

**LUMMI ISLAND FERRY**  
***20-YEAR PLAN***  
***PHASE I "CHARENTE" REPORT***



*August 6, 2001*

*PREPARED  
for*

*Whatcom County Public Works Department*

*by*

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## TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	E-1
1. WHY THIS REPORT WAS PREPARED	E-1
2. SUMMARY OF FINDINGS	E-1
3. SUMMARY OF RECOMMENDATIONS	E-2
4. COMPARISON OF INITIAL FERRY SYSTEM IMPROVEMENT ALTERNATIVES	E-5
PHASE I REPORT	1
1. HOW AND WHY THIS STUDY WAS DONE	1
2. THE CURRENT SYSTEM	3
3. ISSUES AND PROBLEMS	9
4. PRELIMINARY SYSTEM REQUIREMENTS	14
5. COMPARISON OF INITIAL FERRY SYSTEM IMPROVEMENT ALTERNATIVES	17
6. RECOMMENDATIONS	18
7. PHASE III ACTION AND INVESTIGATION ITEMS	19
APPENDICES	A-1
I. COMMUNITY CHARETTE COMMENTS	A-2
II. AGENCY CHARETTE COMMENTS	A-8
III. CITIZEN LETTERS	A-13
IV. WHATCOM COUNTY CORRESPONDENCE WITH COMMUNITY	A-14
V. LIST OF CHARETTE INVITEES AND ATTENDEES	A-15
VI. FINANCIAL DATA	A-17
VII. VESSEL PROCUREMENT TIMELINE	A-18
VIII. TEA-21 REQUIREMENTS -- FHWA'S FERRY BOAT DISCRETIONARY PROGRAM	A-19
IX. PRELIMINARY EVALUATION CRITERIA	A-21

## **EXECUTIVE SUMMARY**

### **1. WHY THIS REPORT WAS PREPARED**

This report was prepared by the consultant team under contract to Whatcom County as a first step toward assessing the current state of the Lummi Island Ferry, evaluating the future capabilities and requirements of the ferry system, and developing the 20-year ferry system plan. The consultant team, led by Hanson Engineers (project management, parking systems and public participation), Art Anderson Associates (vessel and terminal), and Robert Williams (finance), was selected in early 2001.

The study team proposed a three-phase work plan. Phase I, the results of which are reported here, consisted of a full-day site visit by the team and a preliminary round of fact- and opinion-gathering including two brainstorming meetings or “Charettes” – one with agency personnel and one with Island residents. Phase II will consist of developing a full scope and budget for future work. Phase (III) is not yet funded and should be coordinated with work to update the Lummi Island Sub-Area Plan in 2002.

The consultant team recommended this approach to minimize costs and time and to determine, by summer of 2001, what should be done next.

### **2. SUMMARY OF FINDINGS**

The following findings summarize the results of the Charettes, the site visit, and a review of existing data and information provided by Whatcom County.

#### **2.1. Current State of Ferry System and Service**

1. Stakeholders generally consider the overall quality of ferry service to be satisfactory.
2. The crew’s maintenance practices are excellent and the ferry could have 20 years or more of future life; however, the ferry vessel is apt to experience more maintenance problems as it ages.
3. Both terminals are in good condition and are receiving appropriate levels of maintenance.
4. The ferry is experiencing very heavy demand for vehicle transport over long portions of each weekday. If Island population and vehicle use continue to grow, this trend will continue.
5. The heavy demand has generated increasingly long and unpredictable waits by vehicular travelers, not only at peak times but also throughout the day. The long vehicle waits are considered a problem by some but not all users. The heavy demand also increases the number of runs per day, increasing wear on the ferry.

6. Given full vehicle loads associated with the heavy demand, there are more hours of each day when auto travelers may find it hard to exit their vehicles owing to oversized vehicles, the narrow vessel lanes and the full deck.
7. There are intermodal (e.g., ferry to bus) interface problems, especially at the Gooseberry Point side. Some of these problems relate to security, inadequate auto parking, waiting room for walk-on passengers, and bus-ferry schedules.

## **2.2. Current Policy, Information and Financial Issues Relating to 20-year Ferry Plan**

1. The proposed update to the Island Sub-Area Plan will address the vision, population/travel activity forecasts, and other aspects of the Island's future, including growth and infrastructure issues. Many technical and policy areas of the Ferry System Plan and the Sub-Area Plan overlap.
2. The shortest possible timeline for a new vessel and/or pertinent facilities procurement, including planning time, is 3-5 years; because of that timeline, capacity expansion through acquisition of a new vessel, should it be desired, is some years in the future.
3. Current data are inadequate for making informed decisions about the best 20-year Ferry Plan.
4. Data collection and analysis required for the 20-year ferry system facilities planning process are similar to those required for a federal Transportation Equity Act (TEA-21) application for Federal funds for new ferry and related facilities.
5. Federal funds under TEA-21 are available for new ferry facilities but application requirements are more stringent than in previous years. The program's last funding year is FY 2003, which begins October 1, 2002. It is expected that this funding program will be renewed by Congress.

More detailed findings are presented in the full report. Appendices provide additional materials.

## **3. SUMMARY OF RECOMMENDATIONS**

Meeting the Island's ferry transportation needs is an issue that depends on the Islanders' vision for their future and projected activities. That is, transportation is a derived demand; a means to an end. Consequently, the vision of the Island's future that emerges from work on the Island's Sub-Area Plan (now in its initial phases) should be the driver that leads to policy decisions about the amount of needed transportation access. Meshing the two planning efforts will require an earlier start on some elements of the Sub-area Plan work.

Five findings are key to the consultant team's recommendations: 1) the current vehicle capacity of the system is near overload; 2) community involvement in the ferry planning process is essential to its success; 3) the *Whatcom Chief* will need to be replaced

due to age at some time in the future, with planning for this taking place within the 20-year timeframe of the Ferry Plan; 4) there is a 3-5 year lead-time required for new vessel procurement; and 5) the timeframe, requirements and political climate for possible federal funding should be considered. As a result, the consulting team has five primary recommendations:

1. Begin immediately to develop an intensive demand management program to maximize the capacity of the existing system until/if a new vessel and/or pertinent facilities come on line.
2. Proceed immediately with the collection and analysis of ferry system data to ensure that ferry terminal and vessel and/or pertinent facilities system alternatives development and preferred system selection activities can be completed by early in 2002.
3. Initiate the Sub-Area Plan to mesh with the Ferry System Plan. We recommend advancing work on Sub-Area Plan under the assumption that the timeline for applying for TEA-21 funding is the controlling factor in the timeline for the Ferry Plan. At a minimum, selected Sub-Area Plan data should be collected in 2001 so that they are available for the ferry planning process. The goal of this strategy is to ensure that a Ferry Plan is developed compatibly with the Sub-Area Plan and hence will meet Island transportation needs as determined through the Sub-Area Plan and not in isolation.
4. Ensure on-going community involvement through various means throughout the decision-making process so that proposed solutions to the community's transportation needs are consistent with the community's perspective and the Sub-Area Plan.
5. Decide early in 2002 whether to commit to the development of an application for federal funds by March, 2002 under TEA-21's Ferry Boat Discretionary (FBD) Program for federal fiscal year 2003. Work with elected County, state and congressional officials and the Lummi Nation to set the stage for this application.

All other recommendations spring from these five primary ones. The recommendations break down in to three types of work for a Phase III of the ferry study, detailed more fully in the final section of the report and summarized below.

**Phase III-A: 2001 IMMEDIATE ACTION ITEMS, including:**

1. Work with Islanders to further develop a community participation plan;
2. Brief elected officials;
3. Communicate with the Lummi Nation;
4. Address parking problems now;
5. Develop and implement a new fare structure;

6. Implement short-term operational changes; and
7. Develop and test several service-based programs that might reduce ferry vehicle transport load (e.g., “shopping service,” small Island van, etc.).

**Phase III-B: 2001 IMMEDIATE INVESTIGATION ITEMS, including:**

**III-B.1. Ferry System Plan:**

1. Implement and evaluate a Transportation Demand Management Pilot Program as soon as possible (but not only during the 2001 dry-dock, which is an atypical use period);
2. Gather the baseline data required for the Ferry System Plan;
3. Conduct an analysis of vessel size in relation to service quality; and
4. Perform a “fatal flaw”<sup>1</sup> analysis of potential new embarkation points on Lummi Island.

**III-B.2. Jointly with Sub-Area Plan:**

1. Conduct a joint Island survey;
2. Prepare population and ferry ridership activity forecasts; and
3. Complete the Island visioning process for the Sub-Area Plan.

**Phase III-C: (2001-2) LONGER-TERM INVESTIGATION ITEMS, including:**

1. Continue the community participation plan.
2. Brief and solicit input from elected public officials and the Lummi Nation on a regular basis.
3. Analyze and synthesize the data collected under Phase III-B.
4. Develop and implement a Transportation Demand Management Program to begin in 2001. Test alternative strategies, while gathering data to assess the impact of various aspects of the program, over at least a 3-5 year period.
5. Refine system objectives, performance standards and evaluation criteria;
6. Refine the conceptual vessel design and range of alternatives for full investigation and define the resultant system requirements;
7. Develop financial information and financing schedule;
8. Conduct the analysis of the selected alternatives;
9. Select the preferred alternative;
10. Conduct appropriate environmental studies for the future ferry system (including impacts on terminal areas, the communities and Hale Passage);
11. Develop the concept design and cost estimate for the preferred alternative;

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<sup>1</sup> A “fatal flaw” analysis seeks to determine if overwhelmingly convincing problems can be identified with a possible development. If so, it can be dropped from further consideration. If there are weaknesses with the idea but clarifying their scale and nature needs further analysis, then this option could be carried forward for fuller investigation. Steep, narrow and sometimes icy roads leading to a possible southern ferry terminus may be fatal flaws to such a scenario.

12. Develop the implementation plan for the preferred alternative; and
13. Prepare and submit the TEA-21 Ferry Boat Discretionary Program application.

#### **4. COMPARISON OF INITIAL FERRY SYSTEM IMPROVEMENT ALTERNATIVES**

Figure E-1, on the following pages, provides an initial comparison of a wide spectrum of ferry system alternatives. The alternatives were developed based on the input received during the Charettes and from initial analysis. In general, four possible action strategies were considered in developing the Alternatives: 1) changing procedures to increase walk-on passengers and decrease vehicle traffic; 2) increasing the size/capacity of the current ferry; 3) purchasing one or more new ferries (car or passenger) and altering terminus facilities accordingly; and 4) changing the Lummi Island and/or mainland terminus location. The full ferry analysis that would be undertaken in the next phase of this work would determine which, if any, of these strategies to pursue.

Because the present report is based on incomplete and preliminary information, the alternatives and issues summary may or may not be exhaustive, and the possible actions and consultant recommendations should be regarded as suggestions needing refinement based on development of the Sub-Area Plan and further community-based, technical, financial and other information to be obtained during Phases III-b and III-c, resulting in the final 20-year Ferry Plan.

Within the 20-year timeframe of the selected Plan, it must also be possible to move from one option to another over time. Also, the ability of the County to successfully compete for federal funds is an unknown at this time and there needs to be a fall-back plan and interim arrangements in case full funding for new systems takes longer than anticipated. While the outcome of this planning process will be a preferred plan and a “road-map” for implementing it, it will evolve over time as circumstances change. The communication and analysis methods introduced as part of the planning process are aimed at creating a foundation for how any future editions of the plan will be developed.

**Figure E-1  
Initial Comparison of Ferry System Improvement Alternatives**

ALTER-NATIVE	DESCRIPTION	ISSUES	FINANCIAL COST	POSSIBLE ACTION	INITIAL CONSULTANT PERSPECTIVE
A	Business-as-Usual- no policy, operational or facility changes	<ul style="list-style-type: none"> <li>• Quick answer</li> <li>• Fails to address vehicle capacity crunch</li> <li>• Current transit connections unreliable</li> <li>• <i>Whatcom Chief</i> not fully ADA* compliant</li> <li>• <i>Whatcom Chief</i> probably good for 20 more years</li> <li>• Lummi Nation cooperation for Gooseberry terminal, secured parking, etc.</li> <li>• Not all Islanders perceive waits as serious problem</li> </ul>	Minimal capital, staffing costs could increase for relief crew by as much as 1/3rd	Do nothing.	<i>Unacceptable, drop from consideration</i>
B	Transportation Demand Management (TDM) – steps to increase walk-ons, reduce vehicle crossings & improve information about wait status  Note: this alternative must be part of any other alternative too	<ul style="list-style-type: none"> <li>• Quick answer</li> <li>• Chance to consider many relatively low-cost strategies, e.g.,                             <ul style="list-style-type: none"> <li>– Pricing</li> <li>– Vans</li> <li>– Carpools</li> <li>– More reliable transit connections</li> <li>– Parking both sides</li> </ul> </li> <li>• Ability to eliminate need for most capital costs requires investigation</li> <li>• Use “Intelligent Transportation Systems (ITS)” monitoring to inform users and crew of current ferry line length</li> <li>• <i>Whatcom Chief</i> not fully ADA compliant</li> <li>• <i>Whatcom Chief</i> probably good for 20 more years</li> <li>• Success as a stand-alone strategy depends on long-term vehicle growth and use patterns on Island</li> <li>• Emphasizes opportunity/need to work with Lummi Nation re: Gooseberry terminal, secured parking, etc.</li> </ul>	Lowest except for A	Design and implement a test program ASAP. This will assist in evaluating the potential contribution of TDM techniques in solving or delaying capacity problems.	<i>Unlikely to be an adequate solution in itself if usage growth continues</i>

