

St. Mary's River Ferry System Master Plan Final Report

Submitted to:

Eastern Upper Peninsula Transportation Authority



Submitted by:

The Corradino Group of Michigan, Inc.

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Executive Summary

Introduction

In the summer and fall of 2006, the Eastern Upper Peninsula Transportation Authority (EUPTA), with support and funding from the Michigan Department of Transportation (MDOT), assessed ferry transportation needs for its St. Mary's River Ferry System. The study was conducted by The Corradino Group (Corradino).

The purpose of the study was to assess the existing ferry system serving Drummond, Neebish and Sugar Islands (Figure S-1) and determine capital and operational improvements necessary between now and 2020.

This study has involved the development of information to address these issues through four tasks. These are:

- Task 1: Existing Conditions
- Task 2: Potential for Coordination/Consolidation/Expansion of Service
- Task 3: Service Options and Recommendations
- Task 4: Implementation Plan

The study included public involvement and outreach. The study also included discussions with the staff and Board of EUPTA, operators and crew of each ferry, MDOT, and other ferry boat operations.

History of St. Mary's River Ferry System

Operation of boats along the St. Mary's River to provide transportation for people and goods dates to the middle of the 19th century when a variety of private and commercial operators plied the waters. The first real ferry service between the mainland and one of the islands was at Drummond Island. Service to Sugar and Neebish Islands began in the middle of the century. In 1975, EUPTA was established under Public Act 55 and became the authority for the Drummond service. In 1980, EUPTA reorganized and assumed control of the Sugar Island and Neebish Island ferry services.



Figure S-1
Study Area



Existing Marine Transportation Services

Ferry transportation services along the St. Mary's River are provided by the Eastern Upper Peninsula Transportation Authority (EUPTA), which has operated the Drummond Island Ferry since 1975 when it was incorporated and the Neebish and Sugar Island ferries since 1980. The Board of Directors of EUPTA consists of five members who are appointed by the County Commissioners of Chippewa (three members) and Luce (two members) Counties. Although EUPTA provides ferry service only in Chippewa County, it is a two-county authority because it provides public bus transportation in both counties.

The ferry services on Drummond and Sugar Island are operated by employees of EUPTA. The service to Neebish is bid to private operators, who operate a ferry that is owned, maintained, and fueled by EUPTA. Currently, South Shore Marine operates the Neebish Ferry on a three-year contract. The captains and deckhands who operate the Drummond and Sugar ferries are members of the United Steelworkers of America, Local Union 13685, District 2.

Currently, EUPTA owns four vessels:

- **Drummond Islander III**, (Built 1989) 108', 110 T, single-ended hull, with twin screw, Passenger Capacity – 150, Vehicle Capacity – 24 average.
- **Drummond Islander IV**, (Built 2000), 148', 570 T, single-ended hull, with twin screw, Passenger Capacity – 150, Vehicle Capacity – 32 average. (Operates 24 hours a day year round).
- **Sugar Islander II**, (Built 1995), 114', 110T, double-ended hull, Passenger Capacity 150, Vehicle capacity 24 average.
- **Neebish Islander II** (formerly Sugar Islander), (Built 1946), 89', 40T, double-ended hull, Passenger Capacity - 114, Vehicle Capacity – 12 average.

All of the vessels operated by EUPTA have current Coast Guard inspections. Based on review of this information, none have conditions that will prevent operations in the foreseeable future, although staff has indicated the Sugar Islander design does not function well given its use.

St. Mary's River Ferry System Needs Survey

In July 2006, the consultant administered a survey to passengers on the Drummond, Neebish and Sugar Island Ferries. The purpose of the survey effort was to obtain information from passengers about their travel and perceptions of the system for use in developing a master plan for the system operations.

The surveys were conducted on the following days:

- Drummond Island – July 6, 2006, 7 am to 2 pm;
- Neebish Island – July 7, 2006, 7 am to 2 pm; and
- Sugar Island – July 10, 2006, 7 am to 2 pm.

Over ninety percent of respondents thought the existing service was adequate. In addition, more than eighty percent did not think more frequent service was needed. Some of the improvements for the existing service that were posed by the respondents are noted in the comments at the end of the survey include smaller issues such as landside improvements and bigger issues such as a more stable vessel at Sugar Island. Overall, discussions indicated a high level of satisfaction with the service.

Opportunities and Constraints

Over the past 20 years, the EUPTA has made significant capital investment in its fleet. Nevertheless, some capital issues remain. Because of design issues, the Sugar Islander is an unwieldy boat that discussions with crew and staff indicate should be considered for replacement. Likewise, the Neebish Islander II, the old Sugar Islander, also has design issues that should be addressed. Paramount among these are the fact that certain classes of trucks cannot use it. Operational issues facing EUPTA are more positive. The most significant opportunity is how can EUPTA embrace technology to handle cash and fare transfers, log and monitor maintenance, and provide real time information to staff, crew and passengers about vessel operations.

It should also be noted, that based on the passenger survey conducted as part of this master plan effort, there is a high level of trust and acceptance by passengers in the “product” provided by EUPTA, as epitomized by the captains, crews, and experience of various trips.

Perhaps the largest issues that may affect EUPTA in the next decade is the availability of capital funding through the Michigan Department of Transportation (MDOT). As noted earlier in the report, MDOT has reduced the level of funding available to EUPTA and the Beaver Island Transportation Authority. This could eventually constrict their ability to make needed improvements to their services.

Capital and Service Options

EUPTA faces several challenges in the upcoming years. Figures S-2 through S-4 summarize the strengths, challenges and possible opportunities for EUPTA.

Based on the work conducted during this study, the EUPTA ferry operations on the St. Mary's River System are in excellent shape for the foreseeable future. The survey of passengers, information provided by the crew and EUPTA staff during meetings and focus groups, and other information developed during the study point to a system that is effectively meeting capacity with its current resources. Nevertheless, there are challenges. There are several key issues that need to be addressed in the next decade. These include:

Figure S-2
Strengths, Challenges, Opportunities
Drummond Island Ferry

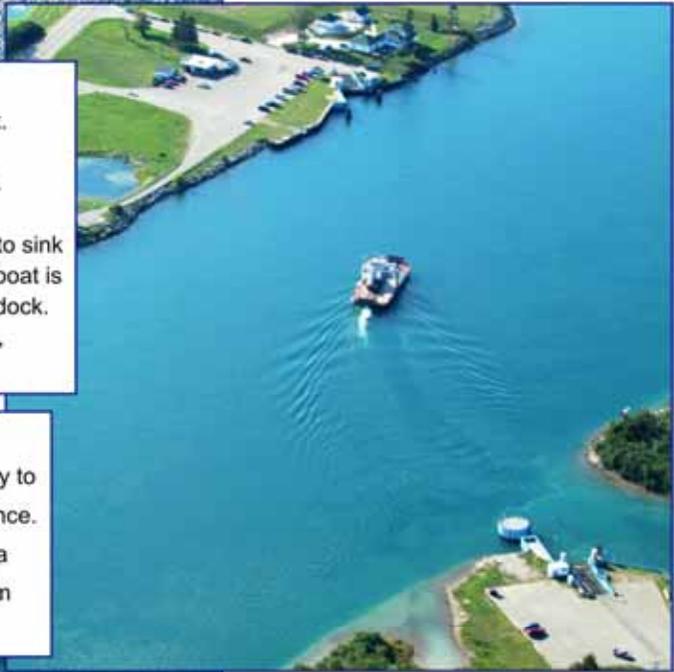


Figure S-3
Strengths, Challenges, Opportunities
Sugar Island Ferry



- Strengths**
- ◆ The schedules have improved.
 - ◆ Crew is solid.
 - ◆ Move cars and trucks efficiently.

- Weaknesses**
- ◆ The bumpers are too slippery. Boat drifts with current. Overall problem with piling clusters and docks.
 - ◆ Pilings are too solid and there is not enough cushion.
 - ◆ Capacity to collect cash in summer.
 - ◆ Boat has weakness it doesn't have enough hull in it to sink props down far enough. Causes stability problem. If boat is loaded too front heavy you can hardly get out of the dock.
 - ◆ Sugar is on a dangerous seaway lots of freight traffic, curves, ice, winds.



- Possible Operational Improvements**
- ◆ EUPTA has requested funds for upgrading technology to facilitate cash collections and preventative maintenance.
 - ◆ In summer time, consider scheduling as needed extra deck hand from 7 am to 11 am and from 3 pm to 7 pm to keep up with traffic.



- Possible Capital Improvements**
- ◆ EUPTA is currently upgrading radar to improve safety in the channel.
 - ◆ Reconfiguration (hull redesign) or replacement of the Sugar Islander II.
 - ◆ Examine the feasibility dock improvements on the mainland side. Dredge as necessary on the Sugar Island side.

Figure S-4
Strengths, Challenges, Opportunities
Neebish Island Ferry



Passenger and vehicle trip projections through 2020 were developed as part of the study. On Drummond, which has a current capacity of 56 car equivalents between the Drummond Islander III and IV, the demand today approaches or exceeds capacity for several hours per day. The capacity can be met by scheduling more trips (one trip per hour from each direction is scheduled; 3 trips per hour per boat can be operated if they run continuously). By 2016, the Drummond boats will be running "wild" to meet capacity for up to eight hours per day. This additional service will impact operational costs (fuel and maintenance) to maintain the same level of service. So, the issue is not whether the system can meet demand on Drummond (they can by operating more trips) but what the effect of this will be on the system in terms of operating costs and wear and tear on the vessels.

At Sugar Island, where only one boat can effectively operate, there are already instances according to staff where traffic is backed up. The Sugar Islander has an average vehicle capacity of 24 and currently operates two scheduled trips in each direction per hour. As can be seen referring to Table 4-2c, per trip capacity in July is exceeded four hours per day eastbound. By 2012 this number will rise to 6 hours. Therefore, by 2012 it is clear that in the summer months the Sugar Islander will be running trips in excess of its schedule much of the day.

This analysis, combined with the fact that the Sugar Islander has design flaws that make it less than suitable for operation at its current location, suggest that planning should begin now to acquire a new vessel, rather than enlarge the existing vessel or add a second boat. Both of those options have issues that make them unsuitable for the needs of the service. Assuming a new vessel can be put into place, the Sugar Islander can be moved to Neebish Island to replace the Neebish Islander II. That vessel would be sold. Additionally, it appears reasonable within the next ten years to begin planning to replace the Drummond Islander III.

In addition to these major capital investments, there is a need for improvements to the docks at all three islands, an opportunity to upgrade technology to facilitate better handling of fare collection and preventive maintenance, and an overall evaluation of schedules to determine efficiencies that can be gained in system operation.

Tables S-1 and S-2 present the 2020 St. Mary's River System Master Plan. This plan reflects the input from passengers of the ferry operations, the captains and crews of the vessels, the staff and the Board of the Eastern Upper Peninsula Transportation Authority, and analysis of system data related to operations. The tables present the listing of the options and the approximate time frame for implementation. Table S-3 presents the capital cost plan for the planning period.

Table S-1
Master Plan Implementation Schedule – Capital Improvement Program

Action	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
C1 - Planning for Sugar Island replacement ferry	x													
C2 - Replace Sugar Islander II					x									
C3 - Move Sugar Islander II to Neebish Island (sell Neebish Islander II)					x									
C4 - Drummond Island dock improvements (new ramp on south side)				x										
C5 - Evaluate need for Drummond Island breakwall	x													
C6 - Implement fare collection technology		x												
C7 - Sugar Island dock improvements			x											
C8 - Ramp improvements on Neebish Island		x												
C9 - Planning for replacement vessel for Drummond Islander III									x					
C10 - Replace Drummond Islander III													x	

Table S-2
Master Plan Implementation Schedule – Operations Improvement Program

Action	Time Frame
○1 - Change snowmobile loading procedures at Drummond Island docks	2007
○2 – Adjust staffing levels on Drummond Island to match demand, particularly in high traffic periods	2007
○3 – On Sugar Island, schedule an additional deck hand in high traffic periods from 7 am to 11 am and 3 pm to 7 pm.	2007
○4 – Monitor fuel prices and determine whether the fares should be raised.	2007 - 2008
○5 – Implement customer-information program based on electronic signage, email alerts, and other options.	2009 - 2010

Table S-3
Master Plan Capital Costs – Major Improvements

Item	Target Year	Preliminary Cost
Acquire new vessel to replace Sugar Islander II	2011	\$5,000,000
Drummond Island Dock Improvements	2010	\$500,000
Fare Collection Technology	2008	\$70,000
Sugar Island Dock Improvements	2009	\$500,000
Neebish Island Ramp Improvements	2008	\$250,000
Acquire new vessel to replace Drummond Islander III	2019	\$8,000,000
TOTAL MAJOR CAPITAL IMPROVEMENTS		\$14,320,000

Table of Contents

Executive Summary	ES-1
1. Introduction	1
Purpose of this Study	1
History of St. Mary's River Ferry System	1
Status of 1987 Master Plan	4
2. Existing Data and Statistics	6
Existing Marine Transportation Services	6
Demographic Characteristics and Trends	11
St. Mary's River Ferry System Needs Survey	11
Perception of Existing Service	16
Respondent Characteristics	21
Economic Impact	21
Possible Rate Increase	21
Development of the Islands	21
Review of Other Marine Transportation Systems	21
3. Potential for Coordination/Consolidation/Expansion of Services	24
Opportunities and Constraints	24
Forecasts of Ferry Use	24
4. Capital and Service Options	32
5. Recommendations	45
Appendix A – Executive Summary of 1987 Master Plan	
Appendix B – Coast Guard Certification	
Appendix C – Ten-Year Profile of Revenue, Passengers and Vehicles	
Appendix D – St. Mary's River Ferry System Study Passenger Survey	

List of Figures

Figure 1-1	Study Area	2
Figure 2-1	Drummond Island Ferry Schedule	8
Figure 2-2	Sugar Island Ferry Schedule	9
Figure 2-3	Neebish Island Ferry Schedule	10
Figure 2-4	Drummond Island Ferry Vehicles	12
Figure 2-5	Neebish Island Ferry Vehicles	13
Figure 2-6	Sugar Island Ferry Vehicles	14
Figure 3-1A	Drummond Island Ferry Passenger Projections	25
Figure 3-1B	Neebish Island Ferry Passenger Projections	26
Figure 3-1C	Sugar Island Ferry Passenger Projections	27
Figure 3-2A	Drummond Island Ferry Vehicle Projections	29
Figure 3-2B	Neebish Island Ferry Vehicle Projections	30
Figure 3-2C	Sugar Island Ferry Vehicle Projections	31
Figure 4-1	Strengths, Challenges, Opportunities – Drummond Island Ferry	34
Figure 4-2	Strengths, Challenges, Opportunities – Sugar Island Ferry	35
Figure 4-3	Strengths, Challenges, Opportunities – Neebish Island Ferry	36

List of Tables

Table 1-1	Status of Key 1987 Study Recommendations	5
Table 2-1	Operating Statistics Trends	15
Table 2-2	2000 Census Data	15
Table 2-3	Passenger Survey Results	17
Table 2-4	Ferry Service Review	22
Table 3-1	Passenger Projections	24
Table 3-2	Vehicle Projections	28
Table 4-1	Drummond Island Vehicle Trips – October Trips	37
Table 4-1A	Drummond Island Vehicle Trips – January Trips	38
Table 4-1B	Drummond Island Vehicle Trips – April Trips	39
Table 4-1C	Drummond Island Vehicle Trips – July Trips	40
Table 4-2	Sugar Island Vehicle Trips – October Trips	41
Table 4-2A	Sugar Island Vehicle Trips – January Trips	42
Table 4-2B	Sugar Island Vehicle Trips – April Trips	43
Table 4-2C	Sugar Island Vehicle Trips – July Trips	44
Table 5-1	Master Plan Implementation Sch. – Capital Improvement Program	46
Table 5-2	Master Plan Implementation Sch. – Operations Improvement Program	47
Table 5-3	Master Plan Capital Costs – Major Improvements	47

1. Introduction

In the summer and fall of 2006, the Eastern Upper Peninsula Transportation Authority (EUPTA), with support and funding from the Michigan Department of Transportation (MDOT), assessed ferry transportation needs for its St. Mary's River Ferry System. The study was conducted by The Corradino Group (Corradino).

Purpose of this Study

The purpose of the study was to assess the existing ferry system serving Drummond, Neebish and Sugar Islands (Figure 1-1) and determine capital and operational improvements necessary between now and 2020.

This study has involved the development of information to address these issues through four tasks. These are:

- Task 1: Existing Conditions
- Task 2: Potential for Coordination/Consolidation/Expansion of Service
- Task 3: Service Options and Recommendations
- Task 4: Implementation Plan

The study included public involvement and outreach. During the week of July 3, a survey was conducted at all the ferry locations. The results of the survey are presented in this report. The study also included discussions with the staff and Board of EUPTA, operators and crew of each ferry, MDOT, and other ferry boat operations.

History of St. Mary's River Ferry System

Operation of boats along the St. Mary's River to provide transportation for people and goods dates to the middle of the 19th century when a variety of private and commercial operators plied the waters. The first real ferry service between the mainland and one of the islands was at Drummond Island where Daniel Murry Seaman bought the Clyde to service a U.S. Mail contract. Since the boat operated on more-or-less a schedule, the Clyde was used to ferry people and goods as well as the mail.



Figure 1-1
Study Area



Following are the known ferries to have operated between DeTour and Drummond¹:

- **Clyde:** 36' fan-tail launch. Probably used "make-break" type marine engine. Carried mail, passengers, and freight to and from the Sault. Owned by Daniel Murray Seaman. Operated 1905 – 1908.
- **Naida:** 45' light-duty tug. Gasoline engine. Originally same serve as Clyde. Later used to carry vehicles. Went on regular Drummond-DeTour route in 1915; used township dock on channel after 1922. Owned by D.M. Seaman, '08 – '22; by Floyd Seaman, '22 – '24. Retired 1924.
- **Drummond:** 50'; resembled NAIDA but heavier. Built by Philo Leonard specifically for Channel service & to carry autos aboard. Two-three cars. Competed w/NAIDA, '22-'24. Owned by J S Church and Earle Bailey. Returned to Channel by Joe Krol to replace PHILLIP after fire, '31-'32.
- **Phillip:** 64' wooden schooner, converted for use on channel. Steam power. Owned by Floyd Seaman, '24-'30; sold to Joe Krol. Four-five cars. Destroyed by fire, winter '30-'31.
- **Wallan:** 60' wooden ice-breaking car-ferry. Built by Philo Leonard, '33 for Walter Partridge & Landon Townsend. Diesel engine. Taken over by Road Commission 1943, re-named SAM C TAYLOR. In service 'til 1947. Last of wooden ferries.
- **Drummond Islander:** 64' all-steel ice-breaker/auto-ferry commissioned by County 1947. Orig. power 120 hp 12-cyl Caterpillar marine. Capacity originally 7 cars. Lengthened to 84'/10 cars; re-powered, supercharged 6-cyl Caterpillar, 1976. Deck enlarged 1991, 12 cars. First steel ferry.
- **Drummond Islander II:** 64' twin-engine auto-ferry. 12-car capacity. Not ice-capable. In service 1961-1989. Sold to MCM Marine.

The Drummond ferries were operated privately until Chippewa County began operating the service to Drummond in 1948. The Eastern Upper Peninsula Transportation Authority (EUPTA) was established in 1975 (under PA 55 of 1963) at which time they became the authority for the Drummond service. In 1980, EUPTA reorganized under PA 7 under the Urban Cooperation Act of 1967 and assumed control of the Sugar Island and Neebish Island ferry services, which had been private prior to 1980.



¹ The information in this section and in the following bullets is based on "ferry fare, a brief history of the Drummond Island ferries," by Paul Cross 1989.

Ferry service on Sugar Island began in 1928 and Neebish Island service in 1933. As noted above, the services were private until EUPTA assumed their operation in 1980. Following is a synopsis of available information on the history of the operations.

Prior to incorporation of the Eastern Upper Peninsula Transportation Authority, the ferry was operated by Wayne Zimmerman, operating as Poyer Marine. John Wellington operated Sugar Island ferry from 1960 to 1973. The boat operated was the Sugar Islander 1 (which is now the Neebish Islander II). Prior to 1960 Bonathon Island Transportation operated the ferry. They operated from 1947 to 1948.

Chippewa County operated a ferry from 1941 to 1947. The County took it over from a gentleman named Peterman. The County built a wooden boat named the Chippewa, which was operated until the Sugar Islander I was built. Mr. Peterman operated the ferry from the mid-30's. The Peterman service was the first ferry carrying cars (when roads were first being built). Prior to the mid-30's, the only ferry service was for foot traffic. It operated from a boat club on Mission Road and Riverside Drive on the mainland down to a place called Payment on the North Channel.

The service to Sugar Island was mandated by the State for the County to provide. The County Board of Supervisors (at that time) elected to operate the service as a franchise. The County set the rates and the hours of operation. This practice dates to the mid-30's.

Ferry service on Neebish Island also dates to the middle of the century with a variety of services operating between the mainland at Barbeau to different dock locations on the island. The current vessel operating the ferry service is the old Sugar Islander, which was moved from Sugar Island to Neebish by EUPTA in 1990 when the Sugar Islander II was delivered. Because of the small number of residents on Neebish service to the island has historically been curtailed during the winter with those on the island crossing the river channel on ice and snow bridges when conditions are suitable.

Status of 1987 Master Plan

In 1987, the Master System Plan for the St. Mary's River Ferry System² was completed. The Executive Summary for the plan is reproduced in Appendix A.

