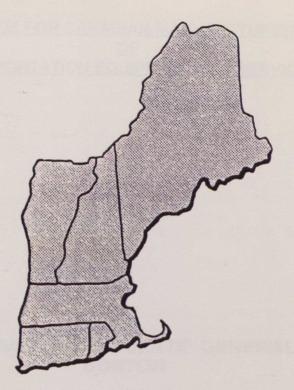
THE TRANSPORTATION INDUSTRY IN NEW ENGLAND



CANADIAN CONSULATE GENERAL - BOSTON JUNE 1993



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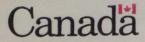


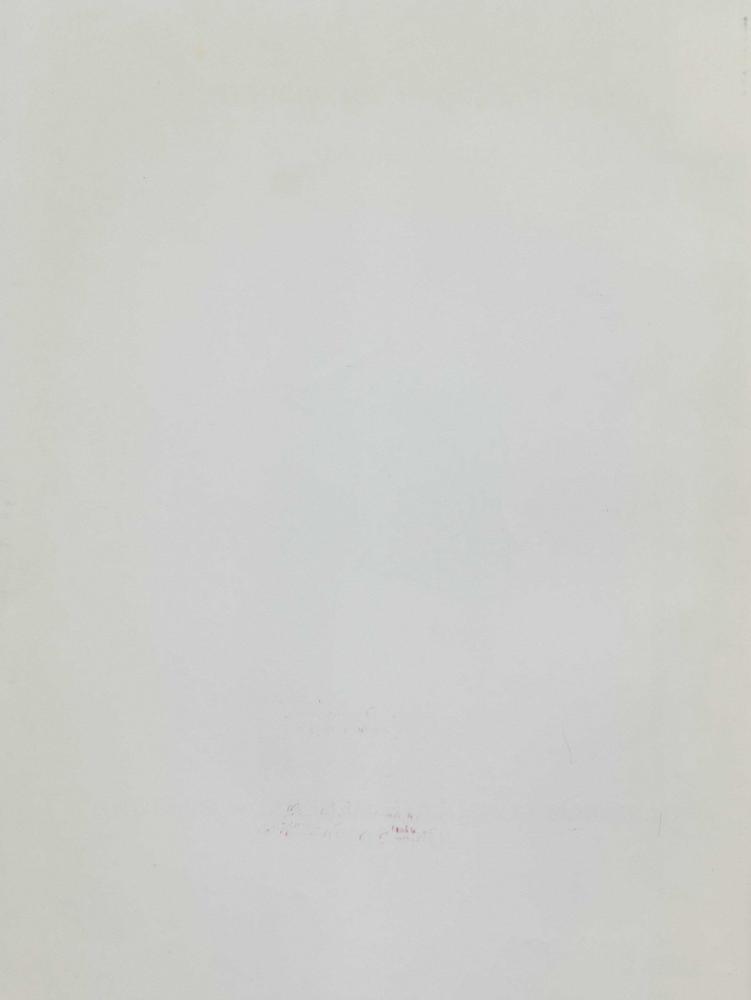
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THE TRANSPORTATION INDUSTRY IN NEW ENGLAND

A GUIDE FOR CANADIAN MANUFACTURERS OF TRANSPORTATION EQUIPMENT AND SERVICES

CANADIAN CONSULATE GENERAL BOSTON

Prepared by: Ms. Harriett Thorp

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EXECUTIVE SUMMARY

The New England transportation industry provides business opportunities unparalleled in the industry in recent years. Transportation and transit are presently experiencing growth due to a number of factors. Among these factors are a renewed interest in transportation planning, federal legislation impacting the industry and federal government commitment to improving the U.S. infrastructure.

The largest growth areas are found in the following industries: bus, rail, highway and bridge. Though some opportunities exist in the water transit industries, there are barriers to market entry created by the Jones Act. Components manufacturers have some potential for sales due to the development of increased water transit in Massachusetts and Maine, especially.

The most opportunities are and will be in Massachusetts. This state is the fourth largest recipient in the nation of federal funding from the Intermodal Surface Transportation Efficiency Act. These funds total \$5.5 billion from 1991 to 1997. The largest projects in Massachusetts will include highway and bridge work, rail restoration and bus procurement for public transit authorities.

The legislative acts which especially impact transportation planning are the Clean Air Act Amendments (CAAA), Americans with Disabilities Act (ADA) and the Buy America Act. The CAAA and ADA are comprised of strict technical requirements to be carried out by transportation planners and procurers and vehicle manufacturers. The Buy America Act presents significant market entry barriers to Canadian companies. Canadian companies must be thoroughly familiar with these acts in order to take advantage of business opportunities in the U.S. It is recommended that companies obtain copies of these Acts through the Government Printing Office in Washington, D.C.

One business strategy would be to supply Canadian companies, such as Bombardier, Orion and MCI which are current suppliers to the New England market.

As mentioned previously, Massachusetts represents the most transportation activity for the next decade. Massachusetts is the most populated and has the most funds available. However, Canadian companies should not discount other New England states that are undergoing extensive highway and bridge work, among other projects.

> XX. Sources of Information A. Publications

I. INTRODUCTION

The purpose of this market study is to generate information for Canadian companies seeking to export into the New England market. This study of the transportation industry in the New England states (excluding Connecticut) will focus on the following transportation segments: airports, buses, freight and passenger rail, commuter rail, rapid transit, light rail/trackless trolley, cargo shippingports, trucking and water transit. All monetary figures in this study are in U.S. dollars.

A. OVERVIEW OF TRANSPORTATION

Currently, in New England, there is an abundance of transportation activity. This trend, which should continue for the next decade, is a result of several factors, among them a renewed interest in transportation planning, recent legislation impacting transportation development, the federal government commitment to transportation and the emerging global economy.

New transportation planning revolves, to a great extent, around recent legislation that has been passed, namely the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the Clean Air Act Amendments (CAAA) of 1990 and the Americans with Disabilities Act (ADA). These pieces of legislation will be elaborated on in the Legislation section. Under ISTEA, there is the requirement for statewide plans from each state Department of Transportation (DOT). There is also increased consideration of the interrelationships and trade-offs among the various modes, increased public involvement, more stringent air quality requirements, increased flexibility in the use of federal-aid transportation funds, better cooperation among the Departments of Transportation (DOT), metropolitan planning organizations (MPO), other state agencies. The Clean Air Act and the Americans with Disabilities Act affect most transportation development. Due to the strict requirements of the Clean Air Act, there will be highway improvements rather than expansion and increased emphasis and development of mass transit systems of buses, water ferries, rail and intermodal systems.

New transportation planning will also incorporate the new technology of the future, for example high speed rail, magnetic levitation (MAGLEV) train systems and electronic toll management for highways and bridges.

The federal government commitment to transportation and to improving the nation's infrastructure is evidenced by the Intermodal Surface Transportation Efficiency Act. This legislation was signed into law by George Bush and will be carried out by President Clinton with slightly different emphasis. The Clinton administration is committed to developing the highways, transit, rail and intermodal system. Transportation Secretary Federico Pena has stated that the era of new big-city airports is probably over.

The emerging global economy is one where New England is aiming to take advantage of its location and increase its trade and shipping activity between Europe and Canada. In particular, one of the goals of Massachusetts Governor William Weld and the Massachusetts Port Authority Executive Director, Alden Raine, is to have Boston serve as the capital of the Atlantic Rim, as Los Angeles is the capital of the Pacific Rim. This goal is far from being realized, however, since Boston faces great competition from other Atlantic seabord ports.

Also, the North American Free Trade Agreement (NAFTA) between Canada, the United States and Mexico will create the largest free trade zone in the world with 360 million people. Please see further discussion of NAFTA in the Legislation section.

B. THE NEW ENGLAND ECONOMY

The New England economy, which has been hit hard by cutbacks in the defense industry and plunging real estate prices, continues to lag behind the rest of the nation. The early eighties was an economic boom period for Massachusetts. In the late eighties, Massachusetts experienced a recession. However, in January 1993, there was an increase of 39,100 jobs in Massachusetts, according to the U.S. Bureau of Labor Statistics. This indicates that Massachusetts is participating in the slow, modest economic growth of the nation.

Also in January, the Associated Industries of Massachusetts (AIM), a 3,300-employer organization, reported that its business confidence index was at its highest point since 1991.

Each New England state, however, is financially constrained and faces financial problems at both the state and local levels. State transportation plans are ambitious and will seek to further mass transit, intermodal development and improve highways and bridges. Projects will depend on funding at every level of government. It is realistic to expect that not all planned projects will obtain the financing necessary for their completion.

Background on the region:

The New England region in the five states forming the consular territory offers a rich market for the Canadian transit industry. New England offers a diversified economy with many predominant industries which create the need for efficient means of transporting people and goods into and out of the region. Boston is the major city in terms of commercial activity.

A large number of excellent colleges and universities contribute to the high level of education in the general labor pool of the region. This factor serves to assure a New England perspective focusing on quality products and services, improvement of the regional economy, and the promotion of research and development throughout the many industries prominent locally.

An international focus also exists with an emphasis on the global marketplace, serving to broaden the scope of regional businesses both large and small.

The predominant industries of each state are noted below.

Maine: Pulp and paper, tourism, agriculture, fishing, transportation equipment (includes shipbuilding).

Massachusetts: High technology, research, education, medicine, tourism, services, defense, banking.

New Hampshire: Services, retail and manufacturing.

Rhode Island: Health services, tourism, jewelry and other miscellaneous manufacturing.

Vermont: Services, retail, manufacturing, government.

C. POPULATION INFORMATION AND STATISTICS

In the fives states that form the consular territory: Maine, Massachusetts, New Hampshire, Rhode Island and Vermont, the population is approximately 10 million. Boston, Massachusetts, is the largest city with about 3 million people in the greater metropolitan area. The next largest cities in the region are: Worcester, MA, Providence, RI, Manchester, NH, Burlington, VT, and Portland, ME.

Maine:

Ма

Total: 1,227,928

1996E: 2000E:	1,299,599		
2000E:	1,330,000	City	Population
		Portland Lewiston Bangor Augusta	64,358 39,757 33,181 21,325
assachuset	ts:		
	6,016,425 6,120,523 6,238,716		
	sales in sac lity Program	Metro Boston Worcester Springfield	574,283 169,757 156,983

New Hampshire:

Total: 1,111,000 1995E: 1,123,639 2000E: 1,233,175

Manchester	99,567
Nashua	79,662
Concord	36,006
Portsmouth	25,925
Laconia	15,743

Rhode Island:

Total:	1,003,464
1995E:	1,022,484
2000E:	1,037,399

Providence	160,728
Warwick	85,427
Pawtucket	72,644
Newport	28,227

Vermont:

Total:	562,758
1995E:	585,537
2000E:	604,003

experienced a recession	Burlington	39,127	there was an
	Rutland	18,230	
Bungen, Snowinger Stiert Bri	Montpelier	8,247	

II. LEGISLATION

Legislation will be the first topic discussed due to its broadreaching importance and impact on the transportation industry.

Four of the federal legislative acts that affect the transportation industry were passed in the 1990's. Certain state legislation also affects the industry. The federal legislative acts discussed below are available through the Government Printing Office in Washington, D.C. To obtain a copy of any of the Acts, contact the Government Printing Office at (202) 783-3238.

Federal Legislation:

A. INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

This \$151 billion piece of legislation will fuel much of the transportation development in the U.S. over a six-year period until 1997. Major construction projects on highways, bridges and transit operations are already underway.

The purpose of the Act is stated in its policy below:

"to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy-efficient manner."

The bill is comprised of eight titles which reflect its coverage and are listed below:

Title I	Surface Transportation (related to highways)
Title II	Highway Safety
Title III	Federal Transit Act Amendments of 1991
Title IV	Motor Carrier Act of 1991
Title V	Intermodal Transportation
Title VI	Research
Title VII	Air Transportation
Title VIII	Extension of Highway-Related Taxes and Highway Trust
	Fund

This landmark legislation set a new standard requiring states to make the various modes of transportation work together to ensure maximum efficiency in transportation services. With this requirement, states must coordinate with metropolitan planning organizations (MPO) and also develop multimodal statewide long range plans and Transportation Improvement Programs (TIP). Important issues in each state TIP include Congestion Mitigation and Air Quality Programs. Some of the major features include:

- A National Highway System (NHS), consisting primarily of existing Interstate routes and a portion of the Primary System, is established to focus federal resources on roads that are the most important to interstate travel and national defense, roads that connect with other modes of transportation, and are essential for international commerce.

