

MARINE HIGHWAY NEW YORK - PORTLAND

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PASSENGER TRAFFIC - PASSENGER VEHICLE

AND

COMMERCIAL VEHICLE TRAFFIC STUDY FOR PROPOSED MARINE HIGHMAY

H 563 . U6 M37 1972

> Maine Port Authority June 30, 1972



MAINE PORT AUTHORITY

MAINE STATE PIER @ PORTLAND, MAINE 04111 @ TEL. 773-5608

A FOWARD LANGLOIS, JR. GENERAL MANAGER

June 30, 1972

Mr. Richard Kilroy President, Board of Directors Maine Port Authority Portland, Maine

Dear Mr. Kilroy:

We are pleased to submit herewith a traffic study which has been done in connection with the Marine Highway Project. The Marine Highway proposes the operation of combination passenger and vehicle carrying ships between New York and Portland.

We believe the results of the study are encouraging and hopefully will provide the Maritime Administration with sufficient information to construct a computer model of the proposed operation, for the purpose of determining the size and type of vessels necessary to handle the estimated traffic, thereby determining its economic feasibility. The report has been submitted to Mr. Richard W. Black, Marine Highway Project Manager, Office of Advance Ship Operations, U. S. Department of Commerce, Maritime Administration, Washington, D. C.

We want to thank the Maine Turnpike Authority and the Maine Department of Economic Development for their guidance and assistance given during this study. We also thank Mr. Clark Neily, Economic Development Director of the City of Portland and Mr. George Garrett, Secretary of the Greater Portland Chamber of Commerce for their quidance and support.

Respectfully submitted,

a. Edward Langlois

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APPENDIX A.

APPENDIX B.

ENABLING LEGISLATION

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APPROVED

CHAPTER

JUN 23'71

28

BY GOVERNOR

RESOLVES

STATE OF MAINE

S. P. 386 - L. D. 1141

RESOLVE, to Provide Funds for a Feasibility Study for New Marine Facilities for the Port of Portland.

Port of Portland; feasibility study. Resolved: That there is appropriated from the Unappropriated Surplus of the General Fund the sum of \$10,000 to the Maine Port Authority for the purpose of providing for a feasibility study of new marine facilities for the Port of Portland.

This is a study to determine the role that the Port of Portland might play in the extension of existing passenger and vehicle service; roll-on, roll-off shipping, and container handling facilities and services.

This study is designed to examine the economic feasibility of a proposed new "marine highway" concept between the Port of Portland and the Port of New York which would utilize the existing new ferry facilities in Portland.

IN HOUSE OF REPRESENTATIVES,
Read and passed finally.
Speaker
IN SENATE,
Read and passed finally.
President
Approved1971
Governor

INTRODUCTION AND SUMMARY

The 105th. Legislature appropriated \$10,000 to undertake a feasibility study of a proposed Marine Highway between the ports of Portland and New York. This idea contemplates the operation of two combination passenger and vehicle carrying ships daily between the two ports. This idea has been discussed on several occasions with Mr. Richard Black, Project Manager for the Maritime Administration, Mr. Clark Neily, Economic Development Director for the City of Portland and Mr. A. Edward Langlois and other members of the staff of the Maine Port Authority.

In presenting the proposal to the Maine Legislature, it was suggested that the Marine Highway ships would feature modular living accommodations which were adjustable to traffic demands as well as having certain environmental assets including a reduction in pollu-The ships would also provide a reliable alternative to hightion. way travel for commercial traffic as well as the esthetic values inherent in an overnight ocean trip from Portland to New York. Certain economic advantages were also cited including an expected increase in tourist traffic which finds present means of travel undesirable for one reason or another and a positive benefit to the Portland water-The proposed Marine Highway would of course, provide the travfront. elers with overnight accommodations while the trip continued in a restfull atmosphere as well as the reliability of ship operation along the coast.

The feasibility of such an operation requires an estimate of potential traffic that would use the service, the development of the size, type and overall facilities necessary to handle this traffic and whether or not such a ship can be operated profitably on revenues it can reasonably expect to generate. It was decided that the State of Maine would undertake the task of determining what traffic might reasonably use the service, study the location of port facilities at both Portland and New York, determine the desirability of certain inovative services such as small package handling that utilize specialized containers and the development of a suggested rate system based on the costs encountered by automobile travelers and commercial vehicles via conventional highway routes. This information will be submitted to the Maritime Administration for further analysis in determining the size and type of vessels necessary to handle the estimated traffic and overall economic feasibility.

"BACKGROUND OF STUDY"

This study examines three basic sources, of traffic, i.e. Passengers, passenger vehicles and trucks or commercial vehicle.

In cooperation with the Maine Turnpike Authority, 50,000 travel survey cards were distributed randomly to passenger vehicles at the southbound lanes of the York Toll Plaza, consisting of 20,000 during the Labor Day weekend, 1971 and 15,000 during the weekend of October 9 - 11, 1971. Another 15,000 were distributed during all of

the weekends of January 1972. The data collected from this initial survey has been analyzed by the Maine Department of Economic Development in its Statement R32-25-06 which is attached hereto as Appendix B.

The initial traffic survey card included a question asking those interested in a proposed Marine Highway Service, if they would complete a detailed travel questionnaire. Of the 8,360 initial questionnaires returned, 45 percent were interested in the proposed Marine Highway. Detailed travel questionnaires were distributed to 2,495 of those indicating interest and 57 percent of them returned the completed questionnaire. (See Table 1). The results have been summerized in Appendix A attached hereto.

The truck or commercial vehicle study was conducted in part by personal interview and mail questionnaire. Efforts were directed toward those trucking firms who are known to have extensive operations between Maine and New York or points beyond. The study included all classifications of carriers, i. e. Common, contract, private and exempt.

TRAFFIC - RATE STRUCTURE - SAILING SCHEDULE

1. COMMERCIAL VEHICLES (TRUCKS)

The study of commercial vehicles includes single or individual trailers, truck tractors, tractor-trailer combinations, straight trucks and containers on wheeled chassis that are operated to and from northern New England by all classifications of carriers including: (a) motor common carriers of general freight, both regular and irregular route, (b) motor common and contract carriers in specialized service, such as heavy haulers, household goods, mobile homes, auto carriers and refrigerated service and (c) private and exempt truck operators whose traffic would either originate or terminate in New York or points south and west.

It was determined that time and resources made it impossible to contact every private and certificated motor carrier operating service between the New York area and northern New England. This decision was based primarily upon the fact that many of the carriers holding operating authority conduct operations spasmodically, if at all. In addition it is virtually impossible to develop a list of all such carriers that would include the private and exempt operators. All for-hire carriers are required to register their operating authorities with the Maine Public Utilities Commission before entering the State of Maine, however this is done on an annual basis and there are a large number of carriers who actually hold authority to or from Maine that do not register every year, consequently the PUC's list is not complete. A large number of the private carriers who conduct

infrequent operations in northern New England are wholly unidentifiable except through observation. Accordingly, it was determined to concentrate on the primary common, contract and exempt carriers who are known to conduct operations on a reasonably regular basis.

The survey was conducted by personal interviews in those cases where the carriers could be contacted in the New England - New York area. Those carriers that could not be interviewed were asked to complete a questionnaire by mail. The interview work sheet and questionnaire are attached, immediately following this narrative.

The number and classification of carriers surveyed together with an indication of their interest in the proposed marine highway, the approximate length and weight of tractors and trailers, together with the estimated volume of trailers between New York and Portland, on an annual basis is shown in Table 2. It will be noted that the carriers interested in a service of this kind have a total of 11,367 units operating between the two areas.

It is significant to point out that in the case of the common carriers of general freight, the estimated traffic originates or terminates almost wholly in the New York and Portland area. The distances which the trailers move beyond the two port cities is small and appears to have little effect on time requirements. The common carriers indicate that the current trend is to move terminals to the Jersey shore rather than trying to operate from Metropolitan New York

or even Long Island.

The common carriers of household goods, the exempt carriers and the specialized carriers of all types indicate that their operations are rather diverse in so far as origin and destination is concerned. Their interest in the service would be primarily to provide an opportunity for long haul drivers to obtain the necessary rest required under Department of Transportation Safety Rules and still keep the vehicles moving. This is in rather sharp contrast with the basic reasons for interest on the part of the common carriers of general The general freight carriers would be primarily moving freight. trailers without the power units. Their traffic would consist of trailers that were in excess of the number of road haul drivers available at the terminal area. Stated differently, traffic of these carriers would be so-called overflow or excess traffic that would be moved via the Marine Highway in lieu of hiring a so-called spare man and running the unit over the road.

From the interview work sheets and the questionnaires, estimated truck traffic interested in using the service by month and day of the week has been developed together with the percentages of each to the total. These figures are derived from the estimated number of vehicles per month and by day of the week supplied by the various carriers and then applied to the total annual volume. This we believe represents a reasonably accurate estimate of the amount of such

traffic that has an interest in using the proposed service. These figures are found in Tables 3 and 4.

In order to develop a reliable estimate of the amount of this type traffic that would use this Marine Highway, the figures in Table 3 must be modified by the various conditions expressed by interested carriers. Primary among those conditions is transit time and costs.

Table 5 constructs the cost of operating a truck between Portland and New York, a distance of some 318 highway miles. It will be noted that we have constructed an average per vehicle mile line haul cost of 33.97 cents. This results in a total line haul cost of \$108.04 one way. It should be pointed out that this cost computation must take into consideration the operation of a substantial number of non-union, private and exempt carriers as well as the unionized common and contract carriers. Consequently, it was determined that the labor costs assigned to line haul costs should be removed in order to get an accurate expression of the actual out-ofpocket line haul costs experienced by all types of carriers. The adjustment for labor shown in column three was developed from a study of the costs of a single carrier and has been confirmed by interviews with experienced operating and cost control personnel of several carriers.

By interview and careful analysis of the questionnaire, it has

been determined that an estimated twelve percent of the truck traffic that would be interested in using the Marine Highway will do so in its first or base year operation. This substantially reduced number results from the fact that almost all of the general freight common carriers have indicated that the projected fifteen hour transit time is simply too long for the majority of their loads. These carriers indicate that much of this traffic will not be ready for shipment from New York before seven o'clock in the evening and must be in Portland ready for breakdown and delivery no later than seven a.m. and several indicated that it should be ready for stripping or breakdown by four a.m. This indicates a range of eight to twelve hours for the general freight common carriers, consequently the trailers which have been included for base year operation by these carriers are those which the carriers have estimated to be excess over and above the number of road haul drivers they have available in either New York or Portland. In other words they are the loads which would require the hiring of spare men.

Specialized common and contract carriers transporting frozen foods, household goods, mobile homes and so called "heavy haulers" do not conduct regular operations in the same sense as the common carrier of general freight. Their loads are generally scheduled at the convenience of either the consignor or consignee depending on which party is controlling. Accordingly, we have used only those loads which in-

dicate they would move at approximately five p.m. from either New York or Portland. The exempt carriers surveyed are engaged primarily in the transportation of fresh fruits and vegetables from northern Maine (potatoes). This traffic is seasonal, commencing to move in November and December through June of each year with the heaviest months being March, April and May. The frozen food traffic is also somewhat seasonal in nature as the heaviest movement occurs in the spring and fall months of each year. These two items have the greatest influence on the variation in truck traffic by months and seasons of the year.

In view of the line haul costs experienced by the truckers in general, it is suggested that a simplified rate system that would be sufficiently attractive to actually move this traffic would require a rate of \$2.50 per foot (outside measurement) for all self-propelled trucks, this would be primarily tractor-trailer units. A rate of \$3.00 per foot (outside measurement) is suggested for all trucks and trailers not self-propelled, this of course would be primarily single trailers. (See Table 6.)

The tractor-trailer units would average 55 feet in overall length and the single trailers would average 40 feet in overall length.

Table 7 estimates the base year traffic, by classification, that is tractor-trailer combinations and single trailers, together

with the estimated revenue which it will produce at the suggested rate scale. The proposed charge should include a berth for the driver, but not meals or other services which he may require. For the purposes of tariff publication, a truck should be defined as any motor vehicle for which specific rates are not provided in the tariff. This description would of course apply to all trucks selfpropelled.

In order to distinguish individual freight trailers from house trailers or other units of this type, primarily used for transporting persons, the description should clearly indicate that the trailer is used exclusively for transporting freight or property. In order to insure minimum revenues to cover trailers of less than 35 feet and straight trucks that may be offered for transportation, a minimum charge of \$50.00 is proposed.

Tables 8 and 9 project the base year revenue for the fifth year of operations and tenth year of operations respectively. In both cases the annual average growth rate of the Maine Turnpike has been used. The increase in rates is based upon the current 2% increase in truckload rates that are being applied by the New England Motor Rate Bureau to its rate scales generally. It is of course entirely conceivable that either of these growth rates may change in the near future. In any case we believe that it is realistic to

(1) COMMERCIAL VEHICLES (TRUCKS) CON'T. apply at least these rates of growth as minimum.

Throughout the whole of this part of the investigation it appears that the ship operator must conduct an intensive sales program in order that this portion of its traffic can realize maximum potential. Many of the motor carriers surveyed have obviously given very little thought to the benefits to be obtained from the use of this service, after all these people are busy with the day to day operation of their businesses and it is unrealistic to expect them to theorize on this potential. Quite clearly, advantages do exist for the common carriers of general freight in the diversion of increased traffic to this service in lieu of hiring additional roadhaul drivers. It is also clear that many private carrier operations can be attracted to this service where time in transit is not of the same importance as it is to the common carrier of general freight. Both of these advantages, however must be sold and the best proof of their existance will of course be, the operation of the Marine Highway.

II. PASSENGERS AND PASSENGER VEHICLES

The study of passengers and passenger vehicle traffic includes travel for both business and recreational purposes. To develop estimates of potential passenger traffic, it was necessary to first define the market from which such traffic might be drawn. Figures in

II. PASSENGERS AND PASSENGER VEHICLES (CON'T.)

Table 5 of Appendix <u>B</u> show that travelers from fifteen (15) states and the District of Columbia expressed a rather consistent interest in the proposed Portland - New York ferry service. Suprisingly, substantial interest was also shown by travelers from such unlikely states as Massachusetts, Connecticut, Rhode Island, New Hampshire and Vermont. Because of the location of these states north of the departure city no attempt was made to develop traffic estimates from them.

It is believed that a realistic market or source of traffic is available from the states of New York, New Jersey, Pennsylvania, Virginia, Maryland, Ohio, Delaware, Michigan, Washington, D. C. and the State of Maine. Table 10 is an outlined map of this area and Table 11 lists the market states and shows the percentage of parties originating in each, together with the percentage of those parties who indicated an interest in the Marine Highway Service.

To estimate the amount of travel between Maine and the market states it was necessary to relate the origin percentage figures shown in Table <u>11</u> to the total vehicles passing the York Toll Plaza on the Maine Turnpike. A historic analysis of traffic entering and leaving Maine at York together with an average annual growth percentage is shown in Table <u>12</u>. For purposes of this study and the questionnaires that support it, a vehicle is considered to constitute a party. The number of persons per party and the percent of those parties with children under 12 and the number of such children per party are shown

II. PASSENGERS AND PASSENGER VEHICLES (CON'T).
in Table 13.

An estimate of the travel between Maine and the market states is developed in Table 14, broken down by northbound and southbound travelers, adults and children under 12. The origin percentages developed in the three separate surveys have been applied to the total passings of the Maine Turnpike at York. This produced an estimated number of parties from the market states. The percentage of interest developed for each of the market states was applied to this figure and produced a total estimated number of parties from the market states interested in the ferry service. Using the percentage figures developed in Table 13 an estimate of the number of adults and children under 12 was developed.