The study consisted primarily of a review of the physical and operating characteristics of the ferry system to meet projected traffic demand in the period to 2010. The study determined that the ferry system would face "significant" growth between 1987 and 2010 and, while the docks and vessels were in good condition, some vessel enlargement/replacement projects and dock repair/improvement projects would be required. Table 1-1 highlights the key recommendations of the study and notes the progress made for each.

² "A Master Plan for the St. Mary's River Ferry System," prepared for the Eastern Upper Peninsula Transportation Authority, prepared by John J. McMullen Associates, Inc., November 1987.

Table 1-1
Status of Key 1987 Study Recommendations

Recommendation	Status	Year Completed
Replace Sugar Islander about 1995 with new double-ended ferry with capacity of 20 to 22 vehicles.	New Sugar Islander was put into place in 1995.	1995
Add capacity to Neebish Island route by 1995.	Neebish Islander was replaced by the old Sugar Islander, which is now known as the Neebish Islander II.	1995
Add capacity by 1989 in the form of a new ferry with capacity of 20 to 24 vehicles.	<ul style="list-style-type: none"> ▪ Drummond Islander III was put in service in 1989. ▪ Drummond Islander IV was built and delivered in 2000. 	1989 2000
Rebuild Neebish Island dock at existing location or at a new location adjacent to the Rock Cut to the south of the present location.	Completed	1990
Replace the ramps at the DeTour and Drummond Island docks. Install de-icing bubblers at all docks without them.	Completed in 1989 with the exception of the de-icing bubblers.	1989

2. Existing Data and Statistics

The chapter provides background information on the existing ferry service and general demographic and development trends.

Existing Marine Transportation Services

Ferry transportation services along the St. Mary's River are provided by the Eastern Upper Peninsula Transportation Authority (EUPTA), which has operated the Drummond Island Ferry since 1975 when it was incorporated and the Neebish and Sugar Island ferries since 1980. The Board of Directors of EUPTA consists of five members who are appointed by the County Commissioners of Chippewa (three members) and Luce (two members) Counties. Although EUPTA provides ferry service only in Chippewa County, it is a two-county authority because it provides public bus transportation in both counties.

Funding for the ferry operations is provided through fares and funds from the State of Michigan. The state began providing operating assistance to EUPTA for ferry service in Fiscal Year 1978/79 and is currently guaranteed through the local bus operating formula via PA 79 of 1997 (an amendment to PA 51, which is the foundation of public transportation funding in Michigan). Under this arrangement EUPTA recovers 50% of its operating expenses. The State also provides a certain level of capital funding, which is split between EUPTA and the Beaver Island Transportation Authority, the other publicly-sponsored ferry system in the state. This funding has been reduced for several years. An important question to be addressed in this study is if that level of capital is sufficient to meet the future needs of EUPTA.

EUPTA operates ferry services to:

- Drummond Island;
- Sugar Island; and
- Neebish Island.

The ferry services on Drummond and Sugar Island are operated by employees of EUPTA. The service to Neebish is bid to private operators, who operate a ferry that is owned, maintained, and fueled by EUPTA. Currently, South Shore Marine operates the Neebish Ferry on a three-year contract. The captains and deckhands who operate the Drummond and Sugar ferries are members of the United Steelworkers of America, Local Union 13685, District 2.

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- **Neebish Islander II** (formerly Sugar Islander), (Built 1946), 89', 40T, double-ended hull, Passenger Capacity - 114, Vehicle Capacity – 12 average.

All of the vessels operated by EUPTA have current Coast Guard inspections (Appendix B). Based on review of this information, none have conditions that will prevent operations in the foreseeable future. Although staff has indicated the Sugar Islander design does not function well given its use.

The ferry operations operate on varying schedules, which are shown in Figures 2-1 through 2-3. The following is a brief summary of their schedules:

- **Drummond Island Ferry**: Operates year round scheduled service 24 hours a day. Generally departs from Drummond Island at 10 minutes after the hour and from DeTour at 40 minutes after the hour. Some trips are by request only during winter. Trips for service between regularly scheduled runs are available for additional cost. In summer, when the demand peaks, ferries will run "wild," i.e., as often as needed.
- **Sugar Island Ferry**: Operates year round with service generally leaving Sugar Island on the hour and half hour and leaving Sault-Ste. Marie on the quarter-after and quarter before the hour. Early morning service (i.e., 3 and 4 a.m.) is on the hour. The ferry will run "wild" as needed.
- **Neebish Island Ferry**: Operates seasonally. During the summer trips generally depart every two hours with some additional trips during the morning and afternoon peak hours. There is no scheduled service between January 15 and April 1.

Each of the ferries has a unique set of passengers. On Drummond Island, a significant number of tourists as well as residential passengers use the service, particularly in the summer. Because tourists generally pay cash as opposed to getting monthly or seasonal passes (at reduced rates), Drummond produces more revenue per trip than the other islands.

Sugar Island, on the other hand, is more a bedroom community of Sault Ste. Marie and has a larger portion of full time or seasonal residents using the service. Neebish Island, which has a very low population, has a customer based that is almost entirely full time or seasonal residents or relatives.

The Sugar Islander 11 was built in 1995. The boat was designed with a double-ended hull and 24-vehicle capacity. The design issues are associated with stability during loading and unloading of boats. In particular, when large trucks load and unload the boat lists severely. While not considered a safety issue, staff (including Captains) believe there could be safety issues in the future.

Figure 2-1
 Drummond Island Ferry Schedule
 Effective – August 16, 2006

SCHEDULE

Lv. Drummond	Lv. DeTour
6:10 A.M.	6:40 A.M.
7:10 A.M.	7:40 A.M.
8:00 A.M.	8:40 A.M.
9:10 A.M.	9:40 A.M.
10:10 A.M.	10:40 A.M.
11:10 A.M.	11:40 A.M.
12:10 P.M.	12:40 P.M.
1:10 P.M.	1:40 P.M.
2:10 P.M.	2:40 P.M.
3:10 P.M.	3:40 P.M.
4:10 P.M.	4:40 P.M.
5:10 P.M.	5:40 P.M.
6:10 P.M.	6:40 P.M.
7:10 P.M.	7:40 P.M.
8:10 P.M.	8:40 P.M.
9:10 P.M.	9:40 P.M.
10:10 P.M.	10:40 P.M.
11:10 P.M.	11:40 P.M.
** 12:10 A.M.	** 12:40 A.M.
1:10 A.M.	1:40 A.M.
** 3:10 A.M.	** 3:40 A.M.
**5:10 A.M. *	**5:40 A.M. *

* On request Sun thru Thurs from Jan2 thru Mar 31
 ** Fri & Sat only from Jan 2 thru Mar 31
 Daily Apr 1 thru Jan 1

\$ 50.00 "PLUS FARE" for trips
 Between regularly scheduled runs.

RATES

All Car, Pickup & Driver	\$ 9.00 *
Sr. Citizen Car, Pickup & Driver	\$ 5.00 *
Pickup with Camper Units	\$ 12.00 *
Bus Camper – Motor Home	\$ 20.00 *
Adults	\$ 2.00
Sen. Citizen/Handicap Passengers	\$ 1.00
Students	\$ 1.00
Lt. Truck or Dual Wheel	\$ 12.00 *
Trucks -130" W.B. or Over	\$ 16.00 *
Tandem Trucks	\$ 19.00 *
Regular Gasoline & Explosives	\$ 20.00 *
Semi Gasoline & Explosives	\$ 40.00 *
Trailer - 0' to 12' long	\$ 9.00 *
Trailer- 12' to 20' long	\$ 13.00 *
Trailer – 20' or over	\$ 17.00 *
House Trailer – One Way	\$ 40.00 *
Motercycle, Snowmobile, ORV & Driver	\$ 4.00 *
Trip Between Regularly Scheduled Runs – Plus Fare	\$ 50.00 *

TICKET RATES

Adult Passenger ticket	\$ 24.00
Senior/Handicap Passenger ticket	\$ 12.00
Reg. Car & Pickup Ticket 20 Trip	\$ 68.00 *
Reg Car & Pickup Ticket 10 trip	\$ 37.00 *
Senior/Handicap – Car & Pickup ticket 20 trip	\$ 37.00 *
Senior/Handicap – Car & Pickup ticket 10 trip	\$ 20.00 *
Lt Truck or Dual Wheel Ticket	\$ 55.00 *
Truck -130" WB or over ticket	\$ 110.00 *
Tandem Truck & Trailer (20' or over) ticket	\$ 135.00 *

*Includes fuel surcharge

For Emergency Service Dial 911
 Dock: (906) 235-3170

Figure 2-2
 Sugar Island Ferry Schedule
 Effective – August 16, 2006

SCHEDULE

Ferry leaves Sugar Island on the hour and half-hour.

First Ferry is at 5:00 am till 2:00 am, with a 3:00 am and 4:00 am

Ferry leaves Sault Ste. Marie on the quarter-after and quarter-before the hour.

First Ferry is at 5:15 am till 2:15 am, with a 3:15 am and 4:15 1m

For Emergency Service – dial 911
 Dock – (906)-635-5421

*Includes fuel surcharge

RATES

All Car, Pickup & Driver	\$ 700 *
Sr. Citizen Car, Pickup & Driver	\$ 4.00 *
Pickup with Camper Units	\$ 9.00 *
Bus Camper – Motor Home	\$ 15.00 *
Adults	\$ 2.00
Sen. Citizen/Handicap Passengers	\$ 1.00
Students	\$.30
Dual Wheel Pickup	\$ 8.00 *
Trucks -130" W.B. or Over	\$ 9.00 *
Tandem Trucks	\$ 14.00 *
Regular Gasoline & Explosives	\$ 17.00 *
Semi	\$ 30.00 *
Trailer - 0' to 15' long	\$ 7.00 *
Trailer- 15' to 20' long	\$ 8.00 *
Trailer – 20' or over	\$ 10.00 *
House Trailer – One Way	\$ 60.00 *
Motercycle, Snowmobile, ORV & Driver	\$ 3.50 *
Trip Between Regularly Scheduled Runs – Plus Fare	\$ 30.00 *
Turn- Around	\$ 5.00
TICKET RATES	
Adult Passenger ticket	\$ 24.00
Senior/Handicap Passenger ticket	\$ 12.00
Reg. Car & Pickup Ticket 20 Trip	\$ 54.00 *
Reg Car & Pickup Ticket 10 trip	\$ 30.00 *
Senior/Handicap – Car & Pickup ticket 20 trip	\$ 29.00 *
Senior/Handicap – Car & Pickup ticket 10 trip	\$ 16.00 *
Student	\$ 4.00
Truck -130" WB or over ticket	\$ 55.00 *
Tandem Truck or Trailer (15' or over) ticket	\$ 80.00 *

*Senior Citizen – 65 and over

Figure 2-3
Neebish Island Ferry Schedule

Friday preceding Memorial Day
to October 1

	SUN	MON	TUE	WED	THU	FRI	SAT
6:50 A.M.		X	X	X	X	X	
8:00 A.M.		X	X	X	X	X	X
9:00 A.M.	X						
10:00 A.M.		X	X	X	X	X	X
11:00 A.M.							
12:00 N	X	X	X	X	X	X	X
1:00 P.M.							
2:00 P.M.		X	X	X	X	X	X
3:00 P.M.	X						
4:15 P.M.		X	X	X	X	X	X
5:00 P.M.		X	X	X	X	X	X
6:00 P.M.	X	X	X	X	X	X	X
7:00 P.M.							
8:00 P.M.		X	X	X	X	X	X
9:00 P.M.							
10:00 P.M.		X	X	X	X		
11:00 P.M.						X	X

Oct. 1 to Jan. 15 & April 1 to Friday
preceding Memorial Day

	SUN	MON	TUE	WED	THU	FRI	SAT
6:50 A.M.		X	X	X	X	X	
8:00 A.M.		X	X	X	X	X	X
9:00 A.M.	X	X	X	X	X	X	X
10:00 A.M.							
11:00 A.M.							
12:00 N	X	X	X	X	X	X	X
1:00 P.M.							
2:00 P.M.							
3:00 P.M.	X	X	X	X	X	X	X
4:15 P.M.		X	X	X	X	X	
5:00 P.M.							X
6:00 P.M.	X	X	X	X	X	X	X
7:00 P.M.		X	X	X	X	X	
8:00 P.M.							X
9:00 P.M.							
10:00 P.M.							
11:00 P.M.							

RATES

All Car, Pickup & Driver	\$ 9.00*
Sr. Citizen Car, Pickup & Driver	\$ 5.00*
Passengers (12 & older)	\$ 2.00
Sen. Citizen/Handicap Passengers	\$ 1.00
Pickups with Camper Units	\$ 11.00*
Motor Home/Bus Camper	\$ 18.00*
Trucks (Dual Wheel under 130" WB)	\$ 11.00*
Trucks (Dual Wheel 130" & over)	\$ 16.00*
Tandem Trucks	\$ 16.00*
Fuel Trucks./Cement Trucks	\$ 17.00*
Semi Tractor/Trailer	\$ 35.00*
Trailer under 14'	\$ 8.00*
Trailer- 14' to under 17'	\$ 10.00*
Trailer – 17' to under 22'	\$ 12.00*
Trailer 22' & over	\$ 17.00*
House Trailer (one way)	\$ 60.00*
Motorcycle, Snowmobile, ORV & Driver	\$ 5.00*
Special Trips	\$ 45.00*

TICKET RATES

Reg. Car & Pickup Ticket 20 Trip	\$ 68.00*
Reg Car & Pickup Ticket 10 trip	\$ 37.00*
Senior/Handicap – Car & Pickup ticket 20 trip	\$ 37.00*
Senior/Handicap – Car & Pickup ticket 10 trip	\$ 20.00*
Passenger ticket	\$ 20.00
Senior/Handicap Passenger ticket	\$ 10.00
Truck (130" WB and over) ticket	\$105.00 *

For Emergency Service Dial 911
 South Shore Marine: (906) 647-7016 Dock: (906) 632-9404
 *Includes fuel surcharge

Updated Aug 16, 2006

Appendix B contains detailed information for the period 1996 to 2005 about historical trends relative to revenues, passengers, and vehicles carried. Total expenses of operations have increased from approximately \$1.5 million to \$2.3 million in the ten-year period from 1996 to 2005. Funds received by the state of Michigan generally matched 50 percent of the expense level. It is important to note that the system attempts to set the service at a level that meets "the need," and at a level which will raise revenue to match the state subsidy. Service at which the cost to operate cannot raise revenues to meet half the operating cost is not viable under the current funding formula (i.e., EUPTA has no other funding source to draw upon). Neither passengers nor vehicles carried has increased at the same rate as expenses with passengers increasing from 722,8904 to 852,398, or 17.9 percent and vehicles from 437,697 to 538,070, or 22 percent. Table 2-1 summarizes these changes.

Figures 2-4 through 2-6 shows the variations in types of vehicles carried by EUPTA. As can be seen, car/trucks are by far the largest number of vehicles. There is generally a consistent presentation in the other types of vehicles carried with none representing more than ten percent of total traffic.

Demographic Characteristics and Trends

Information concerning demographics and trends on the island is summarized in Table 2-2. As can be seen, the overall resident population (as opposed to seasonal or tourist) on the three islands is about 1,800, or slightly less than five percent of the population. The seasonal or tourist population, on the other hand, increases the number of people on the islands, particularly Drummond. Most come in the summer season but there are certain fluctuations in the fall and winter associated with hunting and snowmobiling.

Approximately 66 percent of the resident population is White with almost 30 percent American Indian, with the majority of those on Sugar Island. The population data reflects that the islands have a population with 15 percent over age 65 and almost 43 percent over age 50.

Most of the households throughout the three islands are owner occupied and the islands together have median household incomes that range from \$36,000 to approximately \$43,000.

St. Mary's River Ferry System Needs Survey

In July 2006, the consultant administered a survey to passengers on the Drummond, Neebish and Sugar Island Ferries. The purpose of the survey effort was to obtain information from passengers about their travel and perceptions of the system for use in developing a master plan for the system operations.

The surveys were conducted on the following days:

- Drummond Island – July 6, 2006, 7 am to 2 pm;
- Neebish Island – July 7, 2006, 7 am to 2 pm; and
- Sugar Island – July 10, 2006, 7 am to 2 pm.

Figure 2-4

Drummond Island Ferry Vehicles

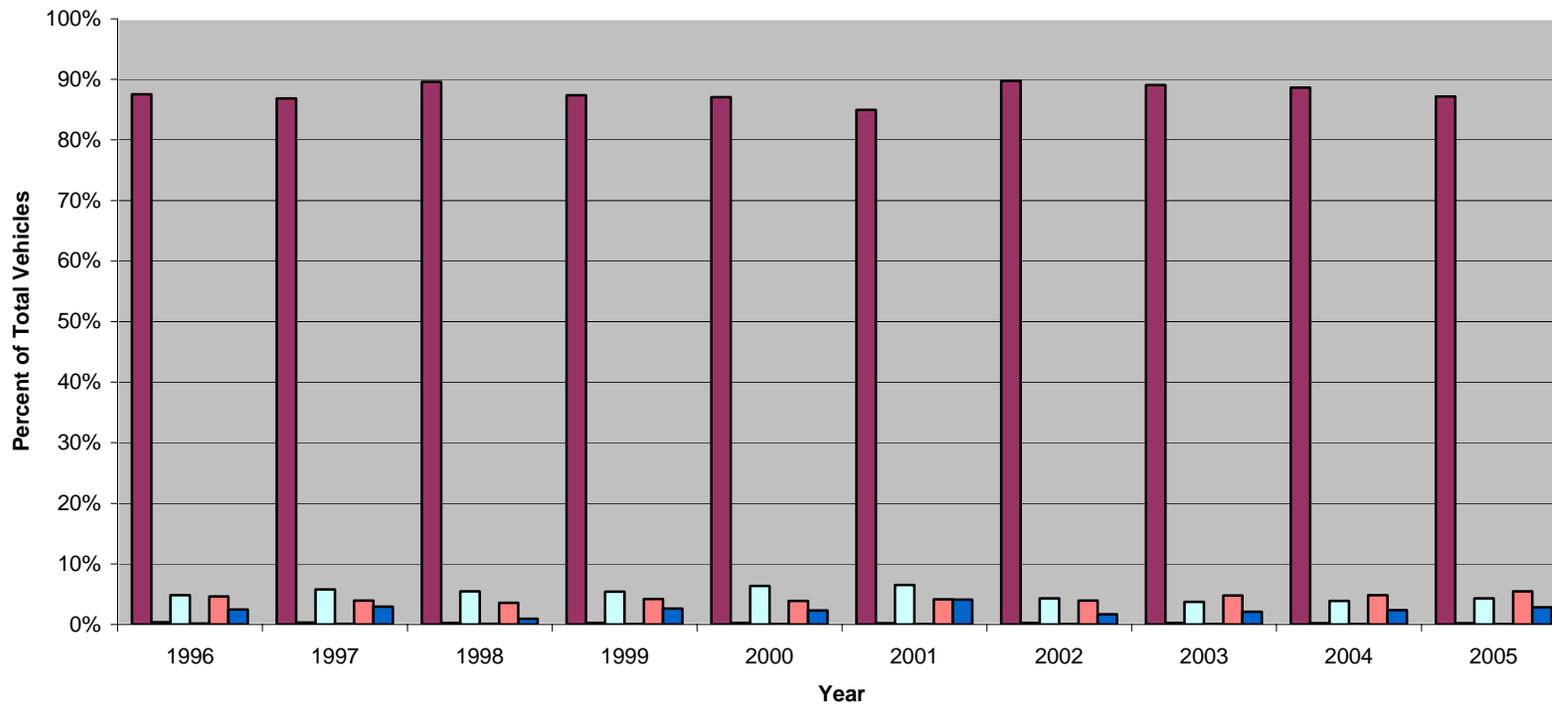


Figure 2-5

Neebish Island Ferry Vehicles

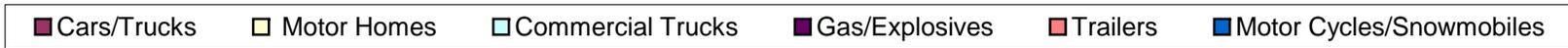
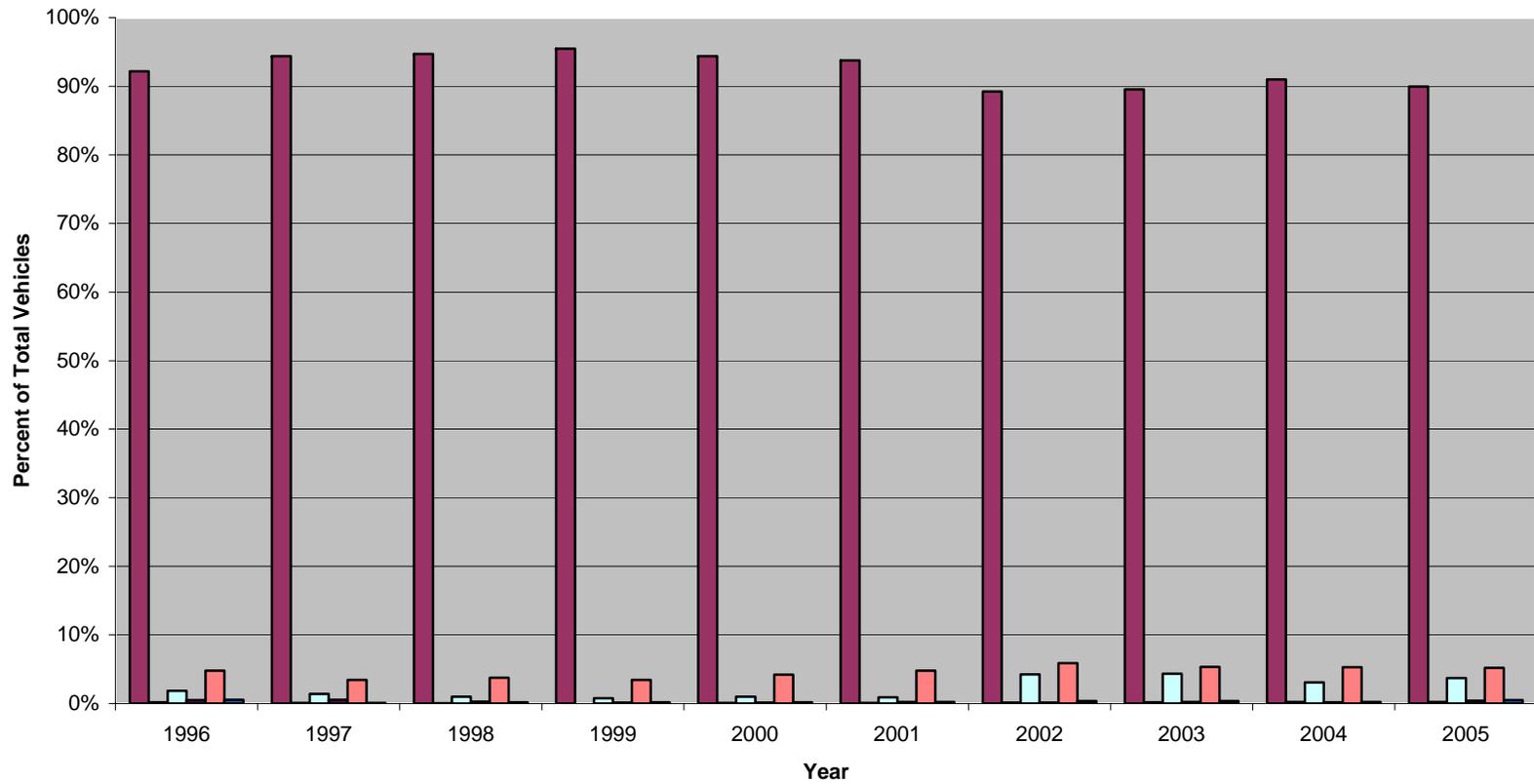


