

STAFF SUMMARY

Date: April 11, 2012

File # GM-597



TO:		FOR:		FROM:
	General Manager	X	Vote	Dept.: General Manager
				Author: Wayne C. Lamson
X	Board Members		Information	Subject: Feasibility of Freight Service Between New Bedford and Martha's Vineyard

To consider the financial viability of a seasonal freight service by the Authority between New Bedford and Martha's Vineyard.

BACKGROUND:

The staff recently revisited the issue of whether it would be financially viable for the Authority to provide freight service from New Bedford to Martha's Vineyard during the peak summer months, based on different variables including the number of days per week, the length of vessel operating day and the frequency of service.

Use the Authority's Spare Freight Vessel

One option the staff considered was to use the Authority's spare vessel (M/V Katama) for freight service from New Bedford to Martha's Vineyard. This option would allow the current service level through Woods Hole to be maintained through the summer months.

Alternative operating schedules from New Bedford were developed based on the following vessel watch arrangements:

1. One single crew (8 hours, but no more than 12 hours per day), 5 days per week;
2. Two single crews (8 to 12 hours per crew per day), 5 days per week;
3. Double crew, (up to 12 hours per day), 7 days per week; and
4. Triple crew (up to 18 hours per day), 7 days per week.

Copies of the alternative operating schedules are attached. The alternative schedules are based on an estimated 2½-hour crossing time between New Bedford and Martha's Vineyard, via Quicks Hole.

The total estimated incremental cost of operating the alternative New Bedford schedules from late June through early September range from \$412,000 to \$958,000 per year. This means that, in order to pay for itself, the service would have to generate the same amount of revenues in addition to the revenues the Authority is currently receiving from its Woods Hole-Martha's Vineyard service. See attached cost estimates for each alternative. These incremental costs include estimated land-side expenses but do not include any potential fees associated with the use of New Bedford's State Pier facility. In addition, these estimated costs do not include any share of fixed costs such as marine

insurance, depreciation or certain vessel maintenance expenses. Also attached is a schedule showing the average revenue per trip for the M/V Katama for the period from June 23 through September 8, 2011 by day of the week for service between Woods Hole and Martha's Vineyard.

Some of the truck traffic currently going through Woods Hole, such as fuel trucks or trash trucks, could be diverted to certain designated trips through New Bedford. But this would not generate any additional revenue for the Authority unless: 1) we charged higher tariff rates for the longer trip through New Bedford; 2) we were able to back-fill those freed-up spaces with more cars or trucks through Woods Hole, or 3) a combination of both. It is very unlikely that the additional revenue would be sufficient to offset the estimated incremental cost of service from New Bedford. On weekdays, there would be a domino effect with cars and trucks being able to go on earlier boats through Woods Hole (with the diversion of certain freight through New Bedford) but it is unclear whether the total combined vehicle traffic would be any higher by the end of the day. On weekends during the summer, each of the four vessels on the Woods Hole-Martha's Vineyard route is currently operating a maximum of seven round trips per day and at full capacity in one direction or both. Any service from New Bedford on weekends during the summer season (if provided) would probably be utilized by customers who are not able to book vehicle reservations through Woods Hole. Given the estimated 2½-hour ferry trip, there would not be any time savings going through New Bedford for our customers unless there were significant traffic delays (more than an hour wait) at the Bourne Bridge. A faster boat would provide a more attractive alternative, but the higher fuel consumption and ownership costs associated with a new vessel would probably make it cost prohibitive.

The use of the Authority's spare vessel for New Bedford service during the summer season would also take away our ability to substitute one vessel for another in an emergency. The Authority's management staff is in the process of reviewing the remaining useful service life of our current fleet as part of a comprehensive vessel replacement study. The assignment of this spare vessel to serve New Bedford would also commit the Authority to maintaining a fleet of four freight vessels indefinitely when we may no longer be able to afford to maintain an extra vessel sitting idle during the peak season.

Redirection of Existing Freight Service from Woods Hole

Another option would be to redirect one of the current freight vessels from the Woods Hole route for a full operating day or a portion of the operating day in order to provide freight service between New Bedford and Martha's Vineyard. This would result in a slight incremental cost increase (additional fuel costs) but there would be a reduction in the overall number of vehicle spaces currently being offered to and from Martha's Vineyard during the peak summer months. Within the current 18-hour operating day, a total of two round trips from New Bedford and up to two round trips from Woods Hole could be made to Martha's Vineyard versus seven round trips from Woods Hole. At approximately 40 car-equivalent spaces per trip, the Authority would be reducing its service capacity level by at least 120 spaces per day in each direction, or about 9% of its

current daily capacity level during the summer months. The longer crossing time between New Bedford and Martha's Vineyard would require an additional vessel to be assigned in order to make up the difference. Even a longer operating day, beyond the current 18-hour operating day, would not be sufficient unless another vessel providing service between Woods Hole and Martha's Vineyard were to operate 24 hours per day.

Use of Additional Vessel Crew(s) and Extended Operating Day

One way to avoid a reduction in service levels through Woods Hole would be to add another crew and operate one of the freight vessels 24 hours per day. One extra trip could be made overnight from Vineyard Haven to New Bedford and return in time to Vineyard Haven the next morning to resume its normal operating schedule between Vineyard Haven and Woods Hole. The trip leaving Vineyard Haven would be about 11:00pm and the return trip from New Bedford would be somewhere between 2:00am and 3:00am. The trucks on this overnight trip from New Bedford would have to return to the mainland through Woods Hole or wait until the following night at 11:00pm to return to New Bedford. On weekends, this overnight trip probably would have few, if any, bookings due to a lack of demand at that time of the operating day, but we would still be required to pay the crew (as we are not able to switch from quad crew to triple crew on the weekends). The estimated incremental cost of this quad-crew alternative for the period June 23rd through September 8th would be \$376,000.

Past New Bedford Freight Service Results

The Authority contracted with a private carrier in 2000 and 2001 to provide freight service between New Bedford and Martha's Vineyard. In the second year of the pilot program, a total of 3,030 trucks were carried between New Bedford and Martha's Vineyard on 686 trips over a 172-day operating schedule from April 2nd through November 30th. The Monday-through-Friday service consisted of two round trips per day, and its revenues covered approximately 22% of the related operating costs. 47% of the vessel's truck carrying capacity was utilized during this eight-month period. During the peak summer season (from late-June through Labor Day Weekend), the service was used more often, averaging 100 trucks per week, or approximately 10 trucks in each direction per day. Two round trips per day between New Bedford and Martha's Vineyard had the effect of reducing truck traffic through Woods Hole by an average of 10 trucks in each direction during the summer months.