Comparative travel costs and a suggested fare system are shown in Table 15. It will be noted that a party of three who stay overnight enroute between New York and Portland incur estimated costs totalling \$70.25 for the one-way trip. This results in an average cost per person of \$23.42. Under the proposed fare system an automobile will cost \$30.00 and a deluxe cabin for two adults and a child will cost \$25.00 per adult plus \$3.00 for a rollaway bed to accommodate the child. This would total \$83.00. If the couple purchased an economy cabin for two adults plus the rollaway bed for a child the charge would total \$73.00.

It is evident from the comments on the questionnaires that the

II. PASSENGERS AND PASSENGER VEHICLES (CON'T)

travelers are truly concerned that the service be provided at competitive costs. If this can be accomplished traffic volumes will be substantial as shown in Table <u>16</u> which estimates the traffic that will use the service in the first or base year of operation.

In developing a realistic estimate of the number of passengers and passenger vehicles that would use the ferry in its first year of operation several adjustments had to be made to the figures produced in Table 14 . Table T of Appendix A shows that 19.9% of the parties surveyed found overnight service inadequate for their travel needs. This means that the suggested fifteen (15) hour transit time was considered too long. In addition 21% of the parties surveyed preferred a departure time of 5:00 P.M. and arrival time of 8:00 A.M. at both Portland and New York. Nearly 15% preferred departure time of 6:00 P. M. arriving 9:00 A. M. In view of the fact that many of the prospective passengers will originate at points south of New York and prefer the later departure time, it was concluded that the Table 14 figures should be adjusted downward by 19.9% using 15% of the resulting figure as the estimated traffic for the base year operation. It will be noted that further adjustments in the traffic estimate had to be made because of capacity operation during the months of July and August. It was assumed that the ship would have capacity for approximately two thousand (2,000) passengers and two hundred (200) passenger vehicles.

II. PASSENGERS AND PASSENGER VEHICLES (CON'T).

A revenue estimate for the base year operation is shown in Table <u>17</u>. It is believed that five and ten year projections of passenger traffic can be constructed by the use of the annual average growth percentage of the Maine Turnpike which Table <u>12</u> shows to be 7%. It seems certain that the fare structure will be subjected to many changes during the five and ten year periods. Nowever because of the present price control policy and the absence of actual experience it is difficult to project the extent of such changes. It was believed that such projections would be unreliable and therefore not particularly meaningful. Accordingly none have been developed. This may appear to be a contradiction in view of the projections made in connection with commercial or truck traffic. However, in that case some precedent exists for using the 2% rate increase factor as the Price Commission and the I. C. C. have twice allowed this to the New England Motor Rate Bureau.

In developing the revenue projections typical costs were constructed for a party of three which is assumed to include two adults and one child. According to Table V of Appendix A, 94% of the parties will require space for their automobile, 6% will not. Therefore parties with automobiles will incur charges of \$30.00 for the vehicle and if an economy double cabin is obtained with a cot for the child, this will result in additional costs of \$39.00 or a total of \$69.00. A party of three without an automobile purchasing the same

II. PASSENGERS AND PASSENGER VEHICLES (CON'T). accommodations would incur charges of \$39.00. Accordingly, the passenger and passenger vehicle revenue estimate for the base year of operation is projected on the assumption that most of the parties with automobiles will incur charges that will average \$69.00. Parties without automobiles will incur charges that will average about \$39.00. None of the revenue estimates attempt to predict the amount that the ship will earn from other services such as meals, baggage handling etc.

The distribution of passengers by month and day of week is estimated in Table O of Appendix A. It will be noted that the months of June, July, August and September will experience the heaviest traffic and that Sunday and Friday are consistently the heaviest days of the week throughout the year.

Table S of Appendix A clearly shows that a majority of the travelers prefer a motel type accommodation which is essentially a double room with enough space for an additional cot for one or two children as necessary.

The preference for food service is set forth in Table T of Appendix A and clearly shows that cafeteria style dining is preferred by the majority at breakfast, whereas semi-formal dining is preferred for the evening meal. A smaller but significant number expressed the preference for take-out food service which would permit not only lower costs but the flexibility of providing food for children without

II. PASSENGERS AND PASSENGER VEHICLES (CON'T) preparing for formal dining.

Table U of Appendix A shows that prospective passengers will expect baggage handling services as well as information and reservation services aboard the ship. It is also interesting to note that a substantial number find elevators between decks an important service as well as ship to shore telephones in the individual cabins. This table also indicates that a large number of people enjoy the use of public rooms such as a saloon for lounging and relaxing.

III. CARGO HANDLING - SPECIALIZED CONTAINERS

Table U of Appendix A shows that some 15% of the prospective passengers will use a baggage handling and small package service. We tried to present this question in such a way the the prospective passengers would understand that the small package service would include the handling of packages or articles in addition to baggage. This would include items of extraordinary value or unusual size that has been purchased and which the passenger did not care to submit to the mails or existing transportation services, preferring to have the article travel with him on the ship. Because of the difficulty of defining and identifying this type of traffic, we have been unable to estimate the volume that will move. We suggest none the less, that the ship have a capability for handling specialized containers that are designed to utilize what would otherwise be void space. Such a

III. CARGO HANDLING - SPECIALIZED CONTAINERS

container would be interchangeable only with the ship and the piers that it serves. A container of this type would be placed on each pier each day to receive small packages and other specialized shipments and then loaded aboard the ship at departure time. A system of charges can be developed once the number and capacity of such containers is determined.

IV. SAILING SCHEDULE

The detailed travel questionnaire contained several suggested arrival and departure times for consideration by prospective passengers and in addition, made provision for the insertion of preferred Table 18 shows a summary of the passenger pretimes not shown. ference. It will be noted that 21% prefer a departure time of 5:00 A.M. and an arrival time of 8:00 A.M. at each port city. This also supports the fifteen hour transit time. It is important to note however that significantly large numbers prefer a 6:00 P. M. and 7:00 P. M. departure time arriving at 9:00 and 10:00 A. M. respectively. This is the preference of prospective passengers in states south of New York and New Jersey. It will also be noted that 27% find the fifteen hour transit time too long. While nearly 73% of the passengers find the transit time of fifteen hours satisfactory, it should be noted that by reducing the transit time one to two hours, an additional 10 to 15% of the passengers would find it satisfactory.

IV. SAILING SCHEDULE(CON'T)

When the ships capacity and speed characteristics are being developed, it is suggested that consideration be given to reducing the transit time by about two hours. This would permit a later departure from New York making it more convenient for passengers south of New York and New Jersey and would permit the same relatively early arrival in Portland and vice versa. This would also be an added inducement for commercial vehicles to use the ferry service.

V. TERMINALS

The development of information on terminal location and terminal facilities has, of necessity, been limited to general discussion until such time as the physical characteristics of the ships are better known. The Port of New York officials have indicated a willingness to cooperate in selecting a facility at either a Manhatten location or the Bush Terminal in Brooklyn. Both are readily accessable by highway.

Consideration will also be given to a location on the Jersey shore which would have the advantage of placing the facility nearer prospective passengers from south of New York and would also be a more convenient location for commercial vehicles.

It is believed that the facility in Portland is entirely adequate for the foreseeable future, particularly in view of the relatively small amount of commercial vehicle traffic anticipated. The

V. TERMINALS

The existing terminal will certainly be adequate for handling the relatively large numbers of automobiles.

Much more study will have to be done in this area before determining port costs, particularly in New York where a final site will have to be selected and arrangements made for the ship operators to lease or otherwise control an adequate facility.

GENERAL CONSIDERATIONS

A. Regulatory Status

The Marine Highway will have to be operated under a Common Carrier Certificate of public convenience and necessity issued by the Interstate Commerce Commission. It will be necessary for the ship operators to acquire this authority by making proper application to the I. C. C. Preliminary discussions with the Commissions Bureau of Operations indicate that the type of service contemplated could not legally be classified as ferry service. Indications are that a common carrier application such as this could, under ideal conditions, be processed in approximately six months. Under less than ideal conditions such a proceeding can take up to two years. Assuming that opposition will be light or nonexistent a proceeding of this kind could be assigned by the Commission to modify procedure which would eliminate the need for public hearings. In lieu of hearings, parties who wish to present evidence, would do so by filing a verified statement. Any

A. Regulatory Status (Con't)

experienced ship operator would be well aware of the Commission's requirements.

B. Economic Benefits

The operation of two combination passenger and vehicle ferries between Portland and New York would certainly produce economic benefits to both regions. In addition to providing a unique travel experience for people going to and from northern New England, the proposed Marine Highway would add a reliable, relatively low-cost public transportation service not now available.

By handling commercial vehicles it would also provide operating economies for motor carriers under certain conditions. In the long run it would help stabilize their costs, reduce maintenance, result in more efficient use of personnel and reduce the potential of loss from hijacks. The ships will create new employment opportunities for marine personnel as well as bringing new and expanded business to the port cities, particularly the waterfront areas.

C. Promotion

The promotion effort for the Marine Highway up to this point has consisted of press releases which briefly describe the proposed operation and the fact that a study of its feasibility is in progress. Once the feasibility has been determined, a full fledged promotion and development program will be under-taken. Hopefully by that time a ship operator will have been found and this responsibility can be

C. Promotion (Con't)

assumed by the operating company.

D. Summary and Conclusions

We believe the study shows that a substantial number of passengers and passenger vehicles can be expected to use a service of this type once inaugurated. We also believe that although the initial use by commercial vehicles will be light that this source of traffic will prove increasingly important as time goes on. In both areas it will be necessary to make the service known to prospective users through an adequate promotion campaign and in the case of commercial motor vehicles it will be necessary to actually put salesmen in the field to call on prospective users and sell the service.

Transit times are important to the commercial vehicle operators and to a large number of the passengers and passenger vehicle travelers. Obviously the distance between Portland and New York can be covered by highway driving in six to seven hours. This avoids staying overnight enroute but results in a rather long and in some instances unpleasant trip for a significant number of drivers. The Marine Highway idea is attractive to a substantial number of these people, because it will be convenient and they can enjoy a pleasant overnight trip, arriving refreshed and ready for a full day of activity. Prospective passengers make it clear that the service must also be reasonable priced , with good but not overly luxurious accommodations.

D. Summary and Conclusions (Con't).

We believe the idea is worthy and we further believe that the figures produced establish substantial interest and prospective use, justifying further study by the Maritime Administration to determine the size and type of vessels required to handle the anticipated traffic and whether such vessels can be operated within the revenues produced from charges consistent with the costs that travelers incur by highway.

THE END

TRAVEL QUESTIONNAIRE RETURNS

DATES	TOTAL QUESTIONNAIRES 	TRAVELERS INTERESTED IN FERRY SERVICE	% OF TOTAL PARTIES	TOTAL DETAILED QUESTIONNAIRES DISTRIBUTED	N JMBER RETURNED	% OF Total
SEPT. 4,5 86 1971	3,956	1919	48.4	1194	723	60.6
OCT. 9,10 & 11 1971	2,735	1111	40.6	876	489	55.8
JAN. 1,2,8,9, 15,16,22,23,29 & 30, 1972	1,669	754	45.2	425	204	48.0
TOTAL	8,360	3784	45.2	2495	1416	56.8

TABLE 1

(Interview)

MAINE PORT AUTHORITY Motor Carrier Survey

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6) Ten Year History of New York - Portland Traffic:

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(2.)

	sailing schedule would be mo ming 15 hour transit time.	ost desirable?
Leav	e New York	Leave Portland
Arri	ve Portland	Arrive New York
Rema	rks:	
a)	Traffic Trend	
b)	Labor	
c)	Equipment	
d)		:e:
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e)	Undesirable features of serv	ice:
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- 7) Number of dispatchers between Northern New England and Middle Atlantic Area to/or via Portland and New York.
- 12 12 month period

a) Portland to New York

Month	leek of	<u>io.</u>	'eek of	No.	Total
JAN.	وروب الإفراقي ويتوري والمراجع والمراجع	- units page motions using the user of	an and service supervises to a	a di badiya yanagi wasangi yangina sangga	
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DEC	 				andrea a terra agenciatan dan ang ang ang ang ang
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(3.)

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b) New York to Portland

Month	Jeek of	No.	Week of	No.	Total
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*1AR	ange a teatr word atteady. • Bit - Statistican and a rate		a maga in cafa na sananakan arawan na mananakan	a a taga sandita makrika panakrana na yap	
	n hay day soogayayaa kasaanna say		 - Aller Labora, group satisfy myster hybridget 	A gagan, a sur is parair this staget, g pag	
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	al and a substantian and a sale and a sale of a	andra and a state of the state	te nev krist vnev and det vnet vne	and a second	a , ar glandige, bitter at times a statistically a surgerial transition
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(4.)

RANDOM WEEK - Number of Trailers a) To New York From: Day Date MON TUES ------WED THURS FRI SAT SUN From: Day Date MON TUES WED THURS FRI SAT SUN _____ b) To Portland From: Day Date MON TUES WED THURS FRI SAT SUN _____

	From:				
Day	Date				
MON					
TUES			والمحافظ والمراجعة والمحافظ والم		
WED	a a superior de la companya de la c				
THURS					
THURS			۵۰۰ - ۲۰۰۰		
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E 7/7	, 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997			<u></u>	
SAT					
		(*************************************			
SUN					
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MAINE PORT AUTHORITY Motor Carrier Survey

			Date	
1)	Classification of	carrier		
2)	a) Would the pro			
·	() YES	-		
	b) On a: () Re	gular, () s	easonal or ()	occasional basis?
	If the answer to best estimate of be very helpful.	question No. answer to the	2 is yes, your following que:	answer or stions will
3)	Terminal location	: (if any)		
	Northern New E	ngland	New York Area	
	*	nguyê majîkênî Arada de v astandî wastanî		
		ar den antañ a su de antañ a de antañ a de antañ		
		المادول 1999 - بروی میکند. مادول 1999 - بروی میکند (مادول میکند) میکند (مادول میکند) (مادول میکند) (مادول میکند)	-1	
		1999-1996-1996-1996-1996-1996-1996-1996		
		an a		
4)	Estimated equipment	nt operating	New England - N	lew York
	N - 12	NO. NET	t Range TARE BOX [] VAN[]	TANK RACK OTHER
		Ta dhalaladh yang baddi saraa sa ay a		-AND-INDEED FEELING CONTRACTOR AND CONTRACTORS
	45'	ringen die onder en de steren versioninge		
b)	Tractors	NO.	Length	Weight
		anga angan anga panangkangkangkangkang kang salay nang	al analysis and the second state and an	eg hann antipe a provinsi de antipera a statement de fonsator e su
		ernille stillenden – ne sole seder nå -mendelses ene	and the approach times is the approached to the the second day	and a survey of the state of th
		rage-lage - vigetaller lagassattik, laga, laga yinge titar	a an	an ann a bha a' an bhailte a bhailte an an bhailte ann an bhailte ann an bhailte ann an bhailte ann an bhailte
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5) Please indicate actual () or estimated () number of dispatches by month between Northern New England and Middle Atlantic area to/or via Portland and New York.