Figure 2-6

Sugar Island Ferry Vehicles

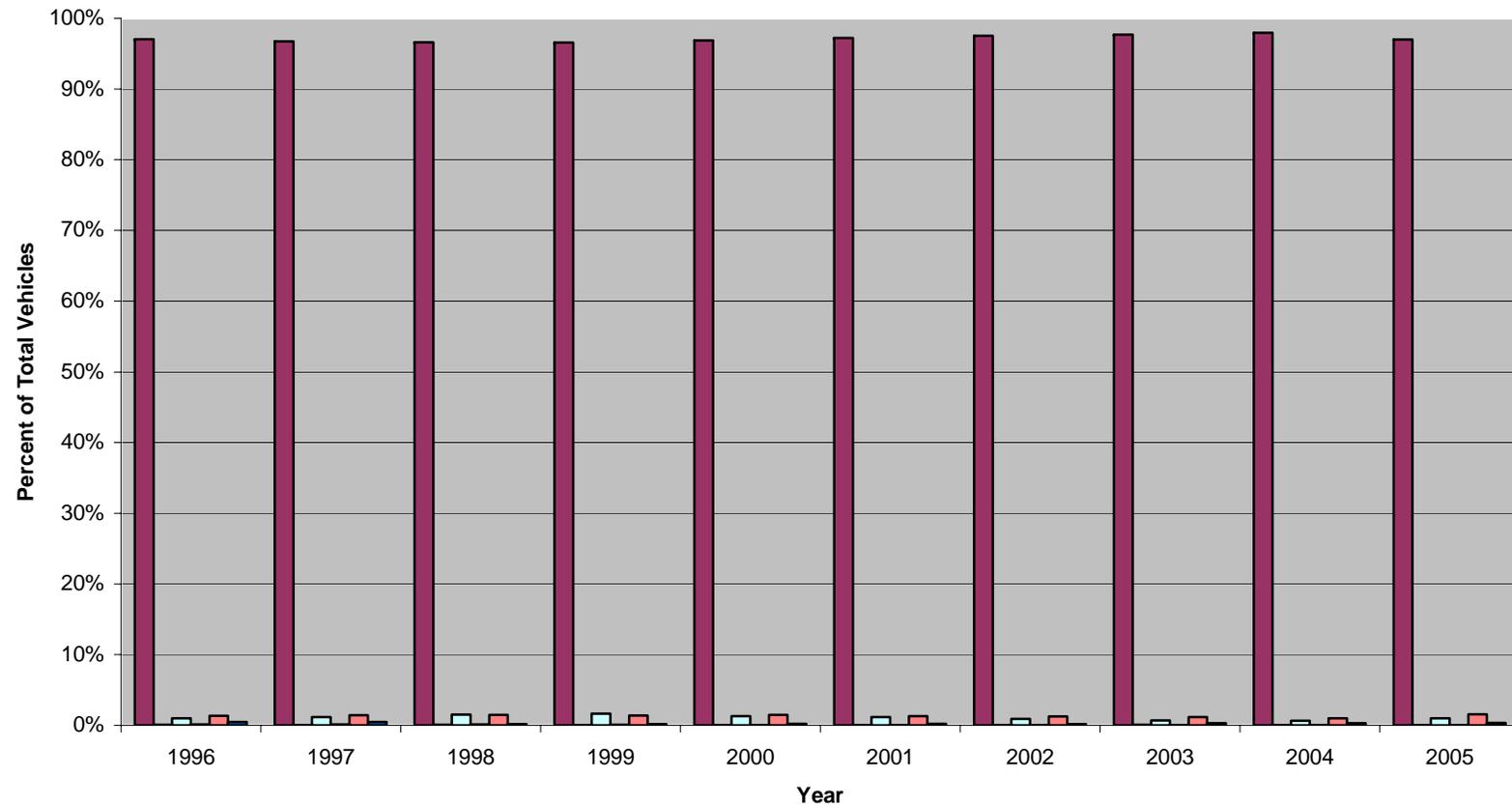


Table 2-1
Operating Statistics Trends

System	1996 Fare Revenue	2005 Fare Revenue	% Change	1996 Passengers	2005 Passengers	% Change	1996 Vehicles	2005 Vehicles	% Change
All Ferries	794,108	1,164,116	46.6	722,804	852,398	17.9	437,697	538,070	22.9
Drummond	475,236	643,671	35.4	295,042	380,698	29.0	174,521	221,050	26.7
Sugar	268,606	452,737	68.6	398,838	434,724	9.0	246,360	301,596	22.4
Neebish	50,266	67,711	34.7	28,924	35,934	24.2	16,816	22,202	32.0

Table 2-2
2000 Census Data

Population and Households

	Drummond	Neebish	Sugar	Chippewa County	State of Michigan
Population	1,031	64	682	38,543	9,938,444
Households	475	33	280	13,491	3,788,780

Population by Race

Race	Drummond		Neebish		Sugar	
	Number	Percent	Number	Percent	Number	Percent
White	931	90.3	56	87.5	450	66.0
African American	0	0.0	0	0.0	0	0.0
American Indian/Alaskan Native	60	5.8	3	4.7	197	28.9
Asian	0	0.0	0	0.0	0	0.0
Hawaiian/Pacific Islander	0	0.0	0	0.0	0	0.0
Other	32	3.1	5	7.8	35	5.1
Hispanic	8	0.8	0	0.0	0	0.0
Total	1,031	100.0	64	100.0	682	100.0

Population by Age

Age	Drummond		Neebish		Sugar	
	Number	Percent	Number	Percent	Number	Percent
Under Age 5	50	4.8	2	3.1	21	3.1
5 to 17	141	13.7	3	4.7	112	16.4
18 to 21	19	1.8	0	0.0	16	2.3
22 to 29	49	4.8	1	1.6	41	6.0
30 to 39	104	10.1	4	6.3	70	10.3
40 to 49	135	13.1	3	4.7	124	18.2
50 to 64	305	29.6	28	43.8	194	28.4
65 and over	228	22.1	23	35.9	104	15.2
Total	1,031	100.0	64	100.0	682	100.0

Table 2-2 (continued)
2000 Census Data

Housing Occupancy

Housing Units	Drummond		Neebish		Sugar	
	Number	Percent	Number	Percent	Number	Percent
Occupied	473	31.6	33	25.2	294	45.2
Vacant	1,025	68.4	98	74.8	357	54.8
Total	1,498	100.0	131	100.0	651	100.0

Housing Tenure

Housing Units	Drummond		Neebish		Sugar	
	Number	Percent	Number	Percent	Number	Percent
Owner Occupied	427	90.3	33	100.0	272	92.5
Renter Occupied	46	9.7	0	0.0	22	7.5
Total Occupied Units	473	100.0	33	100.0	294	100.0

Household Income

Income	Drummond		Neebish*		Sugar	
	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000	55	11.6	55	4.9	41	14.6
\$10,000 to \$24,999	116	24.4	194	17.4	64	22.9
\$25,000 to \$44,999	125	26.3	340	30.5	85	30.4
\$45,000 to \$74,999	119	25.1	354	31.8	63	22.5
\$75,000 to \$124,999	33	6.9	144	12.9	21	7.5
\$125,000 or more	27	5.7	26	2.3	6	2.1
Total	475	100.0	1,113	100.0	280	100.0
Median Household Income	\$36,131	--	\$42,917	--	\$34,000	--

*Household Income data not available for Neebish Island. Data presented are for Soo Township.

The survey form used for the surveys is presented in the appendix. The methodology was passenger intercept, which was usually done while autos lined up to wait to board the ferry. The results of the survey are presented in Table 2-2.

Perception of Existing Service

Over ninety percent of respondents thought the existing service was adequate. In addition, more than eighty percent did not think more frequent service was needed. Some of the improvements for the existing service that were posed by the respondents are noted in the comments at the end of the results in Table 2-3. These include smaller issues such as landside improvements and bigger issues such as a more stable vessel at Sugar Island. Overall, discussions indicated a high level of satisfaction with the service.

Table 2-3
St. Mary's River Ferry System
Passenger Survey Results

Are you a...?

Island	Seasonal Resident		Permanent Resident		Visitor		Here on Business		Total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Drummond	20	20.6	30	30.9	42	43.3	5	5.2	97
Neebish	21	45.7	9	19.6	9	19.6	7	15.2	46
Sugar	16	17.6	56	61.5	14	15.4	5	5.5	91
Total	57	24.4	95	40.6	65	27.8	17	7.3	234

Do you think current transportation services to the island are adequate?

Island	Yes		No		Total
	Number	Percent	Number	Percent	
Drummond	93	95.9	4	4.1	97
Neebish	39	86.7	6	13.3	45
Sugar	88	96.7	3	3.3	91
Total	219	94.0	13	5.6	233

If you are traveling to the mainland (or are coming from the mainland), did you spend money on the mainland?

Island	Yes		No		Does not apply		Total
	Number	Percent	Number	Percent	Number	Percent	
Drummond	42	43.3	2	2.1	53	54.6	97
Neebish	29	63.0	2	4.3	15	32.6	46
Sugar	44	50.6	14	16.1	29	33.3	87
Total	115	50.0	18	7.8	97	42.2	230

If yes, approximately how much did you spend?

Island	\$10 to \$50		\$51 to \$100		Over \$100		Total
	Number	Percent	Number	Percent	Number	Percent	
Drummond	11	26.2	9	21.4	22	52.4	42
Neebish	4	13.8	10	34.5	15	51.7	29
Sugar	32	60.4	8	15.1	13	24.5	53
Total	47	37.9	27	21.8	50	40.3	124

Source: The Corradino Group, Inc.

Table 2-3 (continued)
St. Mary's River Ferry System
Passenger Survey Results

Would you like to see more frequent ferry service?

Island	Yes		No		Total
	Number	Percent	Number	Percent	
Drummond	23	23.7	74	76.3	97
Neebish	19	42.2	26	57.8	45
Sugar	1	1.1	87	98.9	88
Total	43	18.7	187	81.3	230

Do you think the Island is developing...

Island	Not enough		Just enough		Somewhat too fast		Too fast		Total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Drummond	3	3.1	54	55.7	12	12.4	28	28.9	97
Neebish	1	2.3	24	54.5	4	9.1	15	34.1	44
Sugar	4	4.6	44	50.6	6	6.9	33	37.9	87
Total	8	3.5	122	53.5	22	9.6	76	33.3	228

Due to rapidly rising fuel prices, there may be a need to raise the discounted fares. Would you be opposed to a reasonable fare increase if necessary to maintain or improve service?

Island	Yes		No		Total
	Number	Percent	Number	Percent	
Drummond	11	11.3	86	88.7	97
Neebish	13	28.9	32	71.1	45
Sugar	47	51.6	44	48.4	91
Total	71	30.5	162	69.5	233

What is your age?

Island	Under 18		19 to 55		56 to 65		Over 65		Total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Drummond	1	1.1	49	51.6	22	23.2	23	24.2	95
Neebish	0	0.0	23	51.1	12	26.7	10	22.2	45
Sugar	2	2.2	51	56.7	15	16.7	22	24.4	90
Total	3	1.3	123	53.5	49	21.3	55	23.9	230

Table 2-3 (continued)
Comments

Drummond Island
Cushion in winter on mainland to allow people to get there with weather.
Does not like the corner at the top of the island. Some traffic calming. On the DeTour side there should be better controls for no parking to protect access to adjacent properties.
Every half hour service in summer.
Fabulous job running system.
In summer start earlier running both boats.
More weekend service.
Need a place for people to throw garbage. Clean up litter around deck. Rearrange ticket so that if you don't use whole ticket you get a credit for what is not used. Seasonal folks taking a bum rap.
Overall, good service.
Raise fares for tourists - maintain for islanders. Please hold public meeting to discuss raising fares.
Run more frequently.
Run two boats when needed during heavy season.
Run two ferries all summer.
Signage on DeTour side is good.
Some confusion on loading.
They do a good job.

Neebish Island
Additional hours at night and weekends.
Bring back Bob and Mary.
Commercial/special traffic should wait. Car traffic should go first.
Doing great job.
Happy.
Later service.
Like new schedule. They can call and get special run. Called number for emergencies.
Loved Bob and Mary but these guys have done a nice job.
Maybe a hamburger stand.
More frequent. Special ferries are great
More runs. Not enough running. Every hour would be nice.
More service at night.
More trips on Sunday. New boat. Eleven-foot clearance. Don't blow horn long enough. Dangerous. Sometimes late.
Needs a paint job. Complaint about ramps because they can't get garbage service.
Not able to respond.
Not maintained. Not painted very well.
Operations are far superior to any here.
Pilot house were raised so you could bring normal-sized loads. Eleven-foot clearances not enough. Buses or anything of any size cannot cross. More frequent service would be nice.
Ramps are a problem. Bad for trucks and problem. Almost lost a truck in river.
Real good job.
Senior discount should be increased.
Start winter schedule later in year - say mid-October. They are doing a good job.
Would like to see a 9:00 a.m. and 3:00 p.m. ferry. Can't make it into town between two ferry runs. Ops should be Neebish resident.
Would like to see additional Sunday service, such as later afternoon or evening. A porta-potty should be put on the mainland service.
Would like to see summer schedule extended later (even if you had to cut out an earlier run on later month trips).

Table 2-3 (continued)
Comments

Sugar Island
A better designed boat with more hull for weight carrying capacity without listing. Two wide lanes for wide loads trailers and trucks, and better stopping ability.
Better attitudes on deck hands. Should smile. Better PR people.
Bigger boat, more room for hauling trailers.
Bigger boat.
Clock set to ferry time on each side.
Complaint: The deck hands wait until the last minute to load.
Deck hand loading, the wait for the last minute to load. This causes problems to schedule. Fares too high for people who work everyday in town. Should not be paying for other ferry services.
Deck hands could be more courteous and need better training on loading and unloading the boat.
Deck hands should be loading cars ASAP and not sitting in box.
Deck hands wait to last minute to load. Load the boat and then visit.
Do not wait to last minute to load the boat.
Eliminate diesel smell. Higher stacks??
Employee problem has contributed to morale problem. Thinks Drummond has problems with ferry ops.
Fare should be charged by car or axle not kids or extra people.
Fuel up at night to not delay, keep on schedule.
Get boat running less fuel. This would also cut down on money. Boat overloading with logging trucks, they should load alone.
Get people to learn ferry etiquette, is the protocol for school bus.
Great, very polite.
Guys do a good job.
Have real good service.
More trips between 2 and 5 AM
Need to train deck hands better. Don't communicate well.
No expiration date on tickets.
Passes should not expire in six month.
Relative to fares, they should drop the passenger part of the fares. Any fare increase should be cautious. Silly to pay for children.
Senior citizens and disabled should not get a discount. This occurs at expense of young people who have to go to town.
Complaint: Deck hands don't know how to load the ferry, load too late.
Some deck hands are not pleasant.
Some kind of bulletin board for flyers and info. Complaint: they put large logging trucks on ferry with school bus.
They do not want cars loaded on same boat with logging and cement trucks. Feel very unsafe. The big trucks should go by themselves.
Way dockhands put people on boat & collect money. They should put people on ferry, park them and collect fees. Complaint: They need lines pointing on road to mainland so people know where they're going.
Would be nice if they didn't have to raise prices.

Respondent Characteristics

Tourists represented over forty percent of the respondents on Drummond Island but much less on Neebish and Sugar. Conversely, Sugar had a high percentage of seasonal residents while Neebish had the highest percentage of seasonal residents. The ages of respondents was similar on all three islands with approximately fifty percent being in the 19 to 55 age range and twenty percent each being in the 56 – 65 and Over-65 ranges.

Economic Impact

A question was asked to get an understanding of the expenditures on the mainland locally by those using the ferries. Approximately 50 percent of respondents said they were spending money on the mainland and about eight percent said they were not (40 percent are identified as “does not apply” which was used for these people leaving the area after a vacation). Of those responding they did spend money locally, 38 percent spent between \$10 and \$50 while almost 25 percent spent over \$100. Another way to look at the economic impact on the island is that seven percent of those responding to the survey were at the island on business so there is job creation because of the ferries as well as expenditures on the mainland.

Possible Rate Increase

Respondents were asked whether they would oppose an increase in fares because of rapidly rising fuel prices. Sixty-nine percent of the total would not oppose such a scenario. Broken down by island, about 89 percent of Drummond respondents would not oppose a fare increase, 71 percent of Neebish respondents would not oppose a fare increase, and 48 percent of Sugar respondents would not oppose a fare increase. Only Sugar Island had more respondents indicating they would oppose an increase than those who would not.

Development of the Islands

A question was asked about the respondents' perception of growth on the island. Approximately 35 percent of respondents suggested the islands were developing too fast while 52 percent thought they were developing at about the right pace. This would suggest the existing level of ferryboat service is consistent with the frame of mind of the public regarding development.

Review of Other Marine Transportation Systems

Ferry boat transportation is a vital element of the transportation network in parts of the United States and around the world. Alaska, Washington State, New Jersey and North Carolina have significant ferry programs. Table 2-4 presents some of the ferry boat services operated in the upper Midwest and other locations in the United States.

Table 2-4
Ferry Service Review

Selected Ferry Services		
Provider	Frequency	Round Trip Fare
Beaver Island Transportation Authority: Is the authority for provision of ferry service between Charlevoix and Beaver Island.	Provides up to three trips per day each way depending on time of year between April and December.	Basic fares are \$19 per person and \$65 per vehicle
Shepler's Mackinac Island Ferry: Provides passenger and freight service between Mackinaw City, Mackinac Island and St. Ignace	Departures every half hour between 8:00 am and 11:00 pm daily during peak season.	Adults: \$17, Children: \$8
Star Line Mackinac Island Hydro-Jet Ferry: Provides passenger service between Mackinaw City, Mackinac Island and St. Ignace	Departures every half hour between 7:30 am and 7:30 pm during peak season.	Adults: \$17, Children: \$8
Arnold Mackinac Island Ferry: Provides passenger and freight service between Mackinaw City, Mackinac Island and St. Ignace	Departures every half hour between 7:30 am and 9:00 pm during peak season.	Adults: \$17, Children: \$8
Lake Express: Provides passenger, car and freight service between Muskegon and Milwaukee.	Provides three round trips per day between 6:30 am and 10:30 pm.	Adults: \$85, Children: \$40, Cars: \$118
Lake Michigan Car Ferry: Provides Passenger, freight and car ferry service between Ludington and Manitowoc, Wisconsin.	Provides three round trips per day during peak season.	Adults: \$78, Children \$36, Cars: \$98
Manitou Island Transit: Provides passenger service between Leland and Manitou Islands.	Provides two round trips to South Manitou Island and one round trip to North Manitou Island.	Adults: \$25, Children: \$14.
Madeline Island Ferry: Provides service between Bayfield and Madeline Island in Lake Superior.	Provides range of services from four trips per day to 12+ depending on time of year. No service is provided in mid-winter if there is heavy ice.	Base fare of auto plus passenger is \$32 roundtrip. Varying rates for pedestrians, bicycles, trailers, etc.
State Sponsored Ferry Services		
Provider	Frequency	Round Trip Fare
Washington State Department of Transportation: Provides passenger and car ferry service in the Puget Sound area and between Washington State and British Columbia.	Provides service on approximately 16 routes with 2 to 5 round trips daily.	Fares vary by route from free for passengers to Adults: \$27.60, Children: \$22.20, Cars: \$19.50 to \$93.50
State of North Carolina, Department of Transportation, Ferry Division: Provides passenger and car ferry service in the coastal areas of North Carolina	Service varies by route from hourly service between 5:00 am and Midnight to 3 round trips per day.	Passengers: \$2.00, Cars: \$30.00

Most of these services are operated as private companies. In Michigan, only EUPTA and the Beaver Island Transportation Authority receive state and/or federal support for capital or operating funding. Most of the ferry boat operations reported on in Table 2-4 have significant differences in the type of vessels used, the length of the trip, the trip purpose and destination, etc. For example, EUPTA provides short trips from Sault St. Marie to Sugar Island; from Bar Beau to Neebish Island; and, from DeTour to Drummond Island, and uses relatively small vessels. On the other hand, the Beaver Island trip is 32+ miles and requires a significantly larger vessel.