Preliminary Conclusion: The staff does not currently see a scenario where it would be cost effective for the Authority to offer freight service from New Bedford to Martha's Vineyard. The longer crossing time of 2-½ hours from New Bedford (via Quicks Hole) versus 45 minutes from Woods Hole means fewer trips can be completed within a vessel's normal operating day. Also, it would take an estimated 160 gallons of additional fuel in each direction for one of the Authority's freight vessels to operate the trip to and from New Bedford compared to Woods Hole. This is more than twice the estimated amount of fuel that would be saved with a full load of trucks (8 tractor-trailer trucks and 3 straight trucks) not having to travel an additional 40 miles on the road between New Bedford and Woods Hole.

The Authority is going to be faced with significant vessel replacement costs over the next decade (and beyond) in order to continue to provide adequate service for the islands of Martha's Vineyard and Nantucket. In addition, a significant capital expenditure will be required soon in connection with the Woods Hole Terminal Reconstruction Project. Since all of our revenues are derived from the rates and fares we charge, the Authority needs to maintain an efficient operation which, by definition, requires the shortest ferry routes, which result in both the highest possible revenues (due to the ability to run the largest number of trips) and lowest possible operating costs (due to the short time it takes to operate each trip).

One alternative may be for the Authority, after consultation with the New Bedford Harbor Development Commission over the possible use of the ferry terminal at the New Bedford State Pier, to issue a request for proposals from private vessel operators to provide freight service between New Bedford and Martha's Vineyard. Such a private service theoretically could be the most genuine way of testing whether the freight service is financially viable. In this regard, the staff could see:

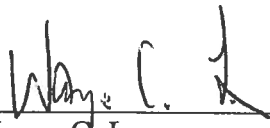
1. providing the private operator the free use of the Vineyard Haven terminal facilities to unload and load vehicles from its vessel(s), provided that such use is compatible with the Authority's ferry slips and does not conflict or interfere with the Authority's own operations;
2. possibly not charging the private operator any license fees in connection with the service;
3. providing the private operator a long-term license agreement (e.g., ten years); and
4. allowing the private operator to establish its own fares and operating schedules (provided that the private operator's use of the Authority's Vineyard Haven terminal facilities does not conflict or interfere with the Authority's own operations).

Realistically, the staff does not expect that, if the Authority were to issue such an RFP, it would receive any proposals to provide private freight service between New Bedford and Martha's Vineyard, even with the free use of the Authority's Vineyard Haven terminal facilities. But the lack of any proposals in response to a good faith, bona fide RFP would also indicate that such a freight service is not financially viable at this time.

The Port Council discussed this subject at their meeting on April 4, 2012 and voted to recommend to the Authority Members that the Authority work with the New Bedford Harbor Development Commission to issue a request for proposals from financially responsible private vessel operators to provide freight service between New Bedford and Martha's Vineyard, with the request for proposals being structured in the best manner to explore whether such a freight service can be financially viable, along with the potential opportunity to also provide freight service between New Bedford and Nantucket.

RECOMMENDATION:

It is recommended that the Members vote to authorize management, in consultation with the New Bedford Harbor Development Commission, to develop a proposed Request for Proposals from private vessel operators to provide freight service between New Bedford and Martha's Vineyard, along with the potential opportunity to provide freight service to Nantucket as well. Such document would be subject to the Board's final review and approval prior to its release.



Wayne Q. Lamson
General Manager

Alternative Schedules - Freight Service Between New Bedford and Woods Hole

One Single Crew - 12 Hour Maximum w/Overtime (M-F)

LV NB	LV WH	ARR VH	LV VH	ARR WH	ARR NB
5:00 AM		7:30 AM	8:00 AM	8:45 AM	
	9:15 AM	10:00 AM	10:30 AM		1:00 PM

Two Single Crews - Two 8 Hour Watches (M-F)

LV NB	ARR VH	LV VH	ARR NB
5:00 AM	7:30 AM	8:00 AM	10:30 AM
11:00 AM	1:30 PM	2:00 PM	4:30 PM

Double Crew - 12 Hour Maximum / 7 Days per Week

LV NB	LV WH	ARR VH	LV VH	ARR WH	ARR NB
5:00 AM	-	7:30 AM	8:00 AM	8:45 AM	-
-	9:15 AM	10:00 AM	10:30 AM	11:15 AM	-
-	11:30 AM	12:15 PM	12:45 PM	-	3:15 PM

Triple Crew - 18 Hour Maximum / 7 Days per Week

LV NB	LV WH	ARR VH	LV VH	ARR WH	ARR NB
5:00 AM	-	7:30 AM	8:00 AM	8:45 AM	-
-	9:15 AM	10:00 AM	10:30 AM	-	1:15 PM
1:30 PM	-	4:00 PM	4:30 PM	-	7:00 PM

or

5:00 AM	-	7:30 AM	8:05 AM	8:50 AM	-
-	9:10 AM	9:55 AM	10:15 AM	-	12:45 PM
1:15 PM	-	3:45 PM	4:15 PM	5:00 PM	-
-	5:30 PM	6:15 PM	6:30 PM	-	9:00 PM

or

5:00 AM	-	7:30 AM	8:00 AM	-	10:30 AM
11:00 AM	-	1:30 PM	2:00 PM	2:45 PM	
	3:15 PM	4:00 PM	4:30 PM	5:15 PM	-
-	5:30 PM	6:15 PM	6:30 PM	-	9:00 PM

2012 OPERATING SCHEDULE ALTERNATIVES - NEW BEDFORD SERVICE

06/20/2012 - 09/05/2012

NEW BEDFORD - MARTHA'S VINEYARD ROUTE

Alternative No.	Description
01	Single crew Mon-Fri (10 hour day)
02	2 Single Crews Mon-Fri (13.5 hour day)
03	Double Crew (12 hour day)
04	Triple Crew (16 hour day) (2 NB-MV, 1 WH-MV)
05	Triple Crew (18 hour day) (2 NB-MV, 2 WH-MV)
06	Triple Crew (18 hour day) (2 NB-MV, 2 WH-MV)
07	Quad Crew (24 hour day) (1 NB - MV) (added to existing running vessel)