ALTER-NATIVE	DESCRIPTION	ISSUES	FINANCIAL COST	POSSIBLE ACTION	INITIAL CONSULTANT PERSPECTIVE
C	<p>Jumbo-ize the <i>Whatcom Chief</i>, make it longer and able to handle 30-50% more vehicles; Improve Gooseberry Pt. Terminal waiting facilities</p>	<ul style="list-style-type: none"> <li>• Maintains or improves frequency of vehicle service</li> <li>• Same slip size</li> <li>• Minimizes need for new roads and holding areas for vehicles</li> <li>• Advanced age of <i>Whatcom Chief</i></li> <li>• Need to remove vessel from service for 4-6 months</li> <li>• Current transit connections unreliable</li> <li>• Emphasizes opportunity/need to work with Lummi Nation re: Gooseberry terminal, secured parking, etc.</li> <li>• Might not create enough congestion relief for current use</li> <li>• Slightly larger holding areas</li> </ul>	<p>Up to 50% of the cost of a new vessel.</p>	<p>Implement “stretch” design.</p>	<p><i>Document reasons against in 1-2 pages and then drop</i></p>
D	<p>Add a slightly larger boat and run in tandem with <i>Whatcom Chief</i>; Improve Gooseberry Pt Terminal waiting facilities</p>	<ul style="list-style-type: none"> <li>• Same slips</li> <li>• Keep <i>Whatcom Chief</i> in reserve to avoid interruption of service during dry dockings</li> <li>• Vehicle loading could be as fast as <i>Whatcom Chief</i> with good design, so increased number of cars/transit time</li> <li>• Need an extra slip at least on one side for emergency tie-ups?</li> <li>• Current transit connections unreliable</li> <li>• Increases opportunity/need to work with Lummi Nation re: Gooseberry terminal, secured parking, etc.</li> </ul>	<p>Lowest capital cost of new boat options; Doubles operating costs</p>	<p>Pursue, investigate pros, cons and costs, compare with alts E, F, G below</p>	<p><i>Develop full scenario and costs</i></p>

ALTER-NATIVE	DESCRIPTION	ISSUES	FINANCIAL COST	POSSIBLE ACTION	INITIAL CONSULTANT PERSPECTIVE
E	30-car boat to replace <i>Whatcom Chief</i> , new construction or second hand	<ul style="list-style-type: none"> <li>• Handle 50% more cars</li> <li>• Wider lanes would allow more and heavier large vehicles such as construction trucks without crowding</li> <li>• Vehicle loading could be as fast as <i>Whatcom Chief</i> with good design, so increased number of cars/unit time</li> <li>• If slower vehicle loading, may not make 3 runs/hr or increase capacity during peak periods</li> <li>• Slightly larger holding areas required</li> <li>• Less frequent runs likely</li> <li>• More passenger cabin space and potentially more amenities</li> <li>• New ferry would be fully ADA compliant; second hand ferry might not</li> <li>• Keep <i>Whatcom Chief</i> in reserve to avoid interruption of service during scheduled dry dockings</li> <li>• Current transit connections unreliable</li> <li>• Opportunity/need to work with Lummi Nation re: Gooseberry terminal, secured parking, etc.</li> </ul>	Moderately high for new boat; moderate for second hand boat	Pursue, investigate pros, cons and costs, compare with alts D, F, G	<i>Develop full scenario and costs</i>
G	Fast passenger supplement plus retain the <i>Whatcom Chief</i> (with <i>Gooseberry Pt terminus</i> ); passenger boat could dock in Bellingham or Fairhaven	<ul style="list-style-type: none"> <li>• New Lummi Island slip needed for passenger embarkation</li> <li>• Transit connections from dock in Bellingham needed if the new terminal is not at Fairhaven Harbor</li> <li>• Ridership unknown given people’s desire to have car for multiple errands when visiting Bellingham</li> <li>• Reduces opportunity/need to work with Lummi Nation re: Gooseberry terminal, secured parking, etc.</li> <li>• Greater chance of dangerous water crossing of Bellingham Bay; unexpected weather changes</li> </ul>	High operating costs because of the “fast” aspect as well as high capital costs	Evaluate especially in relation to appropriate size; compare to D, E, F	<i>Develop full scenario and costs</i>

ALTER-NATIVE	DESCRIPTION	ISSUES	FINANCIAL COST	POSSIBLE ACTION	INITIAL CONSULTANT PERSPECTIVE
H	New mainland car ferry terminus ( <i>Whatcom Chief</i> or new vessel) – Bellingham or other	<ul style="list-style-type: none"> <li>• Removes opportunity/need to work with Lummi Nation</li> <li>• Option to keep <i>Whatcom Chief</i> available for dry-dock and emergencies</li> <li>• 4 miles compared with 9 for “H”; 20-minute crossing with appropriate high speed modern vessel</li> <li>• Transit connections would be good</li> <li>• Greater chance of dangerous water crossing of Bellingham Bay; unexpected weather changes</li> </ul>	Very high: High operating costs because of the “fast” aspect; high capital costs	Evaluate demand and costs.	<i>Develop full scenario and costs</i>
I	New Island embarkation point plus new terminal on mainland, with or without new ferry	<ul style="list-style-type: none"> <li>• Option to keep <i>Whatcom Chief</i> available for dry-dock and emergencies</li> <li>• 4 miles compared with 9 for “H”; 20-minute crossing with appropriate high speed modern vessel</li> <li>• Transit connections would be good</li> <li>• Possible termini unknown (could be Fairhaven Harbor)</li> <li>• Less frequent service</li> <li>• New slips and related shore facilities at both ends</li> <li>• Depending on Island terminus location, might be less centralized (longer driving commutes for many users)</li> <li>• Removes opportunity/need to work with Lummi Nation re: Gooseberry terminal, secured parking, etc.</li> </ul>	Very high	Evaluate possible docking locations	<i>Develop full scenario and costs</i>

\*ADA=Americans with Disabilities Act

## **1. HOW AND WHY THIS STUDY WAS DONE**

### **1.1 Methodology**

This report was prepared by the consultant team under contract to Whatcom County as a first step toward assessing the current state of the Lummi Island Ferry, evaluating the future capabilities and requirements of the ferry system, and developing the 20-year ferry system plan. The consultant team recommended a three-phase approach to develop an initial identification of the issues and data needs. The phased approach allowed the consultant team to quickly identify critical issues and develop a focused list of actions that could be immediately implemented as well as a list of items that required further study and development. The recommendations are provided in Sections 6 and 7 of this report and are summarized in the Executive Summary. The work was contracted in early 2001. The approach used by the consultant team was as follows:

- Review published reports and data furnished by the County;
- Conduct a one-day site survey of the vessel and terminals making direct observations and discussing issues with the Whatcom County Public Works staff;
- Conduct two “Charettes” or brainstorming meetings (held on May 8<sup>th</sup>) with the stakeholder agencies (in the afternoon), and selected members of the Island Transportation and Sub-Area Plan committees and other Islanders (in the evening). Appendices I (community) and II (agency) are summaries of the information and ideas gathered through these two meetings; and
- Review written statements submitted by residents (Appendix III).

### **1.2 Purpose of the Ferry System Plan**

State law (RCW 36.54.015) requires government-owned ferry systems in Washington to carry out and update a capital needs assessment every 14 years to plan for future development. Since the last assessment in 1990, the pressures of growth in ferry travel have led to an extended peak period and longer delays in ferry operations. In response, Whatcom County has begun an update before it was required to do so by law and is extending the 14-year planning cycle required by State law to a 20-year Ferry System Plan.

### **1.3 Relationship of Ferry System Plan to Island Sub-Area Plan**

The Island community’s vision for its future should be a major element in the future Island transportation system planning, with the ferry system supporting the chosen or planned future, not the reverse. During this project it was learned that the Whatcom County Planning Department has scheduled an update to the Lummi Island Sub-Area Plan for 2002. The current Sub-Area Plan was published in 1979. Appendix IV shows several letters from Jeff Monsen, Public Works Director, outlining the expected process. It has become clear that the Ferry System Plan and the Sub-Area Plan have mutual tasks and are co-dependent. It is logical, therefore, that tasks common to both plans be

performed concurrently. Presently, an Island Planning Committee is pursuing the needed groundwork for the new Sub-Area Plan.

Many concerns raised in the Lummi Island Community Land Trust Survey (2000), the Charette process, and other communications relate as much or more to the Sub-Area Plan and the comprehensive planning process in general, as they do to the Ferry System Plan. The Ferry System Plan consultant team is maintaining close communications with the County planning staff making sure that these concerns are shared and factored in to the Sub-Area planning process.

The vision of the Island's future developed through the Sub-Area Plan should be the driver that leads to policy decisions about the amount of needed transportation access. Transportation needs and facilities form just one section of such a plan. Meeting the Island's ferry transportation needs is an issue that depends on the Island vision and its economic activities. That is, transportation is a derived demand; a means to an end, and the end should be defined first. The Ferry System Plan cannot be finalized in isolation.

More specifically, some technical tasks for the Ferry System Plan and the Sub-Area Plan must be performed concurrently. For example:

- The Sub-Area Plan's yet-to-be-developed population forecasts will be the best basis for ferry ridership forecasting and should be developed first and with ferry ridership forecasting in mind;
- Both the sub-area planning effort and the ferry planning will likely require an Island survey. It would be more efficient and logical to combine all needed questions into one survey rather than requiring Island households to respond to multiple surveys;
- Both the Ferry System Plan and the Sub-Area Plan require analysis of Growth Management Act (GMA) concurrency and transportation level-of-service issues; there is a good deal of overlap in the needed work; and
- The Ferry System Plan and its ancillary roadway, holding lane, parking and pedestrian elements is likely to comprise 90 percent of the Sub-Area Plan's transportation element.

Thus, the Sub-Area Plan's work should mesh with the Ferry System Plan's work. As is discussed in the next section, the Ferry System Plan timing is likely to be driven by the federal funding process if the County decides to seek funds under the current TEA-21 federal program.

#### **1.4 Purpose of the Charette Process, And What Comes Next**

A full ferry study can be a major undertaking, as it must cover a wide array of issues. The "Charette" process was recommended by the consultant team as a way of getting early information on what's working and not working about the ferry system and thus, at least in preliminary form, what the desirable future ferry system may include. This process will lead to a scope of work addressing unresolved issues based on a solid

“first pass” around the issues. The next Phase of work (II), already under contract, is to develop a scope, budget and timeline for completion of the full plan. Phase III, actual development of that plan, is not yet under contract and as recommended, its timing should merge as much as possible with the upcoming work for the Sub-Area Plan for Lummi Island.

The findings presented in this report will also be used as a basis for the “Existing Conditions” chapter of the 20-year Ferry System Plan if the County chooses to proceed with Phase III.

### **1.5 The Charette Participation Process**

With the two Charettes held on May 8<sup>th</sup>, the study team initiated the process of community participation in the Ferry System Plan. It was decided that a two-hour meeting of selected residents was the most effective way to get input. There is an ongoing desire to consult with all residents on the Island; however, if, say, even 30 people come to a meeting, it is difficult to allow enough time for each to speak. Thus the chairs for the two existing related committees on the Island, Transportation and Planning, were asked to develop a list of invitees for the first meeting. In addition, several community members came independently and were invited to participate fully in the Charette. Appendix V shows the list of invitees and attendees.

Several invitees submitted written comments that have been included in this report with permission (Appendix III).

At the community Charette, the question was asked, “Will there be an all-Island meeting on the ferry plan?” The consultant team believes that this is a good idea. The consultant recommendation is to hold such a kick-off meeting for any Phase III work. In addition, this report is available to all residents upon request from Kinko’s in Bellingham and reference copies will be available at the Island library, other Island locations and on the County web site.

## **2. THE CURRENT SYSTEM**

On March 26, 2001 the project team conducted a site visit for the purpose of developing a preliminary assessment of the condition of the existing ferry system. The following presents the results of that visit.

### **2.1 Overall**

Today’s ferry operates between Lummi Island and Gooseberry Point in Whatcom County. The current terminus at Gooseberry Point utilizes property leased from the Lummi Indian Nation by Whatcom County. The route between Lummi Island and Gooseberry Point, shown below, is approximately 0.8 miles long and with the current vessel, crossing time is about 5 minutes, not including loading and unloading times.

The County operates a single vessel, the *Whatcom Chief* year-round, excluding the period during which the *Chief* is dry-docked for maintenance. This dry-docking time is generally a two-week period. However, in 2001, a three-week period is scheduled because of engine replacement.

Utilizing this single vessel, with the existing terminal facilities, the County can maintain a two-run per-hour schedule most of the time. During peak times, the County can often make three crossings per hour each way, but usually can only maintain this for about two hours. The demand during peak hours is greater than the level-of-service available and significant backups occur extending the peak period until late into the day.

## **2.2 Terminal Description and Condition**

### **2.2.1 Lummi Island Terminal Parking/Queue**

Existing parking:

- Parking at the ferry terminal is for walk-ons leaving their car on the Island;
- Lane behind building is for drop-off of walk-ons, could be used as HOV lane;
- Queue consists of single lane, holds one boat-load of cars;
- During rush hour, line backs up past stop sign and over hill; and
- People try to cut in, making it dangerous.

Satellite parcel:

- Acquired about 2.5 years ago;
- Currently unimproved;
- Immediate neighbors opposed to development;
- Intended for vanpool/WTA coordinated use; and
- Currently used as holding area and short-term parking.

### **2.2.2 Gooseberry Point Parking/Queue**

- Lot has poor drainage and standing water;
- No physical security, lighting provided; and
- Traffic backs up beyond the holding lane during peak hours, causing a problem with blocked driveways.