3. Potential for Coordination/Consolidation/ Expansion of Services

Opportunities and Constraints

Over the past 20 years, the EUPTA has made significant capital investment in its fleet. Nevertheless, some capital issues remain. Because of design issues, the Sugar Islander is an unwieldy boat that discussions with crew and staff indicate should be considered for replacement. Likewise, the Neebish Islander II, the old Sugar Islander, also has design issues that should be addressed. Paramount among these are the fact that certain classes of trucks cannot use it. Operational issues facing EUPTA are more positive. The most significant opportunity is how can EUPTA embrace technology to handle cash and fare transfers, log and monitor maintenance, and provide real time information to staff, crew and passengers about vessel operations.

It should also be noted, that based on the passenger survey conducted as part of this master plan effort, there is a high level of trust and acceptance by passengers in the “product” provided by EUPTA, as epitomized by the captains, crews, and experience of various trips.

Perhaps the largest issues that may affect EUPTA in the next decade is the availability of capital funding through the Michigan Department of Transportation (MDOT). As noted earlier in the report, MDOT has reduced the level of funding available to EUPTA and the Beaver Island Transportation Authority. This could eventually constrict their ability to make needed improvements to their services.

Forecasts of Ferry Use

Table 3-1 and Figure 3-1 present projections of passengers for 2007 through 2020. The same information is presented for vehicles in Table 3-2 and Figure 3-2. All projection data is based on past trend data. The high range projections are based on a ten-year rolling average of the passenger growth rates, removing the highest and lowest rate. The low range projections are based on a six-year rolling average of the passenger growth rates, beginning with 2001. The low range projection methodology was modified slightly for the low range Sugar Island projections. The 2004 growth rate was excluded. The medium range projections were calculated using an average of the high range and the low range. Vehicle projections are based on passenger projections. The data were calculated using the current passenger/vehicle averages. Drummond Island averages about 1.75 passengers per vehicle, Neebish Island has approximately 1.6 passengers per vehicle and Sugar Island carries approximately 1.45 passengers per vehicle.

Table 3-1
Passenger Projections

DRUMMOND FERRY

Passengers Projections

Range	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High	399,339	410,004	419,392	428,995	437,476	445,606	453,886	460,575	468,062	477,837	487,943	497,822	507,579	517,360
Medium	394,529	400,089	406,452	411,346	415,710	420,905	425,769	429,783	434,271	439,746	445,470	451,174	456,754	462,343
Low	389,719	390,174	393,511	393,697	393,944	396,204	397,651	398,990	400,481	401,655	402,997	404,526	405,930	407,327

SUGAR FERRY

Passengers Projections

Range	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High	448,262	454,152	460,120	465,198	468,323	469,531	470,716	470,576	471,821	475,709	479,175	482,386	485,308	487,904
Medium	447,409	450,696	453,950	455,436	455,951	457,309	458,125	457,971	458,438	460,157	461,802	463,479	464,897	466,107
Low	446,557	447,240	447,779	445,674	443,579	445,087	445,533	445,365	445,056	444,605	444,429	444,571	444,485	444,311

NEEBISH FERRY

Passengers Projections

Range	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High	39,522	40,974	42,479	43,971	45,586	47,260	48,831	50,996	53,229	55,364	57,467	59,659	61,943	64,325
Medium	39,108	40,480	41,772	43,431	45,172	46,846	48,407	50,366	52,404	54,470	56,533	58,653	60,853	63,158
Low	38,694	39,985	41,064	42,890	44,759	46,432	47,983	49,735	51,578	53,576	55,600	57,647	59,763	61,990

Notes:

All projection data is based on past trend data. The high range projections are based on a 10-year rolling average of the passenger growth rates, removing the highest and lowest rate. The low range projections are based on a 6-year rolling average of the passenger growth rates, beginning with 2001. The low range projection methodology was modified slightly for the low range Sugar Island projections. The 2004 growth rate was excluded. The medium range projections were calculated using an average of the high range and the low range.

Figure 3-1A

Drummond Island Ferry Passenger Projections

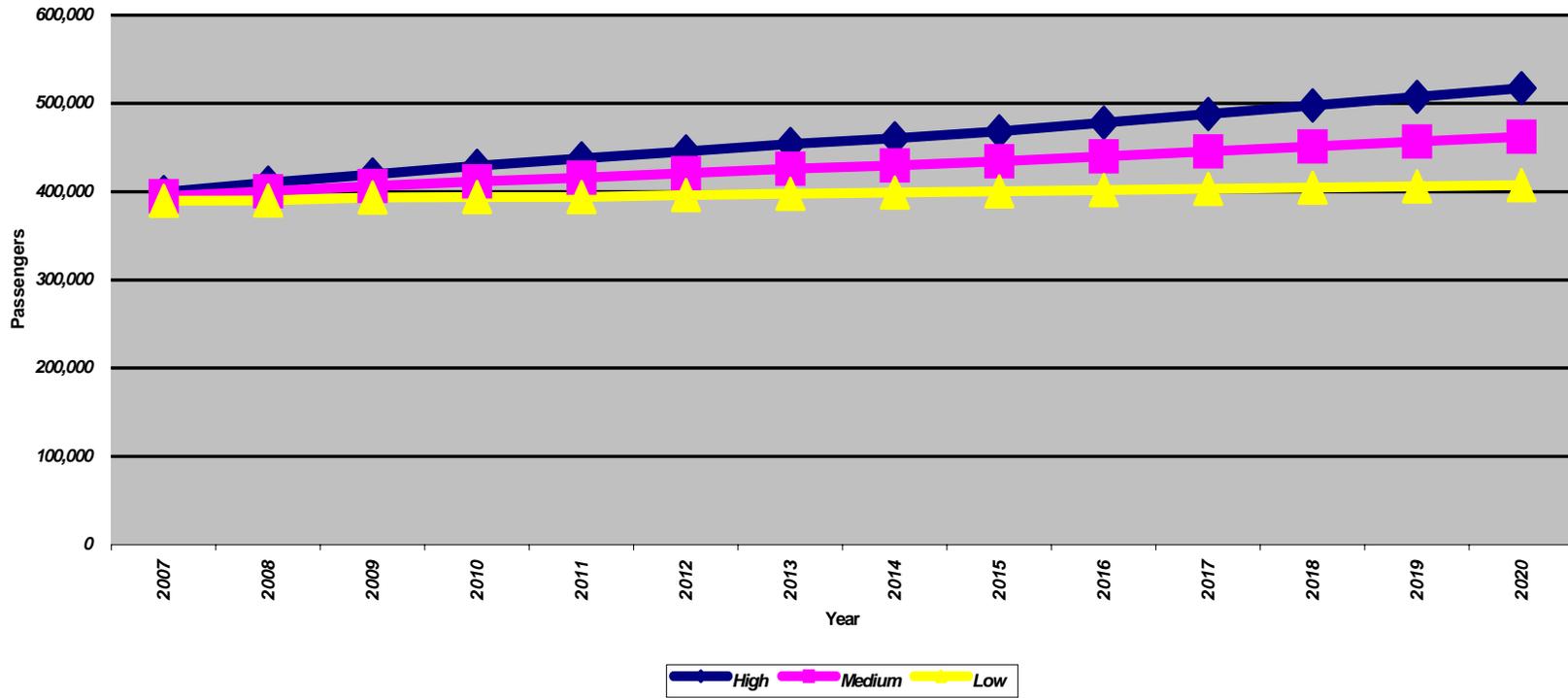


Figure 3-1B

Neebish Island Ferry Passenger Projections

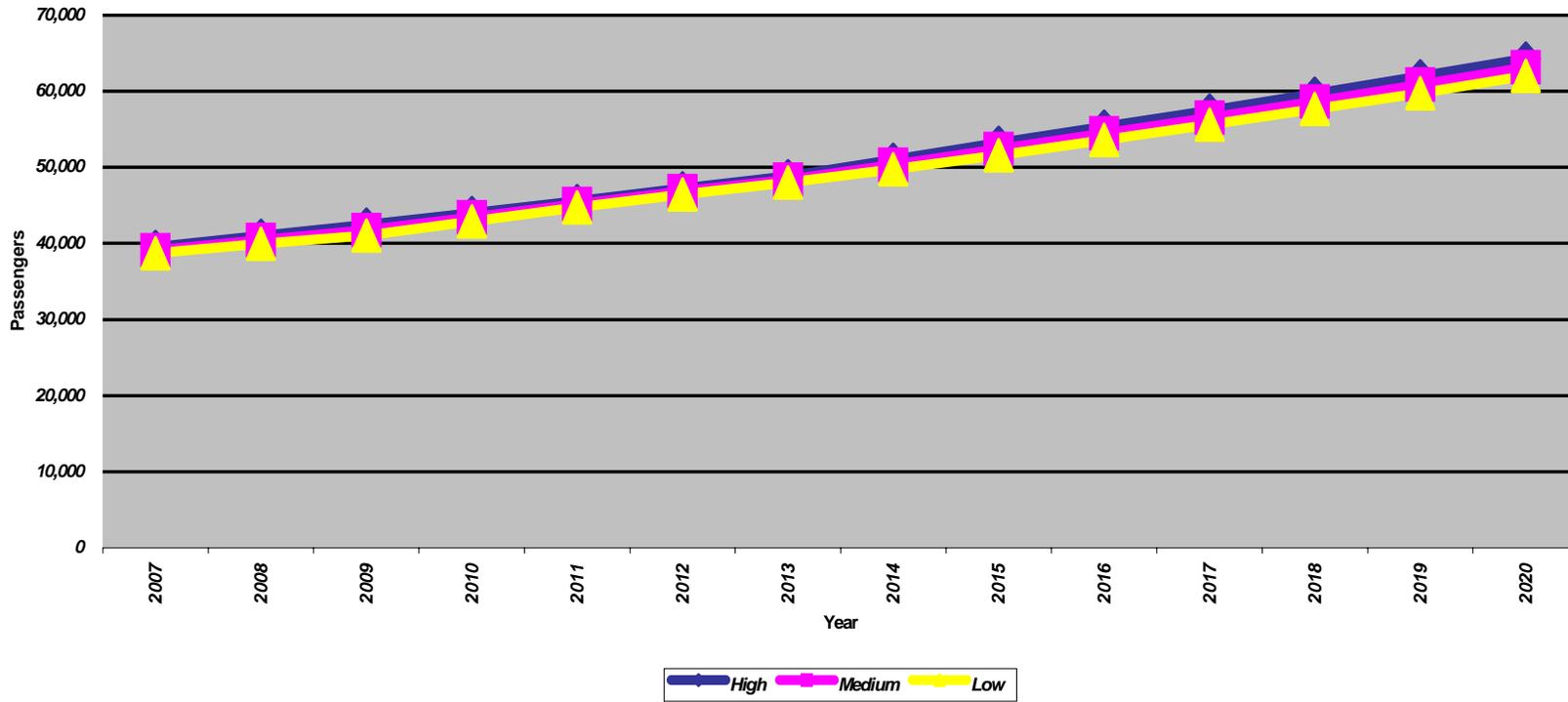


Figure 3-1C

Sugar Island Ferry Passenger Projections

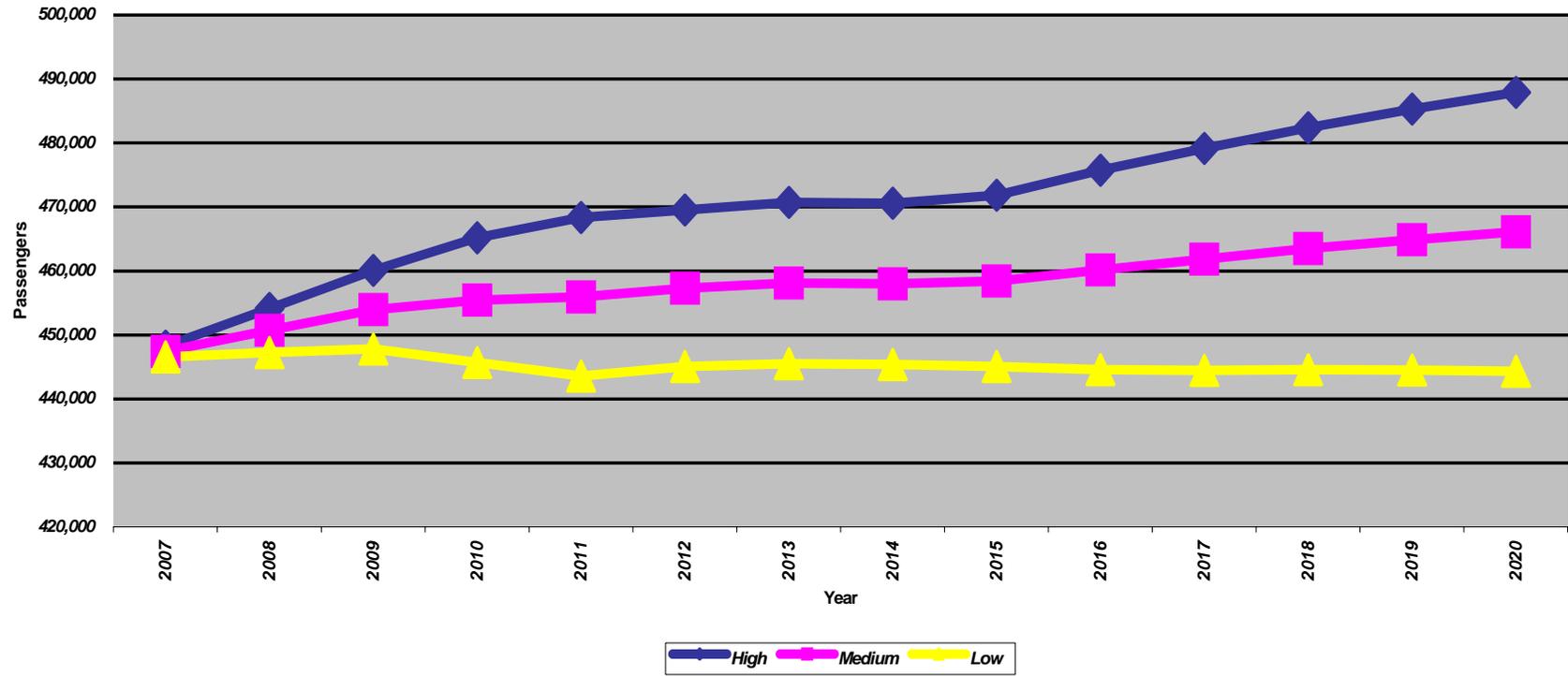


Table 3-2
Vehicle Projections

DRUMMOND FERRY

Vehicles Projections - High Range

Range	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High	228,194	234,288	239,653	245,140	249,986	254,632	259,363	263,186	267,464	273,050	278,824	284,469	290,045	295,634
Medium	225,445	228,622	232,258	235,055	237,549	240,517	243,296	245,590	248,155	251,283	254,554	257,814	261,003	264,196
Low	222,696	222,957	224,864	224,970	225,111	226,402	227,229	227,995	228,846	229,517	230,284	231,158	231,960	232,758

SUGAR FERRY

Vehicles Projections - High Range

Range	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High	309,146	313,208	317,324	320,826	322,981	323,815	324,632	324,535	325,394	328,075	330,466	332,680	334,695	336,486
Medium	308,558	310,825	313,069	314,094	314,449	315,385	315,948	315,842	316,164	317,350	318,484	319,640	320,618	321,453
Low	307,970	308,441	308,813	307,361	305,917	306,956	307,264	307,148	306,935	306,624	306,503	306,601	306,541	306,421

NEEBISH FERRY

Vehicles Projections - High Range

Range	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
High	24,701	25,609	26,549	27,482	28,491	29,538	30,519	31,872	33,268	34,602	35,917	37,287	38,714	40,203
Medium	24,443	25,300	26,107	27,144	28,233	29,279	30,254	31,479	32,752	34,044	35,333	36,658	38,033	39,473
Low	24,184	24,991	25,665	26,806	27,974	29,020	29,989	31,085	32,236	33,485	34,750	36,029	37,352	38,744

Notes:

Vehicle projections are based on passenger projections. The data were calculated using the current passengers/vehicle averages. Drummond Island averages about 1.75 passengers per vehicle, Neebish Island has approximately 1.6 passengers per vehicle and Sugar Island carries approximately 1.45 passengers per vehicle.