. . . <u>.</u>

12 month period

a)	Portland to	New York	b)	New York to	Portland
	Month	No.		Month	No.
	JAN.			JAN.	مۇرۇچۇد ¹ ىلاقىتى قۇرۇچۇنى خانچە سۇرىيى سۇرۇچۇنىغ
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	APR.	n under andere under andere gestanden under andere		APR.	a state of the state
	MAY	Landah, July Japanese, Audraha, Santa, Santa		MAY	- Marine State of the State of
	JUNE			JUNE	
	JULY			JULY	
	AUG.			AUG.	
	SEPT.			SEPT.	
	OCT.			OCT.	
	NOV.			NOV.	
	DEC.	e oge sige a generalle under og i ver		DEC.	an and an an and a second s
		Construction and an experimental construction of the			a a a a a a a a a a a a a a a a a a a

6) Please estimate number of trailers dispatched for a typical week. (by day of week)

	New	York	to/or	via	Portland	Portland	to/or	via	New	York
DAY	,				an a					AN - THE STORE STREET
MON			1914 - ANN 1849 - 1849 - 1849 - 1840 - 1840	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	The address of the second s	utalijas, signing ministration (1990-1997), sada	ident fotosta setta ad unas-	-		likkasita wa shakajimi ^{ja} shi
TUES	5	-	1940 1940 anga Jako 194 (1921 a			, and provide state of the stat				
WED			ngangangan - mining katalan Campunakanan y	urgendezik, sungik bilikerin d	ner dette gebruckens nammelle 1 juni	naana aayon daga adaga ya Makalaha akalan adala "	nahai sayaaning gaga sanka i jayag		a ye and the state of a state of the	
THUF	εs		ang	ugan anan wasa ta Katawa	nin up par i funt e una ponto alfaneistan	ىرىمىيە بىلىرى بىرىيە بىرىيە بىرىيە بىلىدى بىر		** «** •* **** **		
FRI				anta a sugar a di si a	аб, _т алд нау- <u>шанда</u> р - Сайн алдагийн					
SAT					ille fortieren ife ausgesche stelle gegenen met	analaan waxaan ayah - "Waha Bada I Mahaadayaya waxadi		1996 1977 1977 1977 1978 1978 1978 1978 1978		
SUN	- "1001.000, 1 400		arta-anti-a 2 days ago ann 14 athadair 14 at							

(2)

7) Check the sailing schedule that would be most desirable. (Assuming 15 hour transit time)

Leave Portland or New York Arrive New York or Portland () 5:00 p.a. () 3:00 p.c. () 8:00 a.m. () 11:00 a.m. () 6:00 p.m. () 9:00 p.m. () 9:00 a.m. () 12:00 Noon () 7:00 p.m. () () 10:00 a.m. () () 10:00 a.m. () other other 8) Do you expect present traffic volume to: () Increase () Decrease () remain the same

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over the next 10 years.

9) Please use the following space for any remarks concerning the proposed service you wish to make:

TABLE 2

ESTIMATED CURRENT ANNUAL TRUCK TRAFFIC DEVELOPED FROM SURVEY

CLASSIFICATION	OPER	ATION	WI	EIGHT_RANG	<u>SE</u>	TOTAL	ESTIMATED ANNUAL TRAFFIC OF
OF CARRIER	REG.	SEAS.	TRAC	TORS (1)	TRAILERS		CARRIERS INTERESTED
			LENGTH	WEIGHT	NET		IN FERRY SERVICE
Common Gen Frt	1		14-15'	14,500	10,200	1765	1765
Common Gen Frt	1		16' 5''	12,000	10,000	2016	2016
Common Gen Frt	1		14-15'	14,500	10,000	4836	-
Common Gen Frt	1		14- 15'	14,000	10,800	4080	-
Common Gen Frt	1		15'	16,000	10,000	1440	-
Common Frozen	1		201	16,000	14,500	1971	1971
Common Frozen	1		-	-	-	104	104
Common HHG			-	-	-	-	-
Common HHG	1		181	11,140	14,400	49	-
Common HHG	1		20'	13,000	20,000	268	268
Common HHG	1		16'	13,000	20,000	20	-
Exempt		1	10 ¹	14,000	12,000	1500	1500
Exempt		1	15'	16,000	10,000	1800	1800
Exempt Frozen	1		15'	16,000	10,800	64	64
Exempt		1	15'	16,800	17,800	645	645
Exempt		1	15'	17,500	16,500	605	605
Exempt		1	10'	14,000	12,000	1500	-
Private	1		15'	16,500	10,800	285	285
Private		1	20'	16,500	10,800	192	192
Bulk Liquid			-	-	-	-	-
Boats			-	-	-	•	-
Boats	1		15'	8,000	-	54	54
Mobile Homes			-	-	-	•	-
Mobile Homes			12-18'	10,000	-	-	*
Mobile Homes			-	-	-	•	-
Miscellaneous			-	•	-	-	-
Miscellaneous			•	-	-	-	-
Miscellaneous		1	22'	15,000	-	9 8	98
TOTAL		-		,		23292	11367

Reg: Regular Operation Seas: Seasonal Operation

(1) (a) Single trailers will include lengths of 35 feet, 40 feet and 45 feet. It is estimated that 80% will be 40 feet in length. Loaded trailers will average 40,000 net lading.

(b) 80% of the combined tractor trailer units will be 55 feet in length.

table 3

			(1) 	ESTIMA INTERES BY MONTH	TED IN H	CK TRAFFIC VERRY OF WEEK	;					
DAY OF WEEK	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	<u>SEPT</u> .	<u>OCT.</u>	NOV.	DEC.
PORTL	AND TO NEW YORK											
MONDAY'S	88	82	89	89	8 6	95	74	57	69	78	96	97
TUESDAY'S	119	126	114	114	111	115	84	54	73	88	122	116
WEDNESDAY'S	106	100	107	108 114	92	109	89 84	67 64	96 79	88 04	103 122	110
THURSDAY'S FRIDAY'S	119 88	113 94	114 89	95	117 92	115 90	84 69	64 42	7 8 6 4	94 73	91	110 97
SATURDAY'S	93	100	108	102	105	103	78	+2 50	64	83	96	103
SUNDAY'S	<u>12</u>	13	13	13	105	13	15	10	_13	<u>16</u>	13	13
TOTAL	625	628	634	635	615	611	493	354	457	520	643	646
NEW Y	ORK TO PORTLAND											
MONDAY'S	59	5 9	59	60	63	67	49	50	43	51	56	56
TUESDAY'S	105	105	107	105	112	113	95	97	8 9	95	95	9 8
WEDNESDAY'S	47	43	48	44	46	46	33	34	34	37	39	42
THURSDAY'S FRIDAY'S	50 47	51	51 48	52	54 50	55 50	36 36	40 37	34 37	37 41	45	42 38
SATURDAY'S	47 78	50 78	48 79	52 84	50 87	50 85	56 72	37 74	67	41 71	35 70	
SUNDAY'S	<u>4</u>	4_	<u> </u>	4	4_		7	3	3	<u>_6</u>	<u>10</u>	3
TOTAI	, 390	390	396	401	416	420	328	335	307	338	350	349
TOTAI BOT	1,015 H DIRECTIONS	1,018	1,030	1,036	1,031	1,061	821	6 89	764	858	993	995

(1) Estimate developed from total figures - loads per month and typical week .

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TABLE 4

	(IMATED I			TRUCK TH						٩
DAY OF WEEK PORTLAND TO NEW YORK	JAN.	FEB.	MAR.	<u>APR.</u>	MAY	JUNE	JULY	AUG.	<u>SEP.</u>	<u>OCT.</u>	NOV.	DEC.
MONDAY'S	14	13	14	14	14	15	15	16	15	15	15	15
TUESDAY'S	19	20	18	18	18	18	17	18	16	17	19	18
WEDNESDAY'S	17	16	17	17	15	17	18	19	21	17	16	17
THURSDAY'S	19	18	18	18	19	18	17	18	17	18	19	17
FRIDAY'S	14	15	14	15	15	14	14	12	14	14	14	15
SATURDAY'S	15	16	17	16	17	16	16	14	14	16	15	16
SUNDAY'S	_2	2	2	2	2	2	3	3	3	3	2	2
TOTAL (MONTH)	<u>9.07</u>	9.11	9.19	9.21	8.93	9.29	7.15	5.14	6.63	7.54	9.33	<u>9.37</u>
NEW YORK TO PORTLAND												
MONDAY'S	15	15	15	15	15	16	15	15	14	15	16	16
TUESDAY'S	27	27	27	26	27	27	29	29	29	28	27	28
WEDNES DAY'S	12	11	12	11	11	11	10	10	11	11	11	12
THURSDAY'S	13	13	13	13	13	13	11	12	11	11	13	12
FRIDAY'S	12	13	12	13	12	12	11	11	12	12	10	11
SATURDAY'S	20	20	20	21	21	20	22	22	22	21	20	20
SUNDAY'S	1	1	1	1	1	1	2	1	1	2	3	1
TOTAL (MONTH)	8.84	8.84	8 .99	9.09	9.44	9.53	7.44	7.60	6.97	7.66	7.95	7.92

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(1) Percentages developed from trailers per month and "typical week" estimated by carriers surveyed.

CURRENT TRUCK COSTS

PORTLAND - NEW YORK

	(1) VARIABLE LINE HAUL COST PER VEHICLE MILE (TABLE 1)	(2) VARIABLE (3 LINE HAUL COSTS ADJUSTED TO 1972 LEVEL) PERCENTAGE OF LABOR EXPENSE	VARIABLE LINE HAUL COSTS LESS LABOR	(3) MILES	TOTAL LINE HAUL COSTS	AVERAGE COST PER VEHICLE MILE
N.E. GROUP I	42.089	50.507	40.5	30.052	106	\$31.86	• • •
N.E. GROUP I	II 50.331	60.397	-	35.936	212	76.18	<u> </u>
T	TOTAL				318	\$108.04	33.972

- (1) I.C.C. STATEMENT NO. 2 C 1 69
- (2) 1969 COSTS ARE INCREASED 20% TO ADJUST TO 1972 LEVEL. (THIS REPRESENTS THE AGGREGATE TOTAL OF NEW ENGLAND GENERAL RATE INCREASES FOR THIS PERIOD).
- (3) 1972 AVERAGE RUNNINGS COSTS (CUT-OF-POCKET) PER VEHICLE MILE FOR STUDY CARRIER .440 CENTS; LABOR COSTS .178 OR 40.5%.

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PROPOSED RATE FOR COMMERCIAL VEHICLE ONE - WAY

Estimated Cost By Highway	Rate Per Foot (outside measurement)	Minimum Charge Per Truck	Description of Vehicle	Revenue Fer Vehicle
\$108 .0 4	(1) \$3.00	\$50.00	All trucks and trailers NOT self-propelled 40 foot trailer as average	\$120 .00
	(2) \$2.50	\$50.00	All trucks self-propelled 55 foot tractor-trailer combinations as average	\$137.50

- (1) Subject to additional charges for loading and unloading from vessel by pier contractor.
- (2) Drivers fare and berth included.

ESTIMATED TRUCK TRAFFIC

THAT WILL USE FERRY IN BASE YEAR OPERATION

ESTIMATED TRAFFIC

PROJECTED REVENUE AVERAGE REVENUE PER UNIT

Month	Trailers Only	Tractor & <u>Trailer</u>	Total Trucks	\$120.00 T <u>railers onl</u> y	\$137.50 <u>Tractor-Trailer</u>	Total <u>Revenue</u>
January	48	74	122	\$ 5,760.00	\$10,175.00	\$15,935.00
February	48	74	122	5,760.00	10,175.00	15,935.00
March	48	76	124	5,760.00	10,450.00	16,210.00
April	48	76	124	5,760.00	10,450.00	16,210.00
May	48	76	124	5,760.00	10,450.00	16,210.00
June	50	77	127	6,000.00	10,587.50	16,587.50
July	39	60	99	4,680.00	8,250.00	12,930.00
August	33	51	84	3,960.00	7,012.50	10,972.50
September	36	56	92	4,320.00	7,700.00	12,020.00
October	40	63	103	4,800.00	8,662.50	13,462.50
November	46	73	119	5,520.00	10,037.50	15,557.50
December	46	73	119	5,520.00	10,037.50	15,557.50

ESTIMATED TRUCK TRAFFIC 1977 - 5 YEAR OPERATION

(1) ESTIMATED TRAFFIC

(2) <u>PROJECTED REVENUE</u> (2) <u>AVERAGE REVENUE PER UNIT</u>

Month	Trailers Only	Tractor & <u>Trailer</u>	Total <u>Vehicle</u>	\$132.00 \$150.00 Total Trailers Only Tractor & Trailer Revenue
January	67	104	171	\$8,844.00 \$15,600.00 \$24,444.00
February	67	104	171	8,844.00 15,600.00 24,444.00
March	67	106	173	8,844.00 15,900.00 24,744.00
April	67	106	173	8,844.00 15,900.00 24,744.00
Мау	67	106	173	8,844.00 15,900.00 24,744.00
June	70	108	178	9,240.00 16,200.00 25,440.00
July	55	84	139	7,260.00 12,600.00 19,860.00
August	46	71	117	6,072.00 10,650.00 16,722.00
September	50	78	128	6,600.00 11,700.00 18,300.00
October	56	88	144	7,392.00 13,200.00 20,592.00
November	64	102	166	8,448.00 15,300.00 23,748.00
December	64	102	166	8,448.00 15,300.00 23,748.00

(1) Based on annual growth rate of 7%.

(2) Based on annual increase of 2% (current annual increase applied to truck load rate by New England Motor Rate Bureau)

ESTIMATED TRUCK TRAFFIC 1982 - 10 YEAR OPERATION

(1) ESTIMATED TRAFFIC

PROJECTED REVENUE (2) AVERAGE REVENUE PER UNIT

Month	Trailers Only	Tractor & <u>Trailer</u>	Total <u>Vehicle</u>	\$145.00 \$165.00 Total Trailers Only Tractor & Trailer Revenue	
January	94	146	240	\$13,630.00 \$24,090.00 \$37,720.0	.00
February	94	146	240	13,630.00 24,090.00 37,720.0	.00
March	94	148	242	13,630.00 24,420.00 38,050.0	,00
April	94	148	242	13,630.00 24,420.00 38,050.0	.00
Ma y	94	148	242	13,630.00 24,420.00 38,050.0	,00
June	9 8	151	249	14,210.00 24,915.00 39,125.0	. 00
July	77	118	195	11,165.00 19,470.00 30,635.0	.00
August	64	99	163	9,280.00 16,335.00 25,615.0	.00
September	70	109	179	10,150.00 17,985.00 28,135.0	.00
October	78	123	201	11,310.00 20,295.00 31,605.0	,00
November	90	143	233	13,050.00 23,595.00 36,645.0	.00
December	90	143	233	13,050.00 23,595.00 36,645.0	,00

- (1) Based on annual growth rate of 7%.
- (2) Based on annual increase of 2% (current annual increase applied to truck load rate by New England Motor Rate Bureau).



DESCRIPTION OF PASSENGER AND VEHICLE MARKET

		THRE		TOTAL OF THREE SURVEYS	(2) PERCENTAGE WHO INDICAT PROPOSE	SURVEYED ST IN THE HIGHWAY	TOTAL OF THREE SURVEYS	
STATE	<u>SEP., 1971</u>	<u>OCT., 1971</u>	JAN., 1972		<u>SEP., 1971</u>	<u>OCT., 1971</u>	JAN.1972	SURVEYS
NEW YORK	18.7%	12.3%	7.8%	18.7%	74.9%	73.3%	71.5%	74.1%
NEW JERSEY	12.0	7.8	5.5	12.0	81.3	76.2	79.3	79.7
PENNSYLVANIA	6.9	2.9	1.8	6.9	60.7	64.6	70.0	63.4
VIRGINIA	1.3	0.8	1.0	1.3	66.7	63.6	47.1	58.9
MARYLAND	1.3	0.6	1.4	1.3	62.7	94.1	73.9	71.4
OHIO	0.9	0.7	0.4	0.9	45.7	27.8	14.3	36.7
DELAWARE	0.6	0.3	0.4	0.6	64.0	55.6	57.1	61.0
MICHIGAN	0.4	0.5	0.3	0.4	41.2	35.7	0	38.9
WASHINGTON D C	0.5	0.2	0.4	0.5	73.7	75.0	88 .3	75.7
MAINE	2.4	5.0	16.5	2.4	(70.5 ((3) 57.1	67.4 48.8	73.9 41.5	71.5) 46.5)

(1) Source - Tables 1, 2, 3 and 4 Statement R 32-25-06. Me. Dept. Economic Development.