Vessel and Terminal Costs
Freight Boat Service from New Bedford - Martha's Vineyard

1 SINGLE CREW (10 hour work day)

Wages & Benefits																GRAND TOTAL
# of	Classification	Straight Time Wage Rate	Overtime Wage Rate	Straight Time Hours	Overtime Hours	Days Operating	Number of Holidays	Vacation Wage Rate	Total Taxable Wages	Tax Rate	Meals Daily Rate	Base + Vacation + 40% Holiday	Defined Contribution Rate	Defined Benefit Daily Rate	Health Benefit Daily Rate	
1	Captain	46.10	69.15	8.0	2.0	56	2	4.61	31,569.28	10.65%	20.00	23,160.64	10.75%	6.00	53.05	41,847.98
1	Pilot / Mate	38.27	57.41	8.0	2.0	56	2	3.83	26,207.30	10.65%	20.00	19,226.85	10.75%	6.00	53.05	35,492.07
2	AB	25.52	38.28	8.0	2.0	56	2	2.55	34,952.19	10.65%	20.00	25,642.49	10.00%	-	47.91	48,844.77
1	O.S.	22.58	33.87	8.0	2.0	56	2	2.26	15,462.78	10.65%	20.00	11,344.19	10.00%	-	47.91	22,046.95
1	Oiler	26.07	39.11	8.0	2.0	56	2	2.61	17,852.74	10.65%	20.00	13,097.57	10.00%	-	47.91	24,866.78
1	Chief Engineer	46.10	69.15	8.0	2.0	56	2	4.61	31,569.28	10.65%	20.00	23,160.64	12.00%	-	62.92	42,354.21
1	Terminal Manager	33.40	50.10	8.0	0.0	60	0		16,032.00	10.65%		16,032.00		15.00%	48.18	23,035.01
1	Assistant Agent	21.49	32.24	8.0	0.0	60	2		10,830.96	10.65%		10,521.50	4.64		8.5625	16,094.46
0	Ticket Seller	21.05	31.58	0.0	0.0	0	2		0.00	10.65%		-	4.64		8.5625	-
0	Temporary	10.50	15.75	0.0	0.0	0	2		0.00	10.65%		-				-
VESSEL FUEL COSTS																-
VESSEL MAINTENANCE COSTS																-
Route	Route Miles	Scheduled Trips	Miles Operating	Fuel Consumption per mile	Gallons Used	Average Price per Gallon	2012 Maintenance Budget			Scheduled Days Operating	Maintenance per Day Operating	Incremental Maintenance at 50%	Proposed Days Operating			

VESSEL FUEL COSTS

VESSEL MAINTENANCE COSTS

Route	Route Miles	Scheduled Trips	Miles Operating	Fuel Consumption per mile	Gallons Used	Average Price per Gallon	2012				Vessel	Maintenance Budget	Scheduled Days Operating	Maintenance per Day Operating	Incremental Maintenance at 50%	Proposed Days Operating
							Maintenance	Budget	Days Operating	per Day Operating						
NB - MV	23	112	2,576	8.09	20,839.8	3.451										
WH- MV	8	112	896	8.09	7,248.6	3.451					Katama	381,619.00	178	2,144.00	1,072.00	56

71,918.00
25,015.00
60,032.00

411,547.23

Vessel and Terminal Costs
Freight Boat Service from New Bedford - Martha's Vineyard

2 SINGLE CREWS (13.5 hour work day)

Wages & Benefits																	GRAND TOTAL				
# of	Classification	Straight Time		Overtime		Straight Time		Overtime		Days Operating	Number of Holidays	Vacation		Total Taxable Wages	Tax Rate	Meals Daily Rate	Base + Vacation + 40% Holiday	Defined Contribution Rate	Defined Benefit Daily Rate	Health Benefit Daily Rate	GRAND TOTAL
		Wage Rate	Rate	Hours	Hours	Hours	Hours	Wage Rate	Rate												
2	Captain	46.10	69.15	8.0	0.0	56	2	4.61	47,648.96	10.65%	30.00	46,321.28	10.75%	6.00	53.05	65,996.71					
2	Pilot / Mate	38.27	57.41	8.0	0.0	56	2	3.83	39,555.87	10.65%	30.00	38,453.69	10.75%	6.00	53.05	56,195.94					
4	AB	25.52	38.28	8.0	0.0	56	2	2.55	52,754.94	10.65%	30.00	51,284.99	10.00%	-	47.91	77,593.68					
2	O.S.	22.58	33.87	8.0	0.0	56	2	2.26	23,338.69	10.65%	30.00	22,688.39	10.00%	-	47.91	35,139.02					
2	Oiler	26.07	39.11	8.0	0.0	56	2	2.61	26,945.95	10.65%	30.00	26,195.13	10.00%	-	47.91	39,481.12					
2	Chief Engineer	46.10	69.15	8.0	0.0	56	2	4.61	47,648.96	10.65%	30.00	46,321.28	12.00%	-	62.92	67,009.16					
1	Terminal Manager	33.40	50.10	8.0	0.0	60	0		16,032.00	10.65%		16,032.00		15.00%	48.18	23,035.01					
1	Assistant Agent	21.49	32.24	8.0	0.0	60	2		10,830.96	10.65%		10,521.50	4.64		8.5625	16,094.46					
0	Ticket Seller	21.05	31.58	0.0	0.0	0	2		0.00			-	4.64		8.5625	-					
2	Temporary	10.50	15.75	8.0	0.0	60	2		10,584.00	10.65%		10,281.60				11,711.20					

VESSEL FUEL COSTS

VESSEL MAINTENANCE COSTS

Route	Route Miles	Scheduled Trips		Miles Operating		Fuel Consumption per mile		Gallons Used		Average Price per Gallon		2012 Maintenance Budget		Scheduled Days Operating		Maintenance per Day Operating		Incremental Maintenance at 50%		Proposed Days Operating	
NB - MV	23	224	5,152	8.09	41,679.7	3.451															143,837.00
WH- MV	8	-	0	8.09	0.0	3.451															-
																					60,032.00
																					596,125.30