Figure 3-2A

Drummond Island Ferry Vehicle Projections

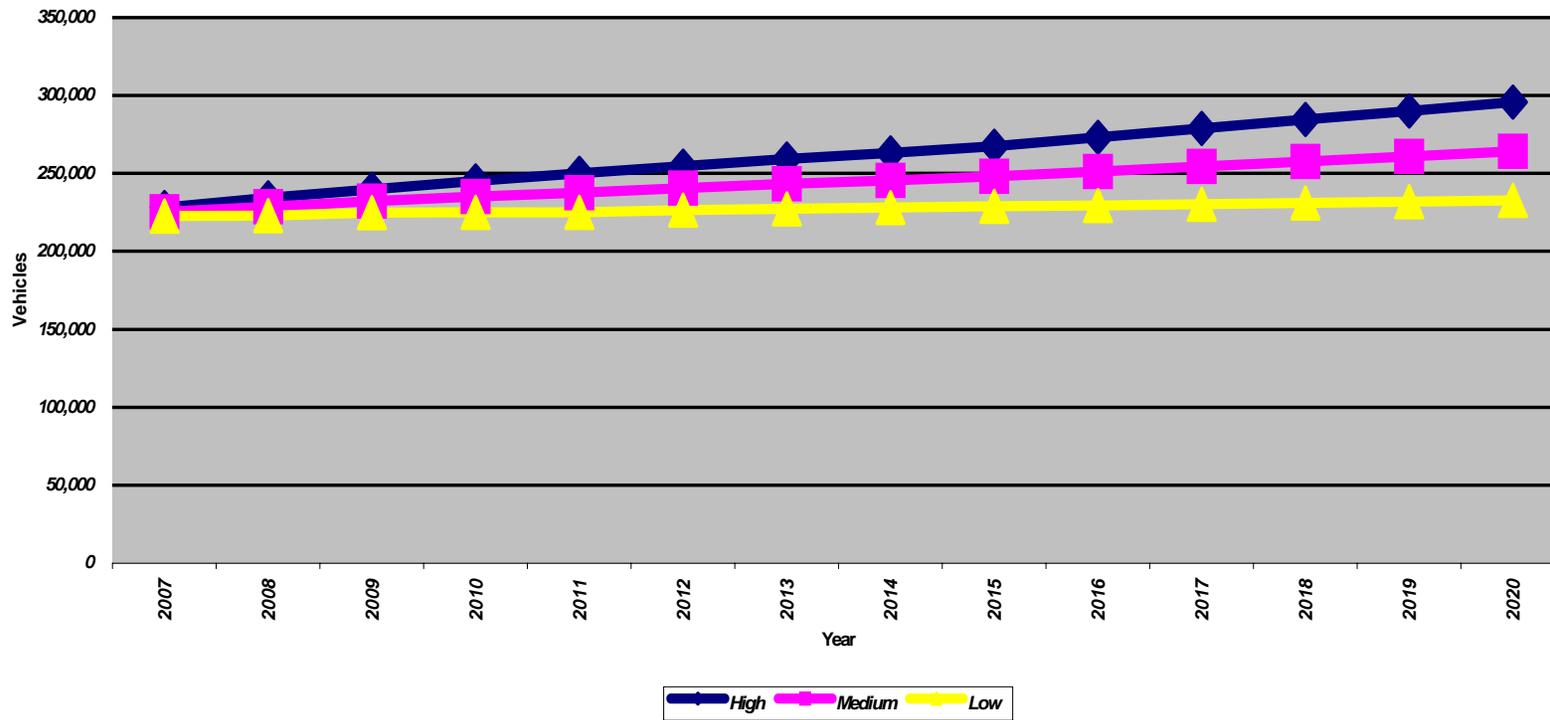


Figure 3-2B

Neebish Island Ferry Vehicle Projections

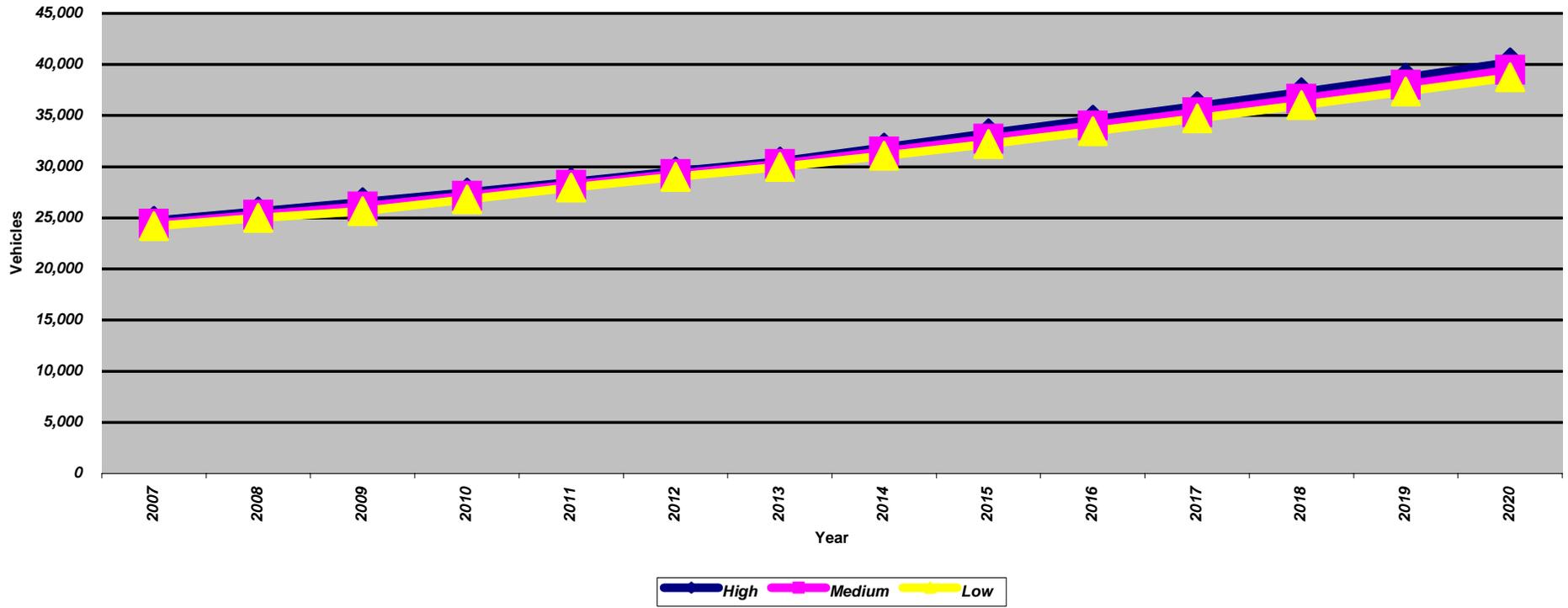
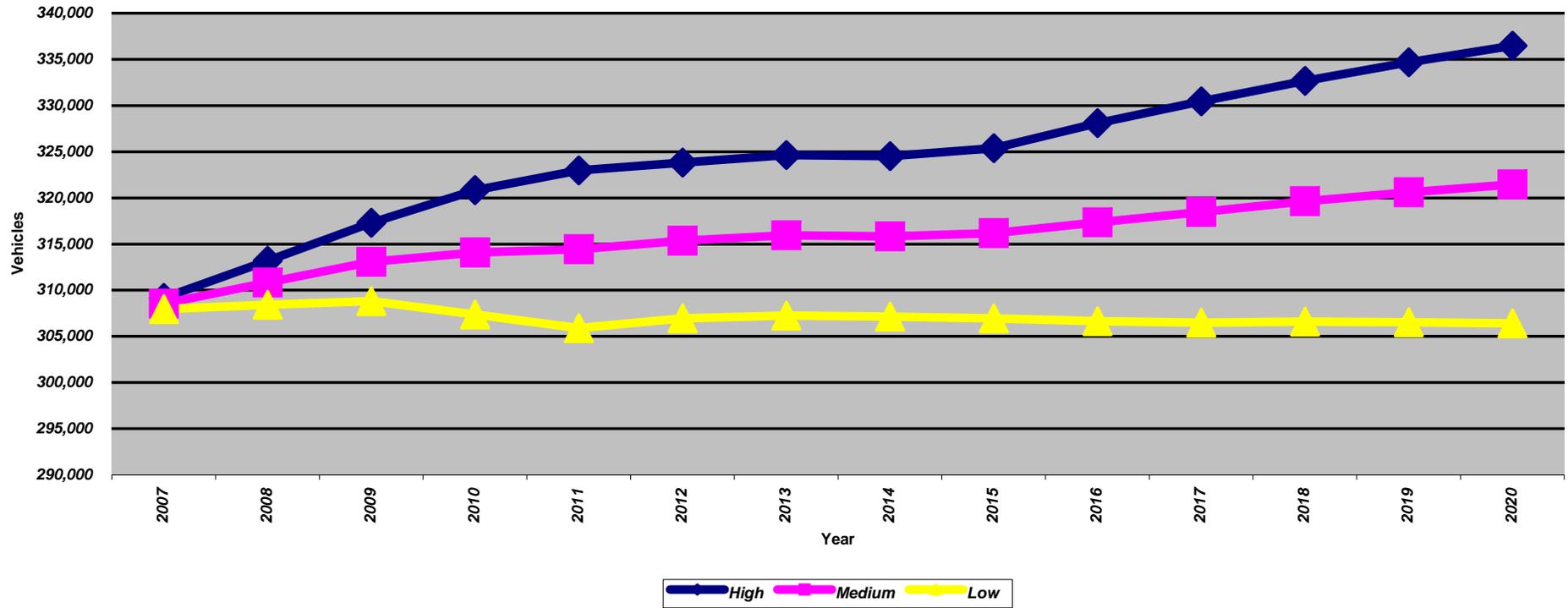


Figure 3-2C

Sugar Island Ferry Vehicle Projections



4. Capital and Service Options

EUPTA faces several challenges in the upcoming years. Figures 4-1 through 4-3 summarize the strengths, challenges and possible opportunities for EUPTA.

Based on the work conducted during this study, the EUPTA ferry operations on the St. Mary's River System are in excellent shape for the foreseeable future. The survey of passengers, information provided by the crew and EUPTA staff during meetings and focus groups, and other information developed during the study point to a system that is effectively meeting capacity with its current resources. Nevertheless, there are challenges. There are several key issues that need to be addressed in the next decade. These include:

- Continuing demand for trips on Sugar Island that requires the existing Sugar Islander to run more trips than are scheduled for several hours a day for much of the year;
- A flawed design on the Sugar Islander that makes loading and unloading large vehicles problematic and also constrains capacity;
- An aging (but operational) vessel operating the Neebish Island service;
- Issues with docks at all three islands;
- Opportunity for improvements in customer service through technology improvements including automated fare collection, intelligent transportation system (ITS) information that could allow real time information to be provided to customers; and increased security; and
- Questions concerning the amount of funding that will be available for capital projects through MDOT.

The following sections address ways EUPTA can address these issues between now and 2020. The most significant issue is understanding the relationship between passenger demand and the scheduled capacity of the system.

In Chapter 3, projections of passengers and vehicles carried through 2020 were presented. To understand better the implications of these projections for the system, the number of vehicles carried per trip by month was analyzed. This analysis was based on data from EUPTA. The data is based on eastbound passengers per trip.³

Tables 4-1 and 4-2 build upon that data and represent a micro-analysis for Drummond and Sugar Islands (Neebish was not analyzed at this level because of the low traffic levels). It should also be noted that as these tables represent eastbound traffic only, they do not cover the morning peak

³ The vehicles boarding the ferried are counted in the eastbound direction only. As fares are collected for a round trip, there is no need to count them when the passengers are returning off the islands in the westbound direction.

hours, as people commuting off the islands to go to work. Therefore, demand during the mornings can be expected to somewhat replicate what is seen in the early evening. The tables are based on projections in the mid range.

Vehicle per trip projections for Drummond Island are shown in Table 4-1. On Drummond, which has a current capacity of 56 car equivalents between the Drummond Islander III and IV, the demand today approaches or exceeds capacity for several hours per day. The capacity can be met by scheduling more trips (one trip per hour from each direction is scheduled; 3 trips per hour per boat can be operated if they run continuously). By 2016, the Drummond boats will be running "wild" to meet capacity for up to eight hours per day. This additional service will impact operational costs (fuel and maintenance) to maintain the same level of service. So, the issue is not whether the system can meet demand on Drummond (they can by operating more trips) but what the effect of this will be on the system in terms of operating costs and wear and tear on the vessels.

At Sugar Island, where only one boat can effectively operate, there are already instances according to staff where traffic is backed up. The Sugar Islander has an average vehicle capacity of 24 and currently operates two scheduled trips in each direction per hour. As can be seen referring to Table 4-2c, per trip capacity in July is exceeded four hours per day eastbound. By 2012 this number will rise to 6 hours. Therefore, by 2012 it is clear that in the summer months the Sugar Islander will be running trips in excess of its schedule much of the day.

This analysis, combined with the fact that the Sugar Islander has design flaws that make it less than suitable for operation at its current location, suggest that planning should begin now to acquire a new vessel, rather than enlarge the existing vessel or add a second boat. Both of those options have issues that make them unsuitable for the needs of the service. Assuming a new vessel can be put into place, the Sugar Islander can be moved to Neebish Island to replace the Neebish Islander II. That vessel would be sold. Additionally, it appears reasonable within the next ten years to begin planning to replace the Drummond Islander III.

In addition to these major capital investments, there is a need for improvements to the docks at all three islands, an opportunity to upgrade technology to facilitate better handling of fare collection and preventive maintenance, and an overall evaluation of schedules to determine efficiencies that can be gained in system operation.

Figure 4-1
Strengths, Challenges, Opportunities
Drummond Island Ferry

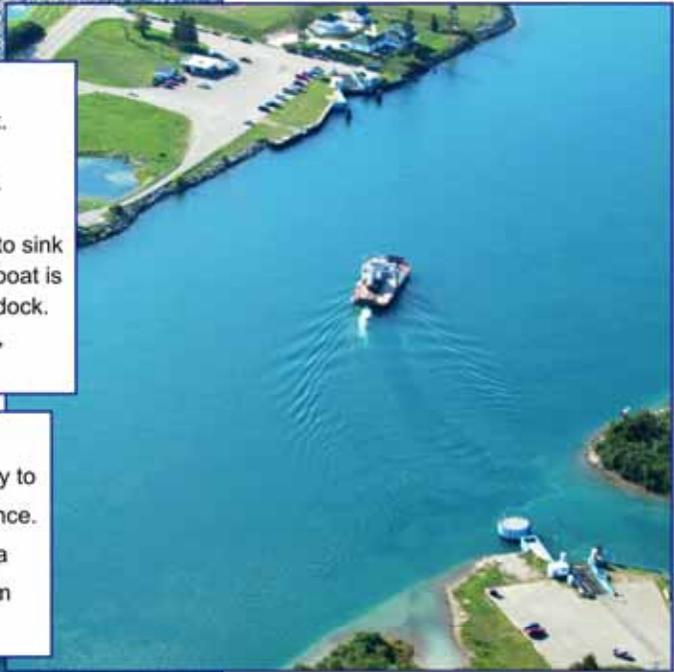


Figure 4-2
Strengths, Challenges, Opportunities
Sugar Island Ferry



- Strengths**
- ◆ The schedules have improved.
 - ◆ Crew is solid.
 - ◆ Move cars and trucks efficiently.

- Weaknesses**
- ◆ The bumpers are too slippery. Boat drifts with current. Overall problem with piling clusters and docks.
 - ◆ Pilings are too solid and there is not enough cushion.
 - ◆ Capacity to collect cash in summer.
 - ◆ Boat has weakness it doesn't have enough hull in it to sink props down far enough. Causes stability problem. If boat is loaded too front heavy you can hardly get out of the dock.
 - ◆ Sugar is on a dangerous seaway lots of freight traffic, curves, ice, winds.



- Possible Operational Improvements**
- ◆ EUPTA has requested funds for upgrading technology to facilitate cash collections and preventative maintenance.
 - ◆ In summer time, consider scheduling as needed extra deck hand from 7 am to 11 am and from 3 pm to 7 pm to keep up with traffic.



- Possible Capital Improvements**
- ◆ EUPTA is currently upgrading radar to improve safety in the channel.
 - ◆ Reconfiguration (hull redesign) or replacement of the Sugar Islander II.
 - ◆ Examine the feasibility dock improvements on the mainland side. Dredge as necessary on the Sugar Island side.

Figure 4-3
Strengths, Challenges, Opportunities
Neebish Island Ferry



Table 4-1
Drummond Island

DRUMMOND FERRY

Vehicles Projections - Mid Range

Eastbound October Vehicles per Trip

	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6:00 - 7:00 AM	12	12	13	14	14	13	13	13	14	15	14	14	14	15
7:00 - 8:00 AM	15	15	16	17	17	16	16	16	17	18	17	17	17	18
8:00 - 9:00 AM	16	16	17	18	18	17	17	17	18	19	19	18	18	19
9:00 - 10:00 AM	21	21	23	24	24	22	23	23	24	26	25	24	24	26
10:00 - 11:00 AM	12	12	13	14	14	13	13	13	14	15	14	14	14	15
11:00 - 12:00 PM	15	15	16	17	17	16	16	16	17	18	18	17	17	19
12:00 - 1:00 PM	13	13	14	15	15	14	14	14	15	16	15	15	15	16
1:00 - 2:00 PM	19	19	20	21	21	20	20	20	21	23	22	21	22	23
2:00 - 3:00 PM	24	24	25	27	27	25	26	26	27	29	28	27	27	29
3:00 - 4:00 PM	19	20	21	22	22	21	21	21	22	24	23	22	22	24
4:00 - 5:00 PM	29	30	32	34	34	31	32	32	34	36	35	34	34	36
5:00 - 6:00 PM	35	35	38	40	40	37	38	38	40	43	41	40	40	43
6:00 - 7:00 PM	26	27	28	30	30	28	28	29	30	32	31	30	31	32
7:00 - 8:00 PM	21	21	22	23	24	22	22	22	24	25	24	23	24	25
8:00 - 9:00 PM	25	25	27	28	29	26	27	27	29	30	29	28	29	30
9:00 - 10:00 PM	18	18	19	20	21	19	19	19	21	22	21	20	21	22
10:00 - 11:00 PM	9	9	9	10	10	9	9	9	10	10	10	10	10	10
11:00 - 12:00 AM	6	6	6	7	7	6	6	6	7	7	7	7	7	7
12:00 - 1:00 AM	5	5	5	6	6	5	5	5	6	6	6	6	6	6
1:00 - 2:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 - 5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 - 6:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 4-1A
Drummond Island (continued)

Eastbound January Vehicles per Trip

	Fiscal Year														
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
6:00 - 7:00 AM	7	7	8	8	8	7	8	8	8	9	8	8	8	8	
7:00 - 8:00 AM	9	9	9	10	9	9	9	9	10	11	10	10	10	10	
8:00 - 9:00 AM	9	9	10	11	10	10	10	10	11	11	10	11	11	11	
9:00 - 10:00 AM	12	12	13	14	13	13	13	13	14	15	14	14	14	14	
10:00 - 11:00 AM	7	7	8	8	8	7	8	8	8	9	8	8	8	8	
11:00 - 12:00 PM	9	9	9	10	10	9	9	10	10	11	10	10	10	10	
12:00 - 1:00 PM	7	8	8	9	8	8	8	8	9	9	8	9	9	9	
1:00 - 2:00 PM	11	11	12	12	12	12	12	12	12	13	12	12	13	13	
2:00 - 3:00 PM	14	14	15	16	15	15	15	15	16	17	16	16	16	16	
3:00 - 4:00 PM	11	11	12	13	12	12	12	12	13	14	13	13	13	13	
4:00 - 5:00 PM	17	17	19	20	19	18	19	19	20	21	19	20	20	20	
5:00 - 6:00 PM	20	21	22	23	22	22	22	22	23	25	23	23	24	24	
6:00 - 7:00 PM	15	16	17	18	17	16	17	17	18	19	17	18	18	18	
7:00 - 8:00 PM	12	12	13	14	13	13	13	13	14	15	14	14	14	14	
8:00 - 9:00 PM	14	15	16	17	16	15	16	16	17	18	16	17	17	17	
9:00 - 10:00 PM	10	11	11	12	11	11	11	11	12	13	12	12	12	12	
10:00 - 11:00 PM	5	5	5	6	5	5	5	5	6	6	6	6	6	6	
11:00 - 12:00 AM	3	3	4	4	4	4	4	4	4	4	4	4	4	4	
12:00 - 1:00 AM	3	3	3	3	3	3	3	3	3	4	3	3	3	3	
1:00 - 2:00 AM	0	0	0	1	0	0	0	0	1	1	1	1	1	1	
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:00 - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 - 5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 - 6:00 AM	0	0	0	1	0	0	0	0	1	1	1	1	1	1	

Table 4-1B
Drummond Island (continued)

Eastbound April Vehicles per Trip

	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6:00 - 7:00 AM	9	8	8	9	9	9	9	9	9	10	10	10	9	10
7:00 - 8:00 AM	11	10	10	10	11	11	11	11	11	12	12	12	12	12
8:00 - 9:00 AM	11	11	11	11	12	12	12	12	12	13	13	13	13	13
9:00 - 10:00 AM	15	14	15	15	16	16	15	16	16	17	18	17	16	17
10:00 - 11:00 AM	9	8	8	9	9	9	9	9	9	10	10	10	9	10
11:00 - 12:00 PM	11	10	11	11	11	11	11	11	11	12	13	12	12	12
12:00 - 1:00 PM	9	9	9	9	10	10	9	9	10	10	11	10	10	10
1:00 - 2:00 PM	13	13	13	13	14	14	14	14	14	15	16	15	15	15
2:00 - 3:00 PM	17	16	17	17	18	18	17	18	18	19	20	19	19	19
3:00 - 4:00 PM	14	13	14	14	15	15	14	14	15	15	16	16	15	15
4:00 - 5:00 PM	21	20	21	21	22	22	22	22	22	23	25	24	23	23
5:00 - 6:00 PM	25	24	24	25	26	27	26	26	26	28	29	28	27	28
6:00 - 7:00 PM	19	18	18	19	20	20	19	20	20	21	22	21	21	21
7:00 - 8:00 PM	15	14	14	15	15	16	15	15	15	16	17	17	16	16
8:00 - 9:00 PM	18	17	17	18	19	19	18	18	19	20	21	20	20	20
9:00 - 10:00 PM	13	12	13	13	13	14	13	13	13	14	15	15	14	14
10:00 - 11:00 PM	6	6	6	6	6	6	6	6	6	7	7	7	7	7
11:00 - 12:00 AM	4	4	4	4	4	4	4	4	4	5	5	5	5	5
12:00 - 1:00 AM	4	3	4	4	4	4	4	4	4	4	4	4	4	4
1:00 - 2:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 - 5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 - 6:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 4-1C
Drummond Island (continued)

Eastbound July Vehicles per Trip

	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6:00 - 7:00 AM	21	20	20	21	23	22	21	22	21	24	25	24	23	22
7:00 - 8:00 AM	26	25	24	25	28	27	26	27	26	30	30	29	28	27
8:00 - 9:00 AM	28	27	26	27	30	29	28	29	28	32	33	31	30	29
9:00 - 10:00 AM	36	35	34	36	40	39	37	38	36	42	43	41	40	39
10:00 - 11:00 AM	21	20	20	21	23	22	21	22	21	24	25	24	23	22
11:00 - 12:00 PM	26	25	25	26	29	28	27	27	26	31	31	30	29	28
12:00 - 1:00 PM	22	21	21	22	25	24	23	23	22	26	26	25	24	24
1:00 - 2:00 PM	32	31	30	32	36	34	33	34	32	38	38	37	36	34
2:00 - 3:00 PM	41	40	39	41	45	44	42	43	41	48	49	47	45	44
3:00 - 4:00 PM	34	33	32	33	37	36	35	35	34	39	40	38	37	36
4:00 - 5:00 PM	51	49	48	51	56	54	53	53	51	60	61	58	56	55
5:00 - 6:00 PM	60	59	57	60	67	64	62	63	61	71	72	69	67	65
6:00 - 7:00 PM	46	44	43	45	51	49	47	47	46	53	54	52	50	49
7:00 - 8:00 PM	36	34	33	35	39	38	37	37	36	42	42	41	39	38
8:00 - 9:00 PM	43	42	40	43	48	46	44	45	43	50	51	49	48	46
9:00 - 10:00 PM	31	30	29	31	34	33	32	32	31	36	37	35	34	33
10:00 - 11:00 PM	15	14	14	15	16	16	15	15	15	17	18	17	16	16
11:00 - 12:00 AM	10	10	9	10	11	11	10	10	10	12	12	12	11	11
12:00 - 1:00 AM	9	8	8	9	10	9	9	9	9	10	10	10	10	9
1:00 - 2:00 AM	1	1	1	1	1	1	1	1	1	2	2	2	1	1
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 - 4:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4:00 - 5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 - 6:00 AM	1	1	1	1	1	1	1	1	1	2	2	2	1	1