(2) Source - Tables 5, 6, 7 and 8 Statement R 32-25-06.

(3) Analysis of the Detailed Questionnaire shows that of the Maine travelers interested, only the indicated percentage actually traveled to New York City or beyond.

TABLE //

TABLE ノン

TOTAL VEHICLE PASSINGS

MAINE TURNPIKE

(1) YORK TOLL PLAZA (THOUSANDS)

	TRUCK AND PASSENG	GER CARS MOTOR HOMES ER VEHICLE TRAILER			VEH	ERCIAL ICLE3 AND BUSES		
YEAR	ENTERING	DEFARTING	TOTAL	% CHANGE	ENTERING	DE PARTING	TOTAL	% CHANGE
1966	1695	1670	3365	-	212	212	424	-
1967	1759	1757	3516	4.5%	200	202	402	(5.2%)
1968	1936	1910	3846	9.4%	208	211	419	4.2%
1969	2078	2058	4136	7.5%	234	237	471	12,4%
1970	2251	2 239	4500	8.8%	258	265	523	11.0%
1971	2381	2382	4763	5.8%	295	307	602	15.1%
AVERAGE								
ANNUAL GROWTH	••••••	• • • • • • • • • • • • • • •		•• 7%	* * * * * * *		• • • • • • • • • •	•••• 7%

(1) LCCATED AT KITTERY PRIOR TO 1970.

PERSONS PER PARTY AND CHILDREN (UNDER 12) PER PARTY

SEPTEMBER 1971

OCTOBER 1971

JANUARY 1972

STATE	Persons Per Party	Children Percent of Parties	Under 12 Number Per Party	Persons Per Party	Children Percent of Parties	Under 12 Number Per Party	Persons Per Party	Children Percent of Parties	Under 12 Number <u>Per Party</u>
NEW YORK	3.5	37.3	1.8	3.0	25.5	2.0	3.1	22.6	2.0
NEW JERSEY	3.4	43.0	1.8	3.1	20.9	1.8	2.7	17.8	1.8
PENN.	3.5	36.3	1.9	2.8	21,6	1.7	2.6	23.8	1.8
VIRGINIA	3.7	44.1	2.7	1.8	28.6	1.8	3.5	25.0	2.0
MARYLAND	3.3	50.0	1.5	3.1	12.5	2.0	3.7	35.3	2.2
OHIO	2.9	37.5	1.5	2.4	0	0	2.0	0	0
DELAWARE	4.0	50.0	1.9	2.4	41.7	1.0	3.8	50.0	1.5
MICHIGAN	2.6	0	0	1.8	0	0	0	0	0
WASH. D.C.	3,4	50.0	2.1	2.7	0	0	3.0	20.0	1.0
MAINE	2,5	18.5	1.8	2.2	14.0	2,2	2,5	21.6	1.9

Source: Tables 10, 11 and 12 Statement R 32-25-06 Me. Dept. Economic Development.

ESTIMATED TRAVEL BETWEEN MAINE AND MARKET STATES

	(1) 197 PASS	1 T/PIKE INGS	EST. P. FR		TOTAL P.	EST IM	ATED TOTAL	MARKET C	F POTENTI ERSONS	AL PASSEN	<u>GERS</u> TOTAL	ALL
	YORK	PLAZA	MARKET	STATES			ADU	LTS	CHILDREN	UNDER 12		
MONTH	<u>N/B</u>	<u>S/B</u>	<u>N/B</u>	<u>s/b</u>	<u>N/B</u>	<u>S/B</u>	<u>N/B</u>	<u>S/B</u>	<u>N/B</u>	<u>S'B</u>	N/B	<u>S/B</u>
JAN.	103,696	109,562	36,812	38,894	19,081	20,163	46,494	48,970	8,106	8,561	54,600	57,531
FEB.	109,462	111,253	3 8,858	39,497	20,145	20,475	48,923	49,727	8,555	8,694	57,478	58,421
MAR.	118,089	119,223	41,921	42,324	21,732	21,938	5 2 ,778	55,155	9,230	9,316	62,008	64,471
APR.	158,278	153,206	56,189	54,389	29,129	28,196	70,739	68,474	12,374	11,978	83,113	80,452
MAY	193,344	182 ,07 8	60,129	56,626	3 9,133	36,854	96,851	91,128	16,4 3 6	15,564	113,287	106,692
JUNE	224,069	20 7,01 4	69,683	64,381	45,402	41,920	112,362	103,745	19,047	17,590	131,409	121,335
JULY	385,465	347,942	173,459	156,574	123,067	111,089	334,511	301,949	87,855	79,304	422,366	381,253
AUG.	357,901	389,055	161,056	175,071	114,269	124,214	310,596	337,626	81,575	88,677	392,171	426,303
SEPT.	218,606	244,379	67,987	76,003	44,249	49,465	109,517	122,422	18,584	20,776	128,101	143,198
OCT.	206,095	211,341	64,0 96	65,727	41,716	42,788	103,190	106,270	17,520	17,966	120,710	124,236
NOV.	164,842	169,451	58,518	60,155	30,335	31,185	73,671	75,737	12,883	13,244	86,554	88,981
DEC.	140,816	137,003	49,9 89	48 ,635	25,898	25,193	62,895	61,194	10,996	10,699	73,891	71,893
							Average N	o. Person	ns Per Par	ty 3.0		

(1) Source: Maine Turnpike Authority

N/B - Northbound S/B - Southbound

COMPARATIVE TRAVEL COSIS SUGGESTED SYSTEM OF FARES MARINE HIGHWAY

	(1) AIR	(2) BUS	AUTOMOBILE	
Fare (One Way	\$33.00 ')	\$17.00	3 Persons - 2 Adults, i child Car (318 miles X11.8¢) = \$37 (per mile cost)	De 7.52 *De Ec
Mi les (318 (surface)	318	Cvernight lodgings: \$18.92 per person average	*Ec Ec Ec
7are Per Mile	•	5.35¢	X 150% double occupancy = 28	
Transit	l hour	75 hours	Cot for Child	8.00 (A)
Time	non-stop 2 hours	-	Tolls (minimum)	.35
	one stop Boston		Total \$70).25 Au
			Average cost per person \$23	3.42 Au Tr
			Driving time 6 - 7 hours. Meals	
			not included in computations as is assumed ships meal prices will be competitive.	ít Mi Mo
			-	Bi

SUGGESTED FARES MARINE - HIGHWAY

	(A)	FARE
eluxe single cabin	* •	\$30.00
Peluxe double cabin		\$25. 0 0
cono. single	••	\$20.00
Cono. 2 berth.		. \$18. 00
cono. 3 berth		.\$14.00
cono 4 berth		.\$12.00
Collaway bed or cot		.\$ 3.00

(A) All fares are per person and include transportation and lodgings.

Charge Automobile\$30.00	
Auto trailer\$ 2.00 per ft	
Travel compers and motor homes\$ 2.00 per ft	•
(self propelled)	
Minimum charge per unit\$30.00	
Motor cycle, Motor Scooters	
& Motor driven bicycles\$10.00	
Bicycles	
Buses\$100.00	

(1) Northeast Airlines in effect 6-14-72

(2) Greyhound Lines in effect 6-14-72

ESTIMATED PASSENGER AND AUTO TRAFFIC THAT WILL USE FERRY IN BASE YEAR OPERATION

		FAL ENGERS		TAL PARTIES	WI	TIES TH TOS	WII	TIES HOUT ITOS	TRAI	LERS
MONTH	<u>N/B</u>	<u>S/B</u>	<u>N/B</u>	$\frac{S/B}{S}$	$\frac{N/B}{}$	<u>S/B</u>	N/B	<u>s/</u> 3	<u>N/B</u>	<u>S/B</u>
JANUARY FEBRUARY	6560 6906 7450	6912 7019 7746	2187 2302 2483	2304 2340	2056 2164 2334	2166 2200 2428	131 138 149	138 140	41 43	43 44 49
MARCH APRIL MAY	9986 13611	7746 9666 1 2 819	2485 3329 4537	2582 3222 4273	2354 3129 4265	3029 4017	200 272	154 193 256	47 63 128	49 61 121
JUNE JULY	15788 *27306 (50747)	14578 *27306 (45807)	5263 8550	4859 8550	4947 5517	4567 5517	316 552	292 552	148 480	137 480
AUGUST	(30747) *27306 (47119)	(43807) *27306 (51070)	8550	8550	5517	5517	552	552	480	480
SEPTEMBER OCTOBER	15391 14503	17205 14927	5130 4834	5735 49 7 6	4822 4544	5391 4677	308 290	344 299	145 136	161 140
NOVEMBER DECEMBER	10399 8878	10691 8638	3466 2959	3564 2879	3258 2781	3350 2706	208 178	214 173	65 55	67 54
N/B - Northbound	S/B - So	uthbound			-	affic est al growt				

based on 7% annual growth of Maine Turnpike at York Toll station.

* July and August passenger traffic would exceed the assumed 1000 passenger capacity per day in each direction. This is especially true on Fridays and Sundays. Assumed vehicle capacity of 200 also limit passengers. Passengers without cars estimated higher these two months.

NOTE: 94% of parties have cars 4% of cars have trailers (est.)

ESTIMATE OF PASSENGER AND PASSENGER REVENUE BASE YEAR OF OPERATION

	(1) PARTIES AUTOS		IES WITHOUT UTOS	(3) T	RAILERS		TOTAL H	REVEN	UE
MONTH	<u>N/B</u>	<u>S/B</u> <u>N/B</u>	<u>S/B</u>	<u>N/B</u>	<u>S/B</u>	3	N/B		S/B
JAN.	\$141,864 \$1	49,454 \$ 5,109	\$ 5,382	\$ <u>1,2</u> 30	\$ 1,290		48,203	\$	156,126
FEB.	149,316 1	.51,800 5,382	5,460	1,290	1,320	1.	55,988		158,580
MAR.	161,046 1	67,532 5,811	6,006	1,410	1,470	1	58,267		175,008
APR.	215,901 2	.09,001 7,800	7,527	1,890	1,830	2	25,591		218,358
MAY	294,285 2	10,608	9,984	3,840	3,630		08,733		290,787
JUNE	341,343 3	15,123 12,324	11,388	4,440	4,110	3	58,107		330,621
*JULY	380,673 3	80,673 21,528	21,528	14,400	14,400	4	16,601		416,601
*AUG.	380,673	80,673 21,528	21,528	14,400	14,400	4	16,601		416,601
SEPT.	332,718 3	371,979 12,012	13,416	4,350	4,830	3	49,080		390,225
OCT.	313,536 3	322,713 11,310	11,661	4,080	4,200	3:	28,926		338, 574
NOV.	224,802 2	231,150 8,112	8,346	1,950	2,010	2	34,864		241,506
DEC.	191,889	186,714 6,942	6,747	1,650	1,620	2	00,481		<u>195,081</u>
				T	OTAL	\$3,3	11,442	\$3,	328,068

N/B - Northbound S/B - Southbound

(1) Estimated at \$69.00 per party of 3 persons with car. (\$30.00 car, \$36.00 econo double room \$3.00 rollaway bed.)

- (2) Estimated at \$39.00 per party of 3 without car. (\$36.00 econo double room plus \$3.00 rollaway bed.)
- (3) Estimated at minimum charge of \$30.00 per trailer

* See Table 16.

SCHEDULING

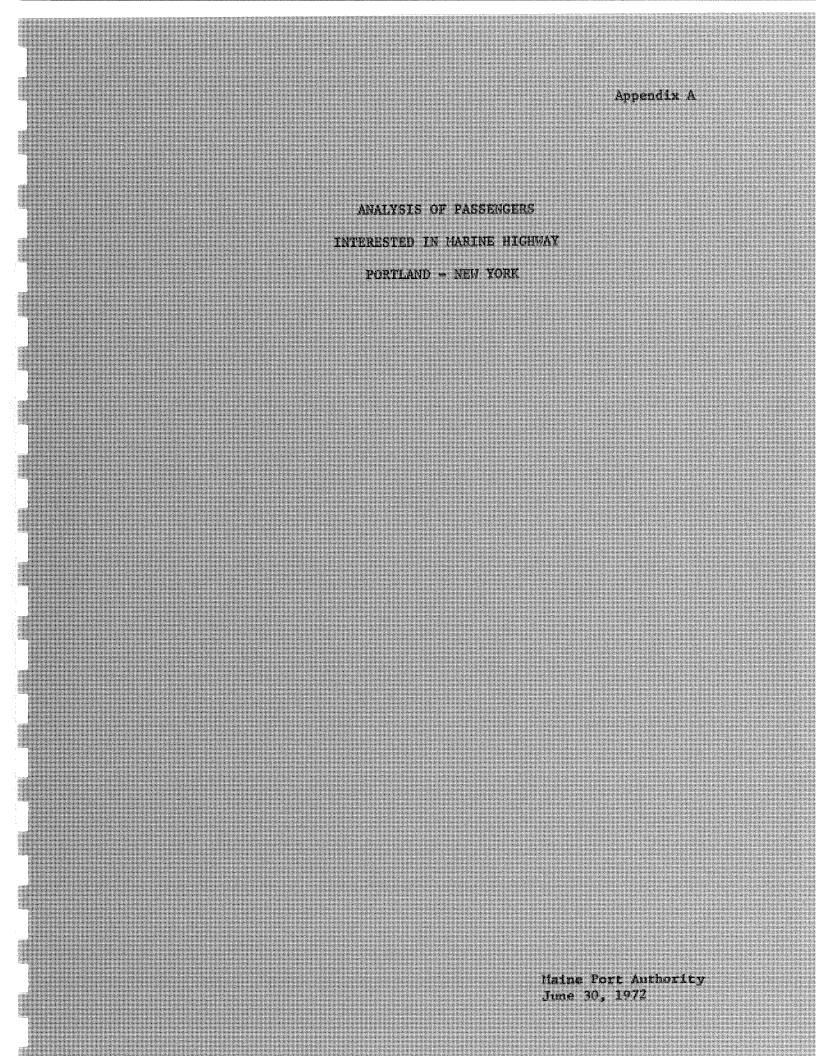
PASSENGER PREFERENCE (PERCENTAGE)

DEPART

ARRIVE

NEW YORK	NEW YORK OR PORTLAND										
OR <u>PORT LAND</u>	<u>8:00 A. M.</u>	Transit Time	9:00 A. M.	Transit Time	10:00 A.M.	Transit Time	11:00 A.M.	Transit Time	<u>12:00 Ncon</u>	Transit Time	<u>OTHER</u>
5:00 P.M.	<u>21.0</u>	15 h	03.3	16 h	01.5	17 h	00.4	18 h	00.5	19 h	-
6:00 P.M.	04.5	14 h	<u>14.9</u>	15 h	01.0	16 h	00.3	17 h	00.3	18 h	-
7:00 P.M.	04.9	13 h	03.1	14 h	<u>13.1</u>	15 h	00.8	16 h	00.5	17 h	-
8:00 P.M.	02.4	12 h	01.7	13 h	02.0	14 h	07.2	15 h	00.7	16 h	-
9:00 P.M.	01.9	11 h	01.0	12 h	00.8	13 h	01.1	14 h	06.6	15 h	-
OTHER	-		-		-		-		-		04.