Vessel and Terminal Costs

DOUBLE CREW (12 hour work day)

Wages & Benefits																	GRAND TOTAL			
# of	Classification	Straight Time		Overtime		Straight Time		Overtime		Days Operating	Number of Holidays	Vacation		Total Taxable Wages	Meals		Base + Vacation + 40% Holiday	Defined Contribution Rate	Defined Benefit Daily Rate	Health Benefit Daily Rate
		Wage Rate	Rate	Hours	Wage Rate	Hours	Hours	Wage Rate	Rate			Daily Rate	Tax Rate							
2	Captain	43.90	65.85	6.0	0.0	0.0	78	2	4.39	46,779.84	10.65%	30.00	45,831.60	10.75%	6.00	53.05	68,240.59			
2	Pilot / Mate	36.45	54.68	6.0	0.0	0.0	78	2	3.65	38,841.12	10.65%	30.00	38,053.80	10.75%	6.00	53.05	58,620.28			
4	AB	24.28	36.42	6.0	0.0	0.0	78	2	2.43	51,745.54	10.65%	30.00	50,696.64	10.00%	-	47.91	81,954.02			
2	O.S.	21.50	32.25	6.0	0.0	0.0	78	2	2.15	22,910.40	10.65%	30.00	22,446.00	10.00%	-	47.91	37,408.92			
2	Oiler	24.80	37.20	6.0	0.0	0.0	78	2	2.48	26,426.88	10.65%	30.00	25,891.20	10.00%	-	47.91	41,644.42			
2	Chief Engineer	43.90	65.85	6.0	0.0	0.0	78	2	4.39	46,779.84	10.65%	30.00	45,831.60	12.00%	-	62.92	69,417.20			
1	Terminal Manager	33.40	50.10	8.0	0.0	0.0	60	0		16,032.00	10.65%		16,032.00		15.00%	48.18	23,035.01			
1	Assistant Agent	21.49	32.24	8.0	0.0	0.0	60	2		10,830.96	10.65%		10,521.50	4.64		8.5625	16,094.46			
0	Ticket Seller	21.05	31.58	0.0	0.0	0.0	0	2		0.00			-	4.64		8.5625	-			
2	Temporary	10.50	15.75	8.0	0.0	0.0	60	2		10,584.00	10.65%		10,281.60				11,711.20			

VESSEL FUEL COSTS

VESSEL MAINTENANCE COSTS

[illegible]

Vessel and Terminal Costs
Freight Boat Service from New Bedford - Martha's Vineyard

TRIPLE CREW (15.5 hour work day)

Wages & Benefits																GRAND TOTAL				
# of	Classification	Straight Time		Overtime		Straight Time		Overtime		Days Operating	Number of Holidays	Vacation		Total Taxable Wages	Tax Rate	Meals Daily Rate	Base + Vacation + 40% Holiday	Defined Contribution Rate	Defined Benefit Daily Rate	Health Benefit Daily Rate
		Wage Rate	Wage Rate	Hours	Time Hours	Hours	Time Hours	Wage Rate	Wage Rate											
3	Captain	43.90	65.85	6.0	0.0	78	2	4.39	70,169.76	10.65%	30.00	68,747.40	10.75%	6.00	53.05	101,190.89				
3	Pilot / Mate	36.45	54.68	6.0	0.0	78	2	3.65	58,261.68	10.65%	30.00	57,080.70	10.75%	6.00	53.05	86,760.43				
6	AB	24.28	36.42	6.0	0.0	78	2	2.43	77,618.30	10.65%	30.00	76,044.96	10.00%	-	47.91	120,591.03				
3	O.S.	21.50	32.25	6.0	0.0	78	2	2.15	34,365.60	10.65%	30.00	33,669.00	10.00%	-	47.91	54,943.38				
3	Oiler	24.80	37.20	6.0	0.0	78	2	2.48	39,640.32	10.65%	30.00	38,836.80	10.00%	-	47.91	61,296.63				
3	Chief Engineer	43.90	65.85	6.0	0.0	78	2	4.39	70,169.76	10.65%	30.00	68,747.40	12.00%	-	62.92	102,955.81				
1	Terminal Manager	33.40	50.10	8.0	0.0	60	0		16,032.00	10.65%		16,032.00		15.00%	48.18	23,035.01				
1	Assistant Agent	21.49	32.24	8.0	0.0	60	2		10,830.96	10.65%		10,521.50	4.64		8.5625	18,321.66				
1	Ticket Seller	21.05	31.58	8.0	0.0	60	2		10,609.20	10.65%		10,306.08	4.64		8.5625	18,076.28				
3	Temporary	10.50	15.75	8.0	0.0	60	2		15,876.00	10.65%		15,422.40				17,566.79				

VESSEL FUEL COSTS

VESSEL MAINTENANCE COSTS

Route	Route Miles	Scheduled Trips	Miles Operating	Fuel		Average Price per Gallon	2012 Maintenance Budget		Vessel	Scheduled Maintenance per Day Operating		Incremental Maintenance at 50%	Proposed Days Operating	
				Consumption per mile	Gallons Used		Maintenance Budget	Days Operating		per Day Operating	at 50%		Days Operating	
NB - MV	23	312	7,176	8.09	58,053.8	3.451								200,344.00
WH- MV	8	234	1,872	8.09	15,144.5	3.451			Katama	178	2,144.00	1,072.00	78	52,264.00
														83,616.00
														940,961.91

Vessel and Terminal Costs
Freight Boat Service from New Bedford - Martha's Vineyard

TRIPLE CREW (18 hour work day)