Table 4-2
Sugar Island

SUGAR ISLAND FERRY

Vehicles Projections - Mid Range

Eastbound October Vehicles per Trip

	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6:00 - 7:00 AM	2	2	3	3	3	2	2	2	3	3	3	2	2	3
7:00 - 8:00 AM	6	6	7	7	7	6	6	6	7	7	7	6	6	7
8:00 - 9:00 AM	7	7	7	7	7	7	7	7	7	7	7	7	7	7
9:00 - 10:00 AM	8	8	9	9	9	9	9	9	9	9	9	9	9	9
10:00 - 11:00 AM	12	12	13	14	14	12	12	12	13	14	13	13	13	13
11:00 - 12:00 PM	13	13	14	14	14	13	13	13	14	14	14	13	13	14
12:00 - 1:00 PM	14	14	15	15	15	14	14	14	15	15	15	14	14	15
1:00 - 2:00 PM	16	17	17	18	18	17	17	17	18	18	18	17	17	18
2:00 - 3:00 PM	14	14	15	16	16	15	15	15	15	16	15	15	15	15
3:00 - 4:00 PM	16	16	17	18	18	16	16	16	17	18	17	16	16	17
4:00 - 5:00 PM	21	21	22	24	24	22	22	22	23	24	23	22	22	23
5:00 - 6:00 PM	27	27	29	30	30	28	28	28	29	30	29	28	28	29
6:00 - 7:00 PM	16	16	17	17	17	16	16	16	17	18	17	16	16	17
7:00 - 8:00 PM	13	13	14	14	14	13	13	13	14	14	14	13	13	14
8:00 - 9:00 PM	10	10	11	12	12	11	11	11	11	12	11	11	11	11
9:00 - 10:00 PM	10	10	10	11	11	10	10	10	10	11	11	10	10	11
10:00 - 11:00 PM	7	7	7	8	8	7	7	7	7	8	7	7	7	8
11:00 - 12:00 AM	7	7	7	7	7	7	7	7	7	7	7	7	7	7
12:00 - 1:00 AM	2	2	3	3	3	2	2	2	3	3	3	2	2	3
1:00 - 2:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 - 4:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4:00 - 5:00 AM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
5:00 - 6:00 AM	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Table 4-2A
Sugar Island (continued)

Eastbound January Vehicles per Trip

	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6:00 - 7:00 AM	6	6	6	7	6	6	6	6	6	7	6	6	6	6
7:00 - 8:00 AM	7	7	8	8	8	8	8	8	8	8	8	8	8	8
8:00 - 9:00 AM	8	8	8	9	8	8	8	8	9	9	8	8	8	8
9:00 - 10:00 AM	10	11	11	12	11	11	11	11	11	12	11	11	11	11
10:00 - 11:00 AM	6	6	6	7	6	6	6	6	6	7	6	6	6	6
11:00 - 12:00 PM	8	8	8	8	8	8	8	8	8	9	8	8	8	8
12:00 - 1:00 PM	6	6	7	7	7	7	7	7	7	7	7	7	7	7
1:00 - 2:00 PM	9	9	10	10	10	10	10	10	10	11	10	10	10	10
2:00 - 3:00 PM	12	12	13	13	13	12	12	12	13	13	12	12	12	12
3:00 - 4:00 PM	10	10	10	11	10	10	10	10	10	11	10	10	10	10
4:00 - 5:00 PM	15	15	16	17	16	15	15	15	16	17	15	15	15	15
5:00 - 6:00 PM	17	18	19	20	19	18	18	18	19	20	18	18	18	18
6:00 - 7:00 PM	13	13	14	15	14	13	14	13	14	15	14	14	14	14
7:00 - 8:00 PM	10	10	11	12	11	11	11	11	11	12	11	11	11	11
8:00 - 9:00 PM	12	13	13	14	13	13	13	13	13	14	13	13	13	13
9:00 - 10:00 PM	9	9	9	10	10	9	9	9	10	10	9	9	9	9
10:00 - 11:00 PM	4	4	5	5	5	4	4	4	5	5	4	4	4	4
11:00 - 12:00 AM	3	3	3	3	3	3	3	3	3	3	3	3	3	3
12:00 - 1:00 AM	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1:00 - 2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 - 5:00 AM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
5:00 - 6:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 4-2B
Sugar Island (continued)

Eastbound April Vehicles per Trip

	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6:00 - 7:00 AM	7	7	7	7	7	7	7	7	7	7	8	7	7	7
7:00 - 8:00 AM	9	8	8	8	9	9	8	8	8	9	9	9	9	9
8:00 - 9:00 AM	9	9	9	9	10	10	9	9	9	10	10	10	9	9
9:00 - 10:00 AM	12	12	12	12	13	13	12	12	12	13	13	13	12	12
10:00 - 11:00 AM	7	7	7	7	7	7	7	7	7	7	8	7	7	7
11:00 - 12:00 PM	9	9	9	9	9	9	9	9	9	9	10	9	9	9
12:00 - 1:00 PM	8	7	7	7	8	8	7	7	7	8	8	8	7	7
1:00 - 2:00 PM	11	10	11	11	11	11	11	11	11	11	12	11	11	11
2:00 - 3:00 PM	14	13	13	13	14	14	14	14	14	14	15	14	14	14
3:00 - 4:00 PM	11	11	11	11	12	12	11	11	11	12	12	12	11	11
4:00 - 5:00 PM	17	17	17	17	18	18	17	17	17	18	19	18	17	17
5:00 - 6:00 PM	20	20	20	20	21	21	20	20	20	21	22	21	20	20
6:00 - 7:00 PM	15	15	15	15	16	16	15	15	15	16	17	16	15	15
7:00 - 8:00 PM	12	12	12	12	12	12	12	12	12	12	13	12	12	12
8:00 - 9:00 PM	15	14	14	14	15	15	14	14	14	15	16	15	14	14
9:00 - 10:00 PM	10	10	10	10	11	11	10	10	10	11	11	11	10	10
10:00 - 11:00 PM	5	5	5	5	5	5	5	5	5	5	5	5	5	5
11:00 - 12:00 AM	3	3	3	3	3	3	3	3	3	4	4	4	3	3
12:00 - 1:00 AM	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1:00 - 2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 - 5:00 AM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
5:00 - 6:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 4-2C
Sugar Island (continued)

Eastbound July Vehicles per Trip

	Fiscal Year													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6:00 - 7:00 AM	12	12	11	12	13	12	12	12	11	13	13	13	12	12
7:00 - 8:00 AM	15	14	14	14	16	15	15	15	14	16	16	15	15	14
8:00 - 9:00 AM	16	15	15	16	17	16	16	16	15	17	17	17	16	15
9:00 - 10:00 AM	21	20	20	21	23	22	21	21	20	23	23	22	21	20
10:00 - 11:00 AM	12	12	11	12	13	12	12	12	11	13	13	13	12	12
11:00 - 12:00 PM	15	15	14	15	16	16	15	15	14	17	17	16	15	15
12:00 - 1:00 PM	13	12	12	13	14	13	13	13	12	14	14	13	13	12
1:00 - 2:00 PM	19	18	17	18	20	19	18	18	18	20	20	20	19	18
2:00 - 3:00 PM	24	23	22	23	26	24	23	23	22	26	26	25	24	23
3:00 - 4:00 PM	20	19	18	19	21	20	19	19	18	21	21	20	19	19
4:00 - 5:00 PM	30	29	28	29	32	31	29	29	28	32	32	31	30	28
5:00 - 6:00 PM	35	34	33	34	38	36	35	35	33	38	38	37	35	34
6:00 - 7:00 PM	27	26	25	26	29	27	26	26	25	29	29	28	26	25
7:00 - 8:00 PM	21	20	19	20	22	21	20	20	19	22	23	22	21	20
8:00 - 9:00 PM	25	24	23	24	27	26	25	25	24	27	27	26	25	24
9:00 - 10:00 PM	18	17	17	18	19	18	18	18	17	20	20	19	18	17
10:00 - 11:00 PM	9	8	8	8	9	9	8	8	8	9	9	9	9	8
11:00 - 12:00 AM	6	6	5	6	6	6	6	6	6	6	6	6	6	6
12:00 - 1:00 AM	5	5	5	5	5	5	5	5	5	6	6	5	5	5
1:00 - 2:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2:00 - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 - 4:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4:00 - 5:00 AM	0	1	2	3	4	5	6	7	8	9	10	11	12	13
5:00 - 6:00 AM	2	2	1	2	2	2	2	2	1	2	2	2	2	1

5. Recommendations

Tables 5-1 and 5-2 present the 2020 St. Mary's River System Master Plan. This plan reflects the input from passengers of the ferry operations, the captains and crews of the vessels, the staff and the Board of the Eastern Upper Peninsula Transportation Authority, and analysis of system data related to operations. The tables present the listing of the options and the approximate time frame for implementation.

Table 5-3 presents the capital costs that can be anticipated with the recommendations in the master plan. These costs are those that can be anticipated with the major capital improvement and staff increases that will occur as a result of the program. These costs are preliminary and would be subject to change based on final design parameters.

Table 5-1
Master Plan Implementation Schedule – Capital Improvement Program

Action	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
C1 - Planning for Sugar Island replacement ferry	x													
C2 - Replace Sugar Islander II					x									
C3 - Move Sugar Islander II to Neebish Island (sell Neebish Islander II)					x									
C4 - Drummond Island dock improvements (new ramp on south side)				x										
C5 - Evaluate need for Drummond Island breakwall	x													
C6 - Implement fare collection technology		x												
C7 - Sugar Island dock improvements			x											
C8 - Ramp improvements on Neebish Island		x												
C9 - Planning for replacement vessel for Drummond Islander III									x					
C10 - Replace Drummond Islander III													x	

Table 5-2
Master Plan Implementation Schedule – Operations Improvement Program

Action	Time Frame
○1 - Change snowmobile loading procedures at Drummond Island docks	2007
○2 – Adjust staffing levels on Drummond Island to match demand, particularly in high traffic periods	2007
○3 – On Sugar Island, schedule an additional deck hand in high traffic periods from 7 am to 11 am and 3 pm to 7 pm.	2007
○4 – Monitor fuel prices and determine whether the fares should be raised.	2007 - 2008
○5 – Implement customer-information program based on electronic signage, email alerts, and other options.	2009 - 2010

Table 5-3
Master Plan Capital Costs – Major Improvements

Item	Target Year	Preliminary Cost
Acquire new vessel to replace Sugar Islander II	2011	\$5,000,000
Drummond Island Dock Improvements	2010	\$500,000
Fare Collection Technology	2008	\$70,000
Sugar Island Dock Improvements	2009	\$500,000
Neebish Island Ramp Improvements	2008	\$250,000
Acquire new vessel to replace Drummond Islander III	2019	\$8,000,000
TOTAL MAJOR CAPITAL IMPROVEMENTS		\$14,320,000

Appendix A

Executive Summary of 1987 Master Plan

TABLE OF CONTENTS

	<u>PAGE</u>
EXECUTIVE SUMMARY	i
I ANALYSIS OF FERRY TRAFFIC AND OPERATIONS	I-1
I.1 Review of Traffic Volumes and Characteristics	I-1
I.2 Selection of Design Traffic Volumes	I-4
I.3 Ferry Service Operating Characteristics	I-6
I.3.1 Service Schedules and Actual Operations	I-6
I.3.2 Winter Operations	I-7
I.3.3 Back-up Capability/Maintenance of Essential Service	I-9
I.4 Forecast of Future Traffic Volmes	I-10
I.4.1 Ferry System Demand Forecast	I-10
I.4.2 Ferry System Capacity Estimates	I-12
II EVALUATION OF EXISTING VESSELS AND DOCK FACILITIES	II-1
II.1 Summary of Vessel Inspection Reports	II-1
II.1.1 SUGAR ISLANDER	II-1
II.1.2 NEEBISH ISLANDER	II-2
II.1.3 DRUMMOND ISLANDER	II-2
II.1.4 DRUMMOND ISLANDER II	II-3
II.2 Summary of Dock Inspection Reports	II-3
II.2.1 Sugar Island Docks	II-4
II.2.2 Neebish Island Docks	II-5
II.2.3 Drummond Island Docks	II-7
III CAPITAL IMPROVEMENT PROGRAM	III-1
III.1 Vessel Replacements	III-1
III.2 Dock Improvements	III-2
APPENDIX A: VESSEL INSPECTION REPORTS	
APPENDIX B: DOCK INSPECTION REPORTS	

EXECUTIVE SUMMARY

The purpose of this Master System Plan for the St. Mary's River Ferry System is to identify the time-phased capital improvements necessary to enable the ferry system to meet service demands over the next twenty years.

The study undertaken in support of the Master System Plan consists of the following two principal elements:

- o A review of the physical and operating characteristics of the ferry services to determine their ability to meet projected traffic demands in the period to 2010.
- o Inspection of the current physical condition of ferry vessels and docks to determine their remaining useful life and, therefore, the requirements for equipment replacements and upgrades.

On-board surveys of the ferry vessels were conducted, together with surface and underwater inspections of the docks. Ferry operations were observed and Ferry System personnel were interviewed for purposes of identifying the operating capacity of the ferry services and physical factors which constrain operations. Long-range traffic forecasts prepared by the Michigan Department of Transportation (MDOT) were evaluated against the carrying capacity of the ferry services to provide a basis for establishing the time-phasing of new increments of capacity.

The following are the study's principal findings and recommendations:

- o The ferry system is facing significant growth in travel demand over the next twenty years on all three routes.
- o While the system's capacity requirements are established by peak summer travel demand, the ferry system must also be capable of providing reliable year-round services to "basic" users.

- o In general, the existing ferry vessels and docks are in good condition and can be expected to have long remaining useful lives. Vessel replacement/enlargement requirements are driven by projected growth in traffic and, therefore, a need to provide additional carrying capacity, rather than by vessel age and condition. On the other hand, dock improvement requirements, in the limited cases where they are needed, are determined primarily by present physical condition.

- o During the time frame of the study, the following vessel replacements/enlargements are required:

Sugar Island Route: The SUGAR ISLANDER, which cannot be enlarged, will require replacement about 1995. It is recommended that the vessel be replaced with a new double-ended ferry with a capacity of 20-22 vehicles. Such a vessel would meet projected traffic demands until beyond the year 2010.

Neebish Island Route: This route will also require additional capacity by about 1995. Two options are recommended for consideration. Under Alternative A, the NEEBISH ISLANDER would be lengthened and repowered at an estimated cost of \$110,000 to give the vessel a carrying capacity of 6 vehicles, which would meet projected traffic demands until beyond the year 2010. Under Alternative B, the NEEBISH ISLANDER would be replaced by the SUGAR ISLANDER, which would become available at about the same time and has sufficient remaining useful life to provide service until beyond the year 2010.

Based on an examination of the SUGAR ISLANDER and observation of ferry operations on both the Sugar and Neebish Island routes, it is believed that the SUGAR ISLANDER would operate successfully on the Neebish Island route.

new
Feet 48
P/R to log here

turn over
of
chassis

CONSTRUCTION
WILL
DEFER

to be resolved
w/c 1/10/78

Drummond Island Route: This route requires additional capacity by 1989. There are two options. Under Alternative A, the DRUMMOND ISLANDER II would be fitted with an enlarged and redesigned forebody which would increase its carrying capacity from 12 vehicles to about 20 vehicles and would also enhance its icebreaking capability. The cost of this alternative is estimated at \$600,000. Under Alternative B, the DRUMMOND ISLANDER II would be replaced by a new ferry with a capacity of 20-24 vehicles at a cost of \$1,500,000, excluding any credit for the proceeds from selling the DRUMMOND ISLANDER II. It is estimated that such proceeds could be \$200,000-\$400,000, assuming a ferry operator capable of using the vessel can be identified.

While Alternative A, enlarging and redesigning the DRUMMOND ISLANDER II, would provide additional capacity and year-round operating capability, the vessel would not be as efficient in vehicle handling as a well designed new ferry. This would make it necessary to replace the DRUMMOND ISLANDER sooner than would be the case if Alternative B were selected. Alternative B is the recommended alternative, subject to identification of a buyer for the DRUMMOND ISLANDER II and realization of a reasonable sales price. If these conditions cannot be met, it is recommended that the DRUMMOND ISLANDER II be enlarged.

- o With the exception of the items noted below, the ferry system's dock facilities were generally found to be adequate from a structural standpoint to meet long-term service requirements.

Neebish Island Route: It is recommended that the Neebish Island dock be rebuilt either at its existing location or, if suitable funding arrangements can be made, at a new location adjacent to the Rock Cut to the south of the present location. Available information about winter ice conditions indicates that the new location would allow year-round ferry service and would thereby allow the west Neebish Channel to remain open for the full Great Lakes navigation season.

The benefits of relocating the dock accrue to Great Lakes commercial traffic, whereas the disadvantages accrue to EUPTA and to the residents of Neebish Island. The disadvantages to EUPTA include (a), a higher capital cost to relocate the dock than to replace it at its present location, primarily because of the need to build a new access road and (b), higher operating costs because the ferry operating season would be extended by at least six weeks to coincide with the Great Lakes commercial navigation season. This extended period of ferry operations would increase operating costs by more than the savings which would accrue from operating the shorter route to the relocated terminal site. The disadvantages to Neebish Island residents are that they would have to pay ferry fares and would be constrained by the ferry schedule for a longer season.

It is recommended that the Neebish Island terminal be relocated only if it is possible to negotiate with commercial shipping interests to contribute (a), the incremental costs of dock relocation relative to the cost of replacement in-place and (b), the incremental operating costs of an extended operating season, such that free ferry service could be offered during this period.

Drummond Island Route: The ramps at De Tour and Drummond Island require immediate replacement and the piers at both locations should be extended to provide greater protection from severe wind and wave conditions. The existing piers do not provide full wind and wave protection for the existing vessels; this problem will be increased when a larger vessel, required to increase the ferry service's capacity, is introduced in the near future. De-icing bubbler systems should be installed at all docks which do not currently have them.

- o Including minor improvements and periodic major overhauls in addition to the vessel and dock replacements/enlargements noted above, the recommended capital improvement program for the period 1988-2010 has an estimated budgetary cost (1987 dollars) ranging between \$4.3 million (based on enlarging the NEEBISH ISLANDER and the DRUMMOND ISLANDER II) and \$5.1 million (based on replacing the NEEBISH ISLANDER with the SUGAR ISLANDER and replacing the DRUMMOND ISLANDER II with a new ferry).

Appendix B

Coast Guard Certification

04/17/2006 15:45 905E3E3344 HEO SALLT STE MARIE PAGE 02

OVB Approved No. 1825-0057



UNITED STATES OF AMERICA
DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

TEMPORARY CERTIFICATE OF INSPECTION

An Agency may not conduct, or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OVB control number.
The Coast Guard estimates that the average burden for this report is 15 minutes. You may submit any comments concerning the accuracy of this burden estimate or any aspect of the collection of information, including suggestions for reducing the burden to: Commandant (CG-MQC), U.S. Coast Guard, Washington, DC 20390-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0057), Washington, DC 20503.

This Temporary Certificate of Inspection is issued under the provisions of Title 46 United States Code, Section 205, in lieu of the regular certificate of inspection, and shall be in force only until the receipt on board said vessel of the original certificate of inspection, this certificate in no case to be valid after one year from the date of inspection.

VESSEL <u>DRUMMOND ISLANDER II</u>	CERTIFICATE NO. <u>0075199501</u>
CLASS <u>T</u>	ORIGIN <u>DRUMMOND ISLAND, MICHIGAN</u>
CYBER ADDRESS <u>EASTERN U.S. TRANSPORTATION AUTHORITY 4001 I 75 BUSINESS SPUR SAULT STE MARIE, MI 49783</u>	OPERATOR ADDRESS <u>EASTERN U.S. TRANSPORTATION AUTHORITY 4001 I 75 BUSINESS SPUR SAULT STE MARIE, MI 49783</u>

The following complement of licensed officers and crew is required to be carried; included in which there must be _____ Certificated Lifeboatmen and _____ Certificated Tankerman:

____ Master	____ Master & 1st Class Pilot	____ Able Seaman	____ Chief Engineer	____ Primary Watchkeepers
____ Chief Mate	____ Class Pilot	____ Ordinary Seaman	____ 1st Asst. Engineer	____ Oiler
____ 2nd Mate	____ Radio Officer	____ Deckhands	____ 2nd Asst. Engineer	____
____ Motorist	____ Operator(s)	____	____ Engineer(s)	____

In addition the vessel may carry no other persons in the crew, _____ passengers, 152 persons in addition to the crew, and _____ Total persons allowed

Maximum steam pressure allowed n/a p.s.i. DATE OF CHECK 02

ROUTE PERMITTED AND CONDITIONS OF OPERATION

INSPECTED AND APPROVED FOR THE GARAGE OF

21 SEP 05

Inspection of the above vessel was completed on _____ I HEREBY CERTIFY that on this date the vessel was in all respects in conformity with applicable vessel inspection laws and regulations prescribed therein.