- State and local governments are given more flexibility in determining transportation solutions, whether transit or highways, and the tools of enhanced planning and management systems to guide them in making the best choices.

- New technologies, such as intelligent vehicle-highway systems and prototype magnetic levitation systems, are funded to push the nation forward into thinking of new approaches in providing 21st century transportation.

ISTEA federal funding totals \$151 billion for the entire U.S. and will be allocated over 6 years through 1997. State authorized amounts for both highway and transit categories are noted below.

Maine:	\$750 million	
Massachusetts:	\$5.5 billion	
New Hampshire:	\$480 million	
Rhode Island:	\$625 million	
Vermont:	\$250 million	

In New Hampshire and Rhode Island, spending is primarily focused on highway and bridge work with no funds allocated for transit.

State notes:

In Massachusetts, spending is focused on a number of capital improvement projects including highway construction, bridge and tunnel work, rail, transit and facilities construction, airport modernization and marine port improvements. As a result of ISTEA, approximately 20,000 jobs were added to the economy in 1992 with 92,000 more jobs expected over the next three years, 40,000 of which will be in the construction industry.

Some projects provided by the bill are noted below:

- \$2.55 billion for the Central Artery/Third Harbor Tunnel
- \$911 million for the road and bridge program
- \$160 million for projects on the National Highway System
- \$243 million for congestion mitigation and air quality improvement
 - \$860 million for urban and rural transit which includes \$278 million for the South Boston Transitway project
 - \$230 million for interstate highway maintenance
 - \$181 million for the Surface Transportation Program

B. CLEAN AIR ACT AMENDMENTS OF 1990 (CAAA)

The Clean Air Act Amendments of 1990 (CAAA) are comprised of Title I and Title II which are summarized below.

Title I establishes criteria for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). These are Federal standards, developed by the Environmental Protection Agency (EPA), that set allowable concentrations and exposure limits for various pollutants. Subsequent to the passage of the CAAA, the EPA released the nonattainment area designations and boundaries for the following pollutants:

- Ozone
- Carbon monoxide
- Small particulate matter

A "nonattainment" area is a geographic region of the U.S. that the EPA has designated as not meeting the NAAQS. Depending on the severity of the air quality problem, officials in each nonattainment area must take specified actions within a set time frame to reduce emissions and attain the NAAQS. The actions become more numerous and more stringent as the air quality problem gets worse. Title I also provides the following:

- A requirement that transportation plans, programs, and projects conform with the State Implementation Plan (SIP) for attaining the NAAQS;

- A requirement for greater integration of transportation and air quality planning procedures in order to address air quality concerns;

- The conditions under which EPA can impose sanctions, including the loss of Federal-aid highway funds.

Under Title II, the CAAA identify actions for reducing emissions from mobile sources, such as motor vehicles. Many of the requirements apply to manufacturers of vehicles and fuels.

Persons responsible for developing, adopting, or implementing transportation plans, programs, and projects, must understand how the CAAA affect their work.

The two brochures entitled, "Transportation Programs and Provisions of the Clean Air Act Amendments of 1990" and "Air Quality Programs and Provisions of the Intermodal Surface Transportation Efficiency Act of 1991" describe CAAA regulations. These brochures are also available from the Government Printing Office.

The purpose of this Act is to improve air quality with near-term stringent deadlines and long-term regulations.

Under this Act, any grantee receiving federal funding would be severely penalized if it does not allocate funding for Clean Air Act requirements.

New EPA standards, beginning in 1994, require that new buses, through a more thorough combustion process, eventually emit only 10% as much particulate matter as 1987 models did.

State notes:

As part of the plan to cut automobile emissions and bring Massachusetts in compliance with new air quality standards under the Clean Air Act, state environmental and transportation officials announced that parking freezes will be implemented in South Boston, East Boston and portions of Revere. Other options for reducing single-occupancy vehicle trips into Boston are being studied. As part of their overall transportation plan, all states are implementing plans to reduce dependency on single-occupancy vehicles and increase usage of multi-occupancy highway vehicles.

C. AMERICANS WITH DISABILITIES ACT OF 1990 (ADA)

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The Americans with Disabilities Act (ADA) is a comprehensive civil rights law that affects private as well as public entities. The final ruling of the Department of Transportation ADA regulation is in the Federal Register, 49 CFR Parts 27, 37 and 38; Vol. 56, No. 173, September 6, 1991.

The Act mandates access by the disabled to transportation services and facilities. All bus, rapid transit, commuter rail and water transit systems are affected by this Act. If they are not already accessible to individuals with disabilities, these modes of transportation are given until the year 2000 to become accessible. In general, it is mandatory that any new vehicle purchases or terminal/station construction be accessible to disabled persons.

transit and facilities construction, dirport

Please refer to the table on the following page for ADA requirements for public and private carriers.

9

	de do	PUBLIC ENTITY	PRIVATE ENTITY			
	an Autor			MARILY GAGED	NOT PRI	
Teresions of a	FIXED	DEMAND RESPONSIVE	FIXED ROUTE		FIXED ROUTE	DEMAND RESPONSIVE
After 8/25/90 new vehicles leased or purchased must be accessible	YES	NA	YES, unless under passng	8	YES, unless under 1 passngr	
After 8/25/90 new vehicles leased or purchased must be accessible unless system as whole provides equivalent service.	NA	YES	NA	YES	NA	NA Iso ni imeass imeass
New vehicles with capacity over 16 must be accessible unless system as whole is accessible.	NA	NA	Same strange	NA	NA	YES
Complementary Paratransit Service must be provided.	YES	NA	NA	NA	NA	NA
Vehicles with a capacity of 16 or fewer shall be accessible unless system as whole is accessible	NA	NA	NA	NA	YES	NA
Certification of Equivalent Service is required.	NA	YES	NA	NA	NA	NA
When purchasing a van with a capacity of 8 or less, the van will be accessible unless system as a whole is accessible.		NA			NA	NA

. C

D. DISADVANTAGED BUSINESS ENTERPRISE (DBE)

This legislation requires a grantee to contract at least 10% of a project's work to a Disadvantaged Business Enterprise (DBE). A DBE must be 51% owned or controlled by minorities or women. If a grantee does not award this work to a DBE it must make a very good case for the reason.

E. BUY AMERICA ACT

Section 165 of the Buy America act stipulates that any "procurement of bus and other rolling stock (including train control, communication, and traction power equipment) under the Urban Mass Transportation Act of 1964 must have components and subcomponents which total at least 60% of the cost of the vehicle or equipment and final assembly of the vehicle or equipment must take place in the U.S." The figure of 60% took effect on October 1, 1991. It was previously 55% of the cost.

In calculating the components' costs, labor costs involved in final assembly are not included in the calculation.

Under this Act, if a transit authority purchases more than ten buses, a transit authority official must be on site of the U.S. facility as the vehicles are being assembled to confirm that 60% of the components are U.S.-made.

The Department of Transportation's final ruling may be found in the Federal Register, 49 CFR Part 661, Part IV, January 9, 1991.

F. JONES ACT

In the Code of Federal Regulations, Title 46, under Law 46 USC 289, it stipulates that "no foreign vessel shall transport passengers between ports or places in the U.S., either directly or by way of a foreign port, under a penalty of \$200 for each passenger so transported and landed."

This Act is popularly named The Jones Act and is part of the Merchant Marine Act of 1920. It also stipulates that "No merchandise shall be transported by water, or by land and water, in any other vessel than is built in and documented under the laws of the U.S. and owned by persons who are citizens of the U.S."

This law is one of the U.S. "cabotage" laws which are a series of laws designed to guarantee the participation of its citizens in its own domestic trade. Any exceptions to this Act, are only made after a foreign company has received Congressional exemption stating that such a vessel cannot be made in the U.S. or is not available.

For Canadian ship and boat manufacturers seeking to sell their vessels stateside, this law all but prohibits this from occurring.

G. U.S. CUSTOMS AND FREE TRADE AGREEMENT

U.S. Customs

Any product crossing the border from Canada into the U.S. must be accompanied by documentation specifying certain categories of information about the product. The shipper may either assume the responsibility of completing this documentation, or contract the services of a customs broker or freight forwarder.

The U.S. Customs Service maintains offices at border crossing points between Canada and the U.S., as well as at other locations. General inquiries may be addressed to any U.S. Customs Office. It is suggested that any detailed inquiry pertaining to the shipping of a specific product into the New England region be directed to the northeast regional headquarters office in Boston at the address below.

U.S. Customs Service 10 Causeway Street Boston, MA 02222-1059 Tel: (617) 565-6108

Free Trade Agreement (FTA)

A major piece of U.S. Customs legislation is the U.S.-Canada Free Trade Agreement (FTA) which became law in 1988. The FTA created the World's largest free trade area. Below is a brief summary of the key provisions:

- Tariffs: Eliminates all tariffs on U.S. and Canadian goods by 1998. These goods must originate in the U.S. or Canada.

- Rule of origin: Uses a rule of origin to prevent third country goods from receiving FTA tariff treatment.

- Customs: Ends customs user fees for goods and duty drawback programs by 1994 for bilateral trade and duty waivers linked to performance requirements by 1998 (except for the Auto Pact).

- Quotas: Eliminates import and export quotas unless allowed by the General Agreement on Tariffs and Trade (GATT).

- National treatment: Reaffirms GATT principle preventing discrimination against imported goods.

- Standards: Prohibits use of product standards as a trade barrier and provides for national treatment of testing labs and Certification bodies. The tariff elimination schedule which pertains directly to the transportation industry includes the following:

- Airbrakes for railroad cars: Immediate elimination of tariffs on January 1, 1989.
- Subway cars: Elimination in 5 cuts of 20% each beginning on January 1, 1989.
- Rail cars: Elimination in 10 cuts of 10% per year beginning on January 1, 1989.

Proposed Legislation:

H. NORTH AMERICAN FREE TRADE AGREEMENT (NAFTA)

As previously mentioned the formation of the North American Free Trade Agreement (NAFTA) will result in the world's largest trading block of the United States, Canada and Mexico with a \$6 trillion market and 360 million people.

As of March 1993, President Clinton is seeking side agreements to NAFTA concerning worker rights and environmental protection. The bill is expected to pass and become official on January 1, 1994.

I. U.S. BUDGET/DEFICIT REDUCTION PLAN

Part of President Clinton's deficit reduction plan calls for an energy tax that, if instituted, will affect all industries. This energy tax will be based on the British Thermal Unit (BTU). Industries such as the trucking and rail industries are extremely concerned about this proposal and the impact it will have on the cost of delivering goods. Marine and water transit operators are also concerned about how much the proposed energy tax will increase fuel prices.

State Legislation:

J. MASSACHUSETTS INTERMODAL TRANSPORTATION AUTHORITY (MITA)

This legislation proposed by Massachusetts Governor William Weld in April 1992 seeks to consolidate all of the 19 separate authorities, departments and commissions that currently operate Massachusetts transportation modes. The purpose of the proposed legislation is to eliminate and reduce layers of bureaucracy that have grown over the years.

III. NEW ENGLAND TRANSPORTATION HIGHLIGHTS

The following overviews highlight the most important transportation issues in each state. Ongoing and planned projects will be detailed further in each transportation area. Information is based on personal interviews with transportation officials, state Transportation Improvement Programs and other planning documents.

A. HIGHLIGHTS BY STATE

Maine or batter sarvice on the old

As other New England states, Maine is in a period of change, adjusting to the slow economic growth of the nineties. Maine recognizes the need for a transportation policy that enhances the environment, conserves energy and simultaneously spurs productivity. The objective of Maine transportation planners is to move goods and people efficiently while minimizing environmental impacts and reducing fuel consumption.

The State Transportation Investment Program for 1992-1993 addresses capital improvements for highway, bridge, air, ports and marine, rail and highway mass transportation. This 2-year program represents approximately \$268 million (from state and federal funding) in capital improvements in these areas.

The Maine Transportation Capital Improvement Planning Commission prepared a study in 1993 entitled "Transportation to the Year 2002" which addresses the following modes: cargo ports, multiple occupancy highway vehicles, rail, aviation and highways. This planning document analyzes the present situation of these transportation areas and presents recommendations for future strategies with budget analysis.

It is their recommendation to develop a more intermodal transportation policy further utilizing the mass transit systems of buses and water ferries, highways and bridges, commercial marine transportation, aviation and the rail system.