TABLE 18



I INTRODUCTION

Objectives

This study presents the results of a detailed passenger travel survey conducted by the Maine Port Authority to determine basic information and preferences of travelers who had previously indicated an interest in the proposed Marine Highway between Portland and New York. The information obtained in this survey will be important in determining the design and speed of the ships, the services to be offered aboard the ships and the terminal facilities at each port. Some of this information will also be used in developing estimates of initial passenger and vehicle traffic volume as well as projecting future traffic volume and developing a system of fares.

Background

In cooperation with the Maine Turnpike Authority and the Department of Economic Development, the Maine Port Authority initiated a travel survey which resulted in the distribution of 50,000 basic questionnaire cards to travelers leaving Maine through the southbound exit of the Maine Turnpike at the York toll plaza. The distribution of these cards was made as follows; 20,000 during the 1971 Labor Day weekend, 15,000 during the weekend of Oct. 9 - 11, 1971 and final distribution of 15,000 during the weekends of the month of January 1972. The data collected from the basic card questionnaire has been summarized by the Department of Economic

Development in its statement R32-25-06 of March 1, 1972. In addition to certain basic travel data the questionnaire asked if the party would be willing to provide further assistance by completing a detailed travel questionnaire. Of the 8,300 plus card questionnaires returned, approximately 2,500 indicated a willingness to so cooperate. Of the 2,500 detailed questionnaires distributed, slightly over 1,400 were returned or a percentage of 56.8. The questionnaire format is attached to this report.

The detailed travel questionnaire has been summarized in Tables A through X. This material has been broken down into three primary sections, the first develops information of a personal and family nature, the second summarizes recent travel experience to and from the State of Maine and the third section involves inquiries into various aspects of the proposed Marine Highway Service. Attention is directed to certain highlights of this information.

II DISCUSSION OF STUDY

(A) Personal and Family Information.

Thirty seven (37) percent of those answering the questionnaire are classified as professionals and approximately the same percentage (39) have an annual family income of \$20,000 a year and over. There are 3 or less persons living in 59 percent of the families at the present time. Sixty three (63) percent of the single persons are

between the ages of 20 and 30, while 51 percent of the married couples are between 30 and 50. Fifty six (56) percent of the children of these married couples are between the ages of 12 and 20. The most popular magazines to which our travelers subscribe are Time, Life, National Geographic, Reader's Digest and Newsweek in that order.

(B) Travel Information

The primary purpose of recent travel to or from the State of Maine is shown to be 90 percent recreation and 10 percent business. Thirty eight (38) percent of these travelers stayed overnight enroute and 64 percent of them stayed in hotels or motels at an average cost of \$18.92 per person, single occupancy.

The vast majority of people purchased meals enroute as opposed to preparing their own meals at campsites or by the use of facilities in campers or other vehicles of this type. Of the meals purchased, 38 percent spend \$1.50 or less for breakfast, 78 percent spend less than \$3.00 for lunch and 32 percent spend over \$5.00 for dinner. A large majority of the persons who prepared meals enroute spend less than \$1.00 for breakfast, less than \$1.00 for lunch and less than \$2.00 for dinner in the evening.

None of the people who completed the detailed travel questionnaire indicated that their vehicles hauled any type of trailer. This does not appear to be inconsistant with the results shown in Table 14

3

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of Statement No. R32-25-06 wherein 94 percent of the vehicles involved in the original survey had no trailer. The questionnaire did show however that 44 percent of the vehicles used are the standard American made auto, 24 percent are compacts of both American and foreign make and 2 percent are pick-up trucks and self-propelled campers. These travelers report an average vehicle operating cost per mile of 11.8 cents. (Note).

Fifteen (15) percent of the respondents indicated that they had also visited the Canadian Provinces. Thirty nine (39) percent of this number visited New Brunswick, 21 percent Nova Scotia, 9 percent Prince Edward Island, 23 percent Quebec, 1 percent Newfoundland and 7 percent Ontario.

(C) Marine Highway Information

Twenty five (25) percent of the interested and prospective users of the Marine Highway Service estimated that they will make two trips per year to or from Maine. Table <u>0</u> of Appendix A shows the estimated percentage of passengers and passenger vehicle traffic that will move by month and day of week. It will be noted that Sunday and Friday are the heavy travel days each week consistently throughout the year. The months of June, July, August and September show the heaviest traffic which is consistent with the seasonal tourist movement.

4

Note: This is approximately 1.2 cents per mile less than the figure currently being used in most estimates but is considered satisfactory for this study as it reflects the beliefs of the drivers themselves.

Of those answering the questionnaire, 80.1% indicate that overnight service via the Marine Highway would be adequate for their needs. Seventy three (73) percent of those who said overnight service was inadequate felt that 12 hour service would meet their needs. If 12 hour service were possible about 90 percent would find this satisfactory. The question concerning scheduling anticipates a 15 hour transit time for the ship. Twenty one (21) percent of the parties surveyed indicated a preference for a 5:00 P. M. departure and a 8:00 A. M. arrival at both Portland and New York. This of course, supposes the operation of a ship in each direction each day. It is significant to note that many of the interested parties from states south of New York and New Jersey, principally Pennsylvania, Maryland and Washington D. C. show preference for a later departure time at New York. These people show an equal distribution of preference for 6:00 P. M. and 7:00 P. M.

Accommodation preference is clearly for the hotel - motel type with twin beds. (94%). The accommodations will have 86.9% double occupancy, 13.1% single occupancy and 36.9% of the double occupancy cabins will require room for children. Of the double occupancy parties with children, 10% will have 1 child under 12, 12% will have 2 and 11% will have. 3.

The shipboard food service question (Table T) shows a clear preference for cafeteria style service at both breakfast and lunch

with semi-formal dining at dinner. For all three meals, a take-out service runs a poor third. Travelers indicate a price range at breakfast of between \$1.00 and \$2.00, the same at lunch and most persons expect to pay \$4.00 or more for dinner.

The questionnaire listed several shipboard services and asked travelers to indicate those that they would expect to use. An information and reservation service is highly preferred, with baggage and small package service second. Ship to shore telephones and elevators between decks are also important to prospective passengers.

A substantial number of the parties surveyed (94%) indicated that they would require space on the ship for their vehicle. While this figure seems high it must be remembered that the parties surveyed travel by automobile regularly. Whether such a large percentage would continue to take their automobile with them on the ferry can be determined only after the ship has been in operation for a period of time. It is important to note the Pier Services question shows that 31% would use a pier baggage handling service, 23% would use a car storage service and 21% would use a car rental service.

General comments on the proposed service were also solicited which are summarized in Table X. Relaxation, a reduction in driving time, a scenic cruise and convenience, in that order were most often cited as desirable characteristics of the Marine Highway.

III SUMMARY

The survey indicates that prospective passengers are reasonable well-to-do people who travel between Maine and the primary market states of New York, New Jersey, Pennsylvania, Deleware, Maryland, District of Columbia, Virginia, Ohio and Michigan. Most of this travel is for recreation purposes with only 10% of our interested passengers traveling on business. Most people indicate a preference for the typical motel type accommodation and expect to pay an average of \$18.92 per person, single occupancy. The cost of meals purchased by these people indicates a price range from approximately \$1.00 to \$2.00 per person at breakfast, \$2.00 to \$3.00 at lunch and over \$4.00 per person at dinner.

Relatively few prospective passengers will be hauling trailers of any type and most will be operating standard U. S. model automobiles. Cost of operating such vehicles, according to the travelers themselves, is 11.8¢ per mile. The majority of people plan to make two trips per year to Maine and it is evident that most of the travel will occur on Fridays and Sundays of each week with the heaviest monthly traffic occurring in June, July and August. Of the travelers surveyed, a large percentage indicate overnight service via the Marine Highway to be satisfactory and prefer a departure time of 5:00 P. M. and an arrival time of 8:00 A. M. at both Portland and New York.

Most of the shipboard living facilities will require double

occupancy and over one third of these will require additional room for children.

The food service preference indicates that both semi-formal and cafeteria style dining are desired by the majority of passengers. A smaller, but none the less significant, number indicating a preference for take-out food service. A surprisingly large percentage (94.1%) of the parties surveyed indicated that they would be traveling with their automobile. This is a significantly larger number than had been originally anticipated.

MAINE PORT AUTHORITY

TRAVEL QUESTIONNAIRE

		Date	19
<u>Pe</u>	rsonal and Family Information		
1)	What is your residence? City	State	e
	What is your occupation?		
3)	What is family income bracket?		
	() Under \$5,000 () \$5,000 - \$6,999 () \$7,000 - \$9,999	<pre>() \$10,000 - \$11,99 () \$12,000 - \$14,99 () \$15,000 - \$19,99 () \$20,000 and over</pre>)9)9
4)	What is the number in your fami	ly living with you?	
	Their ages are:		
	Self	Children	
	Spouse	Other	
5)	To what magazines do you subscr		
$\frac{\text{TR}}{\text{YO}}$	AVEL INFORMATION (The following ur recent trip to (or from) Maine	questions are directe e.)	ed toward
6)	Is your travel to (or from) Main	ne primarily for	
	() Business or	() Recreation?	
7)	Did you stay overnight enroute D	between New York and H	Portland?
	() YES () NO		
	If the answer to question No. 7	is NO, skip to questi	on No. 11.
8)	Where did you stay?	City	State
9)	What type of accommodations did	you obtain?	
	() Hotel () Motel ()	Campsite () Othe	er
	a) If other, please describe		

10) What was the approximate price range of your accommodations?

() \$ 0 - \$12 () \$15 - \$18 () \$20 - \$25() \$12 - \$15 () \$18 - \$20 () \$25 - \$30() Over \$30

11)Did you purchase meals enroute? () YES () NO

If the answer to question No. 11 is NO, skip to question No. 13.

12) What was the number of meals purchased and the estimated price range of each?

Breakfast	Lunch	Dinner
No. Price	No. Price	No. Price

13)Did you prepare any of your own meals enroute? () YES () No

a) If yes, estimate the number of meals prepared and the average cost of each.

	Breakfast	Lunch	Dinner			
	No. Price	No. Price	No. Price			
14)a)	Please indicate your	vehicle make	Year			
	and model	, also the type of	trailer, if any			
	() tent () tra	vel () boat (() other			
. b)	Estimate vehicle ope	erating costs per mile.				
	() 7¢ () 11¢	: () 15¢	() 19¢			
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	() 16¢	() 20¢			
			() 21¢			
	() 10¢ () 14¢	() 18¢	() other			
15)Did	you visit Canada dur	ing this trip? () YE	es () no			
a)	If yes, please name	each Province visited				

The proposed Marine Highway will provide an overnight vehicle and passenger ferry service in each direction between Portland and New York City. Transit time approximately 15 hours. The ships will be equipped with eating facilities, public rooms, lounges, living accommodations for passengers, as well as space for vehicles of all types including automobiles and commercial trucks. In addition, it is anticipated that certain special containerized freight will be handled such as personal baggage, small parcels and articles of unusual value.

The following questions ask your opinion on various features of the proposed ferry service or an estimate of your general travel requirements.

- - b) Estimate the number of trips to be made by month and day of week. (For example, 4 trips in August traveling Friday and Sunday).

NO	Month	Day of Week
	and the second	
		an al fellen a second and a second

- 17) Will overnight service between New York and Portland meet your time requirements?
 - () YES () NO
 - a) If no, briefly describe your time requirements
- 18) Check the approximate arrival and departure times most convenient for you.

Leave Portland or New York	Arrive New York or Portland
() 5:00 p.m. () 8:00 p.m. () 6:00 p.m. () 9:00 p.m. () 7:00 p.m. () 	() 8:00 a.m. () 11:00 a.m. () 9:00 a.m. () 12:00 N () 10:00 a.m. () $$

19) Check your preference of stateroom accommodations:

			<u>.</u>		
	()	Hotel Type Motel Type Other (describe)			
	()	Single occupancy Double occupancy - number Other (describe)	of children_		
20)		te your preference of food per person for each meal:	service and	maximum pr	ice
		Ī	Breakfast	Lunch	Dinner
	()	Semi-formal Dining Room	\$	\$	\$
	()	Cafeteria Style			
	()	"Take-Out" food service to eat in Stateroom			
21)	Check by the	any of the following servic ship:	ces you would	use if pr	ovided
	 () Bai () Pui () Pr () Bao smo () In Ces 	by-sitter service blic Rooms ivate Meeting Rooms ggage handling and	 () Special D () Elevators () Wheel Cha () Telephone (ship t () Cassettes dictation 	between d ir service Service i o shore) in rooms	ecks n Rooms
22)	Will y	ou require space for your v	vehicle? ()	YES () NO
23)	Check . pier:	any of the following servio	ces you will	require at	the [·]
	() Lo () Bac () Ca:	mousine service to hotel or cal ta x i service ggage handling service r rental service r storage	r other desti	nation	

24) You have previously indicated an interest in the "Marine Highway"....will you please list some of the reasons this service would be attractive to you, plus any further comments you may have.