OFFICER IN CHARGE OF INSPECTION
E. Q. KUELER, CAPTAIN USCG

INSPECTION ZONE
SAULT STE, MARIE, MICHIGAN

DEPT. OF HOMELAND SECURITY, USCG - CG-854 (Rev. 03-03) Copy
PREVIOUS EDITIONS ARE OBSOLETE
12-2005

VESSEL NAME		OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
DRUMMOND ISLANDER IV		1101330		2000
HAULING PORT		HULL MATERIAL	MECHANICAL PROPULSION	
DRUMMOND ISLAND MI		STFFI	YES	
GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
377 GT ITC 87 GRT	113 NT ITC 88 NRT	142.1	40.0	12.0
PLACE BUILT				
ESCANABA MICHIGAN				
OWNERS		OPERATIONAL ENDORSEMENTS		
EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY		COASTWISE		
RECEIVED				
MANAGING OWNER				
EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY 4001 I-75 BUSINESS SPUR SAULT STE MARIE, MI 49783				
RESTRICTIONS				
NONE				
ENTITLEMENTS				
NONE				
REMARKS				
NONE				
ISSUE DATE				
AUGUST 22, 2005				
THIS CERTIFICATE EXPIRES				
SEPTEMBER 30, 2006				
		<i>Roma Willis</i>		
		DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER		
		VDS 17163		

PREVIOUS EDITIONS OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

CORRADINO

ORIGINAL



United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	20 Sep 2002
Expiration Date:	20 Sep 2007
IMO Number:	

Certificate of Inspection

Vessel Name DRUMMOND ISLANDER III	Official Number 953891	Call Sign WAN8372	Service Passenger (More Than 6)
Making Port DETOUR MI	Hull Material Steel	Horsepower 1080	Propulsion Diesel Reduction
Home Port ESCATAWPA MS, UNITED STATES	Delivery Date 27 Sep 1989	Date Keel Laid 01 Jan 1989	Gross Tonn R-35
			Net Tonn R-65
			DWT -
			Length R-101.1

Owner: EASTERN U.P. TRANSPORTATION AUTH.
4001 I-75 BUSINESS SPUR
SAULT STE MARIE, MI 49783-3619

Operator: EASTERN U.P. TRANSPORTATION AUTH.
4001 I-75 BUSINESS SPUR
SAULT STE MARIE, MI 49783-3619

This vessel must be manned with the following licensed and unlicensed personnel. Included in which there must be 0 certified lifeboatmen, 0 certified tankermen, 0 HSC type rating, and 0 GMDSS Operators.

1 Master	Master & 1st Class Pilot	Radio Officer(s)	Chief Engineer	0MED/Rating
Chief Mate	Mate & 1st Class Pilot	Able Seaman/ROANW	1st Asst. Engr/2nd Engr.	0Ilers
2nd Mate/0CNW	02. Mate/0CNW	Ordinary Seaman	2nd Asst. Engr/3rd Engr.	
3rd Mate/0CNW	1st Class Pilot	1 Deckhands	3rd Asst. Engr.	
			Lie. Engr.	

In addition, this vessel may carry 140 passengers, 0 other persons in crew, 0 persons in addition to crew, and no others.
Total persons allowed: 151

Route Permitted and Conditions of Operation:

ST. MARY'S RIVER BETWEEN DETOUR, MI. AND DRUMMOND ISLAND, MI. AND FERRY DOCK, MISSION POINT, MI. TO SUGAR ISLAND, MI.

WHEN THE VESSEL IS AWAY FROM A SHOULDER DOCK, OR HAS PASSENGERS ON BOARD, OR HAVE ACCESS TO THE VESSEL FOR MORE THAN TWELVE (12) HOURS IN A TWENTY FOUR (24) HOUR PERIOD, AN APPROPRIATE MASTER AND CREW SHALL BE PROVIDED.

WHEN THE NUMBER OF CHILD PASSENGERS (UNDER 50 POUNDS) EXCEEDS 15, ADDITIONAL CHILD PFD'S SHALL BE PROVIDED TO ACCOMMODATE 100% OF ALL CHILD PASSENGERS ON BOARD.

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this inspection for Certification having been completed at DeTour Village, MI, the Officer in Charge, Marine Inspection, MSO SAULT STE MARIE certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Quarterly Reinspections			This Amended Certificate Issued by:  E. Q. KAHLER, CAPT, USCG <small>Officer in Charge, Marine Inspection</small> MSO SAULT STE MARIE <small>Expiration Date</small>
Date	Zone	A/P/Q Signature	
07 Sep 2003	MSO 88/Mare	P Soule, Steven	
17 Sep 2004	MSO 88/Mare	P Trzil, Lawrence	
-	-	-	

Dept of Home Sec. 3320, 20-101 (Rev. 10/01) 3346 (Rev. 11/01)



Department of Homeland Security
United States Coast Guard

Certificate of Inspection

DRUMMOND ISLANDER
II

Page 2 of 3

Certification Date:
20Sep2002

THE VESSEL SHALL CARRY A MAN-OVERBOARD RESCUE LADDER AND RECOVERY SYSTEM DESIGNED TO ALLOW FOR THE SAFE RECOVERY OF A PERSON FROM THE WATER. THE RESCUE EQUIPMENT SHALL BE STOWED SO THAT IT CAN BE IMMEDIATELY DEPLOYED AT ALL TIMES.

THE MAXIMUM NUMBER OF PERSONS ALLOWED ON BOARD (PASSENGERS AND CREW) IS 151.

CARRIAGE OF DANGEROUS CARGO

TRANSPORTATION OF PERMITTED EXPLOSIVES, DANGEROUS ARTICLES, AND HAZARDOUS MATERIALS OR SUBSTANCES SHALL BE IN FULL COMPLIANCE WITH THE APPLICABLE PROVISIONS OF THE ECT REGULATIONS, TITLE 49 CFR PARTS 172 AND 176.

COMBUSTIBLE LIQUIDS WITH A FLASHPOINT ABOVE 100 DEGREES FAHRENHEIT MAY BE CARRIED WITH PASSENGERS ON BOARD, PROVIDED TANK TRUCKS AND STOWAGE MEET THE APPLICABLE REQUIREMENTS OF TITLE 49, CODE OF FEDERAL REGULATIONS.

THIS VESSEL IS PERMITTED TO TRANSPORT GASOLINE OR LPG IN TANK TRUCKS ON THE ESTABLISHED FERRY ROUTES SUBJECT TO THE FOLLOWING CONDITIONS:

- A. THE VESSEL IS NOT PERMITTED TO CARRY PASSENGERS WHILE SUCH CARGO IS ABOARD, OR WHEN TANKS ARE NOT IN A GAS FREE CONDITION, BUT MAY CARRY IN ADDITION TO THE CREW, NOT MORE THAN (2) PERSONS FOR EACH VEHICLE CARRIED, FOR SAFE HANDLING AND STOWAGE.
- B. WHENEVER GASOLINE CARGO IS TRANSPORTED, THE ADDITIONAL FIRE PROTECTION REQUIREMENTS OF 49 CFR 176.115 MUST BE MET.

THE VESSEL SHALL DISPLAY A RED FLAG BY DAY AND A RED LIGHT BY NIGHT WHENEVER DANGEROUS CARGOS OR HAZARDOUS MATERIALS ARE BEING LOADED OR UNLOADED.

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
Drydock	30Jun2006	14Oct2000	20May1997

---Inspection Status---

Pressure Vessels

Type	Location	Previous	Last	Next
Air Receiver	Manufacturer: CAMERON HAUSFELD	-	20Sep2002	20Sep2005

---Lifesaving Equipment---

Number Persons	Required
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Department of Homeland Security
United States Coast Guard

Certificate of Inspection

DREMMOND ISLANDER
11
Page 3 of 3
Certification Date:
21Sep2002

Total Equipment for		151	Life Preservers (Adult)	151
Lifeboats (Total)	0	0	Life Preservers (Child)	16
Lifeboats (Port)*	0	0	Ring Buoys (Total)	3
Lifeboats (Starbd)*	0	0	With Lights*	1
Motor Lifeboats*	0	0	With Line Attached*	1
Lifeboats W/Radio*	0	0	Other*	1
Rescue Boats/Platforms	0	0	Immersion Suits	0
Inflatable Rafts	0	2	Portable Lifeboat Radios	0
Life Floats/Buoyant App	0	0	Equipped with EPIRB?	No
			[* included in totals]	

---Fire Fighting Equipment---

Number of Fireman Outfits/ 0 Number of Fire Pumps/ 2

Hose information

Qty	Diameter	Length
4	1.5	50

Fire Extinguishers - Hand portable and semi-portable

Qty	Class Type
1	B-I
8	B-II

---Certificate Amendments---

Current Amendment

Port Amending/ MSO SAULT ST. MARIE Date Amended/ 16May2005

-Remarks-

16MAY2005: Conducted Internal Hull Exam for Drydock Extension.

1. Port Amending/ MSO St. Marie Date Amended/ 17Sep2004

-Remarks-

17SEP2004: Conducted re-inspection.

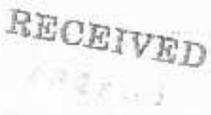
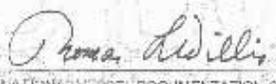
2. Port Amending/ MSO St. Marie Date Amended/ 02Sep2003

-Remarks-

02SEP2003: Conducted re-inspection.

*****END*****

Dep. of Home Sec., MSCD, DC-91 (Rev. 4-2001)
CG Form 2115-211

VESSEL NAME		OFFICIAL NUMBER	IMC OR OTHER NUMBER	YEAR COMPLETED	
DRUMMOND ISLANDER III		953891	115	1999	
HAULING PORT		HULL MATERIAL		MECHANICAL PROPELLSION	
DETROIT MI		STEEL		YES	
GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH	
85 GRT	65 NRT	101.1	37.0	7.2	
PLACE BUILT ESCATAWPA, MS					
OWNERS EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY			OPERATIONAL ENDORSEMENTS COASTWISE		
MANAGING OWNER EASTERN U.P. TRANSPORTATION AUTH. 4001-75 BUSINESS SPUR SAULT STE MARIE, MI 49783-3618					
RESTRICTIONS NONE					
ENTITLEMENTS NONE					
REMARKS NONE					
ISSUE DATE AUGUST 23, 2006		 DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER			
THIS CERTIFICATE EXPIRES SEPTEMBER 30, 2006					

PREVIOUS EDITION OBSOLETE. THIS CERTIFICATE MAY NOT BE ALTERED.

ORIGINAL



United States of America
Department of Homeland Security
United States Coast Guard

Certification Date: 10 Apr 2002
Expiration Date: 10 Apr 2007
IMO Number:

Certificate of Inspection

Vessel Name WEBBISH ISLAND II	Official Number 260723	Call Sign WYZ0634	Service Passenger (More Than 6)
Vessel Type WEBBISH ISLAND MI	Hull Material Steel	Horsepower 400	Propulsion Diesel Reduction
Home Port SAULT STE MARIE MI, UNITED STATES	Delivery Date 15 Dec 1948	Deck/Knot Log	Class Type R-60 R-61
Crew EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY 400' 1-75 BUSINESS SPUR SAULT STE MARIE, MI 49783	Operator SOUTH SHORE MARINE SERVICES 9030 CEDARHURST DRIVE CHEBOYGAN, MI 49721 UNITED STATES		

This vessel must be manned with the following licensed and unlicensed personnel, included in which there must be 0 certified lifeboatmen, 0 certified tankermen, 0 HSC type rating, and 0 GMDSS Operators.

1 Master	Master & 1st Class Pilot	Radio Officer(s)	Chief Engineer	QMED/Rating
Chief Mate	Mate & 1st Class Pilot	Able Seaman/RCANW	1st Asst. Engr/3rd Engr.	Others
2nd Mate/DCNWX	Lt. Mate/RCNWX	Ordinary Seaman	2nd Asst. Engr/3rd Engr.	
3rd Mate/DCNWX	1st Class Pilot	1 Deckhands	3rd Asst. Engr.	
			Lt. Engr.	

In addition, this vessel may carry 112 passengers, 0 other persons in crew, 0 persons in addition to crew, and no others.
Total persons allowed: 114

Route Permitted and Conditions of Operation.

--- Rivers ---

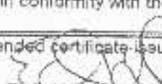
ST. MARY'S RIVER ON ANY REGULAR FERRY ROUTE BETWEEN MICHIGAN'S UPPER PENINSULA AND SUGAR ISLAND OR WEBBISH ISLAND.

WHEN VESSEL IS AWAY FROM A SIDINGSIDE DOCK, OR PASSENGERS ARE ON BOARD OR HAVE ACCESS TO THE VESSEL FOR A PERIOD EXCEEDING 12 HOURS IN A 24 HOUR PERIOD, AN ALTERNATE MASTER AND CREW SHALL BE PROVIDED.

THE MAXIMUM NUMBER OF PERSONS, INCLUDING THE CREW, WHICH MAY BE ON BOARD IS 114.

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this inspection for Certification having been completed at Sault Ste Marie, MI, the Officer in Charge, Marine Inspection, MISO SAULT STE MARIE certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Quarterly Reinspections				This Amended Certificate Issued by:
Date	Zone	A/P/Q	Signature	
21 Apr 2003	MS	SSIMare	P Soule, Steven	 E. CHASTLER, CAPT, USCG <small>Officer in Charge, Marine Inspection</small> MISO SAULT STE MARIE <small>INSPECTION ZONE</small>
11 Apr 2004	MS	SSIMare	P Soule, Steven	
06 May 2005	MS	SSIMare	P Soule, Steven	

Dept. of Home Sec., USCG, CG-101 (Rev. 4-2002)

CGC No. 214 20-7

04/16/2006 21:12 4814318726 BANKYANLEY INC PAGE 01

UNITED STATES OF AMERICA
 DEPARTMENT OF HOMELAND SECURITY
 UNITED STATES COAST GUARD
 NATIONAL VESSEL DOCUMENTATION CENTER
CERTIFICATE OF DOCUMENTATION

VESSEL NAME NEEFISH ISLANDER		OFFICIAL NUMBER 250723	IMO OR OTHER NUMBER	YEAR COMPLETED 1948
HULLING POST NEEFISH ISLAND MI		HULL MATERIAL STEEL		MECHANICAL PROPULSION YES
GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
60 GRT	61 NRT	78.9	25.8	5.5
PLACE BUILT SAULT STE MARIE MI				
OWNERS EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY SOLE OWNER		OPERATIONAL ENDORSEMENTS COASTWISE REGISTRY		
MANAGING OWNER EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY 4001 I-75 BUSINESS CENTER SAULT STE MARIE MI 49783				
RESTRICTIONS NONE				
ENTITLEMENTS NONE				
REMARKS NONE				
ISSUE DATE OCTOBER 17, 2006				
THIS CERTIFICATE EXPIRES NOVEMBER 30, 2006				
			 DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER	

PREVIOUS EDITION OBSOLETE THIS CERTIFICATE MAY NOT BE ALTERED

ORIGINAL



United States of America
Department of Homeland Security
United States Coast Guard

Certification Date: 25 Sep 2001
Expiration Date: 25 Sep 2006
IMO Number:

Certificate of Inspection

Vessel Name SUGAR ISLANDER II	Official Number 1036099	Call Sign WCV8534	Service Passenger (More Than 6)
Home Port SAULT STE. MARIE, MI	Hull Material Steel	Length Overall 540	Propulsion Diesel Reduction
Place Built ESCANABA, MI, UNITED STATES	Delivery Date 20 Oct 1995	Original Laid Down 20 Jan 1995	Gross Tonnage R-90 -222
		Net Tonnage R-41 -71	DWT 106.4 -106.4
Owner EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY 4001 I-75 BUSINESS SPUR SAULT STE MARIE, MI 49783		Operator EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY 4001 I-75 BUSINESS SPUR SAULT STE MARIE, MI 49783	

This vessel must be manned with the following licensed and unlicensed personnel. Included in which there must be 0 certified lifeboatmen, 0 certified tankermen, 0 HSC type rating, and 0 GMDSS Operators.

1 Master	Master & 1st Class Pilot	Radio Officer(s)	Chief Engineer	QMED/Rating
Chief Mate	Mate & 1st Class Pilot	Able Seaman/ROANW	1st Asst. Engr/2nd Engr.	Others
2nd Mate/OICNW	Lic. Mate/OICNW	Crewmen	2nd Asst. Engr/3rd Engr.	
3rd Mate/OICNW	1st Class Pilot	1 Deckhands	3rd Asst. Engr. Lic. Engr.	

In addition, this vessel may carry 138 passengers, 0 other persons in crew, 0 persons in addition to crew, and no others.
Total persons allowed: 140

Route Permitted and Conditions of Operation:

---Rivers---

ST. MARYS RIVER BETWEEN POINT LOUISE AND PIPE ISLAND, MICHIGAN.

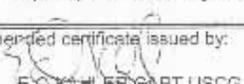
A MAXIMUM OF 140 PERSONS MAY BE CARRIED ON THE VESSEL, OF WHICH 138 MAY BE PASSENGERS.

WHEN THE VESSEL IS AWAY FROM A SHORESIDE DOCK, OR PASSENGERS ARE ON BOARD OR HAVE ACCESS TO THE VESSEL FOR MORE THAN 12 HOURS IN ANY 24 HOUR PERIOD, AN ALTERNATE MASTER AND CREW SHALL BE PROVIDED.

WHEN THE NUMBER OF CHILD PASSENGERS UNDER 90 POUNDS EXCEEDS 14, ADDITIONAL CHILD SEAT'S

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at SAULT STE MARIE, MI., the Officer in Charge, Marine Inspection, MSO SAULT STE MARIE certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Quarterly Reinspections				This Amended Certificate Issued by:
Date	Zone	A/P/Q	Signature	
18 Sep 2002	MSO SS/Marie	P	Soule, Steven	 E.C. KAHLER, CAPT USCG <small>Officer in Charge, Marine Inspection</small> MSO SAULT STE MARIE <small>Inspector at Zero</small>
21 Oct 2003	MSO SS/Marie	P	Soule, Steven	
17 Sep 2004	MSO SS/Marie	P	Soule, Steven	
-	-	-	-	

Type 1 (New) 2m, 16-02, 53-41 (Rev. 4-20-00) (A) 202 No. 2 (Rev. 07)



Department of Homeland Security
United States Coast Guard

Certificate of Inspection

Page 2 of 3

Certification Date:
25Sep2001

SUGAR ISLANDER II

SHALL BE PROVIDED TO ACCOMMODATE 100% OF ALL CHILD PASSENGERS.

THE VESSEL SHALL CARRY A RESCUE LADDER DESIGNED TO ALLOW FOR THE SAFE RECOVERY OF A PERSON FROM THE WATER. THE RESCUE LADDER SHALL BE STOWED SO THAT IT IS IMMEDIATELY AVAILABLE TO THE CREW AT ALL TIMES.

CARRIAGE OF DANGEROUS CARGO

TRANSPORTATION OF PERMITTED EXPLOSIVES, DANGEROUS ARTICLES, AND HAZARDOUS MATERIALS OR SUBSTANCES SHALL BE IN FULL COMPLIANCE WITH THE APPLICABLE PROVISIONS OF THE DOT REGULATIONS, TITLE 49 CFR PARTS 173 AND 176.

COMBUSTIBLE LIQUIDS WITH A FLASHPOINT ABOVE 100 DEGREES FARENHEIT MAY BE CARRIED WITH PASSENGERS ON BOARD, PROVIDED TANK TRUCKS AND STOWAGE MEET THE APPLICABLE REQUIREMENTS OF TITLE 49, CODE OF FEDERAL REGULATIONS.

THIS VESSEL IS PERMITTED TO TRANSPORT GASOLINE OR LPG IN TANK TRUCKS ON THE ESTABLISHED FERRY ROUTES SUBJECT TO THE FOLLOWING CONDITIONS:

A. THE VESSEL IS NOT PERMITTED TO CARRY PASSENGERS WHILE SUCH CARGO IS ABOARD, OR WHEN THE TANKS ARE NOT IN A GAS FREE CONDITION, BUT MAY CARRY IN ADDITION TO THE CREW, NOT MORE THAN (2) PERSONS FOR EACH VEHICLE CARRIED FOR SAFE HANDLING AND STOWAGE.

H. WHENEVER GASOLINE CARGO IS TRANSPORTED, THE ADDITIONAL FIRE PROTECTION REQUIREMENTS OF 49 CFR 176.315 MUST BE MET.

THE VESSEL SHALL DISPLAY A RED FLAG BY DAY OR A RED LIGHT BY NIGHT WHENEVER DANGEROUS CARGOES OR HAZARDOUS MATERIALS ARE BEING LOADED OR UNLOADED.

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
Drydock	30Jun2006	24Oct2000	20Oct1995

---Lifesaving Equipment---

	Number	Personn	Required	
Total Equipment for		140	Life Preservers (Adult)	140
Lifeboats (Total)	0	0	Life Preservers (Child)	24
Lifeboats (Port)*	0	0	Ring Buoys (Total)	3
Lifeboats (Starbd)*	0	0	With Lights*	1
Motor Lifeboats*	0	0	With Line Attached*	1
Lifeboats W/Radio*	0	0	Other*	1
Rescue Boats/Platforms	0	0	Immersion Suits	0
Inflatable Rafts	0	0	Portable Lifeboat Radio	0
Life Floats/Buoyant App	0	0	Equipped with EPIRB?	No
			(* included in totals)	



Department of Homeland Security
United States Coast Guard

Certificate of Inspection

SUGAR ISLANDER II

Page 1 of 3

Certification Date:
25Sep2001

---Fire Fighting Equipment---

Number of Fireman Outfits/ 0

Number of Fire Pumps/ 2

Hose Information

Qty	Diameter	Length
4	1.5	Other

Fire Extinguishers - Hand portable and semi-portable

Qty	Class Type
1	B-I
8	B-II

---Certificate Amendments---

Current Amendment

Port Amending/ MSO SAULT STE MARIE Date Amended/ 18May2005

-Remarks-

16MAY2005: Conducted Internal Hull Exam for Drydock Extension.

1. Port Amending/ MSO SStMarie

Date Amended/ 30Sep2004

-Remarks-

27SEP2004: Conducted re-inspection.

2. Port Amending/ MSO SStMarie

Date Amended/ 01Oct2003

-Remarks-

01OCT2003: Conducted re-inspection.

3. Port Amending/ MSO SStMarie

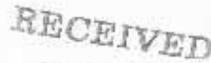
Date Amended/ 18Sep2002

-Remarks-

18SEP2002: Conducted Reinspection.