According to Maine transportation officials, the most important issues include the level of federal funding the state receives, the updating of state highways and bridges, the environmental impact of transportation planning, the Clean Air Act Amendment, and maximizing the efficiency of multi-modal transportation with an improved and restored rail, water and public transit system. Transportation planners must look at other modes of transportation before expanding highway lanes. However, upgrading the highways (especially those connecting Canada) and bridges represents an important part of the planning.

Massachusetts

With Massachusetts being the fourth largest recipient in the nation of funding from the Intermodal Surface Transportation Efficiency Act (ISTEA), there are many significant developments in the state. In December 1992, James Kerasiotes was appointed as the new Secretary of Transportation and Construction. In a recent Boston Globe editorial, he was described as "having the capacity to pursue aggressively the statewide intermodal transportation strategy that is central to the state's economy."

Listed below are some of the major projects that will take place during the next 6 years:

- Central Artery/ Third Harbor Tunnel construction
- Road and bridge reconstruction
 - National Highway System (NHS) projects
- Congestion, mitigation and air quality improvement

impacts and reducing fuel consump

- Urban and rural transit
- Interstate highway maintenance
- Surface Transportation Program tal. 4 morevenents of ores interaction

Other specific transportation projects: represents approximately \$258 million (from stat

Port expansion

As stated in the Introduction, one of Governor Weld's major goals is to make Boston the "capital of the Atlantic Rim." One of the efforts to increase Boston's trading capacity is the Massachusetts Port Authority (Massport) \$50 million capital expansion program of the port of Boston.

Commuter Rail expansion

Several projects in commuter rail are underway or planned. They include the Old Colony Rail Restoration project, the extension of the commuter rail to Newburyport and commuter rail expansion of the Framingham line.

Freight and Passenger Rail enhancement

Plans for increased rail activity include the current conversion of the former military base at Fort Devens in Ayer, MA, to a rail distribution center and the high-speed train from Boston to New York which is scheduled to start regular service in 1998.

South Station expansion

In recent years, South Station has undergone extensive renovations. It now serves as the major gateway to Boston for intercity rail passengers, commuters from the southern and western suburbs and Red Line subway travelers. It plays a vital role in moving 35,000 people each day into and through the financial district. Construction has begun on the second phase of the station, the

intermodal bus station, to be built over the railroad tracks.

By the year 2000, transportation planners believe almost twice as many travelers will pass daily through South Station. At that time, it should prove to be a true transportation hub. It will serve as a second airport terminal where passengers may purchase airline tickets, check their baggage, and board a bus to Logan Airport. The bus will travel through the Third Harbor tunnel that is presently under construction. Commuter rail service will expand to include the 3 Old Colony lines leading to the South Shore. Two new train platforms will be built to allow for better service on the Old Colony lines as well as the electrified Amtrak line. The electrification of the Amtrak rail lines will enable high-speed trains to travel from Boston to New York in under 3 hours.

Please see further discussion of the Old Colony Rail Restoration project in Commuter Rail (Massachusetts) and further discussion of the Amtrak electrification project in Freight and Passenger Rail (Massachusetts).

Privatization

There is a major effort underway by Governor Weld and Transportation Secretary Kerasiotes to privatize certain government services which are transportation-related. Some highway maintenance programs have already been privatized, i.e. taken over by private firms. Currently, there is a bill in the Massachusetts legislature to halt any privatization unless the state proves beforehand that a private contractor can perform the service at least 10% more cheaply.

New Hampshire

As in the other New England states, transportation officials in New Hampshire realize that they must invest in their future by improving their infrastructure and transit facilities. The study "Transportation in the 21st Century" advocates a transportation system that provides efficient movement of people- on foot, on a bus or train, or in a car- goods and services. This study, completed in January, 1993, was prepared by the 21st Century Transportation Task Force. The Task Force was headed by New Hampshire Department of Transportation Commissioner Charles P. O'Leary and included 13 individuals from different transportation industries.

Financial constraints in New Hampshire are considerable and are illustrated by the fact that there are no funds allocated by ISTEA for transit (i.e. all funds are apportioned to highways and bridges). Federal grants are available, but require a 20% local match and most New Hampshire transit systems cannot afford to take advantage of them. Major planned projects include:

- Portsmouth port expansion
- Extensive rebuilding of highways and bridges
- Interstate maintenance

According to transportation officials, the most important issues in transportation are the availability of public transit systems of bus and rail, air quality, traffic congestion and maintenance of the highway system.

Rhode Island

According to transportation officials, the most important transportation planning projects include the following:

- Interstate highway maintenance and rehabilitation
- National highway maintenance and rehabilitation
- Bridge maintenance and reconstruction
- Commuter rail to Boston from Providence and the proposed extension of it to Warwick, RI
- Airport improvement
- Water transit (feasibility study in progress)
- Rail (feasibility study in progress)

The state of Rhode Island is in dire fiscal straits. A recent report of December 1992 concluded that the city of Providence will be insolvent and face a \$40 million deficit by the end of 1993 if drastic measures are not taken. This fiscal crisis has been caused by an eroding tax base, an influx of poor residents, insufficient state aid, increased public school enrollment and long-term obligations.

From 1992 to 1997, Rhode Island will receive \$15.4 million from ISTEA to spend on non-traditional projects, such as bike paths, hiking trails, boat-launching ramps, water pollution control and water transportation.

Increased on the second phase of the station, the

Vermont

According to transportation officials in Vermont, the state is in the midst of conducting various transportation studies on planning, design and environmental impact. Important transportation issues include:

- Highway maintenance and enhancement
- Bridge rehabilitation and replacement
- Rail rehabilitation (bridges, rails, ties and ballast (A feasibility study is now in progress.)
- Public transit- buses

Maintenance of the physical integrity of the existing state transportation system is primary as are projects whose objective is to enhance the system, be it highway, rail or air.

B. REGIONAL TRANSPORTATION PLANNING EFFORTS

For the first time ever, there are several regional transportation planning efforts underway. Politically and economically, it has been recognized that if New England works cohesively as a region, its transportation needs will be met more efficiently and will be eligible for a greater portion of federal money. Some of the efforts include the following:

- New England mayors and governors met in February 1993 to discuss working as a unit in New England to promote and advance the New England economy. One of their objectives is to bring back the rail system and the once-proud seaports.

- The New England Transportation Initiative (NETI) has recently produced a Request for Qualifications for a Conceptual Study Design of the transportation system in New England. The federal grant which NETI received provides for a \$650,000 study. The actual study will begin in July 1993 and last for 18 months. The guiding policy for the study is stated below:

"To optimize the quality of the transportation system for the movement of people and goods in a coordinated and costeffective manner, encompassing all major modes of interstate and intercity travel with regional implicationsroads, rail, air and water-- in a manner that is environmentally sensitive and economically productive." - The New England Transportation Consortium is based at the Massachusetts Institute of Technology in Cambridge, MA. One of their recent projects was a rail study of the region completed in April 1992. The study, entitled "Rail Service in New England," was prepared by the Massachusetts Institute of Technology in cooperation with the U.S. Department of Transportation, and Federal Highway Administration, under a contract administered by the American Association of State Highway and Transportation Officials.

C. MAJOR MASSACHUSETTS TRANSPORTATION ENTITIES

1. Massachusetts Bay Transportation Authority (MBTA)

The Massachusetts Bay Transportation Authority (MBTA), often referred to as the "T," represents an extremely important segment in transportion planning and procurement in Massachusetts, as well as other New England states. This section will discuss important MBTA information that will not be mentioned at length in any of the transportation categories in which the MBTA is involved (bus, commuter rail, rapid transit, light rail/trackless trolleys and water transit).

The MBTA service area includes 78 cities and towns. The MBTA also serves towns outside of its service area via commuter rail and inter-district bus.

At an informal MBTA talk on March 16, 1993, John J. Haley, General Manager of the MBTA, described his organization as a \$7 billion asset and outlined a few of the areas on which management is presently focusing. They are noted below:

- Drastic reorganization at various levels of management: This reorganization may involve placing one person at the head of each mode of transportation, construction and operations. As with "The Year of the Red Line," one person was put in charge to reduce customer complaints and improve on-time service.

- Revenue management reorganization: Plans for a rapid conversion of revenue handling are occurring. In April 1993 bids will be sent out for new automatic fare collection equipment. Equipment that is similar to what is used in the Washington, D.C. METRO is being seriously considered. Mr. Haley said that he plans to have equipment installed by the end of 1994. In essence, there will no longer be a need for revenue collectors in buses or subways. Collectors will serve instead in a customer service capacity. - Bus rehabilitation program: The MBTA rehabilitation program is continuous and proceeds at an annual rate to reduce gradually the age of the bus fleet to an ideal average age of 6 years. Annual purchases/leases include 200 buses per year with an option for 180. Please refer to Buses (Massachusetts) for further information.

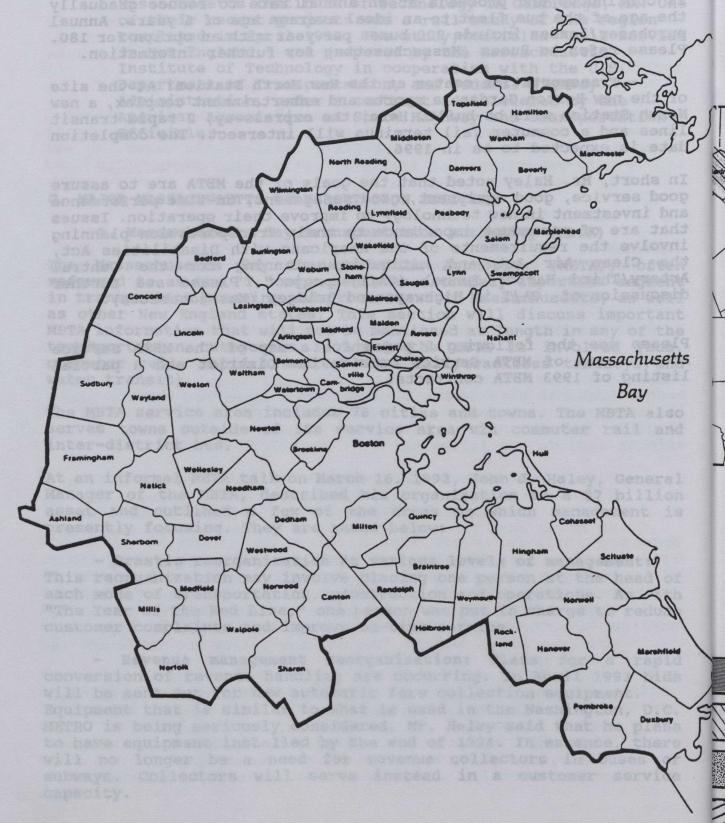
- Transportation center at the New North Station: At the site of the new Boston Garden, a sports and entertainment complex, a new North Station will be built. Here, the expressway, 2 rapid transit lines and a commuter rail terminus will intersect. The completion date is expected to be in 1996.