APPENDIX A PAGE 1

ANALYSIS OF PASSENGERS INTERESTED IN MARINE HIGHWAY PORTLAND - NEW YORK

PERSONAL AND FAMILY INFORMATION

Table	Profession	al Administ	rative Executive	Skilled and Semi-Skilled	<u>Un-Skilled</u>	Retired	<u>Other</u>
<u>A. Occupation</u> Percentage	37.0	10.0	0 20.0	24.0	01.0	03.0	05.0
No. of persons reporting	484	124	255	308	15	37	72
	\$5,000 \$9,999	to \$10,00 \$11,99		\$15,000 to \$19,999	\$20,000 and over		
<u>B. Family Income</u> Percentage	16.0	10.	0 13.0	22.0	39.0		
No. of families reporting	196	132	169	278	499		
		23	5	67	8		
C. Number of persons living in family Percentage	17.0	23.0 19.0	21.0 12.0	05.0 02.0	01.0		
Number of families reporting	. 193	269. 217	2 36 143	59 28	8		

ANALYSIS OF PASSENGERS INTERESTED IN MARINE HIGHWAY PORTLAND - NEW YORK

PERSONAL AND FAMILY INFORMATION

TABLE		SINGLE _H	ERSONS		HUSBAND & WIFE						CHILDREN	
		30 - 40		Over	20 - 30	30 - 40	40 - 50		Over	Under	12 - 20	Over
	yrs.	yrs.	yrs.	_50_	yrs.	yrs.	yrs.	yrs.	60		yrs.	_20_
D. Family Ag	es											
	age 63.0	17.0	10.0	10.0	19.0	21.0	30.0	22.0	0.30	37.0	56.0	07.0
No. of Persons	87 Reporting	24	14	14	373	41 7	597	431	154	591	989	120

E. Magazines to which passengers subscribe	TIME	LIFE	NAT. <u>GEOG</u> .	READERS DIGEST	NEWSWEEK	BETTER HOMES & GARDENS	DOWN EAST	MCCALLS	NEW YORK MAG.	SPORTS ILLUS.	OTHERS
Percentage	14.0	12.0	12.0	12.0	08.0	06.0	05.0	04.0	04.0	04.0	19.0
No. of Subscrib- ers	361	320	314	317	200	144	126	112	95	109	492

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TRAVEL INFORMATION

TABLE

F.	Primary Purpose of Travel					Recreati	on		
	Percentage No. of Parties Reporting			10.0 133		9 0. 0 1211			
G.	Stay Overnight Enroute		7	les		No			
	Percentage No. of Parties Reporting			38.0 482		62.0 797			
н.	Type of Accommodation	Hotel <u>Motel</u>		Campsite	2	Priva Home		<u>Othe</u>	r
	Percentage No. of Parties Reporting	64.0 290		07.0 31		21.0 95	0	08.0 37	
I.	Price Range of Accommodation Per Person	\$0-12 	\$12 - 15	\$15 - 18	\$18 - 20	\$20-25	\$25 - 30	\$30 & Over	Average Per Person
	Percentage No. of Parties Reporting	23.0 88	11.0 40	14.0 54	15.0 55	2 3.0 88	08.0 29	0.6 21	\$18.92

TRAVEL INFORMATION

J.	Cost of Meals <u>PURCHASED</u>	0 - 1		\$2. 0 0	0 -	<u>Lunc</u> \$1.50	\$2.00	•	2.00	<u>Din</u> \$3.00	\$4.00	Over
	Enroute - (Per Person)	<u>\$1.50</u>	-2.00	-3,00	<u>\$1.50</u>	-2.00	-3.00	-5.00 -	3.00	-4.00	<u>-5.00</u>	5.00
	Percentage No. of Persons Reportin	38.0 464	33.0 409	29.0 364	24.0 421	25.0 452	29.0 520		3.0 06	20.0 251	25 .0 329	32.0 416
к.	Cost of Meals PREPARED		Breakfas	+		Lunc	-h			Din	ner	
R.	COST OF MEATS TREFARED	0 -	\$.50	- \$1.00	0 -	\$.50	<u>\$1.</u>	.00	0 -	\$.50	\$1.00	\$2.00
	Enroute - (Per Person)	<u>\$.50</u>	-1.00	-1.50	\$.50	-1.00	<u>-2</u>	.00 \$.50	-1.00	-2.00	3.00
	Percentage	46.0	32.0	22.0	28.0	37.0	35.	.0 0	4.0	16.0	55.0	25.0
	No. of Persons Reportin	ng 108	74	52	165	224	210	0 7	,	31	108	49
-		C.t	4 4					(
L.	(1)Type of Vehicle & Trailer Used	Stan	dard		Pick-r	p Truck		Comp			Д	(2) verage
		Station-wagon	Sed	lan	& Self-H	-		tion-Wagon	S	edan		ating Cost
			<u>4 Door</u>	<u>2 Door</u>	Can	ipers			<u>4 Do</u>	or 2 Do	or Pe	r Mile
	Percentage No. of Parties Reportin	23.0 ng 278	₩4.0 539	07.0 86	02 23	.0		04.0 45	12. 156			1.8¢ P er M 052

(1) Note: None of the parties who answered this question were hauling a trailer. See Table 14 Statement R32-25-06 Me. Dept. of Economic Development.

(2) Traveler estimates ranged from 7 cents to 21 cents per mile.

TABLE

(4)

TRAVEL INFORMATION

TABLE			New	Nova	Prince Edward			
M. Canadian Provinces Visited	Yes	<u>No</u> .	Brunswick	<u>Scotia</u>	Island	Quebec	Newfoundland	<u>Ontario</u>
Percentage	15.0	85.0	39.0	21.0	09.0	23.0	01.0	07.0
No. of Parties Reporting	185	10 71	112	60	26	65	2	19

MARINE HIGHWAY INFORMATION

N.	Estimated no. of trips per year (regardless of mode)	<u> </u>	2	3	_4	_5_	_6	_7		9	_10_	_11_		Over
	Percentage	19.0	25.0	12.0	14.0	05 .0	08.0	01.0	03.0	01.0	04.0	01.0	03.0	04
	No. of Parties Reporting	226	292	144	1 7 8	62	95	6	34	7	48	2	31	60

ANALYSIS OF PASSENGERS INTERESTED IN MARINE HIGHWAY

PORTLAND - NEW YORK

MARINE HIGHWAY INFORMATION

Estimated Percentage of Passenger and

Passenger Vehicle Traffic that will move by month and day of week.

<u>Table</u>

0.

Sunday	(% (No.	-	<u>Jan.</u> 2 7.0 48	<u>Feb.</u> 26.0 57	<u>Mar.</u> 30.0 65	<u>Apr.</u> 30.0 121	<u>May</u> 26.0 155	<u>June</u> 28.0 262	<u>July</u> 27.0 348	<u>Aug.</u> 26.0 400	<u>Sep.</u> 25.0 205	<u>Oct.</u> 26.0 126	<u>Nov.</u> 31.0 84	<u>Dec.</u> 27.0 88
Monday	(% (No.	-	16.0 29	15.0 34	10.0 23	08.0 33	13.0 75	13.0 120	12.0 145	13.0 204	13.0 110	10.0 50	08.0 20	12.0 39
Tuesday	(% (No.	-	03.0 5	04.0 9	05.0 12	03.0 11	04.0 26	04.0 37	03.0 43	03.0 43	02.0 40	04.0 21	03.0 9	05.0 16
Wednesday	(% `No.	-	07.0 12	04.0 9	02.0 5	05.0 21	02.0 11	02.0 23	01.0 15	01.0 19	00.6 5	03.0 13	09.0 24	04.0 15
Thurs da y	(% (No.	-	11.0 21	12.0 26	10.0 21	11.0 42	08.0 50	09.0 82	0 9.0 115	07.0 109	08.5 68	09.0 48	12.0 31	11.0 36
Friday	(% (No.	-	29.0 53	30.0 67	36.0 78	33.0 131	40.0 241	36.0 333	39.0 503	37.0 562	38.5 308	41.0 199	31.0 83	33.0
Saturday	(% (No.	-	07.0 12	09.0 20	07.0 15	10.0 39	07.0 44	08.0 70	09.0 109	13.0 202	08.0 64	07.0 32	06.0 14	08.0 27
Total	(% (No.	• •	02.5 180	03.0 222	03.0 219	05.5 398	08.3 602	12.8 927	17.6 1278	21.2 1539	11.1 800	06.8 489	03.7 265	04.5 329

% - Percentage

No.- Number of trips estimated by travelers

MARINE HIGHWAY INFORMATION

TAB	LE		YES	NO
Ρ.	Is overnight service adequate		80.1	19.9
	Percentage -		969	241
	No. of parties reporting -		909	241
		14 to 12	12 to 8	less than
Q.	Transit time requirement if less than assumed. 15 hours	hrs. inc.	hrs. inc.	<u>8 hrs.</u>
	Percentage	73.0	14.0	13.0
	No. of parties reporting	175	34	32

R. Most Convenient Arrival & Departure Times.

Depart - Portland or New York	Arrive - Portland or New York									
5:00 P.M. (% (No.	<u>8:00 A.M.</u> 21.0 259	9:00 A.M. 03.3 41	10:00 A.M. 01.5 18	<u>11:00 A.M.</u> 00.4 5	<u>12 Noon</u> 00.5 6	Other -				
6:00 P.M. (%	04.5	14.9	01.0	00.3	00.3	-				
(No.	56	184	12	4	4					
7:00 P.M. (%	04.9	03.1	13.1	00.8	00.5	-				
(No.	61	38	166	10	6					
8:00 P.M. (%	02.4	01.7	02.0	07.2	00.7	-				
(No.	30	21	25	89	9					
9:00 P.M. (%	01.9	01.0	00.8	01.1	06.6	-				
No.	24	12	10	13	82					
Other (% (No.	-	-	-	-	-	04.1 51				

% - Percentage No. - Number of Parties Reporting

MARINE HIGHWAY INFORMATION

TABLE

S. Preference of Accommodations

Occupancy - Children			Single	Double		No. of Children under 12 years in Double Occupancy Accommodations							
			Occupancy	<u>Occupancy</u>	<u>Total</u>		2	3	4	5	Over 5		
Hotel-Motel Type	(%	-	13.1	86.9	94.0	10.0	12.1	11.0	02.5	00.8	00.5		
(twin bed)	(No.	-	149	988	1137	98	120	110	25	8	4		
Four Bunks	(%	-	-	-	01.8								
and Bath	(No.	-	-	-	22								
Dormitory or	(%	-	-	-	02.3								
Hostel	(No.		-	-	27								
	(%	-	-	-	01.9								
(1) Other	(No.	-	-	-	23								

36.9% of Double Occupancy Cabins will require room for Children

% - Percentage

No. - No. of Parties Reporting

(1) - Suggestions include reclining chairs, car, camper.

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MARINE HIGHWAY INFORMATION

т.

PREFERENCE OF FOOD SERVICE AND PRICE RANGE PER PERSON - PER MEAL

	\$1.00 or less	<u>Break</u> \$1.00 to 2.00	fast \$2.00 and over	<u>Total</u>	\$1.00 or <u>less</u>	\$1.00 to 2.00	Lunch \$2.00 to 3.00	\$3.00 and over	<u>Total</u>	\$1.00 to 2.00	\$2.00 to <u>3.00</u>	Dinner \$3.00 to 4.00	\$4.00 and over	<u>Total</u>
Semi-Forma		59.0	35 .0	37.4	01.0	21.0	45.0	33.0	37.0	00 .3	05.4	15.7	78.6	51.5
Dining Room		255	149	429	5	81	1 77	131	394	2	3 2	93	464	591
Cafeteria	(% - 25.3	59.2	15.5	50.6	05.0	47.0	37.0	11.0	48.3	04.6	28.2	32.9	34.3	37.5
Style	(No 147	344	90	581	22	243	191	58	514	20	121	142	148	431
Take-out Food Se rvice	(% - 43.7 (No 60	42 .3 58	14 .0 19	12.0 137	16 .0 26	45.0 70	29.0 45	10.0 16	14.7 157	20 .0 25	32.8 41	24.0 30	23.2 29	11.0 125

MARINE HIGHMAY INFORMATION

TABLE

U. Shipboard Services - Estimated Use.

Service	No.	Service%	No.	Service _% No.
Service <u>%</u> Child Care Center05.0	9 8	Special Diet Food03.1	60	Game Room
Baby Sitter Service05.2	101	Elevators between Decks12.6	246	Beauty & Barber Shop)
Public Rooms (Salon)24.7	484	Telephone in Cabin		Swimming Pool)002. 4
Private Meeting Room01.1	22	(Ship to Shore)11.8	230	Movies
Baggage & Small Pkg. Serv13.3	261	Cassettes for dictation		Secretarial Serv.)
Info. & Reservation Serv18.8	3 68	(in Cabin)02.6	51	
		Wheel Chair Serv01.1	21	
		Pet Care Center00.4	7	

V. Parties That Will Require Space For Vehicle

	%	No.		%	No.
	0/ 1	1100		05.0	
Yes	94.1	1133	No	05.9	11

% - Percentage

No. - No. of Parties Reporting

MARINE HIGHWAY INFORMATION

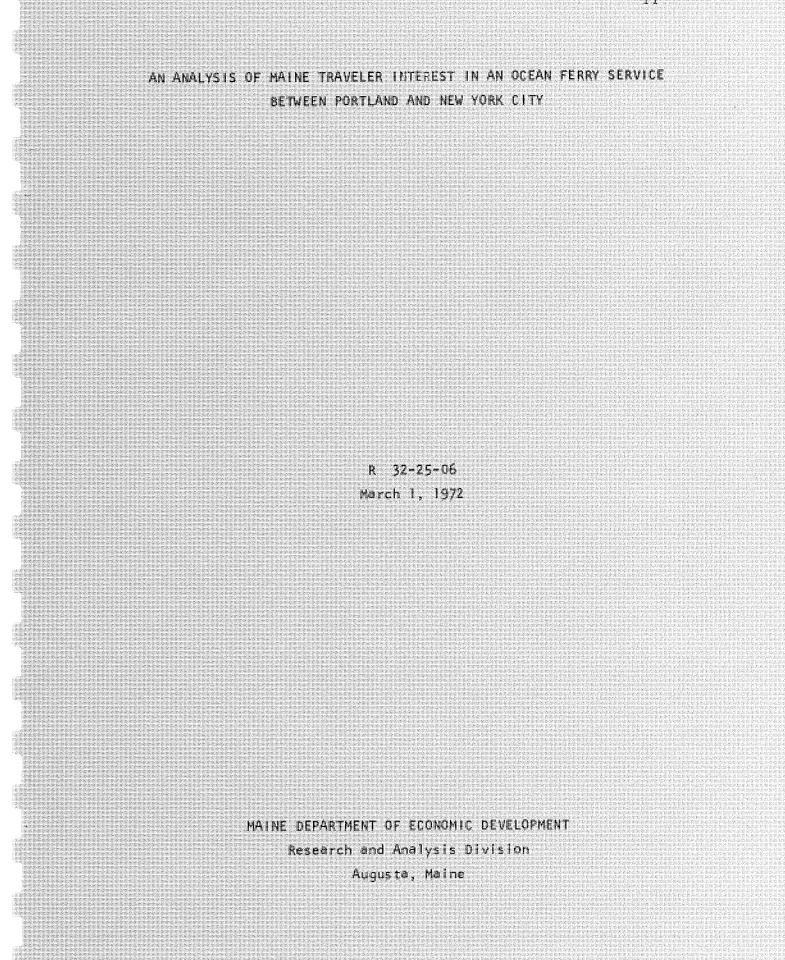
W. Pier Services - Estimated Use

Service %	No.
Limousine Servi08.9	34
Taxi Service15.9	61
Baggage Handling31.1	119
Car Rental Service.21.1	81
Car Storage23.0	88

X. Comments on Proposed Service

Comment	No.
Relaxing25.0	332
Cut Driving Time20.0	266
Scenic15.9	211
Convenience11.4	151
Avoid Traffic Congestion08.3	110
Pleasure Trips07.2	96
Dislike Driving06.2	82
Pleasure Trips07.2	96

Comment %	No.
Safety	23
Reduce Pollution01.4	18
Dislike Flying01.0	13
Good Short Vacation00.8	11
Prefer Daytime Service00.7	9
Prefer N.J. or Conn. Port00.3	4
Prefer Stop at Boston00.2	3



AN ANALYSIS OF MAINE TRAVELER INTEREST IN AN OCEAN FERRY SERVICE BETWEEN PORTLAND AND NEW YORK CITY

ł,

Thomas A. Palmberg

MAINE DEPARTMENT OF ECONOMIC DEVELOPMENT Research and Analysis Division Augusta, Maine

I INTRODUCTION

A. Objectives

This study presents the results of a special survey conducted jointly by the Maine Port Authority, the Maine Turnpike Authority, and the Maine Department of Economic Development to determine basic attributes of seasonal visitors in general and of those who might be interested in an overnight vehicle and passenger ocean ferry service between Portland, Maine and New York City. Specifically, this study was designed to gather information about the origin and destination, party characteristics, overall spending patterns, and relative distribution at overnight accommodations of visitors to Maine.

This report is primarily addressed at meeting the informational needs of the Port Authority. Officials at the Port Authority want to find out whether or not visitors to Maine would be interested in a passenger and vehicle ferry that would run daily between New York City and Portland, Maine. As an aid in planning ferry facilities, it was important to know about the number of persons per party, the type of vehicle used (and trailer pulled, if any), the number of parties with children under 12 and the average number of such children per party for those parties expressing an interest in the service. Assuming that a sufficient number of parties were interested in this service, this information could be used to plan accommodations and other facilities on board the ferry.