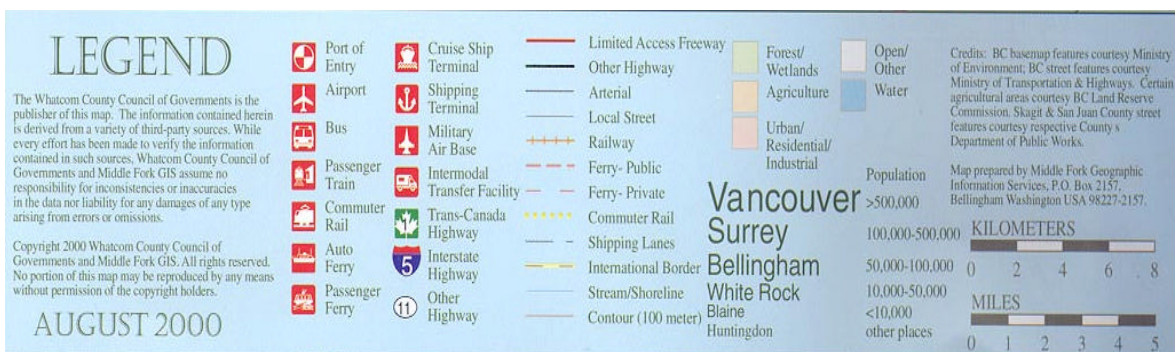
Generally, both terminals are in good condition requiring only minor maintenance action. Both terminals should last for many years with reasonable maintenance activity in place.

Of significant note is the breakwater at the Lummi terminal. The south breakwater is not sufficient to protect the vessel during southerly storms.



Lummi Island and Bellingham Bay

Source: Cascade Gateway Map  
 Published by the Whatcom County Council of Government. Prepared by Middle Fork Geographic Information Services  
 August 2000





Gooseberry Point Terminal



Lummi Island Terminal

### 2.3 Vessel Description and Condition



**The *Whatcom Chief* Approaching Gooseberry Point**

The ferry *Whatcom Chief* is a US Coast Guard certified passenger vessel and carries a crew of three. Although the *Whatcom Chief* is 40 years old, she is in good condition, primarily due to the excellent maintenance program established by the County's crew. She may, in fact, last for another 20 years if maintained as she has been for the last 40 years. That said, the vessel age will certainly require a substantial increase in the maintenance frequency and may require significant unforeseen corrective maintenance actions. Although her speed is appropriate for this route, her design is not suited well for walk-on service nor for the large volume of commercial traffic experienced on this route. Even though her material condition would allow her to operate for many more years, she will not be able to keep up with the demand, nor will she be able to provide the desired service characteristics identified during this study.

The *Chief* is designed for 18 vehicles and can carry a maximum of 20 vehicles depending on vehicle size. The lane widths are 90 and 91 inches. While the crew loads to enable safe emergency exiting for each vehicle, as traffic has grown it has become more difficult if not impossible for some passengers to exit their vehicles once on board. This would be a serious problem in the event of an emergency such as a fire on board. The *Chief* is also not fully compliant with the current Americans with Disabilities Act (ADA), although the deckhands assist wheelchair-bound individuals to get over the curb and into the deckhouse.

## **2.4 Ridership**

Over the last 10 years, ridership for the Lummi Island Ferry has increased substantially. In 2000, there were 381,282 trips, an increase of 27.6% since 1991. Vehicle or passenger car trips grew by almost 30 percent to 139,806, and pedestrian trips increased by 20 percent to 224,167 in 2000. The greater increase in the vehicular vs. pedestrian trips suggests that the number of passengers per vehicle decreased during this period, although this cannot be established with certainty because the data did not distinguish between 'in vehicle' and walk-on pedestrians. Both truck/trailer and bike/motor cycle trips increased only slightly, by about 5 percent over this period. In 2000 there were 2,849 truck/trailer trips and 1,591 bike/motor cycle trips. Figure 1 illustrates these trends. Ridership also shows strong seasonal variations. July and August are by far the busiest months with over 10 percent of all vehicle and pedestrian trips occurring in each of these months.

A major limitation of the current ridership data is that smaller trucks and vehicles associated with construction and service of households are combined with all passenger vehicles, so that the data do not reflect the reality of numbers of trips by Islanders, by people in the construction and service trades, and by visitors. Much of the current heavy vehicular demand on the ferry could be due to transient effects associated with rapid growth and new construction, which might decrease in the future.

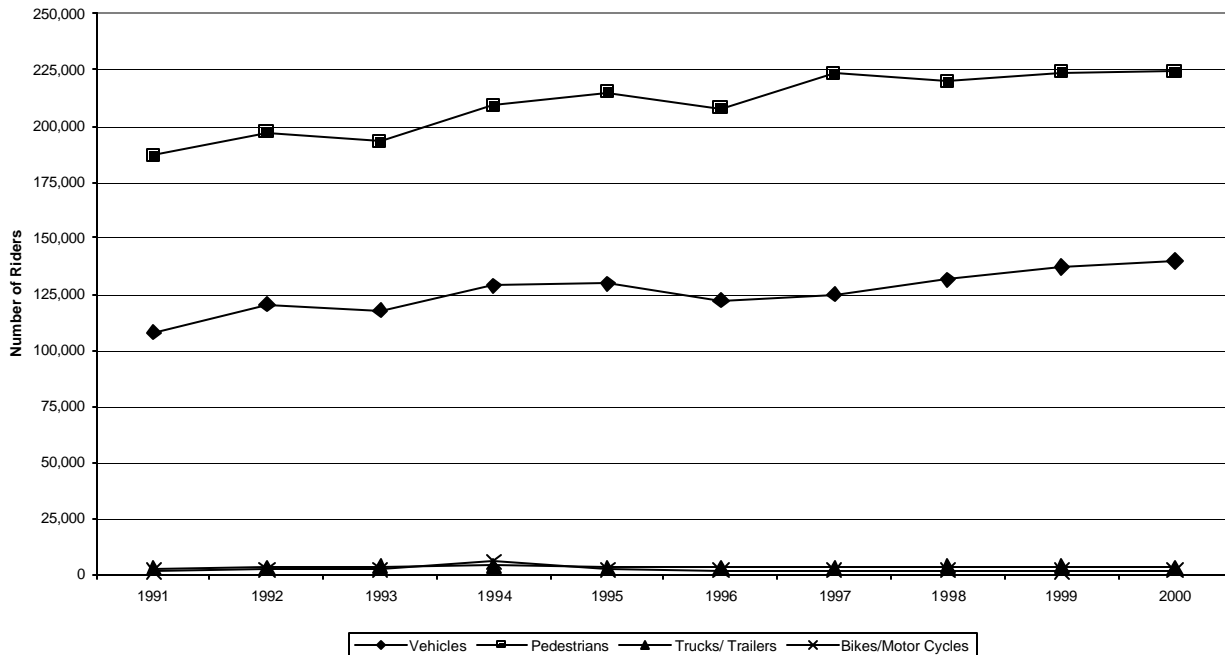
## **2.5 Finances**

The system has been meeting the County's 55 percent of operating costs recovery rate standard and owing to state funds, uses very little in the way of County funds for operations. Initiative 695 did not affect the ferry system operation financially as transit systems and Washington State Ferries were. However, as future needs and their related costs grow, a review will be needed of the system's financial performance and changes may need to be adopted, as discussed in the recommendations.

## **2.6 New Vessel and/or Pertinent Facilities Procurement Process**

Under normal conditions, the procurement process for a new vessel and/ or pertinent terminal facilities, including planning, takes 3-5 years. This is described in more detail in Appendix VII.

**FIGURE 1  
LUMMI ISLAND FERRY RIDERSHIP  
1991-2000**



**Note: “Pedestrians” include passengers in cars –see 3.2.5.3**

### **3. ISSUES AND PROBLEMS**

The following listings of issues and problems are derived from the consultant work, in many cases corroborated by the comments made in the two Charettes (see Appendices I, II, III, and VII).

#### **3.1 Positives Issues**

##### **3.1.1 Operations and Level-of-Service**

- The service is seen by agency personnel and riders alike as reliable with only a few unscheduled dry-dock events during the life of this vessel; the schedule is maintained; and
- The ferry operation has a good safety record.

##### **3.1.2 Physical Infrastructure**

###### **3.1.2.1 Vessel Condition**

- The vessel has been well-maintained and appropriately upgraded and its material condition is good; and
- With continued good maintenance, its potential life is at least another 20 years.

### 3.1.2.2 Terminal (Docking Facility) Conditions

- The Lummi Island docking facilities are in basically good condition; the pre-cast concrete trestle is in good condition;
- The Lummi Island side restrooms are good (but lack handicapped access);
- The Gooseberry Point docking facilities are adequate although there are more concerns (see next section); and
- The Gooseberry Point area is potentially under-utilized and its redevelopment could create an economic opportunity for the Lummi Nation in addressing not only ferry system needs, but also other opportunities such as marina, retail development and other activities.

### 3.1.3 Emergency Coverage

- The consensus of emergency service providers is that the current system works well; having the crew be Island residents and the vessel tie up on the Island to be available for emergency runs provides a workable system for the 10 or so after hours emergency runs that are made each year.

### 3.1.4 System Financing

- Federal Transportation Equity Act “TEA-21” capital funding programs for ferries and related facilities are available; USDOT appears to favor funding larger numbers of smaller projects and to balance rural and urban needs;
- The TEA-21 program also could possibly provide funding for some related transportation facilities, e.g., intermodal transfer facilities.
- Apart from substantial funding for the Washington State Ferries, the only TEA-21 ferry project funded so far in WA appears to be the West Seattle water taxi project, so a more rural application could gain favor;
- USDOT has tightened their application requirements and the set of data needed for a successful application;
- WSDOT coordinates TEA-21 applications for USDOT. The deadline this year for submittals to WSDOT was June 26; the federal deadline for submissions was July 15; by mid-March 2002, the federal request for projects will be initiated for federal FY 2003;
- Submissions need to be for projects that can be obligated, i.e. have the local funds appropriated and the project ready to be built, by the subsequent federal fiscal year. This means an application for funds in FY 2003 would involve County obligation of funds in 2002. It would also require a decision about what vessel and/or pertinent facilities the County wants (and other elements such as parking), as well as being able to spend the funds within fiscal 2003 i.e. between October 1, 2002 and September 30, 2003. This could be achieved if the project keeps moving along.
- Submissions also need to be coordinated with and seek support from the state Congressional delegation; since Senator Murray is now chair of the Senate Transportation Appropriations Committee; Washington State projects have a good chance of consideration; and
- The data that would be generated by any new vessel study (Phase III-C of this study) should probably be more than enough to complete the application; for a fuller

understanding of application requirements, coordination will be necessary with the appropriate WSDOT staff.

Appendix VIII discusses these requirements in more detail.

### **3.2 Negative Issues**

#### **3.2.1 Operations and Level-of-Service**

##### **3.2.1.1 Lack of Vessel Capacity**

- At 20 vehicles per run, the *Whatcom Chief* is no longer large enough to accommodate daily vehicle crossing demand, both morning and evening peak periods are extending to several hours. While the vessel can and does make more than the scheduled runs if vehicles are left behind, its theoretical maximum is still only three runs each way per hour, and after about two hours this cannot be maintained and schedule slippage becomes evident; and
- The actual vehicle capacity of the system is reduced due to large vehicles such as concrete trucks, boats under tow, horse trailers, SUVs and RVs which are heavier and wider, requiring more than the 90-91” lane space and thus reducing the actual capacity of the ferry by several automobiles each time they must cross.

##### **3.2.1.2 Dry-dock Difficulties**

- Lack of a backup or second auto vessel necessitates a 2-3 week dry-dock period each year as well as the occasional unscheduled dry-dock time, leaving the Island without car ferry service;
- Parking at Gooseberry Point during dry-dock is a significant cause of congestion; in past years the Lummi Nation has been very cooperative and the arrangements have worked adequately; and
- Parking on the Lummi Island side is a considerable problem during dry-dock as well as in general.

#### **3.2.2 Physical Infrastructure**

##### **3.2.2.1 Vessel Limitations**

- The vessel lacks crew bathrooms;
- Lanes are narrow, meaning that some car passengers have considerable difficulty exiting a vehicle while on board;
- Lane widths do not comply with current Coast Guard requirements; and
- The vessel is not fully ADA compliant.

##### **3.2.2.2 Terminal (Docking) Facility Limitations**

###### *Both Sides:*

- The loading ramps are only one vehicle wide, leaving no room for pedestrians who must board before or after cars, increasing the loading and unloading time;

- Maximum expected design wave height (i.e. a reasonable “worst case” wave) does not appear to have been determined for either side, and this information is needed for any modifications or new facilities at the shore or under water;
- The holding lanes are confusing, awkward, and intrusive for local residents, on both sides; and
- Endangered Species Act (ESA) listings will increase the cost and time of any required in-water improvements.

*Lummi Island Side:*

- Erosion is undercutting the parking barriers on both the north and the south;
- There is no storm water treatment on either side of the terminal;
- There is eel grass near the north breakwater; this fish habitat would need special consideration in the event of any terminal modification work;
- The piles are concrete or steel and are not embedded into shallow rock. Heavier lateral loads, which may be expected with a significantly larger ferry, may be a problem in the future;
- The south breakwater does not protect the vessel from south storms and needs at least 20 feet more length, perhaps as much as 50 feet;
- The main restrooms are not handicapped-accessible and use a portable toilet to meet ADA requirements;
- There is no adequately marked parking space for the school bus on the Island side; and
- The transfer bridge has a maximum slope of 18 percent, which exceeds code (12 percent) for walk-on passengers. A tide vs. schedule analysis is needed to determine how many times per year the ramp length creates an unacceptable slope for pedestrian access.

*Gooseberry Point Side:*

- The approach roads have been known to flood on rare occasions, cutting the terminal off from drivers and foot-passengers;
- There is no terminal building; the restrooms are portable; restrooms and shelter at Gooseberry Point are thus both inadequate; and
- The timber trestle may need more lateral support; its pilings are less than 100 feet long and embedded only in impacted unconsolidated soil, not bedrock.

**3.2.3 Emergency Coverage**

- There are disaster response concerns including a need for alternate routing if flooding of Haxton Way cuts off the Gooseberry terminal area; the County Emergency Plan is in place and could be fine-tuned to address these concerns.