Wages & Benefits												GRAND TOTAL			
# of	Classification	Straight Time Wage Rate	Overtime Wage Rate	Straight Time Hours	Overtime Hours	Days Operating	Number of Holidays	Vacation Wage Rate	Total Taxable Wages	Tax Rate	Meals Daily Rate	Base + Vacation + 40% Holiday	Defined Contribution Rate	Defined Benefit Daily Rate	Health Benefit Daily Rate
3	Captain	43.90	65.85	6.0	0.0	78	2	4.39	70,169.76	10.65%	30.00	68,747.40	10.75%	6.00	53.05
3	Pilot / Mate	36.45	54.68	6.0	0.0	78	2	3.65	58,261.68	10.65%	30.00	57,080.70	10.75%	6.00	53.05
6	AB	24.28	36.42	6.0	0.0	78	2	2.43	77,618.30	10.65%	30.00	76,044.96	10.00%	-	47.91
3	O.S.	21.50	32.25	6.0	0.0	78	2	2.15	34,365.60	10.65%	30.00	33,669.00	10.00%	-	47.91
3	Oiler	24.80	37.20	6.0	0.0	78	2	2.48	39,640.32	10.65%	30.00	38,836.80	10.00%	-	47.91
3	Chief Engineer	43.90	65.85	6.0	0.0	78	2	4.39	70,169.76	10.65%	30.00	68,747.40	12.00%	-	62.92
1	Terminal Manager	33.40	50.10	8.0	0.0	60	0		16,032.00	10.65%		16,032.00		15.00%	48.18
1	Assistant Agent	21.49	32.24	8.0	0.0	60	2		10,830.96	10.65%		10,521.50	4.64		8.5625
1	Ticket Seller	21.05	31.58	8.0	0.0	60	2		10,609.20	10.65%		10,306.08	4.64		8.5625
3	Temporary	10.50	15.75	8.0	0.0	60	2		15,876.00	10.65%		15,422.40			
VESEL FUEL COSTS															
Route	Route Miles	Scheduled Trips	Miles Operating	Fuel Consumption per mile	Gallons Used	Average Price per Gallon									
NB - MV	23	312	7,176	8.09	58,053.8	3.451									
WH- MV	8	312	2,496	8.09	20,192.6	3.451									
							Katana		381,619.00	178	2,144.00	1,072.00	78		
														200,344.00	
														69,685.00	
														83,616.00	
														956,382.91	

VESEL MAINTENANCE COSTS															
		2012		Scheduled		Maintenance		Incremental		Proposed					
Route	Route Miles	Maintenance Budget	Vessel	Days Operating	Days Operating	per Day Operating	Maintenance at 50%	Maintenance at 50%	Days Operating	Days Operating	Days Operating				

Vessel and Terminal Costs
Freight Boat Service from New Bedford - Martha's Vineyard

TRIPLE CREW (18 hour work day)

Wages & Benefits		Straight Time		Overtime		Straight Time		Overtime		Days Operating		Number of Holidays		Vacation		Total Taxable Wages		Tax Rate		Meals Daily Rate		Base + Vacation + 40% Holiday		Defined Contribution Rate		Defined Benefit Daily Rate		Health Benefit Daily Rate		GRAND TOTAL
# of	Classification	Wage Rate	Rate	Wage Rate	Rate	Hours	Time Hours	Hours	Time Hours	Days	Operating	Days	Holidays	Wage Rate	Rate	Wages	Taxable	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
3	Captain	43.90	65.85	65.85	6.0	0.0	6.0	0.0	78	78	2	2	4.39	30.00	70,169.76	10.65%	10.65%	30.00	68,747.40	10.75%	6.00	53.05	101,190.89							
3	Pilot / Mate	36.45	54.68	54.68	6.0	0.0	6.0	0.0	78	78	2	2	3.65	30.00	58,261.68	10.65%	10.65%	30.00	57,080.70	10.75%	6.00	53.05	86,760.43							
6	AB	24.28	36.42	36.42	6.0	0.0	6.0	0.0	78	78	2	2	2.43	30.00	77,618.30	10.65%	10.65%	30.00	76,044.96	10.00%	-	47.91	120,591.03							
3	O.S.	21.50	32.25	32.25	6.0	0.0	6.0	0.0	78	78	2	2	2.15	30.00	34,365.60	10.65%	10.65%	30.00	33,669.00	10.00%	-	47.91	54,943.38							
3	Oiler	24.80	37.20	37.20	6.0	0.0	6.0	0.0	78	78	2	2	2.48	30.00	39,640.32	10.65%	10.65%	30.00	38,836.80	10.00%	-	47.91	61,296.63							
3	Chief Engineer	43.90	65.85	65.85	6.0	0.0	6.0	0.0	78	78	2	2	4.39	30.00	70,169.76	10.65%	10.65%	30.00	68,747.40	12.00%	-	62.92	102,955.81							
1	Terminal Manager	33.40	50.10	50.10	8.0	0.0	8.0	0.0	60	60	0	0			16,032.00	10.65%	10.65%		16,032.00		15.00%	48.18	23,035.01							
1	Assistant Agent	21.49	32.24	32.24	8.0	0.0	8.0	0.0	60	60	2	2			10,830.96	10.65%	10.65%		10,521.50	4.64		8.5625	18,321.66							
1	Ticket Seller	21.05	31.58	31.58	8.0	0.0	8.0	0.0	60	60	2	2			10,609.20	10.65%	10.65%		10,306.08	4.64		8.5625	18,076.28							
3	Temporary	10.50	15.75	15.75	8.0	0.0	8.0	0.0	60	60	2	2			15,876.00	10.65%	10.65%		15,422.40				17,566.79							

VESSEL FUEL COSTS

VESSEL MAINTENANCE COSTS

Route	Route Miles	Scheduled Trips	Miles Operating	Fuel Consumption per mile	Gallons Used	Average Price per Gallon	2012		Vessel	2012		Maintenance Budget	Operating Days	Incremental Maintenance at 50%	Proposed Operating Days	Grand Total
							Maintenance	Operating		Maintenance	Operating					
NB - MV	23	312	7,176	8.09	58,053.8	3.451										200,344.00
WH- MV	8	312	2,496	8.09	20,192.6	3.451			Kalama	381,619.00	178	2,144.00	1,072.00	78		69,685.00
																83,616.00
																958,382.91