B. Background

It has long been a goal of the Department of Economic Development to find out more about the economic impact of visitors to Maine. A limited staff and inadequate funding have hampered previous efforts to conduct such studies. Only through the cooperation of the Maine Turnpike and Port Authorities was it possible to realize this study.

The Maine Port Authority was interested in questioning visitors about a proposed ferry service between New York City and Portland, Maine. The Port Authority obtained the cooperation of the Maine Turnpike Authority for the distribution of the survey form at the southbound exit of the Maine Turnpike. The Department of Economic Development added several questions and, in turn, promised to do the major portion of initial sorting and analysis.

The final questionnaire represents a compromise among the participating agencies; questions were included that would provide useful information to all three groups. Coincidentally, the Maine questionnaire used in this survey is quite similar to the one used on a year round basis by Vermont.

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C. Procedures and Limitations

Data presented in this study was gathered by postage paid questionnaire cards distributed randomly in the southbound lane of the Maine Turnpike by the attendants of the Kittery exit. The format of this card is shown in Figure 1 of this report.

A total of approximately 50 thousand cards were distributed during three phases of the survey. This consisted of 20 thousand cards distributed during the 1971 Labor Day weekend and another 15 thousand during the weekend of October 9-11, 1971 when the fall foliage was at its peak, and a final distribution of 15 thousand during all the weekends in January, 1972.

The data in this report is relevant only for the needs of the Maine Port Authority as it contains information primarily about those parties interested in the proposed ferry service. A report on the economic impact of visitors and other relevant data will be completed later.

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II DISCUSSION OF RESULTS

A. Traveler Origin

The origin of all travelers sampled during the Labor Day, fall foliage and winter weekend surveys are shown collectively in Table I and respectively in Tables 2 through 4.

Table I shows that a total of 8,360 traveler parties were sampled during the three phases of this survey and that a total of 52 different origins (states, districts, Canadian provinces and other foreign countries) were represented. The highest rate of return of 19.8 percent came from the Labor Day segment of the survey. The return of cards from the fall foliage weekend was slightly less (18.2 percent). While the 11.1 percent return from the winter segment was much lower. A possible reason for this noticeably different response rate might have been due to snow conditions during the early part of this winter. It is a generally accepted fact that fewer people visit Maine during the winter than in the summer. Poor snow conditions restrict further the number of people that might normally come to ski and snowmobile.

Since the card was not convenient for Maine residents who comprise the majority of travelers during the winter months, it is likely that many were disregarded. These factors probably contributed to the lower response rate for the winter segment. The state of Massachusetts alone, accounted for over 37 percent of all visitors. In fact, the four states of Massachusetts, New York, Connecticut and New Jersey accounted for almost three fourths of all visitor parties.

Comparison of seasonal data in Tables 2 through 4 show that these same four states ranked at the top in each survey. Tables 2 through 4 show slight seasonal variations in the rankings among the first 5 or 6 states. This may be in part, due to random chance and in part, to proximity of the state to Maine. New York which is slightly further than Connecticut, ranks above it on the Labor Day weekend survey. Yet, on the fall foliage and the winter weekends, proportionately more people from Connecticut visited Maine than did residents from New York. This might also support the conclusion that former Maine residents have settled in Connecticut and are returning to visit friends and relatives. Closeness may also be a factor as New Hampshire residents outnumber residents from traditionally 4th ranked New Jersey as New Hampshire moves into 5th ranked position in the winter weekend survey. Judging from the written responses on cards from New Hampshire residents, many had come to Maine on weekend or daily shopping tours.

Table 1 shows that just about as many parties responded from Quebec as from all the three Atlantic Provinces of New Brunswick, Nova Scotia and Prince Edward Island. The results are not surprising as the population of the Province of Quebec is over twice as large as the combined population of the three Atlantic Provinces.

It is also interesting to note that Virginia seems to be the geographic cut-off point as a regular supplier of visitors to Maine. Below Virginia, geographically, the number of visitors drops off, drastically. Summary data from Table 1 shows that there were more parties from Virginia than from the states of Florida, North Carolina, South Carolina, Georgia, West Virginia, Alabama, Tennessee, Mississippi, and Kentucky combined.

One final comment relative to winter weekend data in Table 4, Maine, which had not previously ranked above 5th, moves into second. This seems to indicate that Maine people do more traveling outside of

- 5 -

Maine during the winter months than they do either during the summer or the fall.

B. Interest in Proposed Ferry Service

Because many origins were represented by a small sample of travelers, only the top sixteen ranked states were used to assess potential interest in the proposed Portland to New York ferry service. The number and percent of total parties interested in the proposed ferry service sampled during Labor Day, fall foliage and winter weekend surveys are shown in Tables 5 through 8. Table 5 shows that collectively, 16 states represented 97.3 percent of all travelers. An average of 45.4 percent of all parties surveyed from these sixteen states expressed interest in the proposed service. The residents of New Jersey expressed the highest interest. In fact, residents of all Eastern seaboard states between New York and Virginia, had an interest rate of over 58 percent. It is also interesting to note that at the northern terminus of the proposed service, the interest rate of Maine residents was much higher than that of any of the other New England states. Tables 6 through 8 show minor variations in ranking with season, but generally, travelers from the same states indicated a strong interest in the proposed ferry service.

Tables 6 and 8 indicate that there is little difference, on the average, between Labor Day and winter weekend travelers with respect to interest in the ferry service. Table 7 indicates that travelers during the fall foliage weekend seem to be somewhat proportionately less interested in the ferry service than summer or winter travelers. This could be because land travel provides the visitor with an opportunity to experience the maximum amount of colorful fall foliage and

- 6 -

perhaps because fall foliage colors tend to attract more weekend rather than vacation visitors. This latter point, namely, length of visit has not yet been analyzed.

C. Characteristics of Interested Parties

To provide insight on cabin configuration requirements, the survey data was analyzed to determine size of party and number of parties traveling with younger children. Tables 9 through 12 present this data <u>only</u> for those parties who expressed an interest in the proposed service. Table 9 presents this data collectively for the three separate surveys. Tables 10 through 12 represent data individually for Labor Day, fall foliage and winter weekends, respectively. States are ranked in the same order in these tables as they were in Tables 5 through 8.

The discrepancy between total origins and total parties is due to the fact that residents of several states (represented by small samples) did not indicate interest in the proposed service.

Table 9 shows that the average party expressing interest in the service consists of 3.1 persons. This table also seems to indicate that the number of persons per party varies considerably at the extremes (i.e. parties from Maine and parties from great distances such as Michigan, Florida and Ohio) contained considerably fewer people. The last two columns in Table 9 points to the reason for this difference. Parties from Maine and those from great distances are made up of fewer children under 12. Travelers from these states have a much lower percentage of parties with children under 12. This could mean that people from great distances are older and have no children or that it is difficult to travel great distances with children. It also indicates that many Maine residents may be on business or day trips and were

- 7 -

not accompanied by their families. It should be stressed that data in the last column in Tables 9 through 12 represents only the number of children in parties having children under 12. It does not represent the number of children in all parties interested in the ferry service.

Tables 10 through 12 show a slight difference between the average number of persons per party during the summer survey as compared with the average size of party in the fall foliage and winter weekend survey. The average persons per party from the Labor Day survey (Table 10) was 3.3 people. The average number of persons in the fall foliage and winter weekends were 2.8 and 2.7, respectively. Again, children under 12 appear to account for this difference. Labor Day data (Table 10) shows that 36.4 percent of all interested parties had children under 12 years of age. Fall foliage and the winter weekend data (Tables 11 and 12) show only about 24 percent of interested parties had children under 12 years of age. This indicates that parties traveling in the Fall and Winter are different from those traveling in the Summer. While the average number of persons per party varies only slightly, the number of parties having children under 12 varies markedly. Table 10 shows that 36.2 percent of parties from the Labor Day survey had children under 12 years of age. Only about 24 percent of the parties from the fall foliage and winter weekend surveys had children under 12. This reflects the fact that children were in school and these families were less likely to be traveling with their children. Because the average number of persons per party did not change significantly with season, it would seem to indicate that parties late in the season, had a greater proportion of adults.

The average number of children under 12 per party, is quite consistent. The overall average number of children under 12 of parties

- 8 -

interested in the ferry service is 1.8 (Table 8). This number increases only by one tenth of one percent for Labor Day and during the winter weekends. This indicates that family size is constant throughout the year.

D. Vehicles Used By Interested Parties

Tables 13 and 14 show the distribution of type of vehicle and usage of trailers among those who expressed an interest in the proposed ferry service between Portland and New York City. Data was grouped in broad categories because there was no appreciable difference among travelers from different states. The automobile was by far the most common type of vehicle used, comprising over 95 percent of the total. Trucks with campers, comprised 1.1 and 1.4 percent of all vehicles during the Labor Day and fall foliage weekends, but dropped to only 3 tenths of one percent of all vehicles during the winter weekends. This is to be expected since camping is much more popular in the Summer and Fall.

Table 14 shows that trailers are much more frequent during the Summer than in the Fall or the Winter, 9.2 percent of summer vehicles belonging to those parties interested in the ferry service pulled trailers. The most popular type of trailer among this group was the tent trailer comprising 34.8 percent of all trailers pulled.

The number of trailers pulled by travelers drops somewhat after Labor Day and then significantly during the Winter. Judging from a sampling of cards, the "other category" represents mainly snowmobile trailers in the winter and U-Haul-type trailers in the summer.

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E. Accommodations Used By Travelers

Question # 8 (see Figure 1) asked travelers to check the type of overnight accommodations they used while in Maine. Respondents were given a choice of 8 separate, common accommodation types plus an "other" category to choose from. While information from this question may not be of direct use to the Maine Port Authority, it is probably one of the more important questions on the card. Responses to this question gives insight into the relative percentage of parties that use different types of accommodations, indicating the use of the various facilities within the State. It is expected that further analysis will show significant differences in visitor characteristics (such as expenditure patterns) among the groups, based on type of lodging accommodation used. Because of the importance of this data, preliminary findings have been included in this report.

Table 15 shows the lodging accommodations which were used by all travelers who responded to the survey. Ranking of accommodations is based on the total column. The most significant result is that one half of the travelers stayed with friends and/or relatives or at their own seasonal home rather than at commercial lodging facilities. On a seasonal basis, the data indicates that proportionately more travelers stay with relatives and/or friends as it gets later in the year. Only 23.7 percent of Labor Day travelers stayed with friends and/or relatives. This figure jumped to 32 percent in the Fall and then to 37 percent for Winter travelers.

A surprising percentage of travelers stayed overnight in their own seasonal homes. An average of 21.2 percent of all travelers who responded on this survey, owned seasonal homes in Maine. This figure was slightly higher for the Labor Day and fall follage weekends and

- 10 -

sharply lower during the winter. This is logical because many of these homes are not winterized and are only adequate for occupancy during the warmer months. Proportionately, more travelers in the Fall stayed overnight at motels than did their counterparts during the Labor Day and Winter weekends. This probably indicates that the Fall traveler comes to see the foliage rather than to visit friends; he probably is older and has more money to spend.

The use of campgrounds declines as the weather gets colder. This indicates that camping is logically more popular during the Summer and the Fall. Considerably fewer parties brave the rigors of winter camping.

It is interesting to note that there is little seasonal fluctuation in the use of inns or tourist homes, resorts and in-town hotels. This indicates that these accommodations are not affected in any major way by the influx of seasonal visitors. The majority of the summer increase in visitors is felt at motels, at campgrounds and at seasonal homes.

A word of explanation is in order about the last two categories in Table 15. The "none" category includes Maine residents plus outof-state residents who were in Maine on a day trip and did not stay overnight. The "other" category includes travelers who used lodging accommodations not listed on the survey card, such as college dormitories, aboard boats, and so on.

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III SUMMARY

The results indicate that approximately half of the travelers surveyed were interested in a ferry service between Portland and New York City. As was expected, travelers from New York, New Jersey and from coastal states within a one or two days' journey, were strongly in favor of such a service. The results also show that an average party interested in the ferry service consists of 3.1 persons and that about one out of three such parties had an average of 1.8 children under twelve years of age.

The overwhelming majority of parties travel in automobiles and only one vehicle in 10 pulls a trailer of one type or another. FIGURE

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FORMAT OF MAINE TRAVELER SURVEY QUESTIONNAIRE

PATRONS OF MAINE TURNPIKE Maine Travel Survey

We are investigating the potential use of a new transportation service between Portland, Maine, and the New York City area. It involves an overnight automobile and passenger ferry service. Please complete this questionnaire — drop it in the nearest mail box — no postage necessary.

Would you be willing to help us by completing a detailed travel questionnaire which would be forwarded to you by mail. If so, please include your name and address. Thank you. FIRST CLASS PERMIT NO. 353 PORTLAND, MAINE

BUSINESS REPLY MAIL NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

40 Commercial Street Portland, Maine 04111

	What type of vehicle are you using?2a) Automobile()b) Truck with camper()c) Truck without camper()d) Motor home()e) Other()) What type trailer are you pulling?a) Noneb) Tent trailerc) Travel trailerd) Boat trailere) Other
3)	Date	······
4)	Number in Party 5) Number	of children under 12
6)	Where in Maine did you stay?	
8)	What type of overnight lodging accommod a) In town hotel()b) Resort()c) Inn or tourist home()d) Motel()e) Campground()What was the total amount your party specified	dations did you use? f) Rented cottage () g) Own seasonal home () h) Stayed with friends () i) Other ()
• /	What was the total amount your party spe <pre></pre>	nt in Maine during your stay?
10)	Was this your first visit to Maine? Yes ()	No ()
11)	Do you plan to return next year? Yes ()	No ()
12)	What is your residence? City	State
13) 、	Would an overnight vehicle and passenger York City and Portland, Maine be of inte	

Table 1 ORIGIN TOTAL OF TRAVELER PARTIES

State	Number of Parties	Percent of Total	<u>Rank</u>
Massachusetts	3,111	37.2	1
New York	1,208	14.5	2
Connecticut	1,083	13.0	34
New Jersey	783	9.4	4
Maine	509	6.1	5 6
Pennsylvania New Hammahina	374	4.5	
New Hampshire Rhode Island	359 263	4.3	/
Virginia	95	3.1 1.1	7 8 9
Maryland	91 ·	1.1	10
Ohio	60	0.7	11
Florida	51	0.6	12
Delaware	41	0.5	13
Vermont	38	0.5	14
Michigan	36	0.4	15
Washington, D.C.	33	0.4	16
lllinois California	23	0.3	17
California North Carolina	19 18	0.2	18
Quebec	17	0.2	19 20
New Brunswick			
Wisconsin	12 11	0.1 0.1	2 1 22
Indiana	10	0.1	22
Ontario	9	0.1	24
Missouri	8	_	25
Texas	8	-	26
lowa	7	-	27
Louisiana	6	-	28
Georgia	5	-	29
West Virginia	5	-	30
Colorado	4	-	31
Nova Scotia South Carolina	4 4	-	32
Tennessee	4	509 	33 34
Washington	4	-	34
Arizona		829	36
Arkansas	3	· 200 .	37
Hawaii	3	-	38
Kansas	3	. –	39
Kentucky	3	on	40
Minnesota	3	-	41
Prince Edward Islan Alabama		-	42
Alaska	2 2		43 44
Mississippi	2		44
Nebraska	2		46
New Mexico	2		47
0klahoma	2	-	48
Oregon	2	e	49
France	I	-	50
Germany Groat Britair	, 1	-	51
Great Britain Manitoba	1	-	52
Mexico	1	60, 10,	53 54
Montana	1		
Spain	1		55 56
Utah	1	-	56
Total	8,360	100.0	<u> </u>
			57

ORIGIN OF LABOR DAY WEEKEND TRAVELER PARTIES

State	Number of Parties	Percent of Total	Rank
Massachusetts	1,283	32.4	1
New York	741	18.7	· 2
Connecticut	533	13.5	3
New Jersey	477	12.0	- 4
Pennsylvania	272	6.9	5
New Hampshire	120	3.0	5 6
Rhode Island	103	2.6	7
Maine	95	2.4	8
Maryland	51	1.3	9
Virginia	51	1.3	10
Ohio	35	0.9	11
Delaware	25	0.6	12
Florida	23	0.6	13
Vermont	21	0.5	14
Washington, D.C.	19	0.5	15
Michigan	17	0.4	16
Illinois	11	0.3	17
Quebec	11	0.3	18
California	7	0.2	19
North Carolina	6	0.2	20
Wisconsin	6	0.2	21
Indiana	5	0.1	22
Missouri	5	0.1	23
New Brunswick	5 5 3 3 3 2	-	24
Ontario	3	-	25
Tennessee	3	-	26
Alabama			27
Alaska	2	63	28
Georgia	2	-	29
Hawaii	2	. fa	30
Louisiana	2	-	31
Nebraska	2	84	32
Nova Scotia	2	-	33
Texas	2	-	34
Arkansas	1	-	35
Colorado	1	-	36
Manitoba	1	-	37
Mexico		-	38
Minnesota	1	.	39
Montana	I	-	40
New Mexico	1		41 42
Oklahoma	1		42 43
Oregon Dringe Edward Island	1		43
Prince Edward Island	1		44
South Carolina	1	_	46
Utah Washington	1	-	40 47
Washington West Virginia	1	-	47
Mese AllAllia			
57 a. (a.)	0.05/	100.0	

Total

ORIGIN OF FALL FOLIAGE WEEKEND TRAVELER PARTIES

State	Number of Parties	Percent of Total	<u>Rank</u>
Massachusetts Connecticut New York New Jersey Maine New Hampshire Rhode Island Pennsylvania Florida Virginia Ohio Maryland Michigan Illinois North Carolina Delaware California Vermont Washington, D.C. Iowa Ontario Quebec Indiana New Brunswick West Virginia	1161 380 337 214 138 114 105 79 24 22 18 17 14 10 10 9 9 8 8 6 5 5 5 4 3 3	42.4 13.9 12.3 7.8 5.0 4.2 3.8 2.9 .9 .8 .7 .6 .5 .4 .4 .4 .3 .3 .2 .2 .2 .2 .2 .2 .2 .1 .1	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 6 17 18 19 20 21 22 23 24 25 26
Wisconsin Arizona Colorado Kansas Kentucky Minnesota Prince Edward Island Texas Washington Alabama Arkansas Georgia Hawaii Louisiana Missouri Oklahoma Oregon South Carolina	2 2 2 2 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1		27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43

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ORIGIN OF JANUARY WEEKEND TRAVELER PARTIES

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State	Number of Parties	<u>Percent of Total</u>	Rank
Massachusetts	677	40.6	1
Maine	276	16.5	2
Connecticut	170	10.2	2 3 4 5 6
New York	130	7.8	Ĺ
New Hampshire	125	7.5	5
New Jersey	92	5.5	6
Rhode Island	55	3.3	7 8
Pennsylvania	30	1.8	8
Maryland	23	1.4	9
Virginia	17	1.0	10
Vermont	9	0.5	11
Delaware	7	0.4	12
Ohio	7	0.4	13
Washington, D.C.	6	0.4	14
Michigan	5	0.3	15
New Brunswick	5	0.3	16
Florida	4	0,2	17
Texas	4 3 3	0.2	18
California	3	0.2	19
Louisiana	3	0.2	20
Georgia	2	0.1	21
Illinois	2	0.1	22
Mississippi	2	0.1	23
Missouri	2	0.1	24
North Carolina	2	0.1	25
Nova Scotia	2	0.1	26
South Carolina Missonsin	2 2	0.1	27
Wisconsin Arizona	2	0.1	28
Arkansas	1	-	2 9 30
AI Kalisas	1 .		30
France	1	אנו	31
Germany	1		32
owa	1	<u>a</u>	33 34
Kansas	1	8	34
Kentucky	1	Rea I	35
Minnesota		63	36
Ontario Quebee	1	ins .	37
Quebec Tennessee	1	· #20	38
Washington	1		39
West Virginia	1		40
West Virginia		6:3	41
Total	1,669	100.0	

TOTAL TRAVELERS INTERESTED IN PROPOSED PORTLAND-NEW YORK FERRY SERVICE

		Interested in erry Service	
State of <u>Residence</u>	Number of <u>Parties</u>	Percent of Total Parties	Rank
New Jersey Washington, D.C. New York Maine Maryland Pennsylvania Delaware Virginia Florida Connecticut Michigan Ohio New Hampshire Vermont Massachusetts Rhode Island	624 25 895 364 65 237 25 56 29 434 14 22 121 9 724 53	79.7 75.7 74.1 71.5 71.4 63.4 61.0 58.9 56.9 40.1 38.9 36.7 33.7 23.7 23.3 20.2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Total of Above 16	3,697	45.4	
Other 37 Origins	88	39.8	
Total of All 57 Origins	3,785	45.2	

LABOR DAY WEEKEND TRAVELERS INTERESTED IN PROPOSED PORTLAND-NEW YORK FERRY SERVICE

State of <u>Residence</u>	Travelers Proposed F		
	Number of Parties	Percent of Total Parties	<u>Rank</u>
New Jersey	388	81.3	1
New York	555	74.9	2
Washington, D.C.	14	73.7	3
Maine	67	70.5	4
Virginia	34	66.7	5
Delaware	16	64.0	6
Maryland	32	62.7	7
Pennsylvania	165	60.7	8
Florida	12	52.1	9
Ohio	16	45.7	10
Michigan	7	41.2	1 1
Connecticut	209	39.2	12
New Hampshire	37	30.8	13
Massachusetts	306	23.8	14
Vermont	5	23.8	15
Rhode Island	20	19.4	16
Total of Above 16	1,883	48.7	•
Other 32 Origins		37.7	•
Total of All 48 Origins	1,919	48,4	

FALL FOLIAGE WEEKEND TRAVELERS INTERESTED IN PROPOSED PORTLAND-NEW YORK FERRY SERVICE

Travelers Interested in State of Proposed Ferry Service Residence Number of Percent of Parties Total Parties Rank Maryland 16 94.1 1 163 76.2 2 New Jersey Washington, D.C. 6 75.0 3 73.3 4 247 New York 5 6 67.4 Maine 93 Pennsylvania 51 64.6 7 8 Virginia 14 63.6 14 58.3 Florida 5 9 Delaware 55.6 North Carolina 5 10 50.0 Connecticut 155 40.1 11 12 35.7 Michigan 👜 5 New Hampshire 37 32.5 13 27.8 14 Ohio 5 15 Massachusetts 244 21.6 21.6 Rhode Island 22 16 Total of Above 16 1,082 41.8 Other 27 origins 34.1 29 40.6 Total of all 43 Origins 1,111

WINTER WEEKEND TRAVELERS INTERESTED IN PROPOSED PORTLAND-NEW YORK FERRY SERVICE

		Interested in erry Service	
State of <u>Residence</u>	Number of Parties	Percent of Total Parties	<u>Rank</u>
Washington, D.C. New Jersey Maryland Maine New York Pennsylvania Delaware Virginia Connecticut New Hampshire Massachusetts Rhode Island Ohio	5 73 17 204 93 21 4 8 70 47 174 11	88.3 79.3 73.9 71.5 70.0 57.1 47.1 41.2 37.6 25.7 20.0 14.3	1 2 3 4 5 6 7 8 9 10 11 12 13
Vermont		0	14
Total of Above 14 Total of Other 26	728 26	44.6 74.3	
Total of Above 40 Origins	754	45.2	

CHARACTERISTICS OF TOTAL PARTIES INTERESTED IN PROPOSED FERRY SERVICE

			<u>Parties</u> with (<u>Children Under 12</u>
State of <u>Residence</u>	Number of Parties	Persons Per Party	Percent of Parties	Children Under 12 Per Party
New Jersey	624	3.3	38.6	1.6
Washington, D.C.	25	3.1	32.0	2.0
New York	895	3.3	32.5	1.9
Maine	364	2.4	19.0	1.9
Maryland	65	3.3	36.9	1.7
Pennsylvania	237	3.2	32.1	1.9
Delaware	25	3.6	48.0	1.7
Virginia	56	3.4	37.5	2.5
Florida	29	2.2	6.9	1.0
Connecticut	434	3.1	33.4	1.7
Michigan	14	2.1	0	0
0hio	22	2.8	27.3	1.5
New Hampshire	121	3.0	27.3	2.6
Vermont	9	3.0	33.3	2.0
Massachusetts	724	2.9	27.8	1.9
Rhode Island	53	3.2	39.6	1.6
Total of Above 16	3,697	3.1	31.2	1.8
Other 31 Origins	230	2.6	14.8	1.2
Total of 47 Origins	3,785	3.1	30.8	1.8

CHARACTERISTICS OF THOSE LABOR DAY WEEKEND PARTIES INTERESTED IN PROPOSED FERRY SERVICE

			<u>Parties with</u>	<u>Children under 12</u>
State of <u>Residence</u>	Number of Parties	Persons Per Party	Percent of Parties	Children Under 12 per Party
New Jersey New York Washington, D.C. Maine Virginia Delaware Maryland Pennsylvania Florida	388 555 14 67 34 16 32 165 12	3.4 3.5 3.4 2.5 3.7 4.0 3.3 3.5 2.3	43.0 37.3 50.0 18.5 44.1 50.0 50.0 36.3 8.3	1.8 1.8 2.1 1.8 2.7 1.9 1.5 1.9 1.0 1.0
Ohio Michigan Connecticut New Hampshire Massachusetts Vermont Rhode Island	16 7 209 37 306 5 20	2.9 2.6 3.6 3.2 3.0 3.6 3.4	37.5 0 37.3 27.0 28.4 40.0 50.0	0 1.6 2.8 2.0 1.5 1.3
Total of Above 16 Other 16 Origins	1,883 36	3.3 3.0	36.4 22.2	1.9
Total of 32 Origins	1,919	3.3	36.2	1.9

Table II

CHARACTERISTICS OF THOSE FALL FOLIAGE WEEKEND PARTIES INTERESTED IN PROPOSED FERRY SERVICE

			Parties with Children under 12			
State of	Number of	Persons	Percent of	Children Under		
<u>Residence</u>	Parties	<u>Per Party</u>	Parties	<u>12 per Party</u>		
Maryland	16	3.1	1.2.5	2.0		
New Jersey	163	3.1	20.9	1.8		
Washington, D. C.	6	2.7	20.5	0		
New York	247	3.0	25.5	2.0		
Maine	93	2.2	14.0	2,2		
Pennsylvania	51	2.8	21.6	1.7		
Virginia	14	1.8	28.6	1.8		
Florida	14	2.2	0	0		
Delaware	5	2.4	41.7	1.0		
berdidite	2		11.7	1.0		
North Carolina	5	2.4	0	0		
Connecticut	1 55	2.7	27.1	1.6		
Michigan	5	1.8	0	0		
New Hampshire	37	3.1	27.0	2.1		
Ohio	5	2.4	0	0		
Massachusetts	244	2.9	29.5	1.8		
Rhode Island	22	3.2	40.9	1.8		
Total of above 16	1082	2.8	24.2	1.9		
Other 10 Origing	20	27	12 8			
Other 19 Origins	29	2.7	13.8	1.5		
Total of 35 Origins	1111	2.8	23.9	1.8		

CHARACTERISTICS OF THOSE WINTER WEEKEND PARTIES INTERESTED IN PROPOSED FERRY SERVICE

			<u>Parties with Children Under 12</u>			
State of	Number of	Persons	Percent of	Children Under		
<u>Residence</u>	Parties	Per Party	Parties	12 Per Party		
Washington, D.C. New Jersey Maryland Maine New York Pennsylvania Delaware Virginia Connecticut New Hampshire Massachusetts	5 73 17 204 93 21 4 8 70 47 47 174	3.0 2.7 3.7 2.5 3.1 2.6 3.8 3.5 2.6 2.8 2.8	20.0 17.8 35.3 21.6 22.6 23.8 50.0 25.0 35.7 27.7 24.1	1.0 1.8 2.2 1.9 2.0 1.8 1.5 2.0 1.8 2.8 1.9		
Rhode Island	11	3.0	18.2	2.0		
Ohio	1	2.0	0	0		
Vermont	0	0	0	.0		
Total of Above 14	728	2.7	23.9	2.0		
Total of Other 26	26	2.2	23.1			
Total of 40 Origins	754	2.7	23.9	1.9		

Table	13
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VEHICLES USED BY THOSE PARTIES INTERESTED IN PROPOSED FERRY SERVICE

	Labor Day Weekend		Fall Foliage Weekend		Winter Weekends		Total	
Type of Vehicle	Number	Percent	Number	Percent	<u>Number</u>	Percent	Number	<u>Percent</u>
Automobile Truck with Camper	1,863 21	97.1 .1.1	1,058 16	95.2 1.4	737	97.7 0.3	3,658 40	96.7 1.0
Truck without Camper	- 12	0.6	20	1.8	11.	1.5	43	1.1
Motor Home Other	9	0.5 0.7	5 12	0.5	2	0.2	15 78	0.4
Total	1,919	100.0	1,111	100.0	754	100.0	3,784	100.0

Table	TRAILERS PULLED BY THOSE PARTIES INTERESTED IN PROPOSED FERRY SERVICE							
Labor Day Weekend			Fall Foliage Weekend		Winter Weekend		Tot al	
Type of Trailer Pulled	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Vehicles with no trailer Tent Trailer Travel Trailer Boat Trailer Other Total	1,742 62 39 50 <u>26</u> 1,919	90.8 3.2 2.0 2.6 <u>1.4</u> 100.0	1,073 7 14 14 <u>3</u> 1,111	96.6 0.6 1.3 1.3 <u>0.2</u> 100.0	741 3 0 1 <u>9</u> 754	98.2 0.4 0.2 <u>1.2</u> 100.0	3,556 72 53 65 <u>38</u> 3,784	94.0 1.9 1.4 1.7 <u>1.0</u> 100.0

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OVERNIGHT ACCOMMODATIONS USED BY TRAVELER PARTIES

Table 15

	Labor Day Weekend		Fall Foliage Weekend		Winter Weekends		Total	
Accommodations	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Friends or relatives Own Seasonal Home Motel Rented Cottage Campground Inn or Tourist Home Resort In-town Hotel None Other Total	937 893 549 538 447 100 83 50 193 165 3,955	23.7 22.6 13.9 13.6 11.3 2.5 2.1 1.3 4.9 <u>4.0</u> 100.0	882 639 581 74 121 56 29 36 193 124 2,735	32.3 23.4 21.3 2.7 4.4 2.0 1.1 1.3 7.1 4.5 100.0	617 241 171 31 8 44 21 26 411 <u>99</u> 1,669	37.0 14.4 10.2 1.9 0.5 2.6 1.3 1.6 24.6 <u>5.9</u> 100.0	2,436 1,773 1,301 797 643 200 133 112 797 <u>385</u> 8,360	29.2 21.2 15.6 9.5 7.8 2.4 1.6 1.3 9.5 <u>4.6</u> 100.0