**3.2.4 Safety and Security**

**3.2.4.1 Lack of Safety on the Boat Deck**

- Because of the narrow deck lanes and wide vehicles on the ferry, the fare collection may take place from the passenger side window, necessitating awkward reaching and/or opening electric windows during the crossing.

#### 3.2.4.2 Potential Lack of Safety in the Lummi Island Terminal Area

- Passengers load first or last, before or after the vehicles; however, late arrivals may try to board while autos are still boarding; the loading ramp and the deck are both too narrow to allow for a separate pedestrian lane; and
- Parents bringing school-children to the ferry for drop off create a vehicle congestion point; few use the available school bus for ferry access; late school drop-offs cause running and mixing of cars and pedestrians on the loading ramp.

#### 3.2.4.3 Insufficient Safety and Security at Gooseberry Point

- Security was a great concern at Gooseberry Point until the introduction of a security patrol in summer 2001; and
- Addressing security and amenities at Gooseberry Point requires continuing collaboration and agreements with the Lummi Nation.

### 3.2.5 **System Costs, Fares and Finances**

#### 3.2.5.1 Inadequate Fare Procedures: Fares, Fare Policy, Fare Collection/Revenue Control

- As the number of daily vehicle trips increases, it is becoming ever harder to complete the fare collection during the westbound vessel run without detracting from needed docking duties;
- There are concerns and potential problems with transfer of the daily revenue from the vessel to a bank;
- The fare structure is inequitable in terms of the pricing relationship among cars, trucks, other over-size vehicles, and pedestrians;
- The County has been closely within the range of meeting its goal of recovering 55 percent of operating expenses from the fares, despite no fare increase at least since 1989. However, recent cost increases have increased faster than traffic volume and without fare increases recovery will continue to fall further below the policy target (see Figure A-1). The current rate structure has been in effect for over 10 years. The price of virtually all other goods and services has risen during that period, so it is reasonable to expect a catch-up in ferry rates;
- The effects of higher fares on ridership are unknown and need to be taken into consideration; in the past, it appears fares were reduced to encourage ridership;
- In addition, as Washington State Ferries and Whatcom Transit have examined their recovery rate policies in light of Initiative 695 and other factors, Whatcom County may need to do the same;
- Since the County has not had to amortize the cost of a new boat for some years, and has yet to build terminal area parking of any great size, no recent calculations or tests have been done of the feasibility of recovering a portion of capital costs through fares; and
- Further, each of the system operating enhancements mentioned for the future ferry system would further increase operating costs in the short run without necessarily generating offsetting revenue volume increases.

### 3.2.5.2 Other Financial Issues

- RCW 47.56.725 (2), which provides State support for operating subsidies for Whatcom, Pierce, and Skagit ferry operations, is subject to a \$1 million maximum per biennium. Deficit increases among the three counties might require the State to prorate subsidies, increasing financial pressures on Whatcom County for higher fare recovery ratios;
- Increased fares may reduce traffic; and
- The age of the vessel likely will lead to greater maintenance costs.

### 3.2.5.3 Ridership Data

- Current statistics show “walk-ons” as one group that consists of vehicle drivers, passengers in vehicles, plus true walk-ons. Whatcom County indicates that “true” walk-ons are fewer than 100 per day;
- No origin-destination or trip purpose data exist about ferry users, which means that no distinction is drawn between resident, construction and service, or other visitor usage, or between essential and non-essential destination trips (e.g., part of the high vehicle-demand load may be due to high rates of construction, which could decrease or increase in the future);
- No data are currently available about how vehicle size and width influence the number of vehicles per trip or loading/unloading time;
- Ridership data are westbound, gathered when fares are collected. Only limited data are collected eastbound; thus
- Ridership data are inadequate for 20-year system planning purposes.

### 3.2.6 High Occupancy Vehicle (HOV) Access and Connections

- Bus service meets 8 ferries per day only, with a 90-minute headway; the bus service has been in place since 1994 and ridership does not warrant more coverage;
- Due to the passage of Initiative 695 in fall of 1999, Whatcom Transit is using up reserves to pay its bills and will not be able to continue much longer without added funding from some source; rural routes such as the Gooseberry Point run are the most likely to be cut; and
- Islanders do not appear to have had an opportunity to thoughtfully consider the benefits of carpooling and van usage for reducing automobile congestion on the ferry. A recent carpool matching attempt by Whatcom Transit Authority (WTA) was not productive. However, Islanders may already be informally car-pooling and hence perceive additional WTA-matching as unnecessary. Data are needed to evaluate that possibility and steps are needed to ascertain more fully the conditions under which carpooling is effective for residents.

## 4. PRELIMINARY SYSTEM REQUIREMENTS

This section describes the preliminary ferry system requirements arising from the Charettes and client discussions that established preliminary goals for the ferry system of the future. Each of the ferry’s future development alternatives must be evaluated against these system requirements, as well as other requirements such as environmental compliance, to

determine how well each alternative performs. Should the process of planning proceed to Phase III, a Draft and Final System Requirements Report will expand these preliminary requirements, quantify appropriate items and specify the level of performance required or desirable for each. A few of the suggested requirements, such as those relating to fares, may need to be refined immediately for use in Phase III-A rather than waiting till phase III-C. If fares are to be raised, they should be raised in the near future so the effects on ridership and revenue can be determined and used in longer-term planning.

It should be emphasized that this list is preliminary and does not differentiate among requirements that must be met in full (for example, to meet a legal requirement or design standard), and those that can be traded against one another. Not all of the desired system requirements could be met in full. For example, reasonable cost is itself a requirement and some features could be quite expensive, resulting in a conflict; some design objectives may be in conflict with others. The planning process (in Phase III) will weigh and prioritize such conflicts and resolve them through a trade-off process with user inputs.

The preliminary system requirements derived from Phase I work are:

#### **4.1 Operations and Level-of-service**

- Ferry reliability and on-time performance should be at least as good as today;
- The ferry service frequency should be such that all potential users can get on a boat with no more than a pre-determined waiting time (to be defined through level-of-service analysis that would need to be performed in any Phase III);
- Hours of service should be structured to meet the community's needs while not unduly promoting late night road traffic;
- Adequate coordination and communication using suitable technology should take place between ferry crews and bus drivers in order to maximize system connectivity;
- Ferry operators should have sufficient time in the performance of their essential duties to interact with passengers as needed to assist with safety and customer information; and
- Additional runs ideally should continue to be made as needed, subject to captain's determination of weather conditions and other overriding factors.

#### **4.2 Physical Infrastructure**

- The vessel should be capable of continuous weekday and weekend service without breakdowns;
- The vessel should provide adequate crew restroom facilities for both genders (separate or uni-sex);
- The vessel should have sufficiently wide vehicle lanes to allow passengers to exit their vehicle during the trip if necessary or desired;
- The vessel should provide adequately-sized indoor seating for passengers;
- The loading ramps/transfer bridges should be suitable to allow simultaneous fast and safe passenger and vehicle loading and should not exceed a slope of 12% unless the proposed tide/schedule analysis shows this problem to be within an acceptable range;
- The terminal facilities should be safe and adequate for all reasonable weather conditions;
- The docking facilities should be designed for a reasonable "worst case" wave height;

- The future system will likely also require a planned dry-dock period and a backup vessel, as now, it will then be necessary to ensure that the slip can accommodate a variety of vessel designs;
- Terminal facilities must meet, or exceed, the design requirements of the Americans with Disabilities Act (ADA);
- Both terminal facilities should provide adequately sized indoor, weather-protected seating facilities and provide an appropriately-sized shelter for the peak hour number of pedestrians;
- The terminal facilities should provide an integrated covered bus-ferry connection on the mainland side and a safe, distinct school bus location on the Lummi Island side;
- Both terminal areas should provide an adequate supply of parking; and
- The Lummi Island terminal area should provide a convenient, marked area for drop-off operations.

#### **4.3 Emergency Coverage**

- Future ferry vessel and/or pertinent facilities and operations should maintain the current excellent emergency service operations; and
- The future ferry system should require that the vessel(s) be berthed on Lummi Island when out-of-service, for ease of use in an emergency unless a better system can be developed.

#### **4.4 Community Relations**

- The future ferry system should facilitate an ongoing, consistent communications process between Whatcom County and the Island;
- If it is determined that the terminal would best remain at Gooseberry Point, the Island and Whatcom County should have an ongoing cooperative relationship with the Lummi Nation and a workable process for resolving mutual issues; and
- The ferry system should foster community communication, taking advantage of its role as the funnel-point through which community members pass regularly.

#### **4.5 Safety and Security**

- The ferry system should provide adequately lighted and secured parking at Gooseberry Point on a year-round basis through appropriate arrangements with the Lummi Nation;
- Drivers in line for the ferry should be in a secure environment;
- There should be a physical and/or temporal separation of pedestrians and cars both on the docks and the loading ramps at all times;
- The Lummi Island terminal area should be free from skateboarding and the like (if there is an unmet need for such facilities it should be addressed through the Sub-Area Plan); and
- Ferry passengers should be able to make the bus connection at Gooseberry Point with time in hand so that running is not necessary; the pathway between ferry boat and bus should be free of impediments and tripping hazards.

#### **4.6 System Costs, Fares and Finances**

- Fares should be structured to favor walk-on travel. Large vehicles should be charged in proportion to the number of auto-spaces they consume on the boat deck;
- Fares should be structured with peak and off-peak rates for all classes of travel so that non-essential (non-commuter) travel is discouraged at peak times;
- The fare box recovery rate should meet or exceed Whatcom County goals; ferry capital facility improvement projects related to vessel, terminal area and parking facilities should seek federal funds under TEA-21 or its renewal program, preferably jointly with the Lummi Nation; and
- To better document travel patterns and financial needs, trip data should be recorded from the Lummi Island side to supplement the data obtained westbound (gathered from fare sales).

#### **4.7 High Occupancy Vehicle (HOV) Access and Connections**

- The ferry system should be designed to minimize a household's need for additional cars and maximize their access to High Occupancy Vehicle (HOV) modes of travel;
- The ferry system should coordinate schedules to the fullest degree possible with the Whatcom Transit bus schedules, and any proposed bus schedule changes should be discussed first with ferry operations;
- The future ferry system should have year-round HOV feeder service on the Island; and
- Bicycle access and secure bike storage should be provided on an appropriate scale on the Lummi Island side.

Appendix IX lists preliminary evaluation criteria based on these requirements.

### **5. COMPARISON OF INITIAL FERRY SYSTEM IMPROVEMENT ALTERNATIVES**

Based on the information gained from the Charettes and other sources, the consulting team has developed a basic set of ferry alternatives. The list of alternatives that was shown in Figure E-1 at the beginning of this report will provide the starting point for the selection of alternatives for further study.



Bicycle Storage at the Lummi Island Terminal

## 6. **RECOMMENDATIONS**

The consultant team's five primary recommendations are:

1. Begin immediately to develop an intensive demand management program to maximize the capacity of the existing system until/if a new vessel and/or pertinent facilities come on line.
2. Proceed immediately with the collection and analysis of Ferry System Plan data to ensure that ferry terminal and vessel and/or pertinent facilities system alternatives development and preferred system selection activities can be completed by early in 2002.
3. Initiate the Sub-Area Plan to mesh with the Ferry System Plan. We recommend advancing work on Sub-Area plan under the assumption that the timeline for applying for TEA-21 funding is the controlling factor in the timeline for the Ferry Plan. At a minimum, selected Sub-Area Plan data should be collected in 2001 so that they are available for the ferry planning process. The goal of this strategy is to ensure that a Ferry Plan is developed compatibly with the Sub-Area Plan and hence will meet

Island transportation needs as determined through the Sub-Area Plan and not in isolation.

4. Ensure on-going community involvement through various means throughout the decision-making process so that proposed solutions to the community's transportation needs are consistent with the community's perspective and the Sub-Area Plan.
5. Decide in early 2002 whether to commit to the development of an application for federal funds by March, 2002 under TEA-21's Ferry Boat Discretionary (FBD) Program for federal fiscal year 2003. Work with elected County, state and congressional officials and the Lummi Nation to set the stage for this application.

These five primary recommendations result in a series of recommended tasks for Phase III of this project, set forth in Section 7 below and organized in order of sequence.

## **7. PHASE III ACTION AND INVESTIGATION ITEMS**

The following, more detailed work plan outlines the steps that will be necessary to implement the recommendations listed above. Implementation of the recommendations breaks down in to three distinct components of work to be completed during Phase III of the ferry study:

Phase III-A: Immediate action items to be carried out in 2001;

Phase III-B: Data collection, analysis, and investigation to be completed in 2001; and

Phase III-C: Development and prioritization of alternatives to be completed in early 2002.

The Phase III-A action items and the Phase III-B investigation, data collection, and analysis tasks should be carried out during the same time frame. Some Phase III-B tasks need to be completed before Phase III-A action items can be implemented.

Once the context of this work plan is agreed upon and approved, a work scope, schedule, and budget will be developed to carry out the recommended action items.

### **Phase III-A: Immediate Action Items (2001)**

Phase III-A lists immediate action items to be completed in 2001. They include *communication and planning actions*: ensuring the involvement of the community and elected officials, pursuit of a continued strong relationship with the Lummi Nation; and development of a work plan to lay out a federal TEA-21 funding application; and *operations and procedures actions*: addressing parking problems, data collection in the summer and fall of 2001, instituting new fares, implementing short-term operational changes, and developing a "shopping" and other services for Islanders that could reduce the number of vehicular trips.