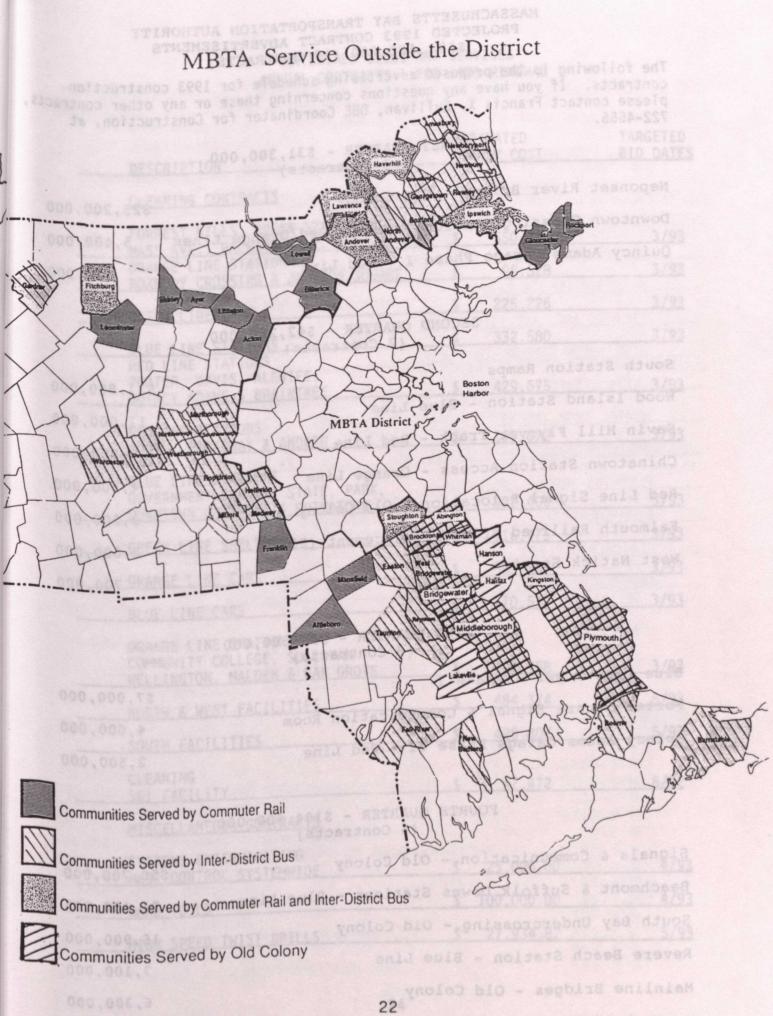
In short, Mr. Haley noted that the goals of the MBTA are to assure good service, good equipment, good management, on-time performance and investment in new technology to improve their operation. Issues that are of paramount importance to their transportation planning involve the requirements of the Americans with Disabilities Act, the Clean Air Act and mitigation planning for the Central Artery/Third Harbor Tunnel (CA/T) project. Please see further discussion of CA/T in Highways and Bridges (Massachusetts).

Please see the following 5 pages for a map of the MBTA Service Area, a map of MBTA Service Outside the District and a partial listing of 1993 MBTA contracts.

20

MBTA Service Area: 78 Member Cities and Towns





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MASSACHUSETTS BAY TRANSPORTATION AUTHORITY PROJECTED 1993 CONTRACT ADVERTISEMENTS \$191,600,000 (19 CONTRACTS)

The following is the proposed advertising schedule for 1993 construction contracts. If you have any questions concerning these or any other contracts please contact Francis X. Sullivan, DBE Coordinator for Construction, at 722-4555.

FIRST QUARTER - \$31,300,000 (3 Contracts)

Neponset River Bridge - Old Colony	\$25,200,000
Downtown Crossing Station Access - Red/Orange Lines	5,400,000
Quincy Adams Garage Phase I - Red Line	700,000

SECOND QUARTER - \$42,200,000 (7 Contracts)

South Station Ramps	\$11,800,000
Wood Island Station - Blue Line	11,000,000
Savin Hill Flyover Track - Red Line	10,000,000
Chinatown Station Access - Orange Line	4,500,000
Red Line Signal Relocation - Old Colony	2,200,000
Falmouth Railroad Bridge Replacement (EOTC)	2,000,000
West Natick Station	700,000

THIRD QUARTER - \$13,500,000 (3 Contracts)

Blue Line Power - Phase I	\$7,000,000
Porter Square Signal & Communication Room	4,000,000
Quincy Adams Garage Phase II - Red Line	2,500,000

FOURTH QUARTER - \$104,600,000 (6 Contracts)

Signals & Communication - Old Colony	\$50,700,000
Beachmont & Suffolk Downs Stations - Blue Line	21,100,000
South Bay Undercrossing - Old Colony	16,900,000
Revere Beach Station - Blue Line	7,100,000
Mainline Bridges - Old Colony	6,300,000
Wonderland Station - Blue Line 23	2,500,000

MATERIALS GOODS AND SERVICES ANNUAL CONTRACTS - FOR 1993 RENEWAL

DESCRIPTION ESTIMATED YEARLY COS	TARGETED ST BID DATES
CLEANING CONTRACTS	
FORREST HILLS, GREEN STREET, RUGGLES <u>MASS AVE., BACKBAY, N.E. MEDICAL CTR.</u> \$ 550,5 ORANGE LINE STATIONNS	<u>36 3/93</u>
ROXBURY CROSSING & JACKSON SOUARE \$ 96.5	<u>3/93</u>
GREEN LINE CARS \$ 225.2	26 3/93
BLUE LINE STATIONS \$ 332.5	80 3/93
RED LINE STATIONS PORTER, DAVIS, ALEWIFE, OUINCY ADAMS & BRAINTREE \$ 429,6	75 3/93
REDLINE STATIONS SOUTH, BROADWAY & ANDREW \$ 169.0	72 3/93
BLUE LINE STATIONS GOVERNMENT CENTER, STATE, PARK, DOWNTOWN CROSSING & CHINATOWN \$ 512.4	00 3/93
GREEN LINE SHELTERS \$ 116.1	75 3/93
ORANGE LINE CARS \$ 85.5	00 3/93
BLUE LINE CARS \$ 70.5	72 3/93
ORANGE LINE STATIONS COMMUNITY COLLEGE, SULLIVAN WELLINGTON, MALDEN & OAK GROVE \$ 194,9	58 3/93
NORTH & WEST FACILITIES \$ 484.3	74 5/93
SOUTH FACILITIES \$ 429.80	04 5/93
CLEANING \$ 47,43	72 8/92
MISCELLANEOUS CONTRACTS	
SYSTEMS EXTERMINATING PEST_CONTROL_SYSTEMWIDE \$ 25,000.	.00 4/93
HAND TOOLS \$ 100.000	.00 4/93
HIGH SPEED TWIST DRILLS \$ 27,934.	

DESCRIPTION	ESTIMATED YEARLY COST	TARGETED BID DATES
please contact Francis X, Sellivan, DBE 722-4555.	Coordinator for Construc	tion, at
ESCALATOR MAINTENANCE	\$6.000.000.00	3/93
LANDSCAPE MAINTENANCE	\$1.453.122.36	5/93
LANDSCAPE MAINTENANCE	\$1.289.412.00	5/93
MISCELLANEOUS HEAVY EQUIPMENT RENTAL	\$ 130.000.00	3/93
MAINTAIN POLICE RADIOS	\$ 53.667.36	2/93
FILTERS INC. A/C FILTERS	\$ 15.320.00	3/93
MISC. SNOW REMOVAL CONTRACTS	\$ 75.000.00	8/93
INSTALL SAFETY GLASS	\$ 111,000.00	3/93
RENTAL DUMP TRUCKS	\$ 25,000.00	4/93
EQUIPMENT RENTAL AIR COMPRESSOR	\$ 27,000.00	6/93
PLUMBING SUPPLY REQUIREMENTS	\$ 229,103.24	5/93
SNOW SHOVELS	\$ 11.515.00	9/93
MEDICAL SUPPLIES	\$ 14.022.43	2/93
ANNUAL STATIONARY & SUPPLIES	\$ 71,425.23	4/93

The MBTA Five-Year Capital Plan focuses on the following topics:

- Accessibility improvements (related to the Americans with Disabilities Act)
 - Central Artery/Third Harbor Tunnel (CA/T) Mitigation/ Clean Air Act

The CA/T should prove to be the dominant transportation issue in the Boston Metropolitan Area. There is one group of MBTA employees dedicated to mitigation planning for the CA/T with which the "T" will interface in 20 locations. Alle Line

- Infrastructure reinvestment
 - Other expansion projects

Budget figures for the Five-Year Capital Plan are summarized below.

FY93-FY97 Capital Spending Access Projects

Project FY93-FY97 Spending (State and Federal)

Green Line accessibility	\$32.4 M
Green Line vehicle procurement	\$280.9 M
Orange Line accessibility	\$16.6 M
Red Line accessibility	\$8.4 M
Blue Line accessibility	\$0.6 M
Parking and station improvements	\$0.4 M
Commuter Rail accessibility	<u>\$12.4 M</u>

Access Total:

FY93-FY97 Capital Spending Central Artery Mitigation/Clean Air Act Projects 10 Reprint 1100 - Room - Rool & dif ont

Project

FY93-FY97 Spending (State and Federal)

\$351.7 M

the second	
Old Colony	\$480.3 M
South Station Transportation Center	\$120.0 M
North Station garage	
South Boston Transitway	1
	\$343.0 M
Washington street replacement	\$0.8 M
Blue Line modernization/access improvements	\$265.6 M
	\$0.2 M
Newburyport Extension	\$3.6 M
Crosstown Bus study	\$0.1 M
Wennetten Dutender	
Worcester Extension	\$73.6 M
Parking and station improvements	\$21.8 M
Commuter Rail vehicles	\$12.4 M
Total Central Artery/Clean Air Act:	\$1,352.5 M
Total contral mitery/clean All Act.	S1.352.5 M

FY93-FY97 Capital Spending Infrastructure Investment Projects

Bus-related \$110.2 M Bus retrofit/rehabilitation \$59.9 M Maintenance facilities upgrades \$0.2 M Blue Line \$0.2 M Track, power, bridges \$2.0 M Signals \$3.5 M Green Line \$17.3 M Track, power, signals \$17.3 M Lechmere Station \$17.3 M Ventilation shafts \$2.1 M Station improvements \$4.0 M Red Line \$22.7 M Station improvements \$4.0 M Ventilation shafts \$11.1 M Track, power, signals \$9.5 M Vehicles (86 replacement cars) \$114.1 M Bridges \$14.2 M Orange Line \$2.2 M Dudley Station \$2.2 M Southwest Corridor \$4.0 M Commuter Rail \$0.7 M Track, signals, bridges, facilities \$20.4 M Boston Engine Terminal \$0.7 M Vehicle rebuild \$28.0 M Service and Inspection facility \$4.6 M Systemwide \$101.9 M Bus and subway fare collection equipment <t< th=""><th>Project</th><th colspan="2"><u>FY93-FY97 Spending</u> (State and Federal)</th></t<>	Project	<u>FY93-FY97 Spending</u> (State and Federal)		
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Power, communications, track, bridges\$16.8 MEnvironmental projects\$2.6 MNew police station\$6.0 M				
Environmental projects \$2.6 M New police station \$6.0 M				
New police station \$6.0 M		\$2.6	M	
Operations control center \$42.1 M	New police station			
	Operations control center			Newbury
Red Line noise barriers\$10.0 M	Red Line noise barriers	\$10.0	M	
WOICester Extension \$73.6 M	\$73.6 M	Extension	14	

Total infrastructure

\$737.8 M

Commuter Rail vehicles Total Central Artery/Clean Air Act:

Purchasing information:

The MBTA Materials Directorate purchases, receives, inspects, stores and distributes materials, equipment, and supplies in support of the MBTA operation.

Transactions take place at: Massachusetts Bay Transportation Authority Materials Directorate 10 Park Plaza- Room 2810 Boston, MA 02116 Tel: (617) 722-4521

To be added to the vendor list, call the Materials Directorate at (617) 722-4521.

The MBTA extends a "Request for Proposal" package to vendors, on the majority of the bids. This package includes a notice to bidders, the Authority's specification and the proposal.

As will be mentioned further in the report, the MBTA also advertises bids in trade publications, such as "Passenger Transport" and the F.W. Dodge Bulletin, as well as the Boston Globe and the Boston Herald.

Construction contracts are also subject to a competitive bidding process. Bids are advertised in the Central Register at least two weeks prior to the deadline for submitting bids and in the Boston Globe and other local newspapers 30 days prior to the bid opening. A bidders list is not maintained for construction contracts.

Contractors must also be prequalified. Prequalification forms are available upon request in Room 5610, Contract Administration, or by telephoning (617) 722-3133.