Vessel and Terminal Costs

Wages & Benefits																	GRAND TOTAL
# of	Classification	Straight Time Wage Rate	Overtime Wage Rate	Straight Time Hours	Overtime Hours	Days Operating	Number of Holidays	Vacation Wage Rate	Total Taxable Wages	Tax Rate	Meals Daily Rate	Base + Vacation + 40% Holiday	Defined Contribution Rate	Defined Benefit Daily Rate	Health Benefit Daily Rate		
1	Captain	43.90	65.85	6.0	0.0	78	2	4.39	23,389.92	10.65%	30.00	22,915.80	10.75%	6.00	53.05	33,730.30	
1	Pilot / Mate	36.45	54.68	6.0	0.0	78	2	3.65	19,420.56	10.65%	30.00	19,026.90	10.75%	6.00	53.05	28,920.14	
2	AB	24.28	36.42	6.0	0.0	78	2	2.43	25,872.77	10.65%	30.00	25,348.32	10.00%	-	47.91	40,197.01	
1	O.S.	21.50	32.25	6.0	0.0	78	2	2.15	11,455.20	10.65%	30.00	11,223.00	10.00%	-	47.91	18,314.46	
1	Oiler	24.80	37.20	6.0	0.0	78	2	2.48	13,213.44	10.65%	30.00	12,945.60	10.00%	-	47.91	20,432.21	
1	Chief Engineer	43.90	65.85	6.0	0.0	78	2	4.39	23,389.92	10.65%	30.00	22,915.80	12.00%	-	62.92	34,318.61	
1	Terminal Manager	33.40	50.10	8.0	0.0	60	0		16,032.00	10.65%		16,032.00		15.00%	48.18	23,035.01	
1	Assistant Agent	21.49	32.24	8.0	0.0	60	2		10,830.96	10.65%		10,521.50	4.64		8.5625	16,094.46	
0	Ticket Seller	21.05	31.58	0.0	0.0	0	2		0.00	10.65%		-	4.64		8.5625	-	
1	Temporary	10.50	15.75	8.0	0.0	60	2		5,292.00	10.65%		5,140.80				5,855.60	

VESSEL MAINTENANCE COSTS

[illegible]

Alternative 07

06/23/2011 - 09/08/2011
AVERAGE REVENUE PER TRIP

Trip #	Time	Route	Total Revenue							
			Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
201	6:15 AM	WH - VH	28,523	30,703	31,882	32,503	29,918	27,782	22,879	204,190
202	7:15 AM	VH - WH	20,372	22,219	19,688	22,229	18,538	27,541	28,066	158,653
205	8:30 AM	WH - VH	24,240	26,126	25,604	25,830	21,971	34,414	28,219	186,404
206	9:45 AM	VH - WH	29,226	28,868	28,337	31,074	27,744	25,361	33,130	203,740
209	11:00 AM	WH - OB	33,875	35,787	33,607	36,278	34,094	35,709	33,910	243,260
210	12:15 PM	OB - WH	37,288	33,221	34,823	35,633	34,897	39,092	35,572	250,526
213	1:30 PM	WH - OB	34,563	31,284	30,028	35,042	34,158	38,636	33,780	237,491
214	2:45 PM	OB - WH	35,785	31,664	33,900	36,488	36,683	38,519	34,625	247,664
217	4:00 PM	WH - OB	28,443	24,020	27,746	35,354	35,045	33,807	31,586	216,001
218	5:15 PM	OB - WH	34,052	29,959	32,665	33,207	37,310	37,885	32,810	237,888
221	6:30 PM	WH - OB	18,920	14,693	15,607	28,965	34,194	32,543	31,016	175,938
222	7:30 PM	OB - WH	17,941	18,000	17,988	20,970	31,832	32,558	31,983	171,272
225	8:45 PM	WH - VH	7,825	1,535	2,991	14,734	25,109	25,285	21,632	99,111
226	9:45 PM	VH - WH	4,762	235	0	4,085	11,292	19,968	19,506	59,848
			355,815	328,314	334,866	392,392	412,785	449,100	418,714	2,691,986

Number of Trips Made								
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	
12	12	12	12	11	11	10	80	
11	12	12	12	11	11	10	79	
12	12	12	12	11	11	10	80	
12	12	12	12	11	11	10	80	
12	12	12	12	11	11	10	80	
12	12	12	12	11	11	10	80	
12	12	12	12	11	11	10	80	
11	11	11	12	11	10	10	76	
11	11	11	12	11	11	10	77	
11	11	11	12	11	10	10	76	
10	11	11	12	11	10	10	75	
5	4	1	7	11	10	10	48	
3	1	0	4	10	9	9	36	
146	145	141	155	153	148	139	1,027	