## **Communication and Planning Actions:**

### **III-A.1 Implement a Community Participation Plan.**

Providing information to and gathering input from the community are crucial elements of the planning process. The community participation and communication plan should include these subtasks during 2001:

1. With the Island Transportation Committee and the Island Planning Committee, develop a community participation and communication plan. A variety of means for community input via telephone, e-mail, regular mail, focus groups, etc. should be part of the plan.
2. Disseminate this Phase I (“Charette”) report in paper and electronic forms as soon as possible.
3. Develop and maintain a web site on the planning process and content, including links to relevant sites (e.g., TEA-21).
4. Conduct a meeting to discuss the results of Phase I, get community feedback about any missed or potentially problematic issues, and select and/or prioritize alternatives to be evaluated in more detail. All stakeholders should have full access to the report and related documents at least 2 weeks before the meeting, allowing them time to consider the report and its implications before the meeting.
5. Ensure that all stakeholders are involved. Those unable to attend should be encouraged to submit their views in writing, by phone, or electronically. A summary of the meeting, its outcomes, and the views of non-attendees should be prepared and disseminated with notes from the meeting.
6. Coordinate with and solicit input from the Island Transportation Committee and Island Planning Committee to identify critical decision points and their timelines in the ferry planning process, and to develop ways for Islanders to provide input *before* decisions are made.

### **III-A.2 Brief Elected Officials.**

This task serves to ensure that elected officials are briefed on the work-to-date and can provide direction at critical decision points.

1. Brief the County Executive and County Council regarding the immediate action and investigation recommendations for 2001.
2. Solicit their input and support for Phase III activities.

### **III-A.3 Communicate with the Lummi Nation.**

Unless the mainland terminal is moved, good relations with the Lummi Nation are critical to the success of the ferry system plan. This task is designed to help establish and foster that relationship:

1. Develop and implement an ongoing project-communications plan with the Lummi Nation, based on current Islander-Lummi Nation communications.
2. Solicit input from the Lummi Nation to address their concerns and interests.

**III-A.4 Foster Communication among Islanders, County Officials, and the Lummi Nation.**

1. Hold a joint meeting of representatives among all three groups concerning the present status and broad goals of the ferry planning process.
2. Identify potential synergistically beneficial aspects of the project for Islanders, the Lummi Nation, and Whatcom County; some might have opportunities for federal funding.
3. Develop and implement an ongoing project-communications plan among the three groups.

**III-A.5 Prepare for a TEA-21 Federal Funding Application.**

The consulting team is assuming that Whatcom County will try to meet the deadline for a fiscal year 2003 application for Ferry Boat Discretionary Program funding under TEA-21. This application process will require the following:

1. Prepare a work plan for the 2002 coordination activities and technical work needed to submit an application for FY 2003 TEA-21 funds, including considering of both ferry and non-ferry aspects of funding opportunities.
2. Incorporate development of the application into the III-C work scope to be performed in early 2002.
3. Coordinate with local, state, and federal officials, including the Washington State Congressional delegation, to maximize the chances of success for the application.

**Facility, Policy and Operational changes to improve current and future service:**

**III-A.6 Address Parking Problems Now.**

1. Continue and finalize the plans for secure parking at Gooseberry Point, so that more Islanders can safely plan on leaving a car on the mainland instead of having to get it onto a boat each way each day.
2. Once the Lummi Nation parking agreement is developed,
  - a. match it quickly by creating the planned County-owned parking expansion on the Island on land already purchased for that purpose (any such expansion should be designed with strong Islander input); and/or
  - b. explore a small van “on-demand” service that could pick up people whose cars are on the mainland with reliable delivery to particular ferries (this would reduce the need for County-owned parking on the Island).

### **III-A.7 Develop and Implement a New Fare Structure.**

Fares can be used to support broader policy goals such as encouraging walk-ons and ride sharing arrangements. (Changes to the fare structure and rates also inevitable if a new vessel is obtained). Our recommendations are:

1. Develop and implement a new pricing policy that could improve usage patterns, e.g.
  - a. Reduce walk-on fares to favor pedestrians;
  - b. Charge by length, width, and weight for large vehicles such as RVs, logging, construction and concrete trucks, horse and boat trailers, and the like (it has been suggested to mark car lengths off on the boat deck so that the price – a straight multiple of car price – can be easily calculated); and
  - c. Increase passenger vehicle fares;
  - d. Create peak and off-peak fares to encourage non-essential trips at less busy times of the week;
  - e. Eliminate discount fares; and
  - f. Implement a fee-based reservation system and/or restricted hours for oversize vehicles with peak period surcharge.
  
2. Create a plan to gradually raise fares to the level they will need to be at under likely future scenarios in order to:
  - a. Manage potential increases in demand due to population growth;
  - b. Create a “down payment” on vessel replacement: receipts in excess of operating subsidy requirements should be deposited by the County in a new Lummi Island Transportation Improvement Fund. Islanders should have some influence on how any such funds are disbursed. This percentage of fare revenue would create a new vessel and/or pertinent facilities investment fund; and
  - c. Minimize fare increase “sticker shock” in the future; that is, introduce higher fares in several increments, each of which is modest rather than in one big increase after all the analysis and forecasting of costs is done.

Note: The letter from Bob Fodor shown in Appendix III is the source of many of these fare ideas.

### **III-A.8 Implement Short-term Operational Changes.**

To address capacity problems now, the consulting team recommends that Whatcom County:

1. Evaluate running the vessel continuously when demand requires, including the effects of this strategy on crew levels, crew breaks as required by law, transit connectivity and other factors.
2. Explore adjusting the weekend schedule to shift demand from weekdays and evaluate related crew costs and crew availability.
3. Explore the possibility of an earlier run on weekend mornings.

4. Develop public information that explains the crew scheduling plan and the ways in which it optimizes capacity for a given amount of labor and/or consult with the community after performing the investigation and before implementing any short-term changes.
5. Update the posted signs at the ferry terminals to match the new schedules.

### **III-A.9 Develop and Test Various Services That Could Reduce Vehicular Trips.**

Investigate, develop, advertise and test new services (private or public) that might reduce the number of vehicular trips to the mainland. Testing and refinement of services (with on-going, systematic feedback from potential users) should be conducted for a sufficiently long time (2-3 years) to determine what strategies are most effective for different sub-populations currently relying wholly on vehicular transport for trips to the mainland. To start, the consultants specifically recommend:

1. Testing and implementing a “shopping service” so that vans could pick up pre-paid orders and make deliveries to a series of Island destinations;
2. Encouraging the Islander store become a source for special order groceries from the mainland; and
3. Exploring a small-van, on-Island service that would pick up and deliver individuals from and to the ferry; encourage its use not only by residents but also by construction workers and visitors.

Note: The first two ideas come from the letter from Kevin Jones shown in Appendix III.

### **Phase III-B: Immediate Investigation Items (2001)**

Phase III-B recommends immediate investigation and data collection and analysis tasks to be completed in 2001. For the Ferry System Plan they include developing a plan to maximize transit use and testing it (but not only during the 2001 dry-dock period, during which ferry use is very atypical); exploring an optimal vessel size concept; and performing a “fatal flaw”<sup>2</sup> analysis of potential new embarkation points on Lummi Island. For the Sub-Area Plan and joint study needs, it includes developing level-of-service standards as part of the system requirements, undertaking a combined Island survey of needs, vision and existing conditions, and initiating population and ridership forecasts based in part on the survey findings.

Some tasks for the Ferry System Plan can be performed without being in lockstep with the proposed Sub-Area Plan; generally others need to be approached jointly:

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<sup>2</sup> A “fatal flaw” analysis seeks to determine if overwhelmingly convincing problems can be identified with a possible development. If so, it can be dropped from further consideration. If there are weaknesses with the idea but clarifying their scale and nature needs further analysis, then this option could be carried forward for fuller investigation. Steep, narrow and sometimes icy roads leading to a possible southern ferry terminus may be fatal flaws to such a scenario.

## **Ferry System Plan Stand-Alone Tasks:**

### **III-B.1 Implement and Evaluate a Transportation Demand Management (TDM) Pilot Program During 2001 Dry-dock.**

Demand management can reduce the needed size of a new vessel. The consulting team recommends that Whatcom County:

1. Develop a program, based on increasing use of the Island van service, to promote and test a range of approaches to increase walk-ons. Testing of this and other demand management concepts should be continued beyond the dry-dock period, during which ferry usage is highly atypical and for which testing would likely yield non-representative results. The TDM potential during the inclement winter months also requires examination.
2. Analyze the results of the pilot program to determine what is a reasonable level of walk-on travel to be expected the rest of the year, i.e. how much of the problem can be solved by more walk-ons and fewer vehicles through more use of vans, buses, vanpools on the Island and the like [the letter from Craig Smith shown in Appendix III details more bus possibilities].

### **III-B.2 Gather the Required Baseline Data.**

A variety of data will be needed to provide the basis for new vessel and/or pertinent facilities development. The consulting team recommends that Whatcom County perform the following:

1. Collect ridership counts on both sides including vehicles, commercial vehicle volumes, wait times, etc. over a period of one month during 2001. This will provide a guide to peak season demand on the ferry.
2. Collect information on *actual* usage patterns (e.g., resident vs. non-resident; reasons for trip; destinations, etc.) via short ferry-line surveys or surveys filled out during eastbound trips for one month.
3. Interview area-trucking companies related to construction and service delivery to better project commercial demands on the ferry system.
4. Gather comparative information on similar small ferry operations in the U.S. and Canada. This may include field visits to three small ferries in WA or BC—for example Guemes, Anderson, and one of the Gulf Islands; and a review of their fare programs, TDM strategies, operations, and other characteristics.
5. Identify and evaluate environmental issues. This will include issues pertaining to the vessel, terminals, feeder roads and holding areas on the mainland, Island holding areas and roads (e.g., if more vehicles are projected to be transported, will current Island roads be able to safely handle increased road traffic?), noise and fumes from vehicles in holding areas, etc.

### **III-B.3 Conduct an Analysis of Vessel Size in Relation to Service Quality.**

A larger vessel does not necessarily mean quicker service. It takes a lot longer to load 100 cars than it takes to load 20. Under this task, the consulting team will provide a basic review of these relationships:

1. Conduct a preliminary analysis, based on assumptions that can be defined now, of optimal vessel size in relation to hourly and daily throughput of vehicles and pedestrians, door-to-door travel times and vehicle and pedestrian wait times. A larger vessel, especially if it is the ONLY vessel does not guarantee shorter trip time. Loading and unloading time may be slower; the number of trips per hour may be fewer. A Bellingham or other mainland destination would increase the crossing time and decrease frequency. Performing this analysis early would help clarify which new vessel alternatives studies are worthy of fully-fledged investigation and would provide the basis for a more detailed optimal vessel design.
2. Identify and adopt level-of-service (LOS) criteria and measures for the future ferry system. Doing this early will allow for community input and help define what performance levels the future ferry system should ideally be capable of. Data on travel needs from the proposed Island survey (see below) may be incorporated into this LOS analysis.
3. Confirm the system requirements and prepare draft system requirements report.

### **III-B.4 Investigate Possible New Terminal Locations on the Island.**

A new terminal location on the Island may allow for service to Bellingham. To explore this opportunity, the consulting team recommends that the County:

1. Conduct an investigation and fatal flaw analysis of possible new terminal locations on Lummi Island to determine whether any feasible options should be carried forward into Phase III-C.
2. Consult closely with Islanders, who often are uniquely knowledgeable about Island conditions and issues, about any proposed locations, to ensure appropriate terminal placement fully reflecting local experiences and conditions.

### **Jointly with the Sub-Area Plan:**

The consulting team understands that the main effort for the Sub-Area Plan will be carried out in 2002. To ensure that the Ferry System Plan addresses and meets the goals and objectives of the Sub-Area Plan, the consulting team recommends that a selected list of tasks from the Sub-Area Plan be completed in 2001, concurrently with the Ferry System Plan. They are outlined in the following. Items III-B5 and B6 need to be coordinated, because adequate survey questions for visioning should provide direction for ferry service analysis of alternate growth forecasts.

### **III-B.5 Conduct a Joint Island Survey and Complete the Visioning Process for the Sub-Area Plan.**

To more precisely determine Islander transportation needs and preferences and their vision of the future, an in-depth survey will be needed. Since transportation will be a critical component of the Sub-Area Plan, the consulting team recommends that the survey be one of the tasks to be completed in 2001:

1. Design, pre-test, implement and analyze a professionally-conducted combined transportation and Sub-Area Plan Island mail or phone survey of needs, vision and existing conditions. An Island subcommittee with expertise in research methods has already begun developing survey issues related to the Island vision and land use.
2. Complete the Island visioning process and use the results to set the stage for an appropriate range of ferry system options to investigate in Phase III-C.

### **III-B.6 Prepare Activity Forecasts.**

Population growth increases demand on the ferry system. Under this task, the consulting team has combined population and ferry travel demand forecasts.

1. Develop Island population and economic forecasts and demographic profiles based on 2000 Census, the Island survey, permit and subdivision data, and other relevant sources (e.g., water and septic information).
2. Use population, survey indications of travel needs, historic ridership data and other sources to develop ferry system vehicular and pedestrian ridership forecasts for different population-economic forecasts.

### **Phase III-C: Longer-term Investigation Items (2001-2)**

Phase III-C is comprised of: 1) communication with stakeholders during the decision process; 2) longer-term investigation that will culminate in an objective rank-ordering of alternatives; and 3) concept design of the highest-ranked alternative and development of a TEA-21 application or other appropriate funding sources for the preferred alternative. The data supporting the rank-ordering of alternatives will form the basis for an application for federal TEA-21 or other funding. Alternatives identified thus far were shown in the Executive Summary. Others may arise during the investigative process.

More than one acceptable alternative should be identified even if federal funding is sought for only one, because many unknown factors (e.g., changes in economic or political circumstances) might make the highest-ranked alternative infeasible. Effective long-term planning requires sufficient delineation of acceptable alternative plans to be able to quickly move forward, should the highest-ranked option become infeasible. Obtaining and analyzing adequate information about several alternatives will be done under Steps III-C4 through C8.

