios and, therefore, dollar values are not included unless specifically noted
- Existing Gooseberry parking space lease continues beyond 2006
- Lummi Island parking expansion is completed in 2005
- Each of the three scenarios (A1, A2, and A3) includes replacement of the Whatcom Chief - A1 includes new ferry in approximately 5 years / A2 and A3 includes a new ferry in approximately 15 years.

A1. Whatcom County should appreciably increase vehicle carrying capacity as Island population grows. A larger vessel or another vessel to supplement the Whatcom Chief would be required.

<u>Resulting per Year Operation Cost Increases</u>	<u>low</u>	<u>high</u>
Purchase a new 35-Car Ferry (\$5.2 million) (40 Year Depreciation Cost)	\$130,000	\$130,000
Maintain the Whatcom Chief for shutdowns & emergency backup	\$90,000	\$110,000
Savings from passenger boat rental and reduced security needs	-\$10,000	-\$ 30,000
Provide off-boat ticketing	\$ 50,000	\$150,000
Increase in vessel maintenance	\$ 10,000	\$ 20,000
 Total increase in annual operation costs	 \$250,000	 \$400,000
55% of increase in costs	\$137,500	\$220,000

The noted alternate of adding a second vessel to operate in tandem with the Whatcom Chief would add an additional \$1,000,000 to \$1,500,000 in annual operation costs (second 20-car vessel and doubling of staff), plus the need to perform major dock modifications on the Gooseberry or Lummi Island side. Due to the magnitude of these costs, limited refinement of these values has occurred or will likely receive much further evaluation.

A2. Whatcom County should not increase vehicle carrying capacity. More parking and better transit can accommodate projected growth.

<u>Resulting per Year Operation Cost Increases</u>	<u>low</u>	<u>high</u>
Construct new 100-space parking lot on Lummi Island (maintenance cost)	\$ 5,000	\$ 10,000
Shuttle Service on Island	\$ 40,000	\$120,000
Lease mainland parking site	\$ 20,000	\$ 30,000
Transportation from Gooseberry ferry landing to off-site parking (Transit style bus)	\$275,000	\$275,000
Construct enhanced passenger-waiting facilities (maintenance)	\$ 10,000	\$ 15,000
Total increase in annual operation costs	\$400,000	\$600,000
55% of increase in costs	\$220,000	\$330,000
Future Additional Cost - Replace Whatcom Chief Purchase New 20-Car Ferry (\$2.8 million) (40-Year Depreciation cost)	\$70,000	\$70,000
Increase in vessel maintenance	\$ 0	\$10,000

The noted alternate of a passenger only vessel to operate in tandem with the Whatcom Chief would add an additional \$1,000,000 to \$1,500,000 in annual operation costs (second vessel and doubling of staff), plus the need to perform major dock modifications on the Lummi Island, Gooseberry, or both sides. Due to the magnitude of these costs, limited refinement of these values has occurred or will likely receive much further evaluation.

Promotion of a private passenger vessel providing peak commute and/or seasonal services is a viable option to consider as a part of this planning focus. No financial values are presented here relative to operation costs under the assumption that such a service would be self-supporting.

A3. Whatcom County should not increase parking or vehicle carrying capacity. As population grows service levels will decrease.

<u>Resulting per Year Operation Cost Increases</u>	<u>low</u>	<u>high</u>
Provide off-boat ticketing	\$50,000	\$150,000
55% of increase in costs	\$27,500	\$ 82,500
Future Additional Cost - Replace Whatcom Chief		
Purchase New 20-Car Ferry (\$2.8 million)		
(40-Year Depreciation cost)	\$70,000	\$70,000
Increase in vessel maintenance	\$ 0	\$10,000

Pros and Cons

With the help of the Lummi Island Transportation Committee, pro and con statement were created to assist in selecting a planning focus. A large number of suggested pro and con statements were submitted by community members to assist in this effort. In many cases the submissions included narrative arguments supporting their positions and/or examples of expected outcomes should one versus another preferred course be selected.

The resulting statements listed below are intended to capture the common themes and topics from all of the submittals without repeating themes or emphasizing one point or another. Recognizing that this list is not exhaustive, the community is encouraged to debate these points within existing forums and other communication means.

Focus Option A1 – New and Larger Ferry

Pros

- Added vehicle capacity will shorten average vehicle ferry line waiting time
- Improves both vehicle and passenger service levels
- Whatcom Chief will need to be replaced at some point in time regardless due to mechanical or regulatory reasons
- Retaining Whatcom Chief for backup substantially improves service during drydock periods
- Compliant with Growth Management legal requirements
- Opportunities for federal financial assistance in covering capital costs

Cons

- If you build it they will come
- Limited increase in carrying capacity due to reduction in round-trip cycle time
- Large capital investment
- Any future (additional) increase in vehicle capacity will require major dock investments
- Increase in traffic volumes during ferry offload

Focus Option A2 – Walk-on User Enhancements

Pros

- Focuses improvements to pedestrian facilities and services
- Encourages walk-on use
- Expands mobility options for users and promotes alternative transportation investments
- Compliant with Growth Management legal requirements
- Opportunities for federal financial assistance in covering capital costs
- Provides incentive to pursue private passenger-vessel service

Cons

- Delays replacement of old vessel
- Vehicle backup and delay increases during peak times
- Requires parking expansion at unknown distance from the ferry landing and associated transport delay
- Large operating cost increases
- No federal financial assistance for operating costs
- Need to expand security services
- Additional costs possible if passenger-ferry alternative developed
- Greatest challenge to design and implement

Focus Option A3 – No Change in Service Levels

Pros

- Lowest cost option
- Encourages creative no-cost alternatives

Cons

- Delays replacement of old vessel
- Ignores growing service demands
- Ignores Growth Management legal requirements and creates land-use policies by default
- Increasing operating costs not off-set by increasing usage
- All decision-making is reactive