MBTA Construction Directorate 10 Park Plaza- Room 5610 Boston, MA 02116 Tel: (617) 722-3135

Professional service contracts for engineers, architects and consultants are also processed through the above office. There are 5 steps to the selection process:

- 1. Authorization/Announcement
- 2. Pre-selection
 - 3. Selection
 - 4. Negotiation
 - 5. Award

MBTA STATISTICAL PROFILE Data represents Fall 1992	
ectorate purchases, receives, inspects.	
MBTA Service District	
<u>Cities and town</u>	sogo Astistentindoridagi
Cities and towns in the MBTA district	Tra87 actions take p
Cities and towns not within MBTA district	<u>52</u>
Total: 0182	130
<u>Size of service area in s</u>	<u>quare miles</u>
MBTA District	1 038
Non-members served	1,306
areen line	
Total: Proposed approximate when the source of the second se	2,344
Population of service area (1988 E	st. U.S. Census)
MBTA District	2 619 748
Non-member sereved	1,528,097
	4,147,845
ne also subject stangi competitive all ding	
Average Weekday Ridership	
Total system riders	
Subway and bus	572,000
Commuter Rail	74,500
Fotal: moissiainimbA tosiinoo ,eise mood	646,500
<u>Transit system riders</u>	aphoning (617) 722-31 M 4.022
<u>Transit system riders</u>	\$20.4 M \$0.7 ATEM
<u>Transit system riders</u> Green Line Red Line	196,000 185,000
<u>Transit system riders</u> Green Line Red Line Orange Line	196,000 185,000 127,000
<u>Transit system riders</u> Green Line Red Line Orange Line Blue Line	196,000 185,000 127,000 54,000
<u>Transit system riders</u> Green Line Red Line Orange Line Blue Line	196,000 185,000 127,000
<u>Transit system riders</u> Green Line Red Line Orange Line Blue Line Bus and Trackless Trolley	196,000 185,000 127,000 54,000 <u>360,000</u> 922,000
<u>Transit system riders</u> Green Line Red Line Orange Line Blue Line Bus and Trackless Trolley	196,000 185,000 127,000 54,000 <u>360,000</u> 922,000
<u>Transit system riders</u> Green Line Red Line Blue Line Bus and Trackless Trolley Total: <u>Subsidized local service r</u>	196,000 185,000 127,000 54,000 <u>360,000</u> 922,000
<u>Transit system riders</u> Green Line Red Line Drange Line Blue Line Bus and Trackless Trolley Total: <u>Subsidized local service r</u> The RIDE (Passenger Rides)	196,000 185,000 127,000 54,000 <u>360,000</u> 922,000 <u>iders</u> 1,718 2,215
<u>Transit system riders</u> Green Line Red Line Drange Line Blue Line Bus and Trackless Trolley Total: <u>Subsidized local service r</u> The RIDE (Passenger Rides) Commuter boat Private carrier bus	196,000 185,000 127,000 54,000 <u>360,000</u> 922,000 <u>iders</u> 1,718 2,215 2,513
<u>Transit system riders</u> Green Line Red Line Blue Line Bus and Trackless Trolley Total: <u>Subsidized local service r</u> The RIDE (Passenger Rides) Commuter boat Private carrier bus	196,000 185,000 127,000 54,000 <u>360,000</u> 922,000 <u>iders</u> 1,718 2,215
<u>Transit system riders</u> Green Line Red Line Orange Line Blue Line Bus and Trackless Trolley Total:	196,000 185,000 127,000 54,000 <u>360,000</u> 922,000 <u>iders</u> 1,718 2,215 2,513

Vehicles

Number	of	subway	vehi	icles
--------	----	--------	------	-------

Red Line	221
Green Line	217
Orange Line	120
Blue Line	70
Subtotal subway:	628
MBTA Police	
Number of	buses
General Manager	Stos. 867 Syswdiges.
Lift-equipped	473
Not lift-equipped	534
Tracklees Trolleys	51,041,986J spast0 50 .041
Subtotal buses:	1,057
Number of commuter	rail vehicles
Assidiant General Manager for:	
Coaches	304
Locomotives	<u>52</u>
Subtotal Commuter Rail:	356
Flangaggiand Budget	stat, statset to at no \$416
Number of othe	r vehicles
PIDE WARA	a market of the second second
RIDE vans	<u>130</u>
Total vehicles:	and I may and
iocal venicies.	2,171
Stations and Stops	
and boops	
Subway:	Handicapped-accessible
	<u>Hanarcapped_accessible</u>
Green Line (63 shelters)	0 70

Green Line (63 Shelters)	0 1 1 23 2	70
Red Line	14	29
Orange Line	11	19
Blue Line	_2	12
Subtotal subway:	27	130
Bus and trackless trolley:		
(249 shelters)		10,000
		Rei
Commuter Rail:	44	101
Total Stations and Stops:	71 57050	10,231

30

Number of routes

T

Subway:	8
Bus and trackless trolley:	154
Commuter Rail:	<u>11</u>
otal routes:	173
and a second	Charles or

Number of route miles (one way)

Subway:	
Green Line	begginp23
Red Line	24
Orange Line	aveller100eee110
Blue Line	tesaud La <u>.6</u>
Subtotal subway:	64
muter rail vehicles	
Bus and trackless trolley:	716
355	
Commuter Rail:	270
Total route miles:	1,050

TIT

Number of scheduled weekday train trips (one way)

Subway:	
Green Line	1,875
Red Line	482
Orange Line	311
Subset Blue Line	380
Subtotal subway:	3,048
Bus and trackless trolley:	14,339

Commuter Rail: 380 Total trips: 17,767

Number of commuter parking spa	ces
Subway:	
Green Line	2,078
Red Line	8,518
Orange Line	2,598
Blue Line	2,100
Subtotal subway:	15,294
Bus:	194
Commuter Rail:	16,019
Commuter Boat:	<u>1,350</u>
Total Commuter parking:	32,857

Departmental Budget Summary

-	FY93 Budget	FY94 Request
(Massior) westcated in 1956 by	ALO 000 100	¢10,070,500
Operations	\$19,026,426	\$18,378,500
Transportation	\$121,115,628	\$120,627,384
Engineering and Maintenance	\$91,121,413	\$87,395,018
Heavy Rail Equipment Maintenance	\$36,239,003	\$36,479,058
Light Rail Equipment Maintenance	\$15,600,132	\$15,600,132
Automotive Equipment Maintenance	\$29,879,177	\$30,210,879
MBTA Police	\$8,046,638	\$8,046,638
Commuter Rail	\$60,020,714	\$63,550,757
General Manager	\$406,867	\$553,348
Treasurer-Controller	\$5,913,169	\$5,174,730
Law	\$3,604,689	\$3,784,384
Safety	\$1,041,187	\$1,041,187
EEO/AA		
	\$218,155	\$222,732
Internal Audit	\$225,045	\$223,045
Assistant General Manager for:		
Design, Construction, Real Estate	\$262,968	\$160,240
Purchasing/Administrative Services		\$7,942,192
Marketing and Communication	\$1,991,880	\$1,832,660
Planning and Budget	\$357,595	\$450,214
Human Resources	\$2,802,923	\$3,312,360
Department Totals:	\$404,890,590	\$404,985,458

Note: FY94 figures represent projections for future expenditures.

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2. Massachusetts Port Authority (Massport)

The Massachusetts Port Authority (Massport) was created in 1956 by an act of the Massachusetts Legislature to supervise and manage the operations of airport, seaport and other transportation facilities in the Boston area. Massport is an independent revenue bond authority, ruled by a seven-member board of directors, who are appointed to seven-year terms by the governor.

Massport's Logan Airport, Hanscom Field, Waterfront Facilities and Tobin Bridge generate a combined annual total of \$6.4 billion in economic benefits to Massachusetts and the New England area. These economic benefits are in the form of jobs, tax and fee revenues to state and local government entities, and incomes to private business that either operate at Massport facilities or serve the users of those facilities.

Economic impact figures for each facility are noted below:

Logan International Airport Hanscom Field		\$4,177,001,000 \$60,177,000
The Waterfront:		
Port Industry		\$1,857,591,000
Redeveloped Waterfront Pr	operties	\$323,421,000
Tobin Bridge		\$16,875,000
Babless before an ever a sade sa z and	Total:	\$6,435,065,000

<u>Trade</u>: Massport Trade Development Unit works with hundreds of local companies to increase their import and export activities and thus expand the amount of cargo being shipped through the Seaport and the Airport. In FY92, Massport public marine terminals handled more than 1 million tons of containerized cargo and 79,768 automobiles. Logan Airport moved nearly 800 million pounds of air cargo and mail in FY92.

<u>Tourism</u>: Massport actively promotes tourism to Massachusetts and New England. Its Airport and Seaport facilities serve as a major gateway for millions of tourists visiting the region. During FY92, Logan and Hanscom brought in 5.3 million visitors and the Black Falcon Cruise Terminal served over 18,000 tourists.

Ongoing principal projects in which Massport is involved are the following:

- Modernization of Logan International Airport. Please see further discussion in Airports (Massachusetts).
- Central Artery/ Third Harbor Tunnel (CA/T) construction

Massport involvement with this Massachusetts Highway Department project centers on coordination of land assembly, engineering, operations and day-to-day problem solving.

- Revitalization of Boston waterfront

Revitalization of Boston Harbor

Massport, the largest landowner on the Boston waterfront, is a major planner, along with the Boston Redevelopment Authority, for the revitalization of Boston Harbor by the year 2000.

Major initiatives include:

- A \$10 million waterfront park in East Boston is scheduled to open in Spring 1994.
- The World Trade Center expansion includes a 400-room hotel, a 1,100 car garage, and \$400 million in phased construction of 1.7 million square feet of new construction on Massportowned Commonwealth Flats.
- The new Logan Airport water shuttle terminal building construction is scheduled to begin in Spring 1993.
- A \$40 million Harborside Conference Center and Hotel at Logan Airport is scheduled to open in Summer 1993.
- \$1.2 million in improvements will be made to the 7-mile Harborwalk which is scheduled to open in Spring 1993.
- Development of Fan Pier in South Boston with a \$200 million federal courthouse is planned.
- A \$10 million expansion of the Children's and Computer museums is planned.
- A second Logan Airport terminal at South Station is planned for development by the year 2000.
- The 10-year redecking and repainting of Tobin Bridge is an ongoing project.

Please see the following 2 pages for a Reference Guide to Boston Harbor and Facts and Figures of Massport Waterfront, respectively.

2. Massachusetts Port Authorizodpame Ap3Pgu 19 noijazilajives

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A solution waterfrom park in East Boston is scheduled to bas selfering a set a constant of the set of the set of the set of a constant of the set of the set of the set of the set of a constant of the set of th

Construction is scheduled the bogin in furthe terminal building

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· 984948800861 95 Fan Fissbrin South Boston with a \$200 million

Trade: Massport Trade Development Unit works with hundreds of local companies ageolignmeetsetbild Dispir to galage and Life 1953 and thus expand the amount of cargo being shipped betwelds the MEESHort and the Airport. In FY92, Massport public merine terminals hendled more themas as kit northers administration as a second descent of the second second

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Ongoing principal projects in which managert is involved are the following:

- Modernization of Logan Interset and Airport, Flease see further discussion in Airports (Massachusetts).
 - Cantral Artery/ Third Harbyr Sugmet (CA/T) construction

Massport involvement with thes messachusetts Highway Department project centers da conditination of land assembly, engineering, operations and dep-to-day problem solving.

- Revitalization of Boston Watesfront

REFERENCE GUIDE

SOUTH BOSTON WATERFRONT 12. Boston Fish Pier (Massport).

1. Fort Independence, at Castle Island, is the eighth fort built at this site since 1634 to protect Boston harbor

2. Conley Terminal (Massport). currently undergoing a \$50 million capital expansion program, is a 101acre terminal equipped with two gantry cranes, 4255-feet of berthing conference center, and docking space, and 32 acres for storage. It is facilities. the first port of call inbound for vessels serving Northern Europe and 14. McKie Lighter Company handles 35,000 containers (standardized metal boxes) annually. 15. Museum Wharf (Children's It is also Toyota's terminal in New England.

3. Coastal Oil South Boston

4. MBTA Power Plant (closed) and DOWNTOWN WATERFRONT Cardinal Medeiros Lobster Terminal

5. Boston Edison Power Plant

6. The Black Falcon Cruise Terminal (Massport) handles between 30-40 ocean-going cruise passenger vessels annually.

7. The Boston Army Base (Massport) provides one million square feet of covered storage space and docking for Navy and other vessels.

8. Coastal Cement Terminal

9. Boston Marine Industrial Park is the location for numerous small businesses as well as the Boston Design Center.

10. Massport Marine Terminal (Massport) is used for the discharge and handling of automobiles and bulk commodities. It is also Subaru's terminal for New York and New England.

11. General Ship Corporation

the oldest working fish pier in the US, opened in 1914. Massport has invested over \$30 million to modernize the pier.