Communication with stakeholders: Steps III-C.4 to III-C8 will provide the information upon which analysis and the rank-ordering process of alternatives will be based. Thus, those steps will precede the dissemination of information, discussion, feedback about, and final rank-ordering of alternatives to Islanders, County officials and Lummi Nation representatives described below. Some joint meetings among stakeholder groups should be held to ensure consideration of all implications of the various options.

### **III-C.1 Continue the Community Participation Plan.**

The public involvement program initiated under III-A will continue during the ferry system selection phase of the project. The consulting team recommends the following approach:

1. Provide regular updates of the web site on the planning process.
2. Coordinate with and solicit input from the Lummi Island Transportation Committee at critical decision points, which will be jointly determined.
3. Prepare and present the results of the analysis (including data) of the selected alternatives to all Islanders:
  - a. Distribute, at the ferry and other appropriate locations, a newsletter about the alternatives; non-residents will be mailed the newsletters;
  - b. Conduct at least one public meeting to discuss and get feedback about each alternative; and
  - c. Solicit written feedback, including from those unable to attend meetings.
4. Rank-order the alternatives based on the analysis and on community, County and (as appropriate, Lummi Nation) feedback:
  - a. Conduct a public meeting to discuss and get feedback about the alternatives; and
  - b. Solicit written feedback, including from those unable to attend the meeting.

### **III-C.2 Brief and Solicit Support From Elected Public Officials.**

The support of elected officials will be critical in Whatcom County's efforts to obtain FBD program funding under TEA-21 or its successor, or any other relevant federal funding. This task serves to ensure that elected officials at the local, state, and federal level are informed about the ferry system plan and support its results:

1. Brief elected officials on the selected alternatives.
2. Solicit their input for rank-ordering of alternatives.
3. Seek support for a subsequent application for FBD Program funds under TEA-21 for the highest-ranked alternative for which TEA-21 funds would be appropriate.
4. Describe any other potential funding sources (private or governmental) for implementing highly-ranked alternatives.

### **III-C.3 Brief and Discuss With the Lummi Nation.**

Whether or not the mainland terminal remains at Gooseberry Point, this decision will impact the Lummi Nation. Therefore progress on the planning process and opportunities for Lummi Nation input should be continued throughout Phase III-C:

1. Brief representatives of the Lummi Nation on the proposed alternatives.
2. Solicit their input and support for various alternatives.
3. Determine points of mutual benefit and concern.
4. Identify potential joint funding ventures (business, non-profit, or federally funded).

### **III-C.4 Analyze and Synthesize the Data Collected Under Phase III-B.**

We will analyze and synthesize the information and data that are needed for the selection process. To carry out this task, the following is needed:

1. Review and, where necessary, refine and expand on the preliminary system objectives and evaluation criteria developed in Phase I. This will integrate the level-of-service (LOS) measures developed in Phase III-B to address Growth Management Act requirements and support the evaluation of ferry alternatives and future planning efforts.
2. Analyze existing ferry vehicle and passenger counts, including proposed data collection under Phase III-A during 2001, in relation to the Level-of-Service (LOS) measures.
3. Analyze and utilize results of an in-depth community trip purpose/mode/origin-destination survey in coordination with Sub-Area Plan survey work.
4. More fully evaluate potential new terminal locations both on the Island and the mainland assuming a new Island embarkation point passes the “fatal flaw” test in Phase III-B.

### **III-C.5 Refine the Vessel Design and Range of Alternatives for Full Investigation and Define the Resultant System Requirements.**

This task serves to identify the alternatives that will go through further analysis:

1. Refine the work from Phase III-B to develop an optimal range of vessel sizes, using inputs from the Sub-Area Plan visioning process.
2. Through a public process, review the nine alternatives depicted in the Executive Summary and narrow them down to for fuller investigation.
3. Confirm the system requirements and prepare the Final System Requirements Report.

### **III-C.6 Develop Financial Information and a Financing Schedule.**

It will be necessary to identify existing and develop potential new funding sources, and determine the level of funding that could be achieved from each of these sources. The consultant team recommends:

1. Perform a detailed analysis of a range of fare structures and levels, showing for each the recovery rate and the potential “surplus” that could be incorporated into a new vessel and/or pertinent facilities fund between 2001-2 and the date the new vessel and/or pertinent facilities come into service.
2. Monitor and evaluate 2001 and 2002 State legislative actions regarding transportation finance and determine their implications for the Lummi ferry and transportation system.
3. Identify other potential funding sources. This should for example include a review of any new legislation that may pass the Legislature, such as new regional authority for transportation taxes.
4. Review the State gas tax subsidy calculation methodology. This should include an analysis of how the distribution of that portion of the fuel tax is determined, and how any fare revenues that are earmarked for capital expenses would affect State ferry subsidies.
5. Determine the fare rate requirements, fare structure and level options and their implications for recovery rates for the different ferry alternatives.
6. Create annualized requirements to finance each alternative.
7. Review State and Federal capital grant requirements in preparation for Task III-C.7 below.
8. Review Whatcom County’s capital financing alternatives and the potential impact of the selected alternatives on the property tax contributions Whatcom County receives from unincorporated areas.
9. Prepare a report on the findings of the financial analysis.

### **III-C.7 Conduct the Analysis of the Selected Alternatives.**

This task involves developing descriptions for and evaluating the alternatives selected under III-A. The descriptions will be detailed enough to allow for an informed selection of the preferred alternative but will not reach the level of detail required for concept design. The consulting team will describe the main features and order-of-magnitude costs for each selected alternative:

1. Identify and describe the main features of each selected alternative. This will include basic, sketch-level information on:
  - a. Vessel(s);
  - b. Schedule;
  - c. Crew;
  - d. Slip and loading ramp;
  - e. Holding lane;
  - f. Parking (both sides); and
  - g. Waiting areas for walk-on passengers and drop-off/pick-up vehicles.
2. Develop basic capital and operating cost estimates for each alternative and its major components.
3. Prepare a list of advantages and disadvantages for each alternative. This will be based on the selection criteria and level-of-service measures finalized under III-C.4 and 5.

### **III-C.8 Select the Preferred Alternative.**

Under this task, the evaluation criteria will be used to determine which of the selected alternatives meet the system objectives. It involves narrowing the alternatives down to 1 preferred alternative that will go forward. The objective is to select both a preferred vessel and its related *systems* (terminals, access, fare collection facilities and other facilities.):

1. Conduct a value analysis of the selection criteria. Some of the objectives are mutually exclusive, making it necessary to weigh the different objectives and related evaluation criteria to identify the preferred alternative.
2. Work with the community and Whatcom County staff to develop appropriate weights to select the best alternative.
3. Coordinate efforts with the County's comprehensive planning efforts to ensure that the weighted evaluation criteria accurately reflect Whatcom County's comprehensive planning goals.
4. Select the preferred alternative with the help of the public and elected officials and take it forward into concept design (see below).

### **III-C.9 Develop and Implement a Long-Term Transportation Demand Management (TDM) Program.**

Whether or not any new facilities or ferry emerge as the preferred alternative, we recommend developing a more detailed TDM approach based on the pilot program and any new decisions made about future facilities:

1. Develop a more detailed TDM approach based on findings of 2001 van improvements.
2. Develop cost analyses and other details (e.g. if there are vans, who owns and operates them). Although a standalone TDM program may not meet the travel needs of the community (its effectiveness will depend on many factors), we recommend that a strong TDM program should be a component of the selected ferry system alternative.
3. Determine potential funding mechanisms for the TDM program.
4. Implement the program and plan for modifications relative to likely changes in the ferry system. However, we recommend that a strong TDM program should be a component of the preferred ferry system alternative.

### **III-C.10 Conduct Appropriate Environmental Studies for the Future Ferry System.**

This task serves to identify and carry out the environmental impact assessment efforts that will be required for implementation of the preferred alternative. Even keeping the current *Whatcom Chief* and terminals for another 20 years has environmental consequences.

1. Identify the needed Environmental Impact Statement/Environmental Assessment work. Once the preferred alternative has been identified, it will be necessary to determine what environmental analysis will be necessary to ensure that the new ferry

- system and all its components comply with the State and National Environmental Policy Acts (SEPA and NEPA) and the Endangered Species Act (ESA.)
2. Evaluate the environmental impact of the ferry system on all marine traffic and wildlife in Hale Passage, the impact of an increased number of cars on the Island and through the Lummi Reservation, as well as on the human and natural communities.
  3. Carry out the required analysis.

### **III-C.11 Develop the Concept Design and Cost Estimate for the Preferred Alternative.**

Once the preferred alternative has been selected, the consultant recommends these tasks:

1. Identify the facility and operating requirements for the preferred alternative. This will include requirements for:
  - a. Vessel(s);
  - b. Schedule;
  - c. Crew;
  - d. Slip and loading ramp;
  - e. Holding lane;
  - f. Parking (both sides); and
  - g. Waiting areas for walk-on passengers and drop-off/pick-up vehicles.
2. Develop capital costs for all elements of the selected ferry system alternative. Capital costs would include initial vessel development and construction costs, expected periodic repair and replacement costs over the life of the vessel(s), and likely salvage values of the vessel(s) over a series of time periods (e.g., 10-15-25-50 years). It would also cover other related capital items such as vehicles, docks, waiting areas, holding lanes, parking, road improvements, and others.
3. Develop operating costs for all elements of the selected ferry system alternatives. This would for example include staffing, fuel and expendable supplies, annual standard maintenance and items not covered by capital costs under periodic maintenance and repair.

### **III-C.12 Develop the Implementation Plan for the Preferred Alternative.**

This task will be to develop a plan for implementing the preferred alternative:

1. Develop schedule, cost, and a financing approach.
2. Prepare contract drawings, specifications and Request for Proposals (RFP) for acquisition of a new vessel to meet the requirements of the selected alternative.
3. Finalize development of the contract package.
4. Issue RFP when all other steps complete.

### **III-C.13 Prepare and Submit the TEA-21 FBD Program and/or Other Relevant Application(s).**

The goal of this task is to prepare the federal application package in a timeframe to achieve County Council approval of submission and a commitment of the needed level of

County funding by no later than May 2002, should the preferred alternative warrant such an application.

1. Develop the data from the analyses in previous tasks and any new data needed specifically for the federal application.
2. Coordinate with elected officials and other relevant parties (Congressional level, Lummi Nation, local, state) to develop a strong application for FBD Program funding that provides compelling evidence of their support.
3. Prepare an application packet to gain County Council approval by May 2002 for TEA-21 federal funds to be sought in FY 2003.

## **APPENDICES**

## I. COMMUNITY CHARETTE COMMENTS

The meeting took place on the evening of May 8, 2001. Appendix V lists invitees /attendees. The following summarizes the key points made, under seven headings:

- Operations and level-of-service;
- Emergency coverage;
- Community relations;
- System costs, fares, and finances;
- Physical infrastructure;
- Safety and security; and
- High Occupancy Vehicle (HOV) access and connections.

There was widespread agreement on these issues unless specifically noted.

### A. Positive Issues

#### A.1 Operations and Level of Service

- The service is seen by agency personnel and riders alike as reliable with only a few unscheduled dry-dock events during the life of this vessel; the schedule is maintained;
- Some residents appreciate the fact that having the last ferry at midnight means there is less late night traffic on the Island; and
- The ferry operation has a good safety record.

#### A.3 Emergency Coverage

- Good relationships exist among the ferry staff and emergency management service providers;
- Emergency service provision is going well; the ferry personnel and emergency responders are in contact by radio; the ferry gets quickly where it's needed to be;
- Islanders commented that it is important to them that the ferry be crewed by Islanders and that the Whatcom Chief ties up on the Island so it is available for emergency services.

#### A.4 Community Relations

- Islanders feel the crew takes good care of the (school) kids;
- The Islanders appreciate communication about the Ferry System Plan update and how it is being done; and
- Dry-dock time is celebrated by some residents as a time of peaceful, communicative travel, when they can actually chat with their neighbors on the passenger vessel, instead of being "trapped" inside their cars on the deck.

#### A.5 System Costs, Fares and Finances

- Most residents at the Charette felt fares are inexpensive.

## **B. Concerns**

### **B.1 Operations and Level of Service**

#### **B.1.1 Lack of Vessel Capacity**

- Islanders generally are frustrated at growing capacity limitations and the resultant uncertainty in planning their travel;
- A petition was submitted, signed by about 200 Islanders, which asks for better ferry service and long term resolution of issues;
- One resident indicated he had done a graph projected at 2.5% growth rate and at that growth rate with same population leaving the Island every day, “in 2006, every person wanting to leave in the first 8 hour shift won’t be able to leave”;
- There is concern than actual vehicle capacity of the system is reduced due to large vehicles which do not pay a proportionate share to make the crossing;
- There is also some concern that less vital trips could be eliminated at peak times or altogether if rates were higher;
- There is always room on the ferry for walk-on passengers. It is perceived that vehicles are the problem; so changing the fares would change the traffic. Decreasing or even eliminating the fares charged for walk-ons and increasing the vehicle fares would create a better balance;
- The large amount of construction under way on the Island has increased construction truck traffic;
- Capacity is also reduced by the weekly fuel-only runs; and
- Summer traffic has a major impact – many summer commuters; the Island population triples according to many sources.

#### **B.1.2 Scheduling Considerations**

- Many riders believe crew breaks interfere with the ability to operate extra runs when needed;
- During the school year, both vessel cabins are somewhat full of kids on the 7 AM school crossing, resulting in little room for other passengers;
- Some believe midnight is too early for the last ferry run;
- Some households have a concern that currently if someone works on the mainland on a Saturday they have to stay overnight in Bellingham because of the limited weekend ferry schedule; and
- The community’s observation generally is that the ferry does not wait if the school bus delivering kids on the mainland side is delayed for some reason, leaving school kids stranded with virtually no shelter, until the next boat.