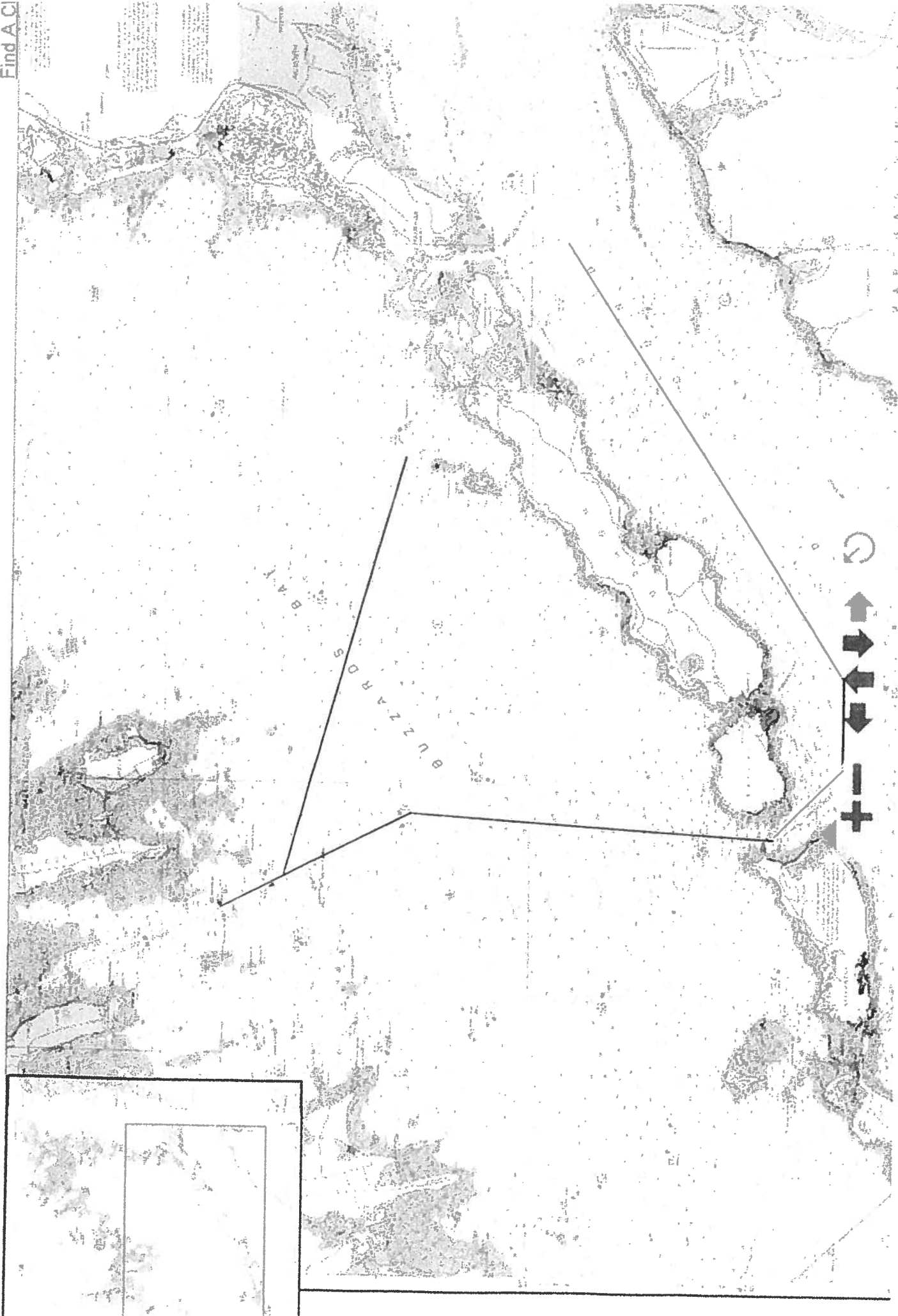
Average Revenue Per Trip								
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	
2,376.92	2,558.58	2,656.83	2,708.58	2,719.82	2,525.64	2,287.90	2,552.38	
1,852.00	1,851.58	1,640.67	1,852.42	1,685.27	2,503.73	2,806.60	2,008.27	
2,020.00	2,177.17	2,133.67	2,152.50	1,997.36	3,128.55	2,821.90	2,330.05	
2,435.50	2,405.67	2,361.42	2,589.50	2,522.18	2,305.55	3,313.00	2,546.75	
2,822.92	2,982.25	2,800.58	3,023.17	3,099.45	3,246.27	3,391.00	3,040.75	
3,107.33	2,768.42	2,901.92	2,969.42	3,172.45	3,553.82	3,557.20	3,131.58	
2,880.25	2,607.00	2,502.33	2,920.17	3,105.27	3,512.36	3,378.00	2,968.64	
2,982.08	2,638.67	2,825.00	3,040.67	3,334.82	3,501.73	3,462.50	3,095.80	
2,585.73	2,183.64	2,522.36	2,946.17	3,185.91	3,380.70	3,158.60	2,842.12	
3,095.64	2,723.55	2,969.55	2,767.25	3,391.82	3,444.09	3,281.00	3,089.45	
1,720.00	1,335.73	1,418.82	2,413.75	3,108.55	3,254.30	3,101.60	2,314.97	
1,794.10	1,636.36	1,635.27	1,747.50	2,893.82	3,255.80	3,198.30	2,283.63	
1,565.00	383.75	2,991.00	2,104.86	2,282.64	2,528.50	2,163.20	2,064.81	
1,587.33	235.00	-	1,021.25	1,129.20	2,218.67	2,167.33	1,662.44	
2,437.09	2,264.23	2,374.94	2,531.56	2,697.94	3,034.46	3,012.33	2,621.21	