13. World Trade Center Boston (Massport), formerly Commonwealth Pier, has been redeveloped to provide 1,000,000 square feet of office and exhibition space, a

Museum, Computer Museum)

16. Boston Tea Party Ship and Museum

17. Rowes Wharf/Boston Harbor

Hotel (airport water shuttle and commuter boats)

18. India Wharf (Harbor Towers) 19. Central Wharf (New England

Aquarium)

20. Long Wharf/Marriott Long Wharf (harbor cruise vessels) 21. Commercial Wharf (residential)

22. Lewis Wharf (residential)

23. Lincoln Wharf (residential)

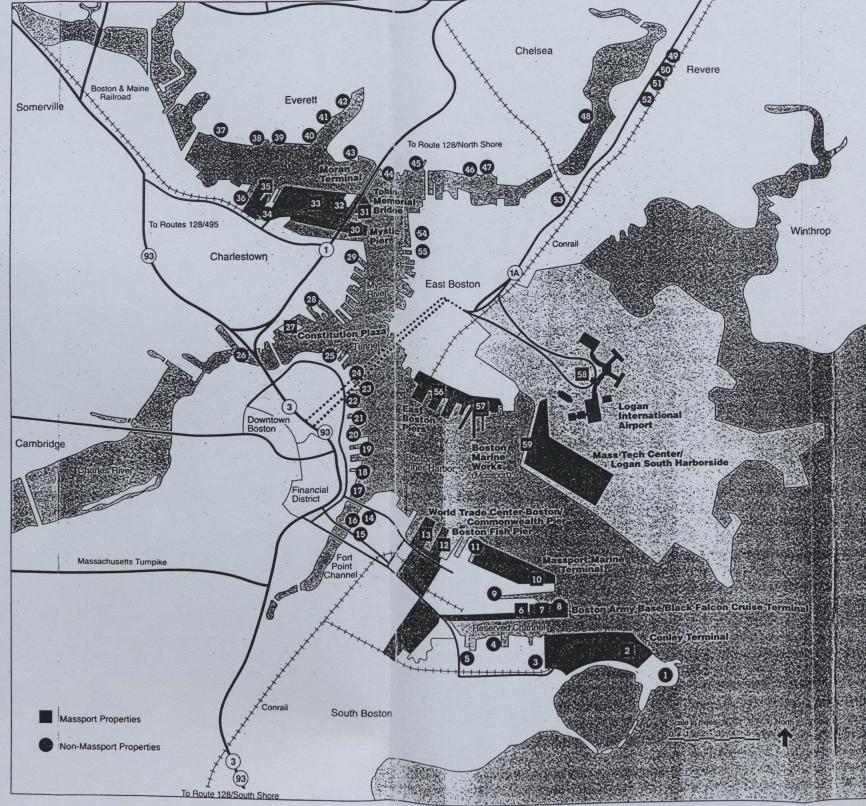
24. Battery (Constitution) Wharf (commercial)

25. US Coast Guard Support Center

CHARLESTOWN WATERFRONT

26. Paul Revere Park (MDC)

27. Constitution Plaza and Constitution Marina (Massport) (formerly Hoosac pier) has been redeveloped by Massport into office, restaurant, and marina space with access to the waterfront.



28. USS Constitution and National Park

29. Charlestown Navy Yard (residential and commercial)

30. Mystic Pier #1 (Massport) provides 220,000 sq. ft. of covered storage suitable for bulk cargo operations.

31. Mystic Piers 48-50 Salt Terminal (Massport)

32. US Gypsum

33. Moran Container Terminal (Massport) is a 50-acre terminal with two gantry cranes and 1100 feet EAST BOSTON WATERFRONT of berthing space. It handles approximately 41,000 containers annually by direct service from Europe and feeder services from the ports of New York and Halifax.

34. Blue Circle Atlantic Cement

35. Revere Sugar Terminal (Massport), purchased by Massport in 1986, is an 18-acre deepwater facility appropriate for handling bulk cargo.

36. Charlestown Marine Park

EVERETT WATERFRONT

37. Boston Edison

38. Prolerized Scrap Terminal

39. Distrigas Liquified Natural Gas Terminal

40. Exxon Oil Terminal

41. Independent Cement Corporation

42. Coldwater Seafood Terminal

CHELSEA WATERFRONT

43. Admiral's Hill Condominium/ Marina (residential)

44. Atlantic Fuel Terminal

45. Eastern Minerals Salt Terminal

46. Coastal Oil New England, Inc.

47. Walton Pier (fish and lobster)

48. Gulf Oil Terminal

REVERE WATERFRONT

49. Coastal Oil Terminal

50. Northeast Petroleum Terminal

- 51. BP Oil Terminal
- 52. Global Petroleum Terminal

53. Mobil Oil Terminal

54. Boston Towing & Transportation Company, Inc./North Terminal

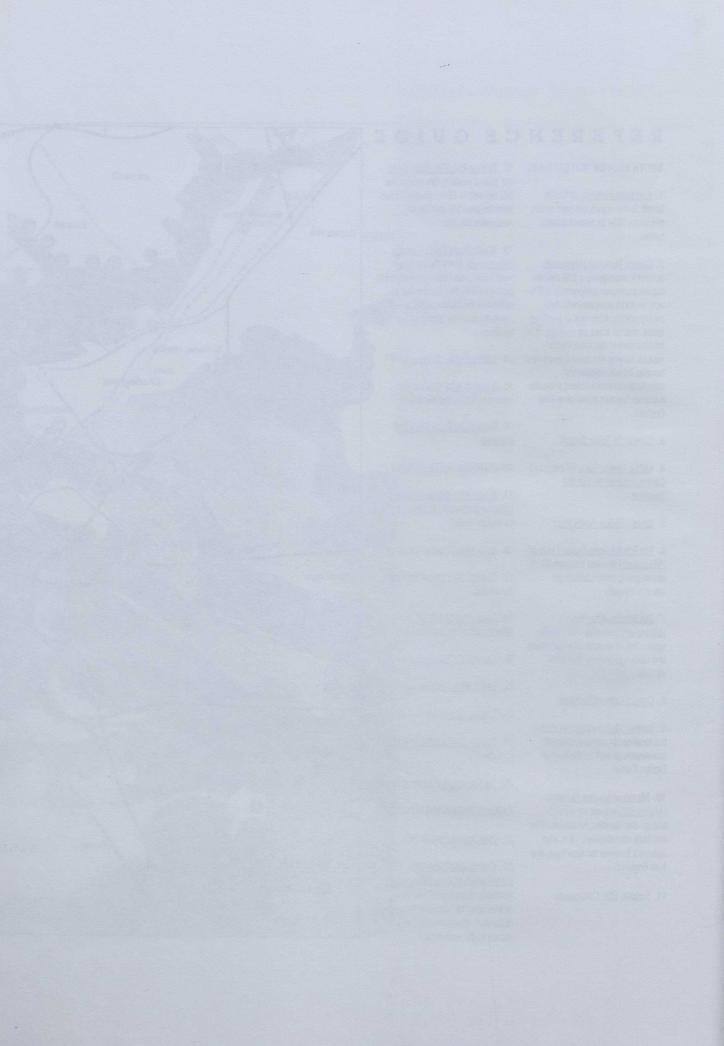
55. General Ship and Engine Works

56. East Boston Piers (Massport) are being redeveloped to house small-scale marine businesses, a lobster terminal, and a major waterfront park.

57. Boston Marine Works (Massport) is leased to Cashman Marine Enterprises for small ship repair and marine construction.

58. Logan International Airport (Massport), 10th busiest airport in. the US, handles 22 million passengers and 786.5 million pounds of cargo and mail annually.

59. Logan South/Bird Island Flats (Massachusetts Technology Center) (Massport) air cargo complex, Harborwalk, Harborside Conference Center and Hotel.



THE WATERFRONT

FACTS AND FIGUPES

Port Industry Facilities

Facility	Use	FY92 Volume	Massport's Capital Investment To Date	Acreage
Moran Container Terminal, Charlestown	Largest container terminal in New England	Containers-38,729	\$58.4 M	50.0
Mystic Piers, Charlestown	Deep-water bulk/breakbulk terminal	Salt-33,968 tons	\$9.4 M	11.0
Conley Terminal, South Boston	Container terminal; auto importing & processing	Containers-33,101 Automobiles-24,041	\$48.8 M	101.0
Massport Marine Terminal and Former Navy Recreation Property, South Boston	Auto terminal & processing	Automobiles-55,727	\$25.6 M	58.0
Army Base, South Boston	Passenger cruise ship terminal; bulk/breakbulk terminal handling cement and lumber	Passengers-18,300 Cement-85,640 tons	\$9.9 M	34.6
are hundreds	of Bagaway could the	TOTAL	\$152.1 M	254.6

Redeveloped Waterfront Properties (Completed or Underway)

Property	Use	Massport's Capital Investment To Date	Acreage
Fish Pier, South Boston	Fish processing, moorage facilities, commercial office space, restaurants	\$32.3 M \$8.5 M (Grants)	8.5
World Trade Center and Commonwealth Flats, South Boston	Exhibition and conference space, offices, food court, ferry/excursion dock, product showrooms, commercial parking lot	\$23.0 M \$2.8 M (Grants)	91.8
Black Falcon Cruise Terminal, South Boston	Passenger cruise ship terminal; handled over 18,000 passengers in FY92	\$6.9 M	1.4
Hoosac Pier (Constitution Plaza), Charlestown	Leased to private developer who has constructed two buildings totaling 160,000 square feet of office, restaurant and maritime museum space	\$4.1 M	15.7
East Boston Shipyard, East Boston	Leased to private entity who uses site for ship repair and marine industrial development	\$12.5 M	18.5
East Boston Piers, East Boston	Berthing space, storage and working pier for lobstermen, tug boats and other waterfront service uses; development of public park underway	\$7.3 M	56.0
Revere Sugar Terminal, Charlestown	Leased to Massachusetts Water Resources Authority; potential deep water uses	\$8.1 M	18.0
	TOTAL	\$105.5 M	209.9

HE WATERFRONT

Purchasing information:

Since Massport is not under state procurement laws, it operates as a private company. Bids are advertised in the Boston Globe for tangible products over \$5,000. Companies wishing to sell to Massport may contact them directly. Massport does not receive any federal funding and is thus not restricted by the Buy America Act. Recent purchases have included snow removal equipment, snow melting equipment, cranes and fire trucks.

Contact:

Ralph DeOrsay, Manager of Purchasing Massport Logan Airport East Boston, MA 02128 Tel: (617) 561-1690 Fax: (617) 561-1773

Other Massport addresses:

Massport 10 Park Plaza Boston, MA 02116 Tel: (617) 973-5500 Fax: (617) 973-5611

Massport, Maritime Department Boston Fish Pier, Bldg. E II Northern Avenue Boston, MA 02110 Tel: (617) 973-5354 Fax: (617) 973-5357

Alden S. Raine Executive Director Anne D. Aylward Maritime Director

Please see further discussion of Massport facilities under the following sections:

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- Airports (Massachusetts)
- Cargo Shipping- Ports (Massachusetts)
 - Highways and Bridges (Massachusetts)

Commonwealth Flat

k Falcon Cruise Terminel. 9 Boston

> sac Plan Biliution Plaza), Isstown

Boston Shipyard, Boston

> Boston Pier Ioston

rte Sugar Tarmiaal, eslown

IV. HIGHWAYS AND BRIDGES

The largest and most important component of all the State Transportation Improvement Programs is that of highways and bridges. The majority of funding from the Intermodal Surface Transportation Efficiency Act is for this category. On the national level, highway interests have earmarked \$1 million for lobbying in 1993.

Highway programs involve the 3R programs (rehabilitation, resurfacing and restoration). Bridge programs involve rehabilitation and restoration.

The most important public policy issues facing this industry are air quality (as it relates to the Clean Air Act Amendments), traffic congestion and demand management. The Clean Air Act promotes air quality planning with the continuing transportation process. Efforts are focused on reducing emissions by increasing the efficiency of the transportation system. One nationwide effort is to reduce the dependency on the single-occupancy vehicle and increase usage of multi-occupancy vehicles.

Any companies wishing to obtain information on the state highway and bridge program should contact the appropriate individuals listed in this section to request a copy of the Transportation Improvement Program for a particular state. For each state, there are hundreds of Highway and Bridge projects that will be executed in the following decade.