#### **B.1.3 Dry-dock Difficulties**

- Dry-dock period logistics, usually about 3 weeks when a passenger-only boat is brought in, can be very challenging, especially for commuters;
- All households and businesses have to make special arrangements, some residents feel that they have to own extra vehicles, dollies etc. just for use in this short

period of the year, which they feel creates an additional cost burden on all Islanders; and

- Parking on the Lummi Island side is a huge problem during dry-dock as well as in general.

## **B.2 Physical Infrastructure**

### B.2.1 Vessel Limitations

- Vessel lacks crew bathrooms and this appears to be seen as affecting break times and duration.

### B.2.3 Lack of Adequate Parking on Either Side

- Lack of secure, adequately sized parking at Gooseberry Point means that only a few people leave a car on the mainland and walk on to the ferry on the Lummi side;
- Lack of access to the Lummi Island side dock by any kind of transit, coupled with lack of much auto (or any bicycle) parking, and very limited drop-off space mean that people tend to drive on to the boat as their primary choice of travel. Security of cars on the Lummi side is not an issue, but the total capacity is;
- The comment was made that for every one parking space on the Gooseberry side there must be a plan for one on the Island side too;
- It was agreed that ferry schedule signage on Gooseberry point is outdated and inaccurate. It has never been corrected since the schedule changed;
- Some riders would like to see a parking space for the school bus on the Gooseberry side;
- Others want a public phone close to the ferry on at least the Gooseberry side; and
- The comment was made that there are good restrooms on the Lummi Island side and poor restrooms on the Gooseberry side, and that there are very few places to stay out of the weather on the Gooseberry side.

## **B.4 Community Relations**

### B.4.1 Communications

- Concern was expressed that the ferry planning process needs to be explained better and kept current, with annual updates; and
- It was noted by one participant that the Island Ferry and Transportation Committee identified communications between Public Works and the Island is a problem.

### B.4.2 Lifestyle Issues

- Some, perhaps not the majority, feel that ferry lines are harming the Island's sense of community – too much time away from home life, unreliable arrival times at community and family functions; and
- Some users feel that the system as currently configured may force a household to have two or even three cars, to deal with dry-dock auto ferry outage.

## **B.5 Safety and Security**

### **B.5.1 Lack of Safety on the Boat Deck**

- The deck lanes are so narrow that most drivers are confined to their vehicles once loaded;
- The narrow deck lanes are also a problem for the crew both as they try to collect fares, and if they need to get to a driver for any other reason; and
- “Walk-on” passengers, and especially any disabled passengers, have extreme difficulty accessing the passenger lounges due to narrow car lanes, the narrow entrance to the lounges, and a step. While the deck hands assist the (occasional) disabled passenger, this is still a safety hazard and a potential cause of schedule delays.

### **B.5.2 Potential Lack of Safety in the Lummi Island Terminal Area**

- Parents bringing school-children to the ferry for drop off create a vehicle congestion point; few use the available school bus for ferry access; late school drop-offs cause running and mixing of cars and pedestrians on the loading ramp; and
- The Lummi Island ferry terminal area (one of the few paved surfaces other than roadways on the Island) has been a popular spot for skateboarding, roller-blading and similar activities, causing a safety hazard as cars enter the area, often in a rush.

### **B.5.3 Insufficient Safety and Security at Gooseberry Point**

- The recent assault and rash of break-ins and vandalism have made ferry riders increasingly reluctant to park a car on the mainland. This is not only a safety and security issue in itself, but substantially hurts capacity since those no longer willing to park a second car at Gooseberry Point then must bring it across each day;
- There is community concern in some quarters about the need for a stronger and more win-win relationship with the Lummi Nation; and
- Some feel the ferry terminal at Gooseberry Point does not currently provide obvious benefits for the Lummi Nation.

## **B.6 System Costs, Fares and Finances**

### **B.6.1 Inadequate Fare Procedures: Fares, Fare Policy, Fare Collection/Revenue Control**

- Many residents feel fare policy seems inequitable – there needs to be a different pricing relationship among cars, trucks, other over-size vehicles, and pedestrians;
- Some residents have expressed a concern that there are too many different types of discount fare;
- Increased fares may reduce traffic; and
- The age of the vessel likely will lead to greater maintenance costs; One participant suggested that with regard to pricing, whatever vessel is procured in the future, one thing to look at is an LID or latecomers fee. One way to deter growth would be an Local Improvement District for newcomers to the Island to

help pay for the increment in transportation facilities that their arrival necessitated, including a share of the new vessel.

### **B.7 High Occupancy Vehicle (HOV) Access and Connections**

- Bus service meets 8 ferries per day only, with a 90-minute headway; the bus service has been in place since 1994 and ridership does not warrant more coverage;
- Due to the passage of Initiative 695 in fall of 1999, Whatcom Transit is using up reserves to pay its bills and will not be able to continue much longer without added funding from some source; rural routes such as the Gooseberry Point run are the most likely to be cut;
- It was agreed that everybody has to go some place different, making use of transit hard;
- One participant commented that the state spent a lot of money on a study of the various Washington State ferry routes and found only two that have high walk-on rates, with the reason being availability of good transit connections and a high concentration of employment downtown. Lummi Island does not have either. All other ferries were found to run between 11-15% walk-ons;
- A frequently-expressed concern was that in order to have many people parking their car on the other side there needs to be a pleasant, dry place to wait for the ferry. It has to be negotiated with Lummi nation if it requires more space;
- One resident expressed a sentiment that a vanpool is a change in lifestyle and will not be accepted. On being asked, the majority in the room agreed that would not be accepted;
- One resident commented that when the van was on the Island for dry-dock he never caught it because he never could match his going and coming with the van's;
- It was suggested that an event bus is an alternative, for use when larger numbers of adults or students are all going to the same place such as a soccer game on the mainland. "One area where a vanpool may be useful on the other side is during various athletic events. We have various teams and having been a participant in that knowing when you try to get off the Island for a certain game and you have part of your team carpooling and you have a couple of different teams going, sometime half that ferry boat load is different people driving their kids in for soccer or whatever. It might be advantageous to see if we can provide a van for those people to try and relieve some of that congestion";
- Some residents had concerns that a point that needs to be addressed is the possibility of getting more high school kids to ride the bus instead of drive. It was mentioned that there are still enough students going into school by car to jam up the ferry a couple of runs in the morning;
- Others countered with an explanation that some high school students are going to the community college in Bellingham not the high school, plus after-school activities make for varied schedules not fitting with the school bus;
- The Island perception is that the bus often leaves just as the ferry is docking, or as would-be passengers are running off the boat to catch it; "They (WTA) still leave

one minute before the ferry docks.” “Bad connections to the bus in town. They’re better than they were but they’re still not all that great;”

- There is no van service on the Island side except during dry-dock and even then it does not get used much;
- Increased bus ridership could, in any case, mean more walk-ons onto the boat, which could slow down loading; and
- It was agreed that people needing to make bus connections could take a scheduled ferry run before the one that would have a tight connection with the bus. The problem lies partly with there being only such a poor place to wait at the Gooseberry side. The bus shelter is only any use depending on which way the wind’s blowing. The bus shelter is inadequate.

## II. AGENCY CHARETTE COMMENTS

This meeting took place on the afternoon of May 8 and the attendees are listed in Appendix V. The comments were generally made by the pertinent agency representative.

### A. Positive Issues

#### A.1 Operations and Level of Service

- The service is seen by agency personnel and riders alike as reliable, with only a few unscheduled dry-dock events (breakdowns) during the life of this vessel; the schedule is maintained;
- The ferry operation has a good safety record; and
- WTA made the comment that whether it is this year, next year, or in two years, the pressure of increasing demand will force the issue of more ferry capacity. They feel more WTA service is not a choice that will solve capacity problems because most people will not ride the bus more. WTA's conclusion is that either a larger ferry is needed, or reducing the number of vehicles on the ferry, through more walk-ons getting to a parked car at Gooseberry Point, requiring improved Gooseberry Point security. On the Island side, there then must also be some way to get from the ferry terminal back home -- a shuttle service or other option, with a cost attached, but that's the only way that seems convenient enough to be a realistic alternative to greater vessel capacity.

#### A.2 Physical Infrastructure

No specific agency comments.

#### A.3 Emergency Coverage

- Good relationships exist among the ferry staff and emergency management service providers;
- Emergency service provision is going extremely well including coordination with fire dept and ferry for after hours and during hours for emergencies; the ferry personnel and emergency responders are in contact by radio; the ferry gets quickly where it's needed to be; and
- The consensus of emergency service providers is that the current system works well; having the crew be Island residents and the vessel tie up on the Island in order to be available for emergency runs provides a workable system for the 25 or so emergency runs that are made each year.

#### A.4 Community Relations

No specific agency comments.

#### A.5 System Costs, Fares and Finances

- The system is meeting its recovery rate goals;
- There has not been a fare increase since 1989;

- Whatcom County indicated it recovers about 60% of ferry operating costs from the fares. By ordinance, the County is supposed to recover 55% but it has averaged 60%. The way the County has used the 55% standard is that if they experienced a collection rate of less than 55% they would start a rate adjustment. This has not been necessary in recent years but may be needed now;
- Prices for parking: if it's improved, will be an issue;
- Another issue is whether the price paid for a walk-on passenger should be more competitive compared to the price for a car trip; and
- Washington State Ferries separates operating costs and capital costs. Likewise, Whatcom County has never factored in recovering any of the capital costs associated with ferry operations. The recovery rate on capital investment will have to be put on the table as part of the 20-year plan.

## **B. Negative Issues**

### **B.1 Operations and Level of Service**

#### **B.1.1 Lack of Vessel Capacity (these comments mirror the community comments)**

- At 20 vehicles per run, the *Whatcom Chief* is no longer large enough to accommodate daily vehicle crossing demand and both morning and evening peak periods are extending to several hours. While the vessel can and does make more than the scheduled runs if vehicles are left behind, its theoretical maximum is still only 3 runs each way per hour, and after about 2 hours this cannot be maintained and schedule slippage becomes evident;
- The actual vehicle capacity of the system is reduced due to large vehicles such as concrete trucks, boats under tow, horse trailers and RV's which are heavier and wider, requiring more than the 90-91" lane space and thus precluding several automobiles each time they must cross;
- The large amount of construction under way on the Island has increased construction truck traffic;
- Capacity is also reduced by the weekly fuel-only runs; and
- Summer traffic has a major impact – many summer commuters; the Island population triples according to many sources.

#### **B.1.2 Scheduling Considerations**

- Contrary to the apparent belief of many riders, crew breaks do not interfere with the ability to operate extra runs when needed; adding an extra crew person would not facilitate more vessel runs at peak periods of the day although it could allow for more runs at less in-demand times;

#### **B.1.3 Dry-dock Difficulties**

- Lack of a backup or second auto vessel necessitates a 2-3 week dry-dock period each year as well as the occasional unscheduled dry-dock time, leaving the Island without car ferry service;

- Parking at Gooseberry Point during dry-dock is a significant cause of congestion; in past years the Lummi Nation has been very cooperative and the arrangements have worked adequately;
- Parking on the Lummi Island side is a huge problem during dry-dock as well as in general; and
- Emergency services are more difficult and costly to provide during dry-dock and include the County Sheriff stationing a patrol car on the Island; a serious illness or accident during dry-dock would necessitate more costly helicopter evacuation rather than the normal use of an ambulance. However, dry-dock has not presented emergency response problems so far.

## **B.2 Physical Infrastructure**

- Handicapped needs only arise once in a while, not very often. Drivers of handicapped riders usually leave them in the car. Once in a while, the ferry has a wheelchair passenger who rolled on rather than being driven. The ferry system changed the passenger lounge door handles to T handles. The ferry crew helps any disabled person enter. There are very few unescorted disabled riders, partly because there's nowhere to go when they get off;
- There is a concern that the Lummi Island dock areas is usually very congested especially for the 7 a.m. weekday ferry run. It's a situation that could create an accident there. Part of the issue is a high number of pedestrians—many students don't ride the bus. They get delivered to the dock and get the bus on the other side. They ride across; and
- The issue was discussed of whether there is a way to get another drop off lane into the design for safety. It is questionable whether there is room for another lane since a lane needs to be kept open for aid cars to be able to get through.

## **B.3 Emergency Coverage**

- There are disaster response concerns including a need for alternate routing if flooding of Haxton Way cuts off the Gooseberry terminal area; the County Emergency Plan is in place and could be fine-tuned to focus more on Lummi Island.

## **B.4 Community Relations**

No specific agency comments.

## **B.5 Safety and Security**

### **B.5.1 Lack of Safety on the Boat Deck**

- The deck lanes are so narrow (90-91") that most drivers are confined to their vehicles once loaded; if any difficulty were to arise, most travelers would be unable to get out of their vehicles and this condition has worsened as the boat is fuller for more hours of the day; and
- The narrow deck lanes are also a problem for the crew both as they try to collect fares, and if they need to get to a driver for any other reason.

### B.5.2 Potential Lack of Safety in the Lummi Island Terminal Area

- Passengers load first or last, before or after the vehicles; however, late arrivals may try to board while autos are still boarding; the loading ramp and the deck are both too narrow to allow for a separate pedestrian lane; and
- Parents bringing school-children to the ferry for drop off create a vehicle congestion point; few use the available school bus for ferry access; late school drop-offs cause running and mixing cars and pedestrians on the loading ramp.

### B.5.3 Insufficient Safety and Security at Gooseberry Point

- The recent assault and rash of break-ins and vandalism had made ferry riders increasingly reluctant to park a car on the mainland (until the security guard was installed at night). The potential lack of security at Gooseberry Point is not only a safety and security issue in itself, but could substantially hurt capacity since those no longer willing to park a second car at Gooseberry Point then must bring it across each day; however, the new security guard arrangements appear to be successfully addressing the situation; and
- The need for decision-making with Lummi Nation leadership is an ongoing concern; the County is eager to develop and sustain a stronger ongoing relationship and to resolve parking facility needs.