Shaded Trips = Hazardous

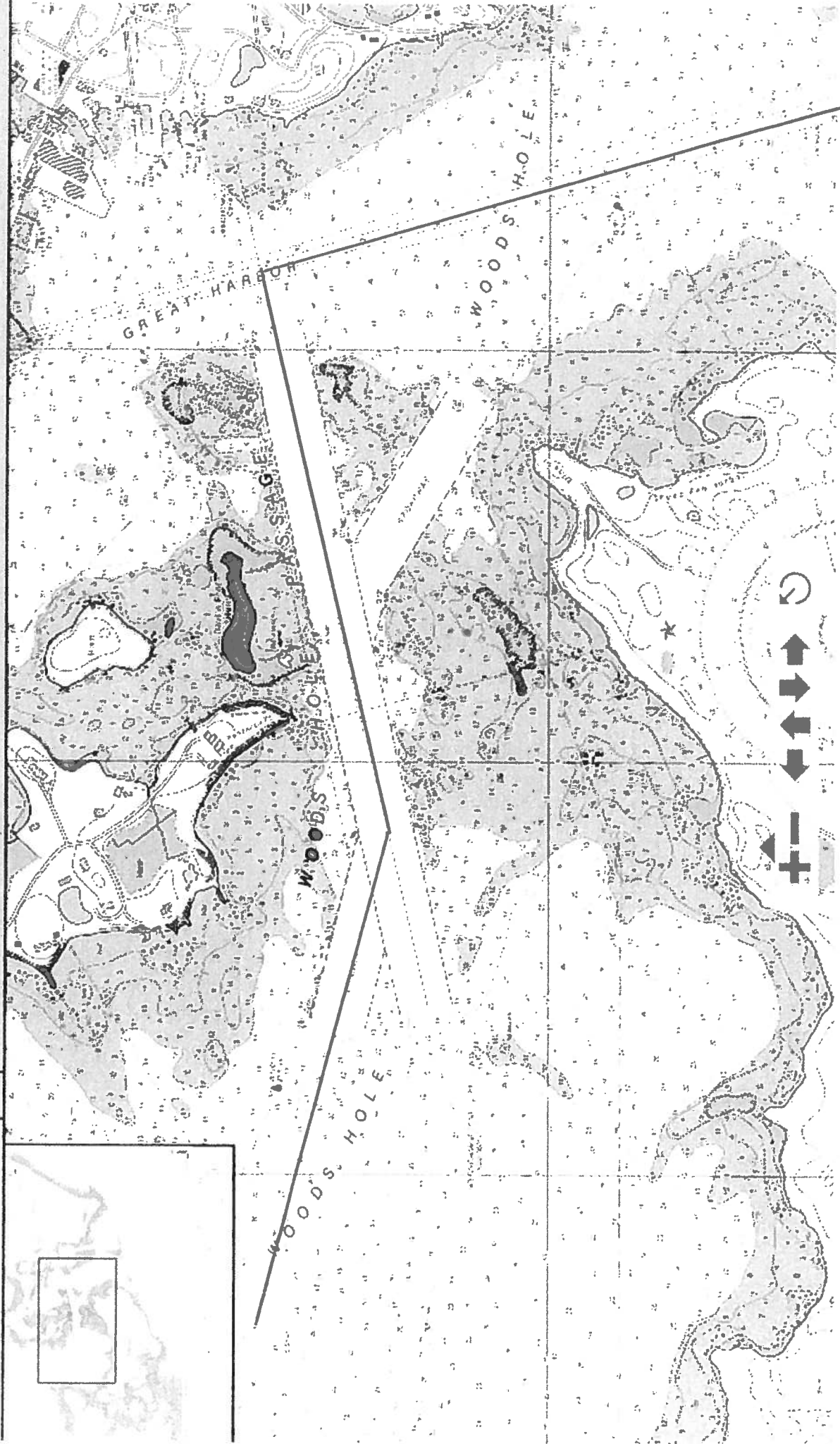
Trip #	Time	Route	Available Capacity in Car Equivalent Units							Total
			Mon	Tue	Wed	Thu	Fri	Sat	Sun	
201	6:15 AM	WH - VH	468	468	468	468	429	429	390	3,120
202	7:15 AM	VH - WH	429	468	468	468	429	429	390	3,081
205	8:30 AM	WH - VH	468	468	468	468	429	429	390	3,120
206	9:45 AM	VH - WH	468	468	468	468	429	429	390	3,120
209	11:00 AM	WH - OB	468	468	468	468	429	429	390	3,120
210	12:15 PM	OB - WH	468	468	468	468	429	429	390	3,120
213	1:30 PM	WH - OB	468	468	468	468	429	429	390	3,120
214	2:45 PM	OB - WH	468	468	468	468	429	429	390	3,120
217	4:00 PM	WH - OB	429	429	429	468	429	390	390	2,964
218	5:15 PM	OB - WH	429	429	429	468	429	429	390	3,003
221	6:30 PM	WH - OB	429	429	429	468	429	390	390	2,964
222	7:30 PM	OB - WH	390	429	429	468	429	390	390	2,925
225	8:45 PM	WH - VH	195	156	39	273	429	390	390	1,872
226	9:45 PM	VH - WH	117	39	0	156	390	351	351	1,404
			5,694	5,655	5,499	6,045	5,967	5,772	5,421	40,053

Total Occupancy										
			Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
201	6:15 AM	WH - VH	360	406	423	414	395	383	258	2,639
202	7:15 AM	VH - WH	325	378	332	374	311	370	339	2,429
205	8:30 AM	WH - VH	344	401	397	416	329	371	326	2,584
206	9:45 AM	VH - WH	376	374	375	399	364	351	374	2,613
209	11:00 AM	WH - OB	389	436	384	418	397	385	364	2,773
210	12:15 PM	OB - WH	450	446	465	473	427	438	387	3,086
213	1:30 PM	WH - OB	411	376	371	430	377	418	369	2,752
214	2:45 PM	OB - WH	434	402	439	457	442	430	377	2,981
217	4:00 PM	WH - OB	349	314	364	429	393	355	350	2,554
218	5:15 PM	OB - WH	394	351	387	384	444	412	363	2,735
221	6:30 PM	WH - OB	251	207	205	385	408	357	366	2,179
222	7:30 PM	OB - WH	204	205	198	239	360	347	354	1,907
225	8:45 PM	WH - VH	102	21	39	192	293	301	281	1,229
226	9:45 PM	VH - WH	63	3	0	49	137	229	236	717
			4,452	4,320	4,379	5,059	5,077	5,147	4,744	33,178

Occupied Capacity										
			Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
201	6:15 AM	WH - VH	76.9%	86.8%	90.4%	88.5%	92.1%	89.3%	66.2%	84.6%
202	7:15 AM	VH - WH	75.8%	80.8%	70.9%	79.9%	72.5%	86.2%	86.9%	78.8%
205	8:30 AM	WH - VH	73.5%	85.7%	84.8%	88.9%	76.7%	86.5%	83.6%	82.8%
206	9:45 AM	VH - WH	80.3%	79.9%	80.1%	85.3%	84.8%	81.8%	95.9%	83.8%
209	11:00 AM	WH - OB	83.1%	93.2%	82.1%	89.3%	92.5%	89.7%	93.3%	88.9%
210	12:15 PM	OB - WH	96.2%	95.3%	99.4%	100.0%	99.5%	100.0%	99.2%	98.9%
213	1:30 PM	WH - OB	87.8%	80.3%	79.3%	91.9%	87.9%	97.4%	94.6%	88.2%
214	2:45 PM	OB - WH	92.7%	85.9%	93.8%	97.6%	100.0%	100.0%	96.7%	95.5%
217	4:00 PM	WH - OB	81.4%	73.2%	84.8%	91.7%	91.6%	91.0%	89.7%	86.2%
218	5:15 PM	OB - WH	91.8%	81.8%	90.2%	82.1%	100.0%	96.0%	93.1%	91.1%
221	6:30 PM	WH - OB	58.5%	48.3%	47.8%	82.3%	95.1%	91.5%	93.8%	73.5%
222	7:30 PM	OB - WH	52.3%	47.8%	46.2%	51.1%	83.9%	89.0%	90.8%	65.2%
225	8:45 PM	WH - VH	52.3%	13.5%	100.0%	70.3%	68.3%	77.2%	72.1%	65.7%
226	9:45 PM	VH - WH	53.8%	7.7%	0.0%	31.4%	35.1%	65.2%	67.2%	51.1%
			78.2%	76.4%	79.6%	83.7%	85.1%	89.2%	87.5%	82.8%



Click the +/- buttons and drag the slider tool (solid triangle) to zoom in and out.



Click the +/- buttons and drag the slider tool (solid triangle) to zoom in and out.

Click the arrow buttons to pan left/right and up/down.