A. MAINE

The highway and bridge program represents a \$100 million investment annually from 1992 to 1997, with highways accounting for approximately 70% of this amount. These funds are dedicated to bridge capital improvements, collector road improvements and maintenance resurfacing.

the following premoting terufactroning warphician

The Federal-Aid portion of the 1992-93 program includes 43 miles of reconstuction/rehabilitation improvements and 280 miles of resurfacing to extend the life of improved section of highways. In this portion, the Interstate Construction program will involve I-95 and the 4 bypass routes of I-195, I-295, I-395 and I-495. Other portions of Federal-Aid program include the following:

- Interstate (4R) resurfacing, restoration, rehabilitation and reconstruction
- Primary system of major highways connecting cities
- Secondary system of feeder roads connecting with the primary highway network and to centers of population
- Urban highways in areas of 50,000 or more population

- Bridge replacement and rehabilitation

Scope of work	Number	of	bridges
Bridge replacement		32	
Bridge rehabilitation		17	
Wearing surface replacement		40	

- Extraordinary bridges (defined as bridges which are generally outside the Department's ability to address within the confines of normal bridge funding levels). rehabilitation These include:

- 1. Million Dollar Bridge (Portland-South Portland)
- 2. Penobscot Bridge (Bangor-Brewer)
- 3. Waterville-Winslow (2nd Bridge)
- 4. Brunswick-Topsham (Bypass U.S. 201)
- 5. Augusta (3rd Bridge and Approaches)
- 6. Biddeford-Saco (3rd Bridge)
- 7. Skowhegan (2nd Bridge)
- Local bridge program involves the 2,035 "local bridges," of which 830 are in need of some type of capital improvement, at a total cost of approximately \$114 million. Funding for FY92 and FY93 will total \$4.1 million and will address the following work.

Scope of work Number of bridges

	rail and curb improvement	2
Bridge	wearing surface replacement	1
	superstructure replacement	4
	rehabilitation	2
Bridge	replacement	18
	removal	1
the second second		

- Hazard elimination

- Rail highway crossings reconstuct (on /reliant) [farter unimprovement
 - Pavement marking program
 - Size/weight enforcement program
 - Preconstruction engineering for future projects (surveys, development of plans and cost estimates)

In this portion, the Interstate Construct

The state portion of the program, which consists of the non-Federal Aid State Highway Program, the Collector Road Program, the Maintenance Resurfacing Program and the State Highway Resurfacing Program includes 44 miles of reconstruction/rehabilitation improvements and 1,355 miles of resurfacing to extend the life of improved sections of highways. The purpose of the Program is also to improve the surface condition of unimproved roadways until such time as more extensive improvements can be made.

Of the 136 bridges proposed for improvement, 54 are projects to replace wearing surfaces at the appropriate time to prevent bridge deck deterioration and thereby extend the life of a bridge and avoid premature replacement.

The Highway and Bridge Investment Program involves hundreds of projects.

Purchasing information: Interstate an \$ 23,500,000 \$ 94638,000 mb

Prequalification of companies is not necessary. Bids are advertised in the Kennebec Journal. Contacts:

Department of Transportation State House- Station 16 Augusta, ME 04333 Tel: (207) 287-2484 Contact: Robert Phillips

Contact: Michael Burns, Contract Department Tel: (207) 287-3171

Contact: Richard Coleman, Chief Engineer Tel: (207) 287-2055

Contact: Paul Minor, Planning Department Tel: (207) 287-3131

Please see the following page for the State Highway funding apportionments for Fiscal Years 1992 and 1993.

FISCAL YEARS 1992 AND 1993 PROGRAM FUNDING SUMMARY

Program Category Total	Federal Funds	State Funds	Local/Other Funds	
FEDERAL/STATE PROGRAMS				
Interstate 4R Primary Secondary Urban Bridge Repl. & Rehab. Local Bridges Hazard Elimination Rail/Highway Crossings Pavement Markings SUBTOTAL	<pre>\$ 22,500,000 54,600,000 18,000,000 9,000,000 29,700,000* 1,400,000 1,800,000 1,800,000 4,000,000</pre>	<pre>\$ 3,610,000 23,690,000 8,670,000 12,710,000 1,400,000 200,000 100,000 -0- \$51,250,000</pre>	\$ -0- 1,000,000 -0- 2,400,000 -0- 1,300,000 -0- 100,000 -0- \$4,800,000	<pre>\$ 26,110,000 79,290,000 26,670,000 12,270,000 42,410,000 4,100,000 2,000,000 2,000,000 4,000,000</pre>
STATE PROGRAMS			Robert Capacity	*1.0,000,00
Non-Federal State High Collector Roads Maintenance Resurfacing State Highway Resurfac Traffic Signals SUBTOTAL	-0- g -0-	<pre>\$ 300,000 8,600,000 8,600,000 3,500,000 100,000 \$21,100,000</pre>	-0- -0- -0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000 100,000
TOTAL PROGRAM	\$142,800,000	\$ 72,350,000	\$ 4,800,000	\$ 21,100,000 \$219,950,000

Bridge Replacement & Rehabilitation figures include Federal Interstate *

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B. MASSACHUSETTS

Highway and bridge projects include the following areas:

interfaces at its subway stations with i

- Interstate maintenance
 - National Highway System
 - Bridges
 - Surface Transportation Program
 - Congestion Mitigation Air Quality
- Demonstration and Other
 - Hazard elimination
- Interstate transfer
- Urban systems Interstate Public lands Scenic byways

Federal highway funding totals approximately \$3 billion for Fiscal Years 1993-1995. Hundreds of projects are planned and are enumerated in the State Transportation Improvement Program.

The Massachusetts Highway Department (MHD), formerly under the name Department of Public Works, is responsible for the execution of all highway and bridge projects with the following exceptions:

- the Massachusetts Turnpike (managed by the Massachusetts Turnpike Authority)
- the Tobin Bridge (managed by the Massachusetts Port Authority)

Ongoing projects:

- Central Artery/Third Harbor Tunnel (CA/T) project

The CA/T project, also known as "the Big Dig," is the major infrastructure project in New England. The Central Artery project is designed to increase highway capacity for traffic traveling in downtown Boston. The estimated completion date is 2003. As of February 1993, the cost for this mega-project is \$5.8 billion and, according to officials, is expected to rise to \$6.4 billion.

This project involves the depression of the Central Artery in Boston and the construction of a third harbor tunnel which will lead from South Boston to East Boston (Logan Airport). The purpose of the project is threefold: 1) to ease traffic impacts in the city of Boston; 2) to improve access to Logan International Airport; 3) to improve land access to the seaport terminals in Boston. Please refer to the following page for a map of the CA/T project. The ramifications for the transit industry involve large scale changes in the current public transit system and roadway access. The Massachusetts Bay Transportation Authority (MBTA) will have 20 interfaces at its subway stations with the CA/T project. The artery and tunnel are expected to improve access to multiple locations along the Boston waterfront.

The Third Harbor Tunnel

Construction of the tunnel began in September 1992. In February 1993, the first of 12 sections of the Third Harbor Tunnel was lowered into place. The tunnel is expected to open on a limited basis to commercial and high occupancy vehicle traffic in the fall of 1995 and will open to all traffic sometime in late 1999. Bethlehem Steel is the manufacturer of the tunnel sections.

Once completed, the tunnel will stretch 3,850 feet across Boston Harbor from the Subaru Pier in South Boston to Bird Island flats in East Boston. It will connect both the Massachusetts Turnpike and the Southeast Expressway to East Boston and Logan International Airport. There will be 2 lanes of traffic in each direction.

Another tunnel project which is part of the CA/T project is the Central Artery North Area Project. This tunnel is located in Charlestown and is slated to open in the Spring of 1993.

Contact:

Central Artery/Third Harbor Tunnel project One South Station Boston, MA 02110 Tel: (617) 951-6000 Peter Zuk, Project Director

Purchasing information:

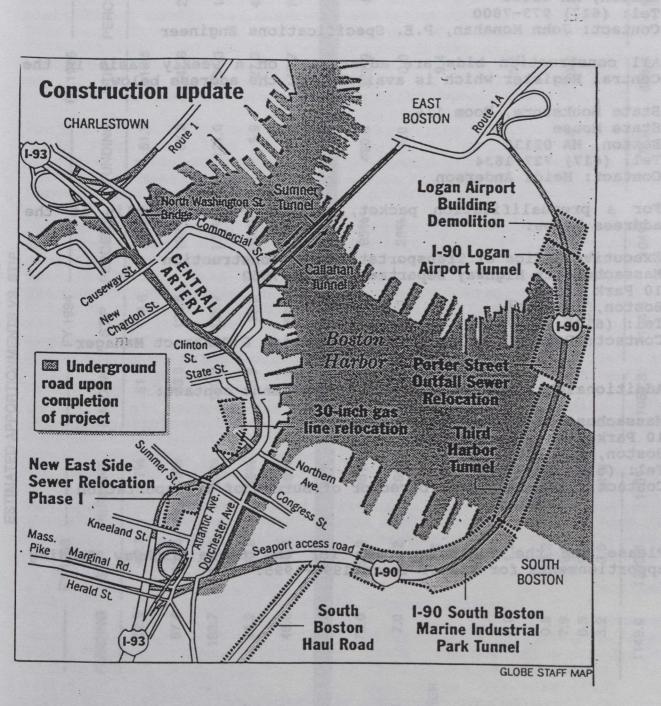
All firms doing construction, engineering, design and consulting work for the MHD must be prequalified. Bids will not be accepted by companies which are not prequalified.

Engineering/General Construction contracts:

Companies may obtain a 5-year, \$75 subscription to receive a weekly mailing of all public bids which includes the date of the bid opening, the location of the work, the work description, the monetary estimate of the bid and the cost of the plans and specifications.

Please refer to the following page for a map of the CA/T project.

Central Artery/Third Harbor Tunnel Project



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Contact:

Executive Office of Transportation and Construction Massachusetts Highway Department, Room 6340 10 Park Plaza Boston, MA 02116 Tel: (617) 973-7800 Contact: John Monahan, P.E. Specifications Engineer

All construction bids are advertised on a weekly basis in the Central Register which is available at the address below.

State Bookstore, Room 116 State House Boston, MA 02133 Tel: (617) 727-1834 Contact: Heidi Anderson

For a prequalification packet, contact Peter Laughlin at the address below:

Executive Office of Transportation and Construction Massachusetts Highway Department, Room 7552 10 Park Plaza Boston, MA 02116 Tel: (617) 973-7620 Contact: Peter Laughlin, Prequalification & Contract Manager

Additional Massachusetts Highway Department contact:

Massachusetts Highway Department 10 Park Plaza, Room 4150 Boston, MA 02116 Tel: (617) 973-7800 Contact: Daniel Beagan, Director of Bureau of Transportation Planning

Please see the following page for the State Highway funding apportionments for Fiscal Years 1993-1995.

26% 224% 163% 104% 13% 128% 67% %06 PERCENT 13.5 142.6 136.3 27.3 42.7 0.0 1995 362 4 327.9 0.2 0.0 6669 9.4 STIP FUNDING 51.9 63.8 5.9 41.0 283,6 121.0 490.0 777.6 0 129% 98% 07% 664% 126% 95% 28% 104% PERCENT 8.6 126.5 355,9 39.2 52.9 FY 1994 128.7 731.9 13.2 0.9 0.0 STIP 1104.6 51.9 FUNDING 63.8 120.3 5.9 41.0 282 9 770.0 4.0 1059.3 77% %06 136% 98% 123% 98% 243% PERCENT 46% 106% 40% 53% 25% 24% 94% 439,65 40.7 164.5 50.8 45.6 FY 1993 756.2 0 0.2 STIP 138.1 9.8 0.3 3.0 1220.6 3 37.2 357.2 FUNDING 52.9 67.8 46.6 152.7 770.0 7.0 3.0 0.8 0.5 7.9 3.2 1149.6 DEMONSTRATION & OTHER NTERSTATE TRANSFER URBAN-BOSTON AREA TOTAL HAZARD ELIMINATION FUNDING CATEGORY UNOBLIG. BALANCES: INTERSTATE MAINT. CON. MIT. AIR QUAL. SUR. TRANS. PROG. JRBAN-LAW/HAV JRBAN-BOSTON NAT. HWY. SYS. JRBAN-WORC. SUBTOTAL: NTERSTATE BRIDGE

REFLECTS TRANSFERS OF \$22.3 m. FROM BRIDGE TO STP IN F.Y. 93

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FEDERAL HIGHWAY FUNDING TOTALS ESTIMATED APPORTIONMENTS VS. STIP

- Tobin Bridge

The Massachusetts Port Authority (Massport) manages the Tobin Bridge. This bridge is the largest in New England, connecting downtown Boston with Route 1, Interstate 95, and the North Shore. It extends across the Mystic River from Charlestown to Chelsea. An estimated 22.6 million commuters, truckers, residents and tourists cross the bridge each year.