## **B.6 System Costs, Fares and Finances**

- As the number of daily vehicle trips increases, it is becoming ever harder to complete the fare collection during the westbound vessel run without diverting crew attention from needed docking duties;
- There are concerns and potential problems with transfer of the daily revenue from the vessel to a bank;
- Fare policy seems inequitable – there needs to be a different pricing relationship among cars, trucks, other over-size vehicles, and pedestrians; and
- The age of the vessel likely will lead to greater maintenance costs.

## **B.7 High Occupancy Vehicle (HOV) Access and Connections**

- Bus service attempts to meet 8 ferries per day only, with a 90-minute headway; the bus service has been in place since 1994 and ridership does not warrant more coverage;
- Due to the passage of Initiative 695 in fall of 1999, Whatcom Transit is using up reserves to pay its bills and will not be able to continue much longer without added funding from some source; rural routes such as the Gooseberry Point run are the most likely to be cut;
- Islanders do not appear to have had an opportunity to thoughtfully consider the benefits of carpooling and van usage for reducing automobile congestion on the ferry. A recent carpool matching attempt by Whatcom Transit Authority (WTA) was not productive. However, Islanders may already be informally car-pooling and hence perceive additional WTA-matching as unnecessary. Data are needed to

evaluate that possibility and steps needed to ascertain more fully the conditions under which carpooling is effective for residents.

- The small degree of interest in carpooling and vanpooling is an issue that WTA faces system-wide; in Whatcom County, they have battled this since 1995 and feel that where you have free parking and no congestion transit use is a tough sell;
- WTA indicates the buses have a 9-minute layover at the Gooseberry terminal bus stop in order to pick up ferry passengers. Their route cannot wait beyond that because then the timed “meet” of all the buses in Bellingham would be thrown off schedule and Gooseberry route riders may miss their next connection; there is a concern that sooner or later someone will trip trying to catch the bus;
- It was noted that a person could take a later with less rushed bus connections but then they have to wait for 15 minutes and that has not been entirely safe; there have been some problems;
- Whatcom Transit indicates that bus ridership involves only 5-10 regular daily riders (who have figured out and memorized the bus and ferry schedules); it is agreed to be hard for newcomers to utilize;
- On the Lummi Island side, there is no prospect of bus service other than the WTA Paratransit service that goes door-to-door to serve qualified disabled and elderly passengers (usually a weekly doctor’s appointment and the like); and
- There is no van service on the Island side except during dry-dock and even then it does not get used much.

### **III. CITIZEN LETTERS**

#### **IV. WHATCOM COUNTY CORRESPONDENCE WITH COMMUNITY**

**V. LIST OF CHARETTE INVITEES AND ATTENDEES  
COMMUNITY CHARETTE**

NAME	INVITEE	ATTENDEE
Jerry Anderson	X	X
Chuck Antholt	X	
Charles Baker	X	
Lauren Christensen		X
Chuck Cowley		X
Bob Fodor	X	
Kathryn Galvin	X	X
Linda Granger	X	X
David Harmony	X	X
Bud Jewell	X	X
Kevin Jones		X
Dan Johnson	X	X
Dana Kershner	X	X
Steve Luke	X	X
Albert W. Marshall	X	X
Sheila Marshall		X
Janet McCrary	X	X
Judy Olsen	X	X
Ian O’Callahan	X	X
Brad O’Malley	X	
Ernest Pearson		X
Craig Smith		X
Art Thomas	X	X
Leo Travenshek	X	
Beach Store Café	X	
Leo’s Live Seafood	X	

**AGENCY CHARETTE**

Mary Green—Co. PW Fleet Manager—Ferry Operations	Jeff Monsen—PW Director	Rick Nicholson—WTA—Bus/Ferry Connection
Matt Aamot—WC Planning	Kim Sederstrom—WTA	Don Hayes--Ferry Captain
Dick Prieve—Assistant Director of PW	Mark Goodman--San Juan Island Shuttle Express	Craig Smith—Lummi Island Fire Dept.
Bob Bush Lummi Island Fire Dept.	Bob Williams—Financial consultant	Julie Rodwell—Project Manager—Hanson Professional Services
Ralph Duncan—Art Anderson Associates	Eric Good—Ferndale School District Transportation	Don Boyd—Emergency Mgmt—WC Sheriff
Darryl Klute	Dustin Hurlbut—WC Sheriff	

**VI. FINANCIAL DATA**

<u>Ferry Costs and Revenues:</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>
<b><u>Costs</u></b>					
Operating Costs	895,183.16	841,766.02	848,397.28	812,561.33	790,959.88
1999 Ferry Incident Costs	40,607.68				
Capital Expenditures	93,332.78				
Dock Maintenance	45,162.85	41,753.56	16,968.41	44,648.65	44,158.86
CRP #994010 Ferry Queuing/Terminal Facilities	55,611.57				
CRP #998021 Ferry Slip Painting	704.81				
<b>Total Costs</b>	<b>1,130,602.85</b>	<b>883,519.58</b>	<b>865,365.69</b>	<b>857,209.98</b>	<b>835,118.74</b>
<b><u>Revenues</u></b>					
Punch card Sales	162,440.15	146,832.98	138,807.04	136,497.65	153,326.55
Cash Fares	333,949.25	316,355.25	314,856.80	300,656.47	303,473.06
<b>Total Ferry Tolls</b>	<b>496,389.40</b>	<b>463,188.23</b>	<b>453,663.84</b>	<b>437,154.12</b>	<b>456,799.61</b>
Punch card Sales	18.15%	17.44%	16.36%	16.80%	19.38%
Cash Fares	37.31%	37.58%	37.11%	37.00%	38.37%
<b>Total Ferry Tolls as % of Operating Costs</b>	<b>55.5%</b>	<b>55.0%</b>	<b>53.5%</b>	<b>53.8%</b>	<b>57.8%</b>
<b>Cash Fraction of Fares</b>	<b>67.3%</b>	<b>68.3%</b>	<b>69.4%</b>	<b>68.8%</b>	<b>66.4%</b>
<b>Punch card Fraction of Fares</b>	<b>32.7%</b>	<b>31.7%</b>	<b>30.6%</b>	<b>31.2%</b>	<b>33.6%</b>
<b><u>Motor Vehicle Fuel Tax-Road</u></b>					
MVFT from deficit report	3,217,495	3,069,206	2,944,398	2,884,056	2,713,831
Ferry Allocation rate	5.52%	5.34%	5.54%	2.77%	2.75%
<b>MVFT Ferry Allocation Amount</b>	<b>177,605.74</b>	<b>163,895.62</b>	<b>163,119.63</b>	<b>79,888.35</b>	<b>74,630.35</b>
<b>Motor Vehicle Fuel Tax-Ferry (50% of deficit pool)</b>	<b>48,730.00</b>	<b>89,148.00</b>	<b>165,157.00</b>	<b>185,699.00</b>	<b>160,697.00</b>
<b><u>Grant Funds for CRP's</u></b>					
CRP #994010	34756.54				
CRP #998021	563.85				
<b>Total Grants</b>	<b>35,320.39</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>County Road Local Funds</b>	<b>372,557.32</b>	<b>167,287.73</b>	<b>83,425.22</b>	<b>154,468.51</b>	<b>142,991.78</b>
<b>Total Revenues</b>	<b>1,130,602.85</b>	<b>883,519.58</b>	<b>865,365.69</b>	<b>857,209.98</b>	<b>835,118.74</b>

Source: Whatcom County Department of Public Works

## VII. VESSEL PROCUREMENT TIMELINE

Much discussion has taken place about the need for a new ferry despite the fact that the current ferry could have a long life. Procurement of a new ferry is not an instantaneous process.

1. First, general programmatic requirements have to be agreed upon – how big a boat, how wide are the lanes, how is the superstructure to be configured for best loading, does it have crew restrooms, what about passenger restrooms, and so on.
2. These programmatic requirements are then coupled with more detailed requirements regarding the materials, engines, speeds, control systems, warranty requirements and the like. These detailed specifications should be developed with great care to ensure that the new ferry will do the job it is expected to do, as they form the basis for the boat's blueprint;
3. Then the plans and specifications go out to bid and interested shipbuilders submit fee proposals;
4. From the time that bids are received, to the time that the vessel is built, tested in dry-dock at dockside, put through sea trials and accepted could be as much as two years;
5. Thus, allowing time for developing the programmatic requirements, developing the plans, specifications and engineering package, getting funding, and for any contingencies, a new vessel would take about 3 years to obtain if the process began tomorrow; and
6. A realistic timeframe for delivery of any new vessel (given the time required for doing and adopting this 20-Year Plan and funding its recommendations) is thus 2005-2006.

## VIII. TEA-21 REQUIREMENTS -- FHWA'S FERRY BOAT DISCRETIONARY (FBD) PROGRAM

### Program Description

- About \$14 million nationwide annually during FYs 2000 through 2003. (The program total is \$38 million annually. There is a set-aside for direct appropriations of \$20 million for marine highway systems that are part of the National Highway System, WSF get \$5 million annually. Another \$4 million are unavailable due to an obligation limitation imposed on the Federal-aid Highway program, they are distributed to states as Surface Transportation Program (STP) funds.)
- Federal funds can cover up to 80% of any project. Local match is 20%.
- The program under TEA-21 has basically remained unchanged from the program under ISTEA. The expectation is that this will also be the case with NEXT-TEA, both in terms of selection criteria and funding levels.
- FHWA usually writes a letter soliciting project submittals in March, with submittals being due to WSDOT at the end of June and to FHWA in mid July.
- The program is administered by WSDOT's Local Programs section.

### Project Selection Criteria and Submittal Requirements

- For FY 2001, FHWA tightened the requirements to ensure that only qualified projects are submitted. A major new requirement is that projects must be ready to obligate any Ferry Boat Discretionary (FBD) funds within the fiscal year in which they are received.
- Selection criteria include:
  - **State priorities**—based on a conversation with the Program Administrator at WSDOT, these are not very well defined but are more or less based on Federal criteria.
  - **Leverage of private or other public funding**—Because funding requests each year far exceed available resources, FHWA is looking for a significant commitment of local funds.
  - **Amount requested**—Because demand for funds vastly exceeds available funds, FHWA is discouraging projects requesting more than \$2 million in any given fiscal year.
  - **Geographic distribution**—FHWA tries to distribute funds across all states requesting funds from the program over time. The WSDOT Program Coordinator indicates that, because of the \$5 million set-aside for WSF each year, the chances for other projects from Washington are fairly slim.
- Submission requirements include:

- Information on the state, County, congressional district, and name of representative of the district in which the project is located;
- Description of service termini and ports, including the link in the roadway system;
- Ownership and operational information;
- Current and future traffic, with a general description of the type and nature of the traffic, and information on year-round and seasonal service, commuter, recreational, or visitor ridership, and traffic generators and attractions;
- Description of proposed work, with reference to whether it is part of a larger project;
- Amount of Federal FBD discretionary funds requested;
- Commitment of other funds (only documented commitments);
- Previous FBD discretionary funding;
- Future funding needs;
- Project purpose and benefits, with brief, lay-person's explanation of how the completed project will benefit the transportation network, information on project schedule, planning, and coordination; and
- An area map, if available.

### **Other Pertinent Information**

- To date, the only Washington State projects that have received funding from the discretionary program are some dock work for a ferry across the Columbia River on the Colville Indian Reservation under ISTEA in 1995 and the Elliott Bay Water Taxi in 2000. The Water Taxi project did not go through the regular program, funding was earmarked in Congress.
- The WSDOT Program Administrator indicated that he felt Washington had only a limited chance of getting additional funding since it already receives the \$5 million set-aside.
- Based on previous projects funded, it is not clear that coordination with an economic development grant on the Lummi Reservation or safety concerns with the existing vessel would improve chances in DC, but the latter does for WSDOT's priority process.
- It will be absolutely critical to get the congressional delegation involved if the project application is to have a chance of being funded.
- WSDOT has a policy of sending the five top-ranked applications to DC, however, it rarely gets that many.

## IX. PRELIMINARY EVALUATION CRITERIA

### Preliminary Evaluation Criteria

These evaluation criteria are combined from both Charettes. The alternatives carried forward into Phase III evaluation should be examined and quantified from the standpoint of the degree to which each ferry alternative satisfies at least the following factors. Some of them need expanding in any Phase III:

#### **A.1 Operations and Level-of-Service**

- Level-of-service – e.g. capacity, run times, wait times, frequency, reliability, comfort, trips per capita per year;
- Demand – can this scenario accommodate the demand and will this scenario actually attract ridership; and
- Dry-dock implications – some alternatives enable the annual dry-dock period, during which there is no car ferry service, to be abolished and provide a reserve auto vessel to continue service while the primary vessel is out of service.

#### **A.2 Physical Infrastructure**

- Comfort and passenger amenities; parking/waiting facility quality;
- Crew amenities including restrooms;
- Terminal capacity including loading rates and amenities;
- ADA compliance;
- Environmental considerations especially relating to new work required in aquatic zones; and
- Adaptability of terminal slip to alternate vessels.

#### **A.3 Emergency Coverage**

- Effects on emergency services – medical, law enforcement, fire.

#### **A.4 Community Relations**

- Implications for and relationship with Lummi Nation; and
- Community views.

#### **A.5 Safety and Security**

- Ability of selected system to ensure safe access, parking and transit connections.

#### **A.6 System Costs, Fares and Finances**

- Capital costs – new vessel, holding areas, roads, ramps, parking facilities on both sides, new slips where needed; and
- Operating costs – full costs including ferry operation, parking lot security, van drivers; and fare-portion;

#### **A.7 High Occupancy Vehicle (HOV) Access and Connections**

- Ability of system to maximize transit, carpool and vanpool usage.