END


UNITED STATES OF AMERICA
 DEPARTMENT OF HOMELAND SECURITY
 UNITED STATES COAST GUARD
 NATIONAL VESSEL DOCUMENTATION CENTER
CERTIFICATE OF DOCUMENTATION

VESSEL NAME BUGAR ISLANDER II		OFFICIAL NUMBER 1036095	IMO OR OTHER NUMBER 083	YEAR COMPLETED 1995	
HAULING POINT SAULT STE. MARIE, MI		HULL MATERIAL STEEL		MEDICAL PROVISION YES	
GROSS TONNAGE 223 GRT	NET TONNAGE 74 NRT	LENGTH 103.4	BREADTH 40.0	DEPTH 10.0	
PLACE BUILT ESCANABA, MI					
OWNERS EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY			OPERATIONAL ENDORSEMENTS COASTWISE REGISTRY		
					
MANAGING OWNER EASTERN UPPER PENINSULA TRANSPORTATION AUTHORITY 4001 I-75 BUSINESS SPUR SAILLIE STE MARIE, MI 49783					
RESTRICTIONS NONE					
ENTITLEMENTS NONE					
REMARKS NONE					
ISSUE DATE AUGUST 22, 2005		 DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER			
THIS CERTIFICATE EXPIRES SEPTEMBER 30, 2008					

PREVIOUS EDITION OBSOLETE. THIS CERTIFICATE MAY NOT BE ALTERED.

Appendix C

Ten-Year Profile of Revenue, Passengers and Vehicles

Appendix C-1
Ferry System
Revenue

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	\$66,852	\$75,217	\$83,899	\$86,987	\$89,678	\$83,950	\$80,571	\$96,954	\$105,442	\$101,236	\$110,092
November	50,709	56,694	55,526	57,242	65,487	63,325	65,036	78,257	73,762	76,948	80,732
December	34,400	40,367	43,955	47,617	52,965	48,725	54,485	58,283	59,457	65,323	63,075
January	33,089	37,488	39,107	44,871	49,252	54,003	67,493	56,375	55,264	51,762	59,255
February	38,543	46,570	45,753	52,072	59,278	58,041	56,130	59,843	65,280	69,386	74,146
March	35,069	45,197	42,996	49,763	52,678	60,336	53,571	56,359	51,152	63,609	64,410
April	36,449	43,023	57,302	61,405	64,510	57,148	63,957	64,776	74,530	73,895	75,354
May	73,233	77,360	89,193	90,792	93,578	88,427	106,007	112,529	105,879	115,184	118,704
June	86,984	92,400	102,154	101,851	103,534	103,952	122,870	128,360	115,076	122,739	128,361
July	124,907	134,201	142,036	148,247	145,046	143,526	170,030	173,015	173,388	172,930	162,252
August	125,738	129,111	127,189	127,083	124,878	133,719	158,762	167,899	139,931	138,370	156,958
September	88,135	87,225	103,441	103,085	107,051	99,765	107,704	116,316	120,853	112,735	129,628
Total	\$794,108	\$864,853	\$932,551	\$971,015	\$1,007,935	\$994,917	\$1,106,616	\$1,168,966	\$1,140,016	\$1,164,116	\$1,222,966

State Funds	\$725,000	\$791,500	\$846,448	\$905,807	\$982,532	\$1,065,108	\$1,036,558	\$1,081,117	\$1,077,433	\$1,146,050	\$1,232,800
Total											
Expenses	\$1,527,970	\$1,629,237	\$1,692,896	\$1,748,662	\$1,965,665	\$2,151,326	\$2,086,429	\$2,179,515	\$2,169,104	\$2,303,574	\$2,465,599

Appendix C-1A
Ferry System
Passengers Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	64,096	66,648	68,268	71,676	72,562	74,800	77,838	77,896	81,880	79,378	74,730
November	49,494	50,710	50,112	53,244	57,836	60,058	63,866	67,116	67,178	66,430	60,606
December	38,688	41,688	44,890	47,472	51,662	52,554	58,612	55,406	57,302	55,522	53,208
January	37,568	37,874	40,610	42,978	47,594	52,052	52,442	50,974	52,188	50,220	49,448
February	39,326	41,790	41,938	44,242	47,332	49,365	52,434	49,002	52,720	51,400	52,916
March	42,304	41,082	43,860	47,914	51,170	54,504	49,020	49,012	48,790	53,936	53,285
April	42,023	43,666	51,900	53,984	58,304	57,092	49,936	53,414	61,398	59,502	56,774
May	66,872	62,576	69,938	68,680	75,134	77,522	69,188	78,944	75,674	71,762	75,368
June	71,549	70,018	74,908	79,862	82,528	80,834	81,470	86,762	81,084	79,660	79,484
July	98,694	95,024	101,484	110,500	111,568	117,418	114,856	122,236	114,736	109,068	99,094
August	96,901	94,836	94,312	101,388	103,706	111,612	112,212	115,186	99,760	92,608	92,952
September	75,289	72,284	81,414	85,574	89,602	90,082	83,102	91,650	92,220	82,912	83,038
Total	722,804	718,196	763,634	807,514	848,998	877,893	864,976	897,598	884,930	852,398	830,903

Appendix C-1B
Ferry System
Vehicles Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	39,187	40,834	42,752	44,680	45,144	46,816	48,776	48,788	53,736	47,180	47,102
November	31,291	31,894	32,218	34,315	36,526	38,886	40,790	41,122	41,410	41,620	38,612
December	23,958	26,366	28,870	31,130	33,510	33,554	37,322	34,490	35,172	34,418	33,290
January	23,773	23,983	26,688	28,004	31,552	34,334	33,308	32,232	32,360	31,072	31,538
February	25,037	26,978	26,762	29,594	31,170	33,983	33,412	31,332	33,882	33,262	34,578
March	26,268	27,090	27,242	31,090	32,812	35,566	31,260	31,000	30,744	34,854	33,322
April	26,484	27,442	33,549	33,692	37,066	35,116	34,892	32,872	37,562	36,134	34,624
May	40,726	38,672	43,435	42,938	45,858	47,772	46,744	49,254	46,286	45,674	47,224
June	43,825	43,988	47,428	49,106	51,337	51,796	53,876	55,632	52,512	51,528	51,146
July	56,496	56,564	60,469	64,060	66,958	69,358	68,776	72,934	69,820	73,332	61,264
August	56,612	55,828	57,164	59,002	64,146	67,664	66,984	68,014	61,784	58,574	58,424
September	44,040	43,836	48,992	51,029	53,730	53,946	52,450	55,164	56,346	50,422	50,570
Total	437,697	443,475	475,569	498,640	529,809	548,791	548,590	552,834	551,614	538,070	521,694

Appendix C-2A
 Drummond Ferry
 Fare Revenue by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	\$38,519	\$43,859	\$46,706	\$50,028	\$52,013	\$46,229	\$44,523	\$54,847	\$59,142	\$56,737	\$53,360
November	27,252	29,166	26,190	28,669	33,973	31,837	33,110	39,080	37,873	36,748	37,099
December	17,198	18,092	19,052	21,781	26,173	23,064	24,343	27,326	27,936	30,394	28,309
January	16,381	17,686	18,212	22,585	25,687	29,261	24,587	27,481	27,855	25,778	27,590
February	23,597	26,438	24,471	33,219	35,225	36,233	33,623	33,831	39,958	41,625	43,251
March	18,756	24,537	20,586	26,259	25,947	32,922	30,225	31,132	25,691	33,731	31,436
April	17,960	19,553	27,831	32,131	34,643	28,383	31,982	29,659	38,316	36,124	34,279
May	43,809	42,849	48,385	52,960	52,997	49,284	57,263	60,308	59,939	63,682	60,340
June	54,646	53,802	59,533	60,057	63,251	62,618	69,967	70,036	65,889	70,266	73,267
July	80,655	86,926	86,851	90,457	87,308	90,341	97,703	102,338	109,116	105,506	92,979
August	82,981	81,744	79,388	76,026	75,480	81,252	92,898	98,316	83,793	79,134	88,557
September	53,482	50,502	60,995	61,099	62,830	55,847	59,095	59,397	69,656	63,944	73,482
Total	\$475,236	\$495,154	\$518,200	\$555,271	\$575,527	\$567,270	\$599,319	\$633,751	\$645,166	\$643,671	\$643,951

Appendix C-2B
Drummond Ferry
Passengers Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	26,462	28,570	30,638	33,222	32,200	33,406	34,010	36,170	34,648	35,528	34,154
November	18,190	20,832	19,978	21,936	23,584	24,320	26,582	26,782	27,494	27,254	24,210
December	13,606	15,548	16,004	18,068	19,856	20,420	21,282	21,498	23,258	21,700	20,994
January	13,252	14,036	15,618	17,096	18,784	21,816	19,522	20,588	20,468	19,950	20,058
February	15,796	18,554	17,384	20,828	18,784	22,138	22,566	22,064	25,308	24,022	25,696
March	15,900	16,584	16,840	19,522	20,540	22,854	20,206	21,768	20,174	22,298	22,900
April	14,712	17,318	20,458	21,316	24,668	23,018	19,306	21,642	25,160	23,348	23,924
May	27,182	26,550	29,678	29,790	33,942	34,110	29,378	34,628	34,858	33,048	34,318
June	30,340	30,812	33,828	36,576	40,166	37,946	35,562	37,622	36,630	37,090	38,070
July	42,758	45,086	45,990	53,626	51,386	55,184	52,802	56,734	56,130	53,788	47,500
August	43,768	45,330	44,304	47,118	49,314	52,962	53,174	54,638	46,170	43,296	46,268
September	33,076	32,896	39,244	39,352	43,526	40,048	37,084	38,528	42,186	39,376	41,158
Total	295,042	312,116	329,964	358,450	376,750	388,222	371,474	392,662	392,484	380,698	379,250

Appendix C-2C
 Drummond Ferry
 Vehicles Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	15,101	16,120	17,746	18,986	18,162	19,109	18,690	20,820	22,638	18,238	18,612
November	11,318	12,224	11,892	13,161	13,262	14,466	15,176	14,962	15,402	14,808	13,340
December	8,468	9,274	9,530	11,226	11,904	12,134	12,282	12,020	12,598	11,654	11,262
January	8,302	8,692	9,474	10,702	12,010	14,112	11,228	11,734	11,418	10,664	11,074
February	10,234	12,032	10,308	13,876	12,010	15,132	13,516	13,556	15,448	14,660	16,120
March	9,886	10,986	9,662	12,236	11,940	14,180	12,232	12,472	11,480	13,026	12,448
April	8,866	9,992	12,127	12,206	14,624	13,186	12,688	11,986	13,572	12,358	12,240
May	15,506	15,526	17,149	17,204	19,312	19,526	18,456	19,948	19,246	19,176	18,922
June	18,454	18,486	20,776	21,044	23,801	23,010	21,842	22,728	21,796	22,500	22,540
July	24,886	26,388	27,149	29,368	29,268	30,980	29,772	31,712	31,664	31,008	26,900
August	25,437	25,910	26,088	25,598	27,456	29,628	29,826	30,534	26,374	25,016	26,300
September	18,063	18,242	22,032	21,287	23,740	21,690	21,076	21,116	23,284	27,942	22,352
Total	174,521	183,872	193,933	206,894	217,489	227,153	216,784	223,588	224,920	221,050	212,110

Appendix C-3A
Sugar Ferry
Fare Revenue by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	\$22,685	\$25,772	\$31,511	\$31,410	\$32,384	\$31,225	\$31,540	\$36,126	\$39,488	\$38,118	\$41,529
November	18,137	22,289	24,579	23,722	27,029	26,164	27,452	34,015	30,288	33,869	36,339
December	15,454	20,573	23,083	23,342	24,640	23,438	27,637	29,062	27,752	30,994	31,355
January	15,787	18,411	19,245	20,983	22,347	23,134	40,663	27,673	26,456	24,335	28,904
February	14,946	20,132	20,060	18,853	22,643	21,808	20,812	26,012	25,322	27,761	27,874
March	16,313	20,492	21,106	22,764	24,597	27,414	22,386	24,697	25,461	29,772	30,550
April	17,207	21,414	26,522	26,016	27,111	26,372	28,674	32,757	33,079	34,216	38,153
May	24,461	30,051	35,974	33,093	33,988	34,229	42,175	45,756	38,354	44,182	48,612
June	26,854	32,911	36,936	36,286	33,584	35,379	45,774	50,267	40,858	43,830	44,224
July	35,385	39,070	45,451	48,187	48,272	45,077	62,347	58,298	51,316	56,245	56,264
August	33,557	38,767	39,839	42,544	40,865	43,744	56,457	57,862	44,648	48,499	55,053
September	27,820	31,630	37,072	36,023	36,632	36,427	42,039	50,901	43,156	40,914	45,742
Total	\$268,606	\$321,512	\$361,378	\$363,223	\$374,092	\$374,412	\$447,955	\$473,426	\$426,178	\$452,737	\$484,599

Appendix C-3B
Sugar Ferry
Passengers Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	34,500	34,932	34,702	34,820	37,046	37,998	40,920	38,652	43,822	40,424	36,910
November	28,538	27,086	27,478	28,196	31,360	32,844	34,276	37,704	36,906	35,946	33,084
December	23,946	24,828	27,426	27,530	30,346	30,464	35,428	32,338	32,242	32,134	30,248
January	23,636	22,832	23,668	24,694	27,662	29,124	31,148	29,424	31,040	29,372	27,822
February	23,530	23,236	23,360	23,414	27,312	27,228	28,706	26,938	27,412	27,378	25,788
March	26,404	24,280	25,852	27,950	29,194	31,634	27,942	27,008	28,616	31,636	29,076
April	26,615	24,824	29,742	30,400	31,712	32,964	29,048	30,662	34,842	33,520	31,192
May	36,824	33,274	37,426	35,906	37,892	40,408	37,062	41,736	37,894	35,530	37,592
June	37,987	36,032	37,768	39,622	38,624	39,384	42,398	45,664	40,730	38,118	37,002
July	50,964	44,856	49,750	50,994	54,650	56,816	56,508	58,966	52,252	48,768	44,976
August	47,303	44,176	44,914	48,762	48,946	53,034	53,380	54,826	47,858	43,082	40,854
September	38,591	35,844	38,468	41,966	41,970	45,812	42,338	49,346	45,580	38,816	37,160
Total	398,838	376,200	400,554	414,254	436,714	457,710	459,154	473,264	459,194	434,724	411,704

Appendix C-3C
Sugar Ferry
Vehicles Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	22,092	22,762	23,206	23,438	24,892	25,578	28,100	25,970	28,992	26,822	25,800
November	18,177	17,800	18,602	19,170	21,216	22,350	23,578	24,328	24,210	24,658	23,024
December	14,782	16,270	18,404	18,860	20,656	20,352	23,766	21,440	21,416	21,670	20,696
January	15,163	14,706	16,398	16,564	18,736	19,496	21,098	19,842	20,514	19,844	19,362
February	14,803	14,946	15,756	15,718	18,350	18,852	19,100	17,776	18,434	18,602	17,482
March	16,382	16,014	16,898	18,572	19,916	21,376	18,434	18,366	19,264	21,826	19,910
April	17,228	16,582	20,404	20,094	21,162	21,224	21,228	20,170	23,092	22,734	21,312
May	23,532	21,488	24,530	23,882	24,564	26,352	26,550	27,684	25,220	24,544	25,964
June	23,427	23,610	24,902	25,810	25,262	26,616	29,898	30,790	28,458	26,226	25,716
July	28,864	27,486	30,012	31,452	34,698	35,382	35,760	37,634	34,552	31,864	31,004
August	28,077	27,082	28,342	30,366	33,484	34,840	34,058	34,178	32,082	29,832	28,514
September	23,833	23,662	24,754	27,188	27,448	29,526	29,160	31,756	30,304	26,340	25,254
Total	246,360	242,408	262,208	271,114	290,384	301,944	310,730	309,934	306,538	294,962	284,038

Appendix C-4A
Neebish Ferry
Fare Revenue by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	\$5,647	\$5,586	\$5,682	\$5,549	\$5,281	\$6,496	\$4,509	\$5,981	\$6,812	\$6,381	\$15,202
November	5,320	5,238	4,757	4,851	4,485	5,325	4,474	5,162	5,600	6,330	7,293
December	1,748	1,702	1,820	2,494	2,152	2,223	2,505	1,895	3,769	3,937	3,411
January	922	1,391	1,650	1,303	1,218	1,608	2,243	1,221	953	1,649	2,761
February	0	0	1,222	0	1,410	0	1,695	0	0	0	3,021
March	0	169	1,304	740	2,134	0	960	530	0	105	2,425
April	1,282	1,391	2,949	3,258	2,754	2,392	3,301	2,360	3,134	3,554	2,921
May	4,964	4,460	4,833	4,739	6,593	4,914	6,569	6,465	7,587	7,320	9,752
June	5,483	5,687	5,685	5,508	6,700	5,955	7,129	8,057	8,329	8,643	10,870
July	8,867	8,205	9,734	9,602	9,466	8,109	9,980	12,379	12,956	11,179	13,009
August	9,200	8,600	7,962	8,633	8,533	8,723	9,407	11,721	11,491	10,737	13,348
September	6,833	5,093	5,374	5,963	7,589	7,491	6,570	6,018	8,041	7,876	10,404
Total	\$50,266	\$47,522	\$52,972	\$52,640	\$58,315	\$53,236	\$59,342	\$61,789	\$68,672	\$67,711	\$94,417

Appendix C-4B
Neebish Ferry
Passengers Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	3,134	3,146	2,928	3,634	3,316	3,396	2,908	3,074	3,410	3,426	3,666
November	2,766	2,792	2,656	3,112	2,892	2,984	3,008	2,630	2,778	3,230	3,312
December	1,136	1,312	1,460	1,874	1,460	1,670	1,902	1,570	1,802	1,688	1,966
January	680	1,006	1,324	1,188	1,148	1,112	1,772	962	680	898	1,568
February	0	0	1,194	0	1,236	0	1,162	0	0	0	1,432
March	0	218	1,168	442	1,436	16	872	236	0	2	1,309
April	696	1,524	1,700	2,268	1,924	1,110	1,582	1,110	1,396	1,592	1,658
May	2,866	2,752	2,834	2,984	3,300	3,004	2,748	2,580	2,922	3,184	3,458
June	3,222	3,172	3,312	3,664	3,738	3,504	3,510	3,476	3,724	4,452	4,412
July	4,972	5,082	5,744	5,880	5,532	5,418	5,546	6,536	6,354	6,512	6,618
August	5,830	5,330	5,094	5,508	5,446	5,616	5,658	5,722	5,732	6,230	5,830
September	3,622	3,544	3,702	4,256	4,106	4,222	3,680	3,776	4,454	4,720	4,720
Total	28,924	29,878	33,116	34,810	35,534	32,052	34,348	31,672	33,252	35,934	39,949

Appendix C-4C
Neebish Ferry
Vehicles Carried by Month

Month	Fiscal Year										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
October	1,994	1,952	1,800	2,256	2,090	2,132	1,986	1,998	2,106	2,120	2,690
November	1,796	1,870	1,724	1,984	2,048	2,070	2,036	1,832	1,798	2,154	2,248
December	708	822	936	1,224	950	1,068	1,274	1,030	1,158	1,094	1,332
January	308	585	816	738	806	726	982	656	428	564	1,102
February	0	0	698	0	810	0	796	0	0	0	976
March	0	90	682	282	956	10	594	162	0	2	964
April	390	868	1,018	1,392	1,280	706	976	716	898	1,042	1,072
May	1,688	1,658	1,756	1,852	1,982	1,894	1,738	1,622	1,820	1,954	2,338
June	1,944	1,892	1,750	2,252	2,274	2,170	2,136	2,114	2,258	2,802	2,890
July	2,746	2,690	3,038	3,240	2,992	2,996	3,244	3,588	3,604	3,826	3,918
August	3,098	2,836	2,734	3,038	3,206	3,196	3,100	3,302	3,328	3,726	3,610
September	2,144	1,932	2,206	2,554	2,542	2,730	2,214	2,292	2,758	2,918	2,964
Total	16,816	17,195	19,158	20,812	21,936	19,698	21,076	19,312	20,156	22,202	26,104

Appendix D

St. Mary's River Ferry System Study Passenger Survey

Figure D-1
Survey Form

St. Mary's River Ferry System Study Passenger Survey

Drummond

Neebish

Sugar

Circle One

1. Are you a ...?

- ₁ Seasonal Resident
₂ Permanent Resident

- ₃ Visitor
₄ Here on Business

2. Do you think current transportation services to the island are adequate?

- ₁ Yes ₂ No

3. If you are traveling to the mainland (or are coming from the mainland), did you spend money on the mainland?

- ₁ Yes ₂ No ₃ Does not apply

If yes, approximately how much did you spend?

- ₁ \$10 - \$50 ₂ \$51 - \$100 ₃ Over \$100

4. Would you like to see more frequent ferry service?

- ₁ Yes ₂ No

5. Do you think the Island is developing ...

- ₁ Not enough ₃ Somewhat too fast
₂ Just enough ₄ Too fast

6. Due to rapidly rising fuel prices, there may be a need to raise the discounted fares. Would you be opposed to a reasonable fare increase if necessary to maintain or improve service?

- ₁ Yes ₂ No

Figure D-1 (continued)
Survey Form

7. What is your age?

₁ Under 18

₃ 56 to 65

₂ 19 to 55

₄ Over 65

8. What improvements would you suggest in ferry operations?

9. What complaints do you have about the ferry operations?

Other comments:
