



MAINE

TRANSPORTATION

1973

SUMMARY REPORT

Prepared By

The Maine Department of Transportation

Augusta, Maine

March 15, 1973



State of Maine

AUGUSTA, MAINE 04330

DAVID H. STEVENS Commissioner

Pepartment of Transportation

March 15, 1973

TO: Governor Kenneth M. Curtis and Members of the 106th Legislature

In accordance with the provisions of Chapter 113, Private and Special Laws of 1971, I am pleased to submit the Department of Transportation's report entitled "Maine Transportation 1973".

Respectfully,

David H. Stevens, Commissioner Maine Department of Transportation

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SUMMARY

The following report, while prepared by the Maine Department of Transportation in response to Chapter 113, Private and Special Laws, 1971, attempts to provide an initial overview of Maine's transportation problems and to suggest priorities for response to those problems. The report should not be construed as a "transportation plan" for the State of Maine since such a document would require considerably more effort than could be provided in the brief six months or so of the Department's existence. Furthermore, the report stresses the more immediate areas of concern in transportation, rather than proposing long-range goals. The suggested areas of activity listed below are defined generally in priority order within each transportation mode; and obviously, progress in each modal area should be made concurrently.

RAIL TRANSPORTATION

The importance of rail transportation to Maine's economy through its service to the manufacturing sector cannot be overstressed. The economic conditions of New England's railroads creates the need to assure continuation of viable, lowcost freight handling as a distinctly more important need than the more intriguing aspect of regenerating rail passenger service. The following areas of activity are being, or will be pursued by the Maine Department of Transportation.

1. Petition the Interstate Commerce Commission and participate with others in an investigation of the wide variance in feed grain freight rates between the southeastern part of the United States and the northeast in order to assist Maine's poultry, egg and dairy industry to remain competitive in the respective marketing areas.

2. Encourage the railroads to provide improved service and the Maine potato industry to utilize the Maine railroads for potato shipments so as to insure the continuation of competitive modes of transportation to the long-range advantage of both the railroad and the potato industry.

3. Participate in proceedings before federal agencies concerning the future of the New England railroads with the objective of assuring competitive, equitable freight rates for Maine shipments to the south and west of the New England area so that Maine's geographic location problems are not compounded by freight rates developed to offset costs of other unprofitable segments of any particular railroad system.

4. Continue to participate with the other New England States in the activities of the New England Rail Office in an effort to encourage and coordinate rail passenger activities in the Northeast, providing insight into the potential successes of such service in Southern New England that might later be translated to the northern secitons of New England including Maine.

5. Provide assistance to Maine railroads through increasing use of highway funds for improvement and maintenance of highway-railroad grade separation bridges.

6. Encourage the availability of private foundation, university-sponsored research, or U. S. Government funds for evaluating and encouraging innovative rail uses, such as increased use of unit trains, car-train systems, and seasonal passenger service coupled with modal interchange systems for travel beyond the rail system, such as for access to coastal peninsulas or ski areas.

7. Provide assistance to Maine citizens, Maine industries, and the Maine railroads, in various day-to-day railroad related transportation problems.

AIR TRANSPORTATION

Maine's previous but long history of woe in the scheduled air passenger field is well known to those who have attempted to fly in and out of the State. Also, if Maine is to attract small, clean industrial development (seemed desirable on the part of many), safe, adequate aviation facilities must be available for company executives, salesmen, and clients at convenient locations. In order to respond to those needs, the Department is or will be participating in the following endeavors:

1. Continue participating in the New England Service Investigation conducted by the Civil Aeronautics Board to attempt to assure adequate, long-term, scheduled service to Maine by insisting on an end to discrimination against Northern New England by allowing federal subsidies to assist a local service carrier in providing frequent dependable air service at those Maine points not provided service by Delta.

2. Work closely with Delta Air Lines to encourage adequate schedules at Portland, Bangor and Presque Isle.

3. Complete a statewide airport systems plan and utilize priorities established therein to assist local communities in airport improvements, with particular emphasis on revitalization of existing facilities, improved navigational aids, and other safety related items.

4. Provide assistance to the City of Bangor in the continuing development of Bangor International Airport. In addition to the funds provided by the State for the Domestic Terminal Building and the International Arrivals Building, the following should be provided:

- a. Complete the master plan for Bangor International Airport.
- b. Encourage cargo movements at Bangor International Airport including requests to the Civil Aeronautics Board for cargo "flag-stop" designation.
- c. Improve transportation cost aspects of aviation fuel in order to assure the competitiveness of Bangor in charter and other potential airport uses.
- d. Assist the City in other areas as indicated.

5. Encourage Maine-Canadian air service and other new air service which may seem desirable, particularly Portland to Montreal Service.

6. Assist local communities in developing individual airport master plans.

PORT FACILITIES

Maine's port activities are one of the most discouraging aspects of the Maine transportation scene as a result of the decline of dry cargo exports and imports, particularly at Portland. In an effort to improve the situation the Department is engaged in the following activities.

1. Development of a demonstration project, through New England Regional Commission funds, to provide container handling capability at Portland by leasing and/or acquiring equipment so that limited numbers of containers on combination cargo vessels can be effectively handled.

2. Initiate and support a request to the Maine Legislature with the Governor's assistance, of \$500,000 to acquire land, add further equipment for container handling capability, and improve the area around the Maine State Pier in Portland by paving, fencing and other improvements.

3. Encourage and promote feeder-type container service from either Halifax, Nova Scotia or New York, and complete an inventory of container imports and exports to assist in that effort.

4. Work closely with private developers interested in significant development at Maine ports.

5. Participate with Department of Commerce and Industry in a feasibility study of the potential marine terminal development at Searsport in a study initiated by that department prior to the formation of the Department of Transportation.

6. Continue to work with the Federal Maritime Administration in developing the "Marine Highway" concept providing for ferry type service between Portland and New York.

7. Increase emphasis on promoting use of Maine ports.

FERRY SERVICE

The State of Maine has been providing ferry service to several island communities for some time. The following appear to be appropriate activities on the part of the Department in the near future:

1. Complete the ferry service study currently being conducted by consultant for the Department.

2. Initiate a program for replacement of vessels so as to be able to schedule these replacements as the vessels get increasingly older.

3. Provide for an additional ferry vessel of larger size in order to meet the increasing demand for usage.

4. Assure the continuation of a transportation service to Matinicus Island.

5. Maintain ferry terminal facilities as the need arises.

HIGHWAYS

As a result of our large geographical size in relation to our relatively small, dispersed population, Maine's highway system will remain a particularly important element in overall transportation needs. Because of the size of the system and a small revenue base, many highway problems will be related to making the most effective use of available revenue. The Department is attempting to respond to these problems by continuing and expanding the following activities:

1. Proposing the expansion of the highway maintenance resurfacing effort which provides for plant mixed bituminous overlay applications in lieu of the older road-mixed system. This program was developed to extend the life of existing facilities and to provide improved riding qualities.

2. Implementing the provisions for "stop-gap" improvements as proposed in the Department's Biennial Construction Program for 1974-75 whereby lower standards and less sophisticated construction improvements can be accomplished increasing the miles of improvement per dollar.

3. Increasing emphasis on identifying and improving accident-prone locations.

4. Significant additional effort in highway safety public information programs.

5. Increased orientation in construction programming efforts toward replacement of a significant number of older bridges existing throughout the State.

6. Implementing the provisions of the "Action Plan" which directs additional emphasis on the environmental, social and economic consequences of highway improvement projects, including additional participation of local agencies.

7. Assisting Maine's motor carrier industry in efforts to improve the effectiveness and safety of truck transportation.

BUS TRANSPORTATION

Bus transportation in Maine may be considered as three distinct systems at this time: intercity long-distance systems; urban, fixed route systems such as exist in Portland and Lewiston-Auburn; and demand-type systems providing service to those lacking other means of transportation. The Department proposes to par ticipate in the development of these systems as follows: 1. Local communities and regional agencies have historically assumed basic responsibility for urban bus system needs beyond that which can be provided by the private sector and continuation of that function for the near future would appear appropriate. The Department will continue to provide assistance with planning grants and coordinating activities as desired.

2. The Department is currently seeking funds from several different sources to evaluate the transportation need on a statewide basis of the rural poor, elderly and others needing transportation in order to provide factual information relative to the demand for such service as well as the appropriate agency and system for the provision of such service.

3. Efforts are also being considered to develop projects to evaluate other bus-type systems such as in coastal areas to reduce the traffic loads and parking needs in peninsula locations.

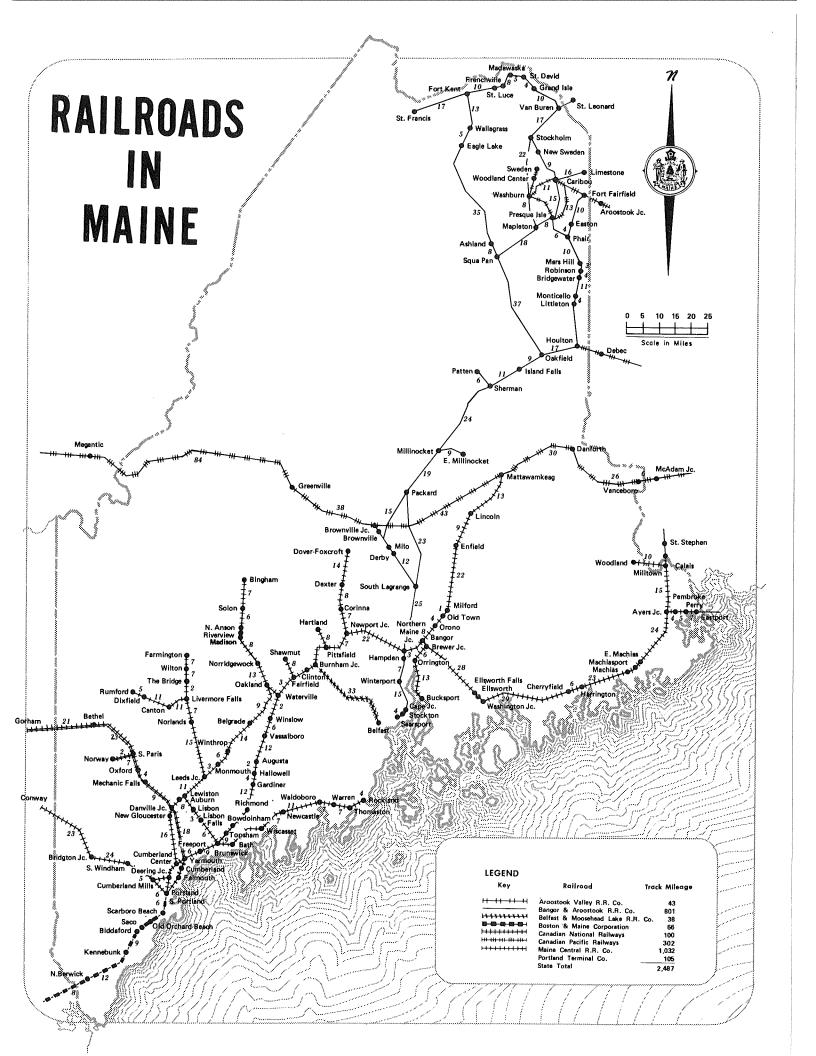
CONCLUSIONS

The preceding summary of transportation needs should indicate fairly conclusively that the Maine Department of Transportation will have to utilize both its financial and staff resources effectively and in an overall framework of priorities in order to show significant progress in providing for overall transportation improvements for the citizens of the State of Maine.

A further detailed review of the transportation systems currently available, information pertaining to deficiencies and problem areas within each system and an outline of the proposals and approaches to be taken by this Department and other agencies are contained in the remaining chapters of this report.

CHAPTER I

RAIL TRANSPORTATION



RAIL TRANSPORTATION

SITUATION

The Maine railroads in recent years have converted to diesel electric locomotives; mechanized the rebuilding and maintenance of track and generally improved their main line freight operations by the use of longer freight trains. However, passenger train service in Maine is practically nonexistent. The only remaining service within the State is on the daily Canadian Pacific train from St. John, New Brunswick to Montreal. This train crosses Maine at night and will make a stop at points between Vanceboro and Jackman upon request.

The eight railroad companies currently operating within the State are: the Maine Central, which includes the Portland Terminal Company; Bangor and Aroostook; Boston and Maine; Belfast and Moosehead Lake; Aroostook Valley; Canadian Pacific and the Canadian National. The routes of these railroads, major interchange junction and connections with other railroads to the south and west, are shown on the route map. A brief summary pertaining to each railroad is contained in the following paragraphs.

The Maine Central Railroad, one of our two U. S. main lines, runs from Portland east through Central and Coastal Maine to Bangor with branch lines serving all freight providing areas and a coastal line continues to Calais and Eastport. The Maine Central also operates between Mattawamkeag and Vanceboro on track jointly used with the Canadian Pacific Railroad. This allows Maine Central to interchange with Canadian Pacific at Vanceboro and provide freight service between Maine and the Maritime Provinces. The Maine Central also runs through the White Mountains to St. Johnsbury, Vermont where it can interchange with the Canadian Pacific for westbound traffic. A branch of this line runs to North Stratford, New Hampshire where it connects with Canadian National. However, for mutual convenience interchange with Canadian National takes place at Danville Junction, near Lewiston, Maine. In addition to the connections with the Canadian Railroads, Maine Central interchanges with the Bangor and Aroostook at Northern Maine Junction, near Bangor and with the Boston and Maine at Rigby Yard, South Portland. The ability of the Maine Central to connect with either Canadian Railroad is important in that it allows competition with the Boston and Maine, the only other railroad available to Maine Central, for the interchange of freight traffic to the south and west.

The Bangor and Aroostook Railroad is the other major U.S. line in Maine. This line runs generally north and south and interchanges with the Maine Central, as mentioned above, and with the Canadian Pacific at Brownville Junction. This railroad also maintains a limited routing capability with the Canadian National at the International Border between Van Buren, Maine and St. Leonard, P.Q. In addition, the Bangor and Aroostook has a line which runs from Northern Maine Junction to Searsport where the company maintains port facilities capable of handling general and bulk cargo and petroleum products. The availability of this line makes it possible for the Bangor and Aroostook to avoid complete dependence on other railroad connections for import and export shipments. The Boston and Maine Railroad went into bankruptcy early in 1970 and is currently operating under a trusteeship. This railroad is important to Maine in that it provides the valuable south and west connections for the Maine traffic. The more important interchange points are located at South Portland, Maine; Worcester, Massachusetts; and at Rotterdam Junction and Mechanicville, New York.

The Canadian Railroads in Maine also form an important part of the rail network. They provide an outlet not only to Canada, but also via Canada to the Central and Western States. The Canadian Pacific is independently owned while the Canadian National is government owned and operated. The Canadian National runs from Portland northwest through New Hampshire and Vermont. The Canadian Pacific crosses Northern Maine generally on a line from Vanceboro to Jackman. Short branches of the Canadian Pacific cross Maine's eastern border to Houlton, Fort Fairfield, Presque Isle and Caribou. The Aroostook Valley Railroad, a short line subsidiary of the Canadian Pacific, also serves Presque Isle, Caribou and Washburn.

There are also two small railroads which operate in the State. One is the Portland Terminal Company which is owned by Maine Central and is used for switching operations in the Portland area. The other is the Belfast and Moosehead Lake Railroad and is controlled by the City of Belfast. This line operates between the City of Belfast and Burnham Junction and, in general, carries grain products.

The railroad companies mentioned above operate both main line and branch line trackage within the State. The main line track provides rail siding service for shippers requiring numerous inbound and outbound carload movements on regularly scheduled trains. The branch line track, on the other hand, provides for minimum service both in frequency and quality due to the limited amount of traffic available for shipment. The miles of main and branch line track maintained in Maine by each railroad is summarized in the following table.

MILES OF TRACK

RAILROAD	<u>Main Line</u>	Branch Line-Siding	Total
AROOSTOOK VALLEY	32	11	43
BANGOR & AROOSTOOK	579	222	801
BELFAST & MOOSEHEAD LAKE	33	5	38
BOSTON & MAINE	56	10	66
CANADIAN NATIONAL	90	10	100
CANADIAN PACIFIC	234	68	302
MAINE CENTRAL	800	232	1032
PORTLAND TERMINAL	-	105	105
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TOTAL	1824	663	2487

The railroads in Maine are geared to the economy of the State. The inbound movement of food, feed, consumer durables, industrial products and raw materials by rail freight is approximately matched by carloads of paper, paper products, agricultural and other products outbound. Much of the inbound freight comes from the west and tends to funnel through the Chicago area. Outbound freight and products find their principal markets in the area south and west of the Hudson River. A review of annual reports of our two major railroads, the Maine Central and the Bangor and Aroostook, indicates that approximately 52 percent of the total revenue traffic is derived from the shipment of paper, paper products and pulp, agriculture and petroleum products account for approximately 15 percent each and the remaining 18 percent is accounted for by miscellaneous products.

PROBLEM AREAS

Rail transportation in Maine, as well as in the rest of the nation, is faced with numerous operational and economic problems. A few of the more important ones are summarized below.

Railroad companies have experienced difficulty in generating capital funds internally or through borrowing for improvements in track and related structures other than freight cars and locomotives, since rolling equipment such as cars and engines can be sold or repossessed by the lender whereas track, bridges and tunnels are considered to be investments which cannot readily be removed or sold to other companies. Directly related to this problem is the inevitable situation of obsolescence. The lack of sufficient financial support to modernize the railroad as a whole causes certain facilities to be placed in a low priority category. Generally, this is concentrated on the branch lines providing limited service where the track is old, badly worn and not welded together. Eventually, action may be taken to request abandonment of the line due to complete deterioration; thereby further eroding rail service to the smaller communities.

The problem of having the right kind of empty freight car available at the location and at the time desired by the user is another area of concern. This includes the problems of cleaning and maintenance as well as keeping track of other empty cars. There are instances where a car is positioned for outbound loading and then rejected by the customer due to internal debris, wall damage or insufficient devices required to secure the freight in place. The car must then be replaced with an acceptable car. The time element involved causes further shipping delays for the customer. Associated with the availability of cars is the quality of service which includes reliable and fast movement of loaded freight cars as well as any intermodal or intramodal transfer of freight. Rail transportation in Maine is believed to suffer a reduction in quality due to the lack of through freight trains and having to operate over three or more New England railroads. This has been particularly applicable in the shipment of potatoes and many growers are utilizing truck service rather than rail.

The subject of rail freight rates is another area of major concern to Maine industries. For example, the producers of poultry and eggs are in competition with producers in the Delmarva and southeastern regions of the nation. These regions obtain a substantial proportion of their feed grain requirements from the midwest states and the transportation cost is a major factor in the delivered cost of such grain to the Maine users. The existing rail rates for transporting midwest grain to Maine producers are so high in comparison with rates applicable to the movement of grain from the same origins to competing producers in the southeast that a severe economic disadvantage is imposed upon the agriculture and poultry industries in Maine.

The last area of concern to be noted for rail transportation is that of passenger service. With the exception of limited service on the Canadian Pacific Railroad, previously covered, rail passenger service in Maine was discontinued in the early 1960's due to a continuous decline in patronage and the overwhelming preference of the public to utilize their private automobile for travel. New and improved highways continue to decrease intercity travel time and there is little reason to expect this trend to change in the near future due to the distancedemand features of the traffic. Conventional rail passenger service finds difficult competition with the private automobile, the bus, or aircraft from the point of view of travel time and convenience. In addition, the upgrading of rail lines to high speed standards is extremely expensive and a considerable volume of patronage would be required to sustain this type of service from an economic point of view. In addition, the installation of high speed lines on existing right of ways will be further complicated by the existence of many highway grade crossings. However, in view of current emphasis on land use, concern over the availability of fuel, recent improvements in rail technology and the high speed demonstration projects in progress, consideration must be given to investigating the feasibility and possibility of providing some aspect of vehicle and passenger service between Boston and the major population centers of Maine.

PROPOSALS

Railroads and rail transportation are of great importance to the citizens of Maine and to the industrial economy of the state, particularly to the wood and paper industries and the growers and processors of agricultural products. In view of the economic conditions of New England's railroads every effort must be made to support and encourage preservation and further development of essential rail transportation. The efforts being taken by the Department of Transportation in this area are as follows:

The first is an overall consultant study to more completely review the present and future rail transportation needs of the State. This effort will consist of a general, time-phased analysis of short term (existing), intermediate term (1980) and long term (1990) needs for railroad service to support the economy of Maine. The analysis and evaluation of existing railroad freight service will include the amount of freight service being provided, the numbers of carloads handled, the condition of equipment and facilities, cost of services and the interrelationship with other modes of transportation.

Based upon the information developed, future trends will be projected and specific reference will be made to such items as: branch lines that may be the subject of abandonment in the near future, the requirements for equipment replacement, the possibilities of the merger of Maine railroads particularly the Bangor and Aroostook and the Maine Central, the effect upon the Maine railroads of the Boston and Maine bankruptcy and reorganization, the need to restore rail passenger service to include type, cities to be served and estimated costs for rehabilitation of track and purchase of equipment. Recommendations will also be made concerning areas where additional study is required to further evaluate the future of rail transportation in Maine.

The next area receiving considerable attention is the subject of rail rates. The Maine Department of Transportation and The Department of Agriculture are participating with the New England Governors Conference, New England Grain and Feed Council, the Water Transport Association and other interested groups in a petition to the Interstate Commerce Commission to institute an inquiry into railroad rates and service for the movement of feed grains from mid-western origins to northeastern destinations. The objective of the petition is to improve service and freight rates currently being charged and provided by the railroads in New England.

The reorganization of the Boston and Maine Railroad is another area where considerable effort is being applied. The Department of Transportation, as a member of the New England Rail Office, is currently participating in a study of the Boston and Maine which includes its financial condition and physical characteristics for the purpose of evaluating present and future service needs for northern New England and the development of a plan for the reorganization of the railroad,

The Department is also actively engaged in reviewing the recommended Order and Report of the Administrative Law Judge of the Interstate Commerce Commission issued February 1973, which approved the Trustee Plan for reorganization with significant modifications. The recommended Order calls for the Trustees to submit a definite plan on or before June 30, 1974. Further hearings in the proceedings have been set for September 9, 1974 to receive evidence on any plans then pending.

With regard to the Boston and Maine reorganization the Department, in cooperation with The Public Utilities Commission, has filed exceptions with the Interstate Commerce Commission to a portion of the Administrative Law Judge's Report which recommended the acquisition of commuter lines and "other properties of the Boston and Maine in Massachusetts" by the Commonwealth of Massachusetts. It is the position of Maine that the viable portions of the Boston and Maine need not be publicly owned. According to the Administrative Law Judge Report these lines include Rigby Yard (South Portland) to Worcester; the Connecticut River Line and Ayer, Massachusetts to Mechanicville, New York. It is also the stated position that if the only way that successful reorganization of the Boston and Maine can be accomplished is by the acquisition of right of way by the states involved, then the Interstate Commerce Commission should retain jurisdiction to determine the reasonableness of lease back charges and maintenance agreements.

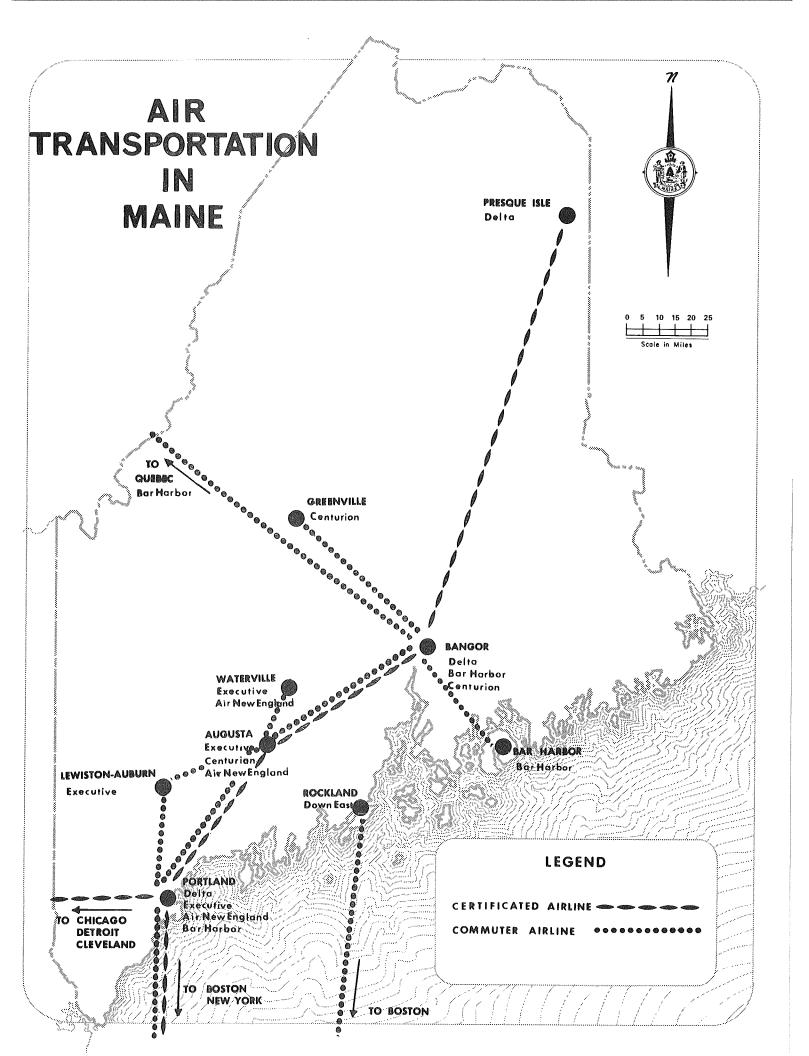
In a related matter the Interstate Commerce Commission has initiated an investigation of the railroad situation in the northeast with particular reference on bankrupt railroads including the Boston and Maine. The Commission investigation seeks to determine whether present services are adequate for the transportation needs of the region and the National Transportation Policy with particular emphasis upon whether adequate service to the public requires operation by two or more competing rail systems. The State of Maine has adopted the position that a competitive route via a revitalized or merged Boston and Maine should be maintained through the Mechanicville, New York gateway in addition to the Penn-Central route via Boston and Maine at Worcester, Massachusetts. In addition, the Commission has been urged to proceed with the expeditions resolution of the several abandonment cases now before it involving both the Penn-Central and the Boston and Maine.

Effort will also be applied in the area of private and university sponsored research and U. S. Government programs to evaluate and develop innovative rail systems. One such system is the car-train concept currently operating between Washington and Florida. It may be feasible to operate such train systems during the summer from the New York area to Portland or Bangor. Another such system could be special seasonal trains to the ski or coastal areas with additional feeder service being provided by bus or comparable systems.

The subject of funding for improvements and maintenance of highway-railroad grade separation structures which are not eligible for federal funding is not eligible for federal funding is another area receiving attention. The funds available for improvements to structures which are not on the federal aid or state highway system are very limited and in order to provide assistance to the Maine railroads legislature has been proposed which will allow the Department to utilize highway funds to initiate improvements for structures on the State Aid System.

In addition to the more specific areas outlined above, effort will also be directed toward areas such as: improved service and utilization of railroads for the shipment of potatoes; the possible utilization of unit trains for the movement of grain and increased rail activity to and from our major ports. CHAPTER II

A I R T R A N S P O R T A T I O N



AIR TRANSPORTATION

SITUATION

The Air Transportation System in Maine consists of public and private airports, airway systems, a certificated airline, commuter airlines, charter, business and private aircraft. The utilization of air transportation continues to increase in Maine and there are numerous aviation facilities and airports located throughout the State. Twenty-eight of the airports have paved runways and the remaining are either a gravel or grass land strip. Eight of the airports with paved runways are considered to be major facilities and are currently receiving scheduled passenger service. These airports are located at Portland, Bangor, Presque Isle, Lewiston-Auburn, Augusta-Waterville, Bar Harbor and Rockland.

The facilities and landing areas at the three existing jet airports (Portland, Bangor and Presque Isle) appear to be reasonably adequate to accommodate current volumes of aircraft and passengers with only modest improvements and expansion. The airports currently being served by the commuter airlines are also capable of accommodating todays' aircraft and passenger traffic with a continuation of improvement projects generally oriented toward maintaining existing facilities and the installation of instrument landing aids to increase safety and utilization during inclement weather. The facilities available at the other public airports throughout the State appear to be adequate to satisfy the needs of general aviation and require only minimum additions or improvements. Some additional new airports at selected locations may prove to be desirable for economic development and/or to replace existing outmoded airports.

The air transportation service currently available to the Maine public is provided by one certificated airline, five commuter airlines, and various charter and air taxi operators. Delta Airline is the only one certified by the Civil Aeronautics Board to provide regulated, scheduled service in the State and it provides jet service to and from the major airports at Portland, Bangor and Presque Isle. The Delta certificate also includes the requirement to serve the other five airports mentioned above. However, Delta has received permission from the Civil Aeronautics Board to temporarily suspend service at these airports and substitute service is being provided by various commuter airlines. In the event commuter service is discontinued Delta is required to provide service under the terms of the certificate.

The commuter airlines (in some instances referred to as third level or supplemental air carriers) operate in accordance with Federal Aviation Agency Safety standards and procedures and provide non-regulated service to and from the airports not being served by Delta. In this regard Centurion Airlines has recently initiated service between Bangor, Augusta and Greenville. These airlines are permitted to develop their own routes and schedules. However, under the Civil Aeronautics Board temporary suspension order a minimum frequency of service is required. In addition, a recent Civil Aeronautics Board ruling changed the minimum take-off weight restriction for commuter airlines and they are now authorized to carry 30 passengers or a 7,500 pound payload. This change will also permit the installation of additional safety devices and passenger comforts in the aircraft being utilized. There are five commuter airlines currently operating in the State and providing a limited scheduled service. These are: Executive, Air New England, Down East, Bar Harbor Airways, and Centurion Airlines.

The charter and air taxi operators further expand the service provided by the commuter airlines and provide to the public an additional source of air transportation. This is an "on-call" type service and is generally available at most of the smaller airports.

With regard to the overall air service available to the public, it can be stated that the service provided at the three major jet airports has generally improved since Delta Airlines acquired Northeast Airlines in August of this year and there has been no appreciable change in the commuter airline service being provided at the other airports. The only exception to this is that Presque Isle has suffered some reduction in the number of daily flights available due to the discontinuance of service by Aroostook Airways.

The routes flown and the airports served by the certificated and commuter airlines are shown on the route map. In addition the following table is provided to indicate the airlines currently serving these airports and the number of daily arrivals and departures available to the public.

AIRPORT	AIRLINE	ARRIVALS*	DEPARTURES*
Portland	Delta Air New England Executive Bar Harbor	9 6 6 3	9 6 6 3
Bangor	Delta Bar Harbor Centurion	7 2 3	8 2 3
Presque Isle	Delta	2	2
Augusta	Executive Air New England Centurion	5 6 1	5 6 1
Waterville	Executive Air New England	4 3	4 3
Lewiston/Auburn	Executive	5	5
Rockland	Down East	3	3
Bar Harbor	Bar Harbor	3	3
Greenville	Centurion	2	2
*Weekday Flights, Subject to change.			

PROBLEM AREAS

In the light of the existing situation it would appear that air transportation available to the public in Maine is generally adequate to satisfy the demand for service. This, however, is not necessarily the case. Comments and opinions expressed by various segments of the traveling public: private, business, state and local government indicate that the air service currently being provided by the scheduled airlines should be improved. A few of the more important factors contributing to these opinions are: The "end of the line" geographical position of Maine, the dependence upon a single certificated airline, the limitations of the commuter airlines, frequency of schedules, airport facilities and the dependence upon Boston for the interchange of flights.

In general, the aviation problem in Maine can be placed in two categories, facilities and service. The first category relates to requirements for airport development, passenger and freight facilities and access roads to airports. The other category is that of scheduled service which pertains to such areas as the numbers and frequencies of flights provided and the routes being flown by the various airlines.

PROPOSALS

The provision of air transportation in Maine which will satisfy not only the demands of the traveling public, but also be acceptable to the aviation industry is a very complex problem and will require comprehensive evaluation, planning and cooperation by State, local and private agencies.

The Department has recognized the requirement to conduct a study which will determine, analyze and forecast the statewide demands for airports and associated facilities. Accordingly action has been initiated by the State and a combination Federal-New England Regional Commission Grant has been obtained to fund a Statewide Systems Plan. Negotiations are currently in progress to select a Consultant to accomplish the study.

The subject of frequencies and routes of airline service is well recognized by all aviation interests not only in Maine but also in the rest of New England. The Civil Aeronautics Board is currently conducting a New England Service Investigation to determine what changes, if any, in service should be authorized for New England and the subject of continued and expanded service for Maine is part of this investigation. The Department, representing the State, and the cities and towns involved are actively participating in this investigation and proceedings.

The State of Maine has adopted the position that certificated subsidized service for Maine communities should be vested in a single carrier, and not divided up among the numerous commuter carriers who have interim suspension/substitution arrangements with Delta. The state has also recommended that certificated subsidized service for the Maine points should be authorized for an experimental period of at least seven years. While the State of Maine believes a newly subsidized certificated carrier would have proper incentives to promote and develop the needed service and would be preferable to compelling service by a reluctant trunkline, Delta should have the obligation for service if all or a part of the local service experiment proves unsuccessful. In addition, the City of Portland urges increased intra-New England Regional Service plus competitive service with Delta to major markets outside of New England and the City of Bangor asks the Board to determine a service level for Delta to its major markets before determining to what, if any, extent commuter or local service carriers should be certificated.

Providing assistance to the City of Bangor in the continuing development of Bangor International Airport is another area where planning effort is being applied. In this regard the possibility of obtaining international air freight flag stop service through Bangor is being studied. Commodity flow investigations and discussions with various overseas airlines are in progress to determine the interest and feasibility of such service.

Another area being considered is the possibility of developing and expanding air service between Maine and Canada and more specifically a Portland to Montreal service.

The Department has also requested modest funding which will permit airport improvements to be made throughout the State to provide for dependability of service and improve safety. In addition, funds have been requested to continue the development of Master Plans for improvements to individual airports.

The above approaches and actions are considered to be the more important planning activities. The results of the air transportation study, the findings and recommendations of the New England Service Investigation and the results of the other actions mentioned will assist and influence, to a great degree, the formulation of future air transportation policies and programs within the State.

CHAPTER III

PORT FACILITIES

PORT FACILITIES

SITUATION

The principal ports utilized for international shipping are Portland and Searsport. In addition, there are various other ports along the coast of Maine located in areas such as Bangor, Bar Harbor, Bath, Bucksport, Eastport, Kittery, Rockland and Rockport. The cargo shipped to and from these ports include products such as: crude and refined oil, paper products, woodpulp, fish products, flour, china clay, hides and general cargo.

The Port of Portland is the largest of the Maine ports in terms of traffic and tonnage handled. Statistics compiled by the U.S. Government in 1970 indicate that Portland is the second largest crude oil port on the east coast, the largest being Philadelphia. The Portland Harbor is approximately $3\frac{1}{2}$ miles from the open sea, is ice free and the controlling depth of the Maine Channel is 45 feet. The main harbor waterfront area provides facilities and services to accommodate tankers, cargo, government and other commercial vessels. The Fore River further extends the waterfront areas and provides additional facilities and services.

There are several terminals and piers in the port capable of handling import and export cargo. The largest and most significant terminal is operated by the Portland Pipeline Corporation and provides facilities to transfer substantial quantities of crude oil to major refineries in Montreal, Quebec. The Maine State Pier is another important facility and provides equipment and services to transfer general cargo directly from a vessel to a rail car or truck and, if required, to a covered storage area. In addition, suitable equipment is being made available to handle a reasonable volume of ocean container traffic. The Portland International Ferry terminal is another very active facility. This terminal currently serves the Portland to Nova Scotia ferry "Prince of Fundy". However, the terminal has an adjustable transfer bridge and sufficient paved parking space to accommodate additional feeder type vessels requiring a roll-on, roll-off capability.

The last facility to be covered is the Portland Terminal Company Pier #3. Although the pier is inactive at this time, equipment and facilities did exist to handle bulk cargo, such as China clay and scrap metal, directly from a vessel to rail cars. In addition to the facilities outlined above, the port is further served by several additional private piers which handle petroleum products, three railroads, numerous trucking companies, a major arterial highway from the waterfront to the Interstate Highway System and an important commercial airport.

The other principal port in Maine is Searsport, which is located on the west side of Penobscot Bay approximately 30 miles from the open sea. The port is ice free and has a controlling depth of 40 feet. There are two piers at Searsport capable of handling general and bulk cargo and petroleum products. One is the Bangor and Aroostook Railroad Pier which is equipped with two traveling gantry cranes and has the capability to transfer cargo directly from a vessel to rail cars or to covered storage areas on the pier. Pipeline facilities are also available on the pier for the transfer of petroleum products. The other pier is operated by the C.H. Sprague Company and can handle basically dry bulk cargo. Three movable towers are equipped with grab buckets to transfer cargo from a vessel to top loaded rail cars or trucks. In addition to the piers, the port is served by the Bangor and Aroostook Railroad with a yard capacity of 700 cars and several trucking companies.

The type and magnitude of shipping activity through the two principal ports has changed in recent years. The following table indicates the number and trend of cargo and oil vessels utilizing these ports for the period 1960 to 1972. It is of particular interest to note the decline in cargo vessels and the increase in oil vessels through the port of Portland, and the lack of growth in the number of vessels utilizing Searsport.

PORTLAND

YEAR	CARGO VESSELS	OIL VESSELS	TOTAL
1960	171	554	725
1965	69	551	620
1969	36	734	770
1970	43	886	929
1971	23	932	955
1972	24	1014	1038

SEARSPORT

YEAR	CARGO VESSELS	OIL VESSELS	TOTAL
1960	95	64	159
1965	73	87	160
1969	72	56	128
1970	96	50	146
1971	60	46	106
1972	93	51	144

In addition to the services provided by the two principal ports, there are several other ports in Maine, such as Bucksport, which provide limited cargo and oil handling facilities and services and Bar Harbor, which provides terminal facilities for the International Ferry to Yarmouth, Nova Scotia. The remaining ports are utilized primarily by the fishing industry and for recreational purposes.

PROBLEM AREAS

The gradual but significant reduction in the number of cargo vessels utilizing Maine ports has resulted in a steady decline in port activity and the deterioration of waterfront facilities. Present trends in water transportation are toward intermodal coordination and the use of containers. However, the ports in Maine have not had the facilities and the equipment to efficiently handle ocean container traffic. The subject of commodity flow is another area of concern. There is insufficient cargo moving through the ports at this time to justify the establishment of scheduled service by ship companies. Therefore, import-export cargo from many Maine firms, not large enough to attract a vessel to a Maine Port, is handled through the larger ports of Boston and New York. In addition to the problems associated with cargo vessels, other problems such as insufficient inner harbor depth to accommodate the new super tankers, emphasis on harbor and coastline damage due to oil pollution and the trend toward the development of deep water off shore oil terminals and facilities could contribute to a further decline in port activities.

PROPOSALS

The modernization of Maine ports and increased traffic in dry cargo and containers is required if improvement in port activity is expected. This is recognized and concentrated effort is being expended by the Department of Transportation to improve the situation.

One of the more significant accomplishments is the development of a demonstration project to provide a minimum container handling capability at the State Pier in Portland. A Grant of \$90,000 has been obtained from the New England Regional Commission to lease the necessary equipment required to load and unload containers from combination cargo vessels in a more efficient manner.

The Department has also initiated a request, with the Governor's assistance, to the Legislature for \$500,000 to acquire land, provide additional paved storage space and other improvements in the vicinity of the State Pier. In this regard a consultant firm has developed a report concerning a feasible location and layout, from an engineering viewpoint, for a modern Marine Terminal in the port of Portland. In addition, the Department is participating with the Department of Commerce and Industry in a study of Marine Terminal development at Searsport.

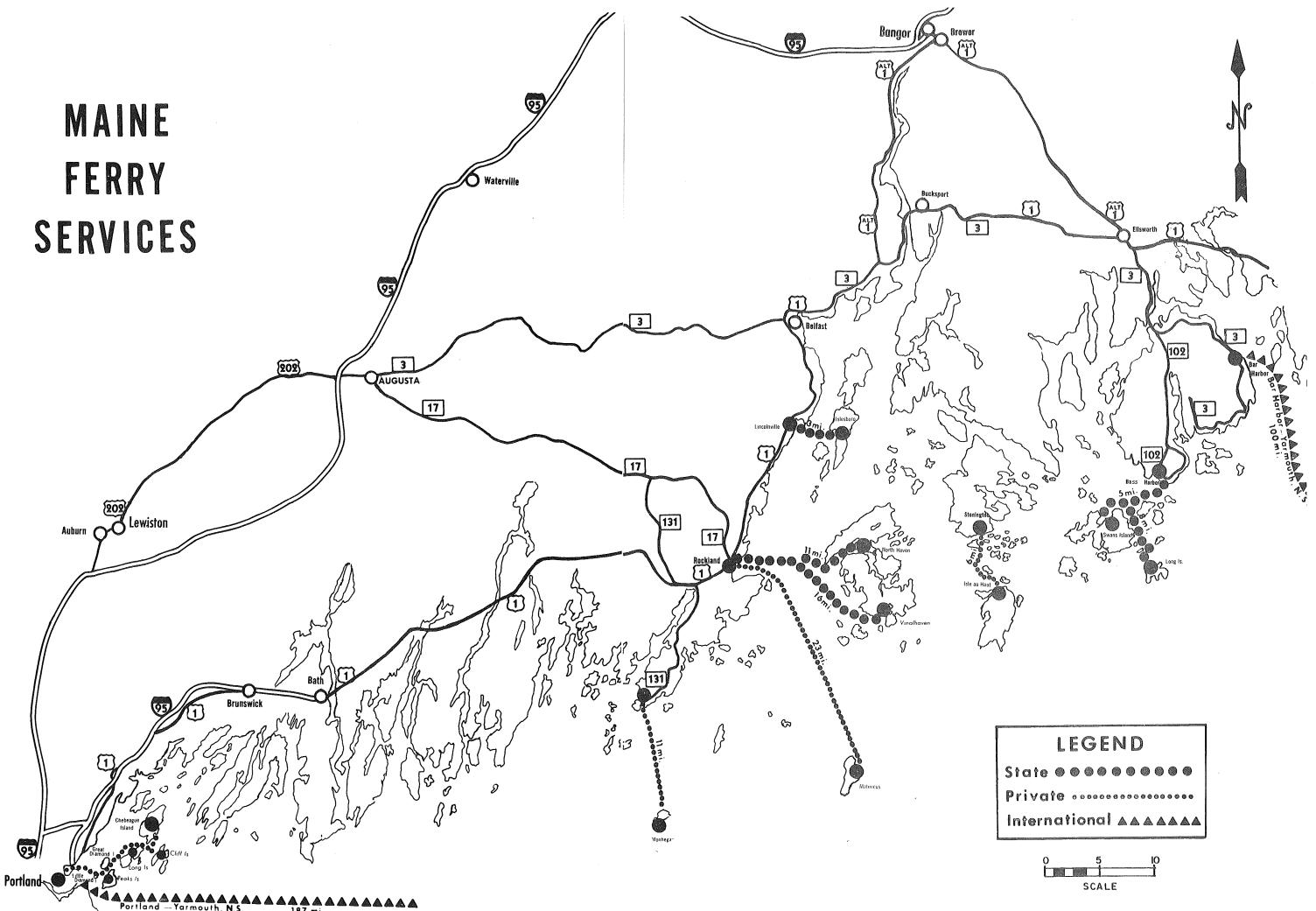
The Department is also cooperating with various agencies to explore the possibility of establishing a feeder type roll-on, roll-off service from Halifax or New York to Maine ports. In this regard the Department is also completing an inventory to determine the types and quantities of containerized commodities imported and exported by industries in northern New England which would support this type of service.

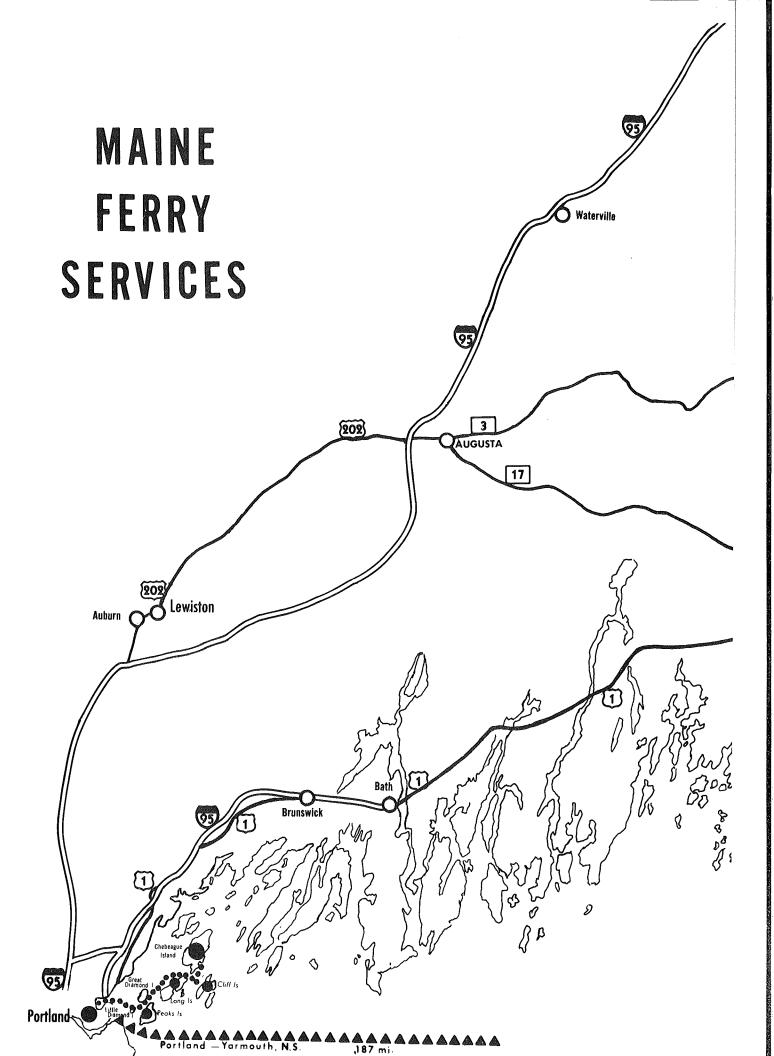
CHAPTER IV

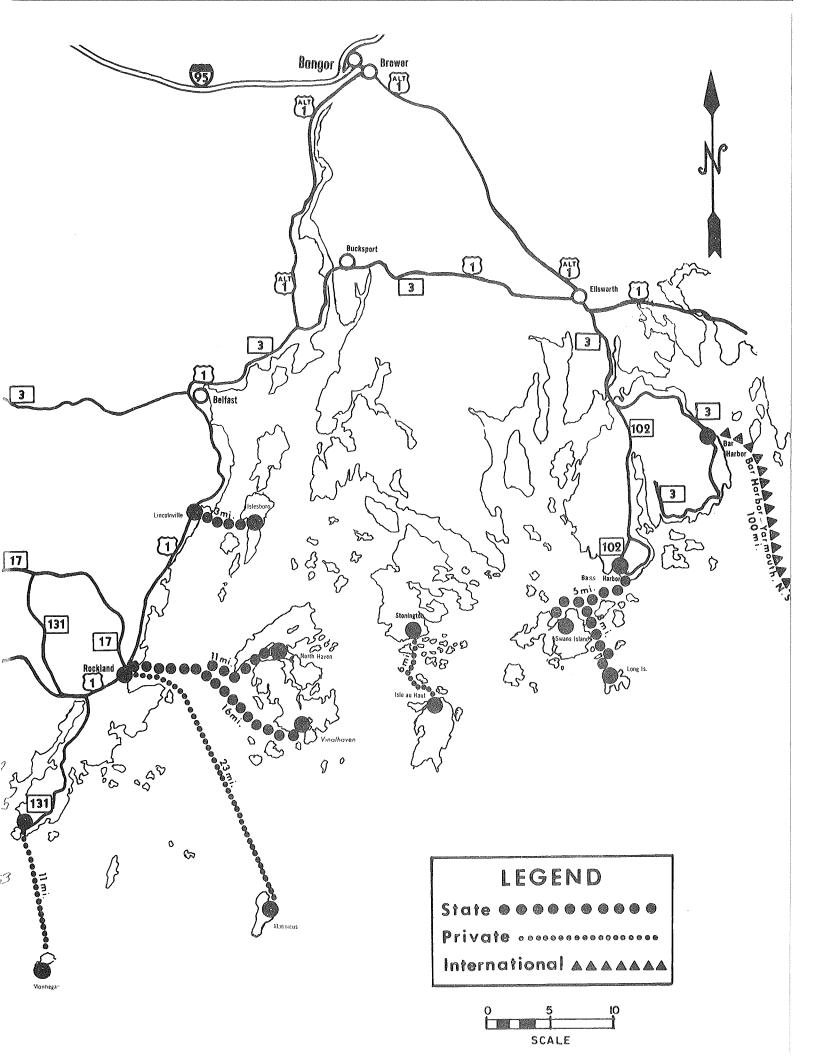
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FERRY SERVICE

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FERRY SERVICE

SITUATION

Passenger, vehicle and freight ferry service in Maine is provided by the State and private operators between the mainland, various islands off the coast and Nova Scotia. The State of Maine owns, operates and provides ferry services in Penobscot Bay except for the Rockland to Matinicus Island, Stonington to Isle Au Haut, and Port Clyde to Monhegan services which are privately owned and operated. The Casco Bay Lines owns and operates service from the Portland mainland to various islands in Portland Harbor and two international systems provide service from Portland and Bar Harbor to Yarmouth, Nova Scotia. The routes of the State, private and international ferry systems are depicted on the preceding map.

STATE FERRY SERVICE

The authority for the operation of the State Ferry Service is contained in the private and special laws of 1957 and 1959. The Department of Transportation, through its Bureau of Waterways, operates the system and provides service from the mainland to North Haven, Vinalhaven, Islesboro, Swans Island and Long Island Plantation. The facilities utilized to operate the system consist of five vessels and eight terminals.

The largest terminal and the Ferry Service administrative office is located at Rockland and a combined waiting room and ticket agent's office is provided at each of the other mainland and island terminals. Four of the five vessels are used to meet normal operating schedules and the fifth one is retained as a spare to cover maintenance, demands for additional service or other contingencies. Each vessel requires a minimum operating crew of four men, consisting of a captain, an engineer, and two able seamen. The vessels all have the capability to load and unload from the bow and the stern thereby eliminating the need to back vehicles off when debarking. In addition, the vessels are interchangeable on the various routes with the exception of the "Governor Muskie". This vessel is restricted to the Lincolnville-Islesboro route as it was designed as a harbor ferry and is not suited for operations on the open sea. The following table summarizes information pertaining to each vessel and includes the date placed in service, passenger and vehicle capacity and the route normally assigned. The table also indicates the distance and one-way travel time between terminals and the number of daily round trips normally scheduled during a typical summer season.

VESSELS	PLACED IN SERVICE	CAPAC PASSENGERS	ITY VEHICLES	ROUTE
Governor Curtis	1968	175	17	Vinalhaven
Governor Muskie	1959	125	24	Islesboro
North Haven	1960	125	8-10	North Haven
William S. Silsby	1960	125	8-10	Swans Island
Everett Libby	1960	175	12	Spare

ROUTES	MILES	TIME <u>HR./MIN.</u>	DAILY ROUND TRIPS
Rockland to Vinalhaven	16	1:25	3
Rockland to North Haven	11	1:10	3
Lincolnville to Islesboro	3	0:25	9
Bass Harbor to Swans Island	5	0:40	5
Bass Harbor to	8	1:05	1*

Long Island Plantation

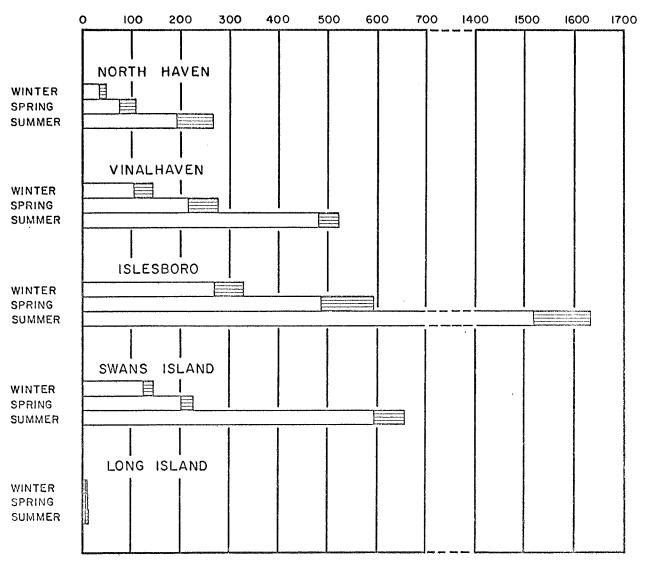
*Wed. and Thurs. Only.

The numbers of passengers and vehicles carried by the State Ferry Service increased at a uniform, moderate rate from 1962 through 1967 and then experienced a noticeable increase which established the trend for the present annual growth rate of approximately 11 percent. This rate of growth in traffic is graphically depicted on the following table.

250,000 CARRIED CARRIED 200,000 PASSENGERS 150,000 100,000 VEHICLES CARRIED 50,000 0 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 YEAR - 25 -

PASSENGER AND VEHICLE TRAFFIC

With regard to traffic increases, another important aspect is that of the seasonal variations. In general it can be stated that during the month of August traffic is five times greater than for the month of January. This significant seasonal change is a factor to be carefully considered when requirements for additional facilities are developed. The following table indicates the number of vehicles transported during a typical week in the winter, spring and summer of 1972.



NUMBER OF VEHICLES





NOTE: TYPICAL WEEK IN WINTER IS THAT ENDING JANUARY 29, 1972. TYPICAL WEEK IN SPRING IS THAT ENDING MAY 13, 1972. TYPICAL WEEK IN SUMMER IS THAT ENDING AUGUST 26, 1972.

PRIVATE FERRY SERVICE

Three private operators provide ferry service in Penobscot Bay. One service which is subsidized by the State is provided from Rockland to Matinicus Island. The vessel utilized is capable of carrying 54 passengers, light freight and mail over the 23-mile route in approximatlely two hours. In addition, one vehicle may also be transported in good weather. The pier facility utilized at Rockland is part of the State terminal, but has its own transfer bridge. The docking facility at Matinicus Island is privately owned. The Stonington to Isle Au Haut service is provided by two vessels: one has a capacity of 47 passengers, the other is capable of carrying 20 passengers. The vessels utilize a privately owned pier at Stonington and the public docking area at Isle Au Haut. No automobiles are transported on these vessels and traffic consists primarily of summer tourists and light freight. The Port Clyde to Monhegan Island service is provided by a vessel capable of carrying 70 passengers and 5,300 pounds of cargo over the 11mile route in approximately one hour. The vessel is also capable of transporting one automobile in good weather. The docking facility at Port Clyde is owned by the operator and the facility at Monhegan is a municipal pier.

In Casco Bay, the private operator is the Casco Bay Lines who provides passenger, freight and vehicle traffic from the Portland mainland to various islands in Portland Harbor. The line operates five vessels, four are passenger vessels and one is primarily a car ferry capable of transporting 9 automobiles. Two of the passenger vessels have a capacity of 300 each, one can carry 265 and other 235.

The Casco Bay Lines utilize several terminals in the Portland Harbor. The principal facility is Custom House Wharf, which is the main terminal and administrative office for Casco Bay Lines. This facility is located off Commercial Street in Portland, is leased from a private group and provides a passenger waiting room and a freight storage area. The Portland Pier, owned by the City of Portland, has a floating transfer bridge and is used to accommodate the Casco Bay vehicle The terminal utilized on Peaks Island is owned by the State and consists of ferry. two piers: a single wooden pier with a fixed freight ramp and a modern pier with an adjustable transfer bridge capable of handling the vehicle ferry. The other island terminals utilized by Casco Bay Lines are located on Long Island, Little Diamond Island, Great Diamond Island, Chebeague Island and Cliff Island. The terminal at Cliff Island is owned by the City of Portland and the remaining terminals are owned by the State. These piers are designed primarily to accommodate passenger traffic. However, with the exception of the Little Diamond pier they will support vehicle traffic to the limit of ten tons.

The International Ferry Services available to the public are operated between Yarmouth, Nova Scotia and the ports of Bar Harbor and Portland. These services are extensively used by tourists and the trucking industry. The Canadian National Railway operates the vessel "Bluenose" from Bar Harbor with a capacity of 600 passengers and 150 vehicles. Lion Ferry A/B of Sweden provides service from Portland with the "Prince of Fundy" which has a capacity of 525 passengers and 187 vehicles. In addition, Lion Ferry proposes to add a second vessel to the Portland service this summer. This new vessel named "Bolero" will have a capacity of 880 passengers and 230 vehicles. The international terminals in Portland and Bar Harbor provide customs and immigration room, facilities for passenger comfort and ample paved vehicle and truck parking space.

PROBLEM AREAS

The two international ferry systems have proven to be highly successful in their operations and summer traffic has increased to such an extent that additional service is required to satisfy the demand. The State Ferry Service also has a requirement for increased service during the summer season. There have been frequent peak periods where the vehicle capacity of the vessels have been reached on certain routes and a significant number of vehicles have been left at the terminals. In light of the trend toward increased demands for service this situation is expected to continue. In addition to this problem, there are other deficiencies in facilities and service such as: the need for increased parking space and improved passenger facilities at various terminals, pier and transfer bridge improvements, greater disemination of information pertaining to services available, and improved scheduling. The problem of vessel replacement must also be considered. The life expectancy of a ferry vessel is approximately 20 years and four of the five State vessels have been in service since early 1960.

The subject of financial support is another area of concern. The State Ferry Service, even with increased traffic, is unable to meet operational costs from its own revenues. The continuation of this service to the public is therefore heavily dependent upon general fund appropriations to support not only current operations, but also to provide funding for capital improvement projects. Another significant fiscal problem is the State subsidy to support the financially uncertain Matinicus Island service. Without subsidy, the private operator may consider abandonment of his service if sufficient usage does not occur. In this event the State Ferry System may be required to provide a service to Matinicus Island.

PROPOSALS

The primary planning effort in the area of ferry service consists of a consultant contract, currently in progress, to assess the past, present and future ferry service demand and to develop a program for scheduled improvements in services and facilities. In addition, the consultant will review the interrelationships of ferry service to other modes of transportation to determine the necessity for adjustments in terminal facilities and other intermodal requirements.

In view of the apparent successful operations of the Maine to Nova Scotia international ferry service and the increasing vehicle conjestion in the Northeast Corridor the State is currently conducting a "Marine Highway" Study which contemplates the operation of two combination passenger and vehicle carrying vessels daily between the ports of Portland and New York. This would provide one trip per day in each direction.

The vessels would provide a reliable alternative for automobile tourists as well as commercial highway traffic as the trip would continue for both the vehicle and the driver while the traveler enjoyed comfortable overnight accommodations. The vessels would also utilize certain innovative features such as modular passenger accommodations adjustable to traffic demands and gas powered turbines that would permit relatively high operating speeds.

To determine the feasibility of a service of this type it is necessary to develop an estimate of the traffic potentially available, the size and type of ships and other facilities necessary to handle the traffic and whether or not such ships can be operated profitably on revenues they can reasonably expect to generate. The transit time is another factor which must be considered as it will have a definite influence on the amount of truck-traffic that the vessels can expect to handle at least during the initial stages of the service.

The State of Maine undertook the task of determining what traffic might reasonably use the service, study the locations of port facilities at both Portland and New York, study certain innovative services such as small package handling (utilizing specialized containers), and develop a rate system based upon the costs of auto travelers and commercial vehicles when using conventional highway routes.

Additional information developed indicates that ocean containers now moving over the highways could be expected to utilize the Marine Highway's sailing schedule and roll-on, roll-off capability as a feeder service to and from the port of New York.

The portions of the study completed and reported on to date conclude that a substantial number of passengers and passenger vehicles can be expected to use a service of this type once inaugurated. Although the initial use by commercial vehicles may be relatively light, the study suggests that this source of traffic would prove increasingly important as time goes on. In both areas it would be necessary to make the service known to prospective users through an adequate promotion program.

The last area with regard to ferry service which will require continuing review by the Department is the desirability of providing state ferry service to various other islands should existing private service be discontinued.

CHAPTER V

HIGHWAY SYSTEMS

SITUATION

The Highway system is a particularly important framework of transportation in the State of Maine. Not only do most trips involving the movement of goods and people occur on highways but the highway system, generally provides the connecting link between airports, waterports and rail facilities. Few trips occur which do not use the highway system for some portion of the trip. The predominant use of the highway system is by the private automobile. However, the trucking industry and most public transportation including inter and intra-city buses, taxis, ambulances, and school buses are dependent on the highway system for the transportation service they provide.

There are 21,424 miles of public highway in the State of Maine. The total mileage in the network has changed very little over the years. In 1950, for example, the highway network included 22,032 miles. This represents a decrease since 1950 of about 600 miles; however, there are more multiple lane facilities today, so on balance, the system remains essentially the same.

Three basic sub-systems make up the highway network. They are State Highways, State Aid Highways, and Town Ways. In addition, there is the Maine Turnpike, which provides a vital arterial function, and a few other roads under other jurisdictions. The State Highway System includes the major arterial highways in the State and consist of some 3,891 miles. The State Aid Highway system is generally considered to be a collector road system and, in general, connects the local or town way system with segments of the State Highway System. There are 7,631 miles of State Aid Highways in the State. The remaining portion of the highway network serves essentially local traffic, and is categorized as town ways. There are some 9,902 miles of highway in this category.

The Maine Department of Transportation is entirely responsible for construction improvements on the State Highway System. Also, the Maine Department of Transportation is responsible for the total maintenance of approximately 3,700 miles of the State Highway System, which includes summer maintenance and plowing and sanding during the winter months.

The construction and reconstruction of State Aid Highways is a joint State and local responsibility with the State matching the appropriations made by the town. The matching ratios are based on town valuation with those towns having lesser valuations receiving more favorable matching ratios. Additionally, apportionments of Special State Aid funds, made available by the Legislature, are available for the construction and reconstruction of certain sections of State Aid Highways.

The Maine Department of Transportation is responsible for the summer maintenance of approximately 6,800 miles of State Aid Highways with the towns being responsible for the remaining portion. The towns are responsible for snow removal and sanding on State Aid Highway; however, the State reimburses the towns for a significant portion of the winter maintenance costs. The towns are entirely responsible for construction and maintenance of all town ways. The State does make available a significant annual allotment of funds, on a non-matching basis, to assist towns in the improvement of rural town roads. Winter maintenance on town ways is the responsibility of the local units of government; however, the State does provide for significant reimbursement of winter maintenance costs for the major portion of town ways on the same basis as State Aid Highways.

Federal designations are also applied to certain roads in the State as Federal Aid Primary, Federal Aid Secondary and other miscellaneous federal designations. Financial assistance is available from the Federal Government on a cost reimbursement by category basis to construct or reconstruct designated federal aid highways.

The following table summarizes existing highway mileages as of March 1, 1972.

STATE			FEDERAL-AID PRIMARY		FEDERAL-AID SECONDARY
State Highway	3,891	includes	1,881	and	1,752
State Aid	7,631	includes		and	805
Town Way & Misc.	9,902	includes	55	and	
TOTAL	21,424	includes	1,936	and	2,557

HIGHWAY MILEAGES

There are also approximately 4,600 bridges in the State of Maine. Of these the Maine Department of Transportation is responsible for maintaining approximately 2,600. Also, the State contributes to the cost of construction and reconstruction of those bridges on State Aid Highways. The amount of the State's contribution is based on the valuation of the town in which the bridge is located with those towns having smaller valuations receiving a more favorable matching ratio.

Although the number of miles of highway in the State of Maine has not increased appreciably over the years, the use of the highway system has grown tremendously. The number of licensed drivers, registered vehicles, and travel expressed in vehicle miles regularly increases each year. The Maine licensed drivers on our highways now number over 550,000 and the number of Maine vehicles using our roads also is now approximately 550,000. Travel on our highways exceeds 6 billion vehicle miles annually. In the last ten years the number of Maine licensed drivers has increased at a rate of approximately 2% per year, while Maine registered motor vehicles have increased at the rate of approximately 4% per year and total travel on Maine highways has increased at a rate slightly in excess of 5% per year. It is expected that use of the highway system will continue to grow at this rate to the year 2000 when travel will have doubled over current usage levels

The trucking industry is a major user of the highways in Maine and consists of common, contract, private and exempt motor carriers.

The common carrier provides a service to the general public and operates over regular routes. The common carrier is required to obtain authority to operate from the Interstate Commerce Commission or the Maine Public Utilities Commission or both Agencies if both interstate and intrastate service is provided.

The contract carrier provides a service under special and individual contracts or agreements and is also required to obtain authority to operate from Federal or State regulatory Agencies. Private carriers transport commodities as owners or lessees of vehicles when the transportation is in the furtherance of any commercial enterprise. The exempt motor carrier is one involved in transporting agricultural, livestock or fish products from origin to market. Private and exempt carriers are not required to obtain authority from the Interstate Commerce Commission.

Financial support for highways on the State System is provided by the General Highway Fund comprised of revenues derived from fees, excise and license taxes relating to registration, operation and the use of vehicles on public highways and most importantly, taxes on fuels used for the operation of such vehicles. Revenues from these sources are dedicated for expenditure only for highway operations, construction and allied functions. In addition, federal aid for highways is available from the Federal Highway Trust Fund established in 1956. These funds are available to construct and reconstruct roads designated as a part of the federal-aid highway system. There are no federal funds available for maintenance and administration. In addition to allocations made by the legislature from the General Highway Fund for maintenance, construction, administration and for town subsidies, the legislature has found it desirable in recent years to authorize the sale of bonds to support highway construction activities in the State. Bond financing has been considered necessary to ensure that a reasonable construction program is maintained.

PROBLEM AREAS

The Highway Program in the State of Maine continues to face serious financing problems as a result of the extensiveness of the highway network, severe weather conditions, and the rural nature of the State. As previously noted, bond financing to support the highway program has been regularly authorized by the legislature. Highway Construction costs have increased dramatically in recent years. In 1965 the average cost per mile to construct a typical two-lane rural highway on the federal aid primary system was \$278,000. In 1972 the cost per mile increased to \$573,000, or it more than doubled in seven years. The available funds for construction activities, however, during the same period of time have increased only slightly. This has resulted in fewer miles being rebuilt each year. Even with bond financing the rate of deterioration of the highway system exceeds the rate at which reconstruction activities are replacing worn out facilities. Highway safety is another area of particular concern. There are over 25,000 accidents each year on Maine roads. Over 10,000 citizens are injured and over 250 die on Maine Highways each year. Although the accident rates are decreasing modestly each year, the increased use of the highway system results in an intolerably high number of deaths and injuries on our highway system. A concentrated and comprehensive safety program has been initiated in an effort to reduce this tragic situation.

As previously noted there are approximately 4,600 bridges within the State of Maine of which the Maine Department of Transportation is responsible for approximately 2,600. Most of these bridges are at least 30 years of age, with many substantially older than that. The department is currently conducting in depth inspections of both the structural adequacy and traffic safety of the bridges. Many deficiencies will exist as these bridges increase in age and it will be necessary to replace many structures considered unsafe and obsolete.

Although Maine is a relatively rural state with the major highway needs in the rural areas there are, never-the-less, urbanized areas which have critical problems. The growth of traffic has caused capacity deficiencies on many of the older major streets. Also, safety problems and parking problems exist in most of the urban areas in the State. These problems will increase as traffic increases and as the urbanized areas grow.

Pressures for improved transportation facilities and particularly highway facilities require that adequate consideration be given to environmental, social, and economic impacts of all improvements to ensure that the quality of life is enhanced and not decreased significantly. This is an ever increasing problem and requires continued attention.

Maintaining an adequate highway system implies substantial understanding and support. Public information efforts and citizen participation are critical in this regard.

PROPOSALS

Continued inflationary trends in the highway construction industry and the limited available resources to maintain the highway system has caused the Department to examine ways of extending the life of existing facilities. The hot mix resurfacing program is an example of a technique which has been developed to accomplish this. Approximately eight hundred miles of resurfacing were accomplished this past biennium and the program is proposed to be modestly expanded in the future. In addition, the Department has included a number of projects in its current highway construction program labeled Stop Gap Improvement Projects. These projects have been included where the alignment is generally reasonable but problems in the structural condition of the pavement and drainage exist. They are, of course, less expensive due to lower standards and are constructed at selected locations along given sections of roadway. A better riding surface and reduced maintenance costs are expected on these projects. The Stop Gap Improvement type project will compliment the resurfacing projects and should assist in combating the problems caused by inflation and the limited amount of available resources. The Department will continue to improve techniques of monitoring the highway system to ensure that the most critical needs will be accomplished first. Surveillance of the system will be done in such a manner as to anticipate possible deficiencies in the system, providing for the effective correction of such deficiencies with minimum expenditure of available resources in a reasonable manner and with emphasis on relative priorities.

Several activities are proposed to assist in reducing the traffic accidents that occur on the highway system. First, improved engineering techniques will continue to be developed and implemented and analyses of accidents to identify high accident locations and elements of the highway network that are involved in highway accidents will continue to be identified and appropriate improvements made. Secondly, the Department will continue to expand its activities regarding highway safety programs. Increased public information regarding the problems of highway safety will be initiated. In addition, increased local involvement in the safety program and concern for the safety effort will be encouraged. The Department will maintain close coordination with other agencies involved in the overall safety program.

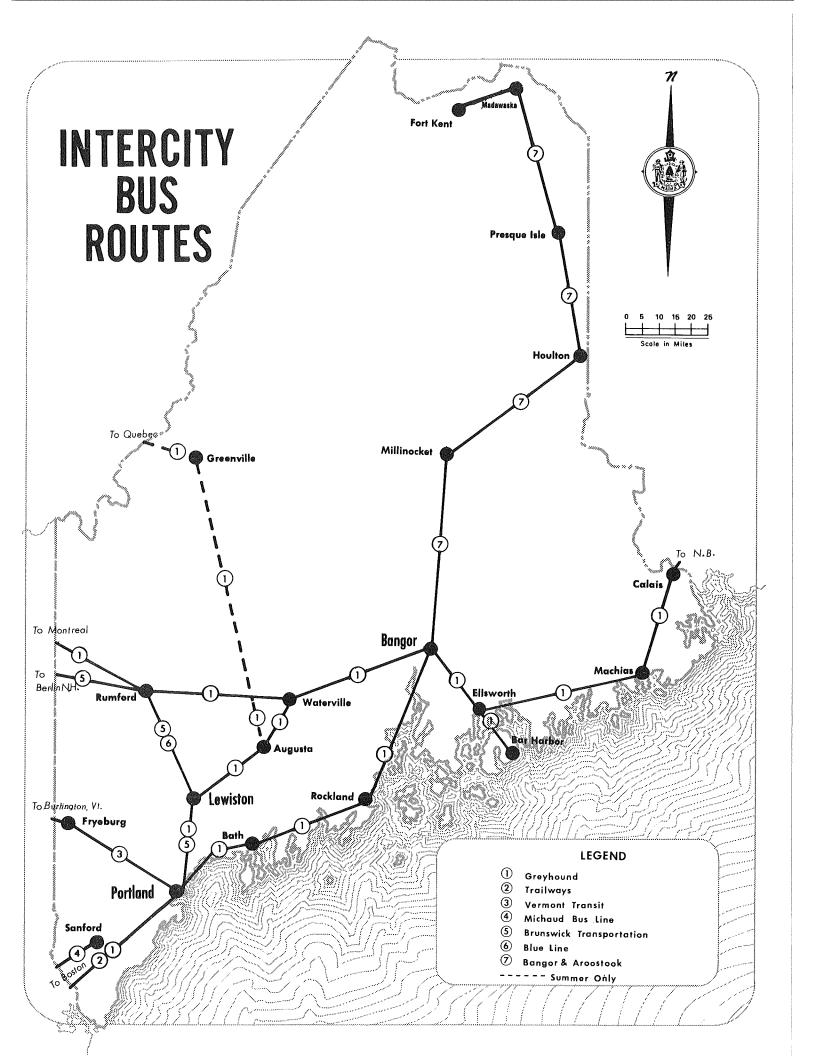
The inspection of bridges will be completed and a program developed to ensure that obsolete bridges are replaced as rapidly as resources allow.

The Department is currently developing what is called an action plan. This plan describes procedures to be followed from the time a highway project is first conceived to the time it is constructed. These procedures will ensure that proper consideration is given to traffic service and the environmental, social and economic impacts of the project. It will also ensure that an opportunity is extended to all interested agencies and individuals so that they may contribute to the planning and development of all projects.

Finally it is proposed that the highway network be developed in such a manner that satisfactory relationships are maintained with all other modes of transportation.

CHAPTER VI

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BUS TRANSPORTATION

SITUATION

Bus transportation in Maine is the only public transport available other than airlines and the ferry service and may, at this time, be considered as three distinct systems. They are the intercity/interstate long distance systems, the urban fixed route systems such as exist in Portland and Lewiston-Auburn and the demand-type systems providing transportation for specialized groups. All of these systems are capable of providing economical service to certain segments of the population which have no other means of transportation.

Bus transportation also falls into two categories, common carriers and charters. The common carriers are regularly scheduled bus lines while charters provide service for special parties and groups. Several of the lines offer both types of service and in many instances the charter service provides greater revenue. Currently there are seven intercity/interstate common carrier bus lines providing service in the State. They are: Greyhound, Bangor and Aroostook, Trailways, Vermont Transit, Brunswick Transportation, Blue Line and Michaud. In addition, there are several other agencies and/or individuals throughout the State which offer charter service. The terminal facilities in the cities and towns served by these lines range from modest down to only bus stops.

The Greyhound Line provides the majority of the intercity/interstate service. Their routes are generally in the southern portion of the State and run from Bangor south to Boston, east to Calais and New Brunswick and west through New Hampshire to Montreal. They also operate a summer route which extends service through Jackman to Quebec. The next largest intercity carrier is the Bangor and Aroostook Line which connects with Greyhound at Bangor and operates north to Madawaska and Edmundston, N.B. where it connects with Canadian lines. The other common carriers operating in the State connect with and supplement the Greyhound line and provide additional service to the west and south. In addition, all lines offer a package service throughout the State which assists the public in the small shipment problem. The principal routes of the common carriers in the State are shown on the route map.

In addition to the intercity/interstate service outlined in the preceeding paragraphs there is local bus service available to certain urban areas of the State. The two more important operations are in the Greater Portland and the Lewiston-Auburn areas. Bus service in the Bangor area is limited to one route which runs from Bangor to the University Campus at Orono and Old Town. The remaining service available in the State is minimal and is provided in the communities of Augusta, Bath and Biddeford-Saco.

The Greater Portland Transit District was recently established by the communities of Portland, South Portland, Westbrook and Cape Elizabeth in order to maintain a local bus system in the Greater Portland area. A federal subsidy was negotiated and proportional contributions based on population were obtained to purchase the Portland Transportation Company and provide funds for capital improvements. The transit District currently provides service on a regular schedule and also furnishes school bus transportation for the Portland and South Portland School Districts. The Hudson Bus Line provides regular service in the Lewiston-Auburn area and provides school bus transportation for the Lewiston School District. The revenue from the school contract continues to finance the significant operational deficit of this company. In an effort to further assist this company with its operating deficit, the Governor's Council authorized a loan of four thousand dollars in December of last year to subsidize the payment of employees' salaries through April 1, 1973. However, this is only a stop gap measure and in view of the progressively deteriorating financial condition of this company, cessation of operations is imminent without some form of public subsidy.

There are currently several other special or demand-type bus services which have been established by various community action program organizations throughout the State to aid low-income groups, the elderly and the handicapped. These programs provide free door to door service for those people who are unable to obtain any other form of transportation.

The various programs differ slightly in form. The north Kennebec CAP provides transportation to all low income groups for trips to health care facilities, while the south Kennebec CAP provides the same service for all purposes. Other services for the elderly are operated by the Knox County and York County CAP's. The programs also vary in type of operation. Some utilize fixed routes and others the more flexible and more common on-call type system.

The most ambitious of these programs is the service provided by Project Independence. This program was designed by Health and Welfare Community services to aid the elderly in Androscoggin, Franklin and Oxford Counties. The transportation component of the program is divided into three separate operations; one, serving the Lewiston area, a second centered in the East Wilton area, and the third serving the Rumford-Norway area. The Lewiston operation is the largest and provides in excess of 2000 rides per month to transport elderly from outlying areas to Health Care, shopping and recreational facilities in the Lewiston-Auburn complex.

PROBLEM AREAS

The intercity/interstate bus line operations appear to be stable. However, due to increased operational costs and decreasing revenues practically all companies have found it necessary to file for rate increases. In general, the services and facilities currently available should be improved within the framework of anticipated demand. Some of the more significant needs considered necessary to attract additional ridership are increased frequency of service and improved connecting schedules with other bus systems, additional express service, modern equipment and terminals which are clean, comfortable and conveniently located for the traveler.

Overall decline in local bus service has been particularly acute in the two major urban areas of Portland and Lewiston-Auburn. The bus companies in these cities have experienced, in recent years, a marked decline in ridership which has reduced operational revenues and necessitated a continuous decrease in the service provided. The decline in ridership can be directly attributed to the increased use and convenience of the private automobile and the tendency to suburbanize housing and disperse shopping centers, which makes bus transportation less viable. The subject of transportation services for specialized groups such as the elderly, low income, and the handicapped is another problem area. While these services are considered desirable on the basis of public need, care must be exercised to assure these services are provided at the lowest possible cost.

In certain cases these programs tend to consider the welfare of the patrons rather than the overall cost of operating the program. There are situations where it might be possible to provide the cost of fares to patrons and utilize existing bus or local taxi systems rather than provide a separate system to serve a very small segment of the population.

PROPOSALS

The planning effort and the development of programs to improve public bus transportation in the urban and rural areas and the requirement to satisfy the needs of specialized groups appears to be the basic responsibility of the communities concerned. However, in view of the number of organizations involved, each with its special interest or concern, a need exists for a statewide coordinating agency to monitor these programs and attempt to prevent conflicts and duplication of planning effort. In this regard, the Department of Transportation will continue to provide assistance to obtain planning grants and in the coordination of the various interagency proposals and programs in an effort to obtain the most appropriate form of bus transportation for the community concerned.

In addition, the Department is attempting to obtain funds from various sources to evaluate the transportatin needs of the elderly rural poor, handcapped and others in order to provide factual information concerning the demand for such service to include the appropriate agency to administer the program and the type of system that should be provided. This will also include a review of the Community Action Programs currently operating to determine the degree of success being attained, the near and long term goals of these programs and their prospects for the future.

The Department will also devote planning effort to consider the development of projects to evaluate other types of bus systems such as service to the coastal areas to reduce traffic congestion and parking problems in peninsula locations and the possibilities of utilizing certain school bus operations, particularly to and from rural areas, to provide some additional public bus service.