In Fiscal Year 1992, the Tobin Bridge generated more than \$16.8 million in tolls. It is the tenth busiest toll bridge in the nation, with the lowest tolls of those toll bridges.

Ongoing projects:

- 10-year project of redecking and repainting
- Automatic toll system on the Tobin Bridge

A 90-day automated and computerized toll system test began in February 1993. With this system, a scanner reads a pass card which is mounted inside a vehicle windshield, and deducts the toll from a prepaid account, allowing the driver to pass through without stopping. This process is referred to as "automatic vehicle identification" or AVI.

Alden Raine, Executive Director of Massport, said that the automatic collection system will be put into operation on the Tobin Bridge this year if the test is considered successful.

This technology is especially important because it helps to eliminate traffic congestion at toll booths, reducing exhaust emissions.

Purchasing information:

The operation and maintenance of the Tobin Bridge required purchasing goods and services valued at \$6 million in FY92. Among those goods and services were materials and supplies, utilities, repairs, construction and equipment.

Contact:

Massport Logan Airport East Boston, MA 02128 Tel: (617) 561-1690 Fax: (617) 561-1773 Contact: Ralph DeOrsay, Manager of Purchasing - Massachusetts Turnpike Authority (MTA)

Ongoing projects:

- 5-Year reconstruction and improvement program of I-90

This second phase of a 10-year reconstruction program will take place from 1993 to 1997. The capital investment will bring the Turnpike into conformance with current interstate highway safety standards. Extensive bridge rehabilitation is also involved.

- Truck feasibility study

The MTA is presently undertaking a feasibility study for developing truck stop facilities along the turnpike. This study is being conducted by Monacelli Associates of Cambridge, MA. The contract is part of the Massachusetts Turnpike plan for the improvement of the Jines 1933ed turnpike and its facilities.

Planned projects:

- Automated vehicle identification system

The Massachusetts Turnpike Authority is also expected to sollicit bids for an automatic vehicle identification system. This system could be instituted on the Massachusett Turnpike, as well as the airport tunnels, the Sumner and Callahan Tunnels, sometime in 1994. The MTA also manages these tunnels. Sceneric ans entire blands ers

Purchasing information:

Prequalification is necessary for all companies. The MTA is open to a competitive bidding process. Any companies wishing to sell to the MTA should send a letter describing their goods and services. The MTA purchasing policy is as follows: For expenditures from \$1,000 to \$5,000, a senior staff member signs off on unsollicited bids. For \$5,000 to \$10,000 expenditures, bids are sent out to those companies on the relevant bidders list. For expenditures over \$10,000, bids for construction work and capital equipment are advertised in "Goods and Services" in the Central Register, which is published weekly. Please see address and contact on page 45.

Contact:

General contact:

Massachusetts Turnpike Authority State Transportation Building 10 Park Plaza, Room 5170 10 Park Plaza, Room 5170 Boston, MA 02116 Tel: (617) 248-2862 Contact: Alice Larner

Massachusetts Turnpike Authority State Transportation Building Boston, MA 02116 Tel: (617) 248-2822 Contact: Loretta Cedrone, Policy Analyst

C. NEW HAMPSHIRE

As in the other New England states, the issues of air quality and traffic congestion are extremely important. All Intermodal Surface Transportation Efficiency Act (ISTEA) funding is apportioned to highways and bridges in New Hampshire. Hundreds of highway and bridge projects are dedicated over the next decade to the following:

- National Highway System
 - Interstate maintenance
- Congestion/mitigation/air quality
- Bridge rehabilitation
 - Surface Transportation Plan
- Forest highways
- Rural access projects
- Innovative projects
- Turnpike
 - Betterment

As set forth in the State Transportation Improvement Program for 1994 to 2003, the goals concerning highways and bridges are the following:

- Address bridges at both the state and municipal levels by replacing those bridges considered critical; establish a long-term maintenance program for this aging infrastructure

- Maintain and preserve the current level of service for the highway stystem, with minimal expansion. At the same time, the state should refine and implement the state pavement management system

- Address the congested roadways and air pollution problems

- Identify and preserve vital transportation corridors

Purchasing information:

Prequalification is necessary for all companies for construction, engineering and design work.

Contacts: Department of Transportation John O. Morton Building P.O. Box 483, Hazen Drive Concord, NH 03302-0483 Tel: (603) 271-3732 Contact: Deborah Weil, Prequalification Department

Ken Hazeltine, Planning and Bids Same address as above. Tel: (603) 271-3344

Please see the following page for State Highway funding apportionments for 1994-2003.

NEW HAMPSHIRE'S ESTIMATED TOTAL APPORTION MENTS FEDERAL PROGRAMS (Estimates in minions)

FUNDING CATEGORY		1994	1995	1996	1997	1998	1999	2000	2001	2002	200:	TOTAL
IN TERSTATE MAINTENANCE	Total	15 230	15 230	15 230				24. 2. 25		1. 27	101,12	
Erroapage, Jup 100 1	Federal	13 707	13 707	13 707	15 230	15 230	15 230	15 230	15 230	15 230	15 230	152 30
		10.00		13707	18707	13 707	13 707	13 707	13 707	13 707	13 707	137 07
NATIONAL HIGHWAY SYSTEM	Total	36 093	36 093	45 893	45 893	36 093	25 093	-25 093	25 093	25 093	100	
	Federal	28 874	28 874	35 714	36 714	28 874	20 074	20 074	20 074	20 074	25 093	1
CONOFERIOR	El ali	temt								mark to the		1 200 42
CONDESTION MITIGATION & AIR QUALITY	Total	6 047	6 047	6 047	6 047	6 047	6 047	6 047	6 047	6 047	6 047	60 47
	Federal	4 838	4 8 3 8	4 8 38	4 8 3 8	4 838	4 838	4 838	4 838	4 838	4 8 38	48 37
BRIDGE REHAB & REPLACEMENT	Total	11 476	11 476	11 476	11 476							
ON-SYSTEM	Federal	9 181	9 181	9 181	9 181	11 476 9 161	11 476 9 181	11 476 9 181	11 476 9 181	11 476 9 181	11 476	
	(82), SALAT			0110			3 101	3 101	9 101	3 181	9 181	91 808
OFF-SYSTEM	Total	4 552	4 552	4 552	4 552	4 552	4 552	4 552	4 552	4 552	4 552	45 520
IS LEWIS FARM NO ENT	Federal	3 642	3 642	3 642	3 642	3 642	3 642	3 642	3 642	3 642	3 642	36 410
	5 Day of	outres										
SURFACE TRANSPORTATION PROGRAM	Total	1 464	1 464	1 464	1 464	1 464	1 464	1 464	1 464	1 464	1 464	14 640
and a tradition of the New	Federal	1 171	1 171	1 171	1 171	1 171	1 171	1 171	1 171	1 171	1 171	11 712
TRANSPORTATION ENHANCEMENT	Total	3 203	3 203	2 202				Secola.	10 G.G.			1
CTUO CONCERNICE CONCERNIC	Federal	2 562	2 562	3 203	3 203	3 203 2 562	3.203	3 203	3 203	3 203	3 203	32 030
	17 10 10 10 10	V LAR	2	2 :02	2 202	2 302	2 562	2 562	2 562	2 562	2 562	25 624
URBANIZED OVER 200,000 POP	Total	0 366	0.366	0 366	0 366	0 366	0 366	0 366	0 366	0 366		
(SALEM-PLAISTOW-WINDHAM)	Federal	0 293	0 293	0 293	0 293	0 293	0 293	0 293	0 293	0 293	0 366	3 660
I de from the first the second		See allow				5 6 6 5	1 C				V 2.7.7	2 3/0
ANY AREA	Total	7 068	7 068	7 068	7 068	7 OCR	14 068	14 068	14 068	14 068	14 068	105 680
	Federal	5 654	5 654	5 654	5 654	5 654	11 254	11 254	11 254	11 254	11 254	84 544
NON LIRBAN AREAS												
TON UNDAN AILEAS	Total	0 000	0 000	0 000	0 000	0 000	3 857	3 857	3 857	3 857	1 84.7	13 2RS
	Federal	0 000	0 000	0 000	0 000	0 000	3 080	3 086	3 086	3 086	3 086	15 42A
URBAN LESS THAN 200.000 POP	Icial	11 780	11 780			5057						
· · · · · · · · · · · · · · · · · · ·	Federal	9 424	9 424	9 424	9 424	11 780	11 780	11 780	11 780	11 780	11 760	117 800
	a la la la la			2 424	2 424	9 4 ? 4	9 4 2 4	9 42.1	9 42.4	9 424	9 12.1	34 240
RAIL-HWY PROTECT DEVICES	Total	0 222	0 222	0 222	0 222	0 222	0 222	0 222	0 222	0 222	0.111	
	Federal	0.178	0 178	0 178	0 178	0 178	0 178	0 178	0 178	0 178	0 222	2 220
BAN WINTER AT /DAVI SY	WELL CON					vel an	serrib of	· 00/20		0110	0176	1776
RAIL-HWY ELIMOF HAZARDS	Total	0 222	0 22.2	0 222	0 222	0 222	0 222	0 77.2	0 222	0 222	0 222	2 770
	Federal	0 178	0 178	0.178	0 178	0 178	0 178	0 178	0 178	0 178	0 178	1 776
HAZARD ELIMINATION												
	Federal	0 599	0 599	0 599	0 599	0 599	0 599	0 599	0 599	0 599	0 593	5 990
	I COPI BI	,0 479	0 479	0 479	0 479	0 479	0 479	0 479	0 479	0 479	0.179	4 792
OREST HIGHWAY PROGRAM	Total	0.564	0 564	0 564	0 564	0 564	0.564			0.000	2012	
	Federal	0 564	0 564	0 564	0 564	0 564	0.564	0.564	0.564	0 564	0 564	5 640
	a all	The mark		mades	server a		0.504	0.304	0 364	0 364	0 564	5 640
URAL ACCESS PROJECTS	Total	5 198	5 198	5 198	5.198	0.000	0.000	0 000	0.000	0 000	0 000	20 792
	Federal	4 158	4 158	4.158	4 158	0 000	0.000	0 000	0.000	0 000	0 000	16 6336
NOVALINE DOD ISS IS	19323							9003				
INOVATIVE PROJECTS	Total	1.909	1 909	1 909	1 909	0 000	0 000	0 000	0 000	0 000	0 000	7 636
OTAL	Federal	1.527	1 527	1 527	1 527	0.000	0 000	0.000	0.000	0 000	0.000	6.109
De CARATINGTON DEDG -	Total	105 993	105 993	115 793	115 793	98.886	98 743	98.743	98 743	98 743	98 743	1036 173
一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一	Federal	86 430	86 430	94 270	94.270	80 745	80 630	80 630	80 630	80 630	80 630	845 296

D. RHODE ISLAND

The state program is a standard reconstruction program, according to transportation officials. Highway and bridge work totals \$373 million for the 1992-1993 time period. Arterial highway construction and reconstruction projects account for a large portion of highway expenditures (approximately \$130 million during these 2 years).

Ongoing projects:

- Construction of the Memorial Boulevard Extension in Providence
 - Construction of the Woonsocket Industrial Highway
- Improvements to RI-138 in Jamestown, U.S. 44 in Smithfield and Glocester
- Improvements to US-1 in Warwick, North Kingstown, South Kingstown, Charlestown and Westerly

The RRR (resurfacing, restoration and rehabilitation of highways) is earmarked for \$64 million over the next 2 years. This program is geared to extend the service life of existing roads and to address the safety considerations.

Purchasing information:

Bids are advertised in the Providence Journal. Companies interested in doing contract work should send a letter of introduction including the company qualifications to the State Purchasing Division at the address below.

Department of Transportation Department of Administration One Capitol Hill Providence, RI 02903 Tel: (401) 277-2321 Contact: Peter Corr, State Purchasing Agent

Please see the following 7 pages for State Highway funding apportionments for 1992-1997.

RHODE ISLAND

Transportation Improvement Program OCTOBER 1, 1991 TO SEPTEMBER 30, 1997 (Cost in \$ Thousands)

			1002	\$ 1993		1994 &	05	1996 & 9	7 1014
RANK:		3 5991		0 199J			1		7 TOTAL
	· OF WIADWAY & DOLOGE DEDAIDS	PROVIDENCE	C SELECTION	4000	1 11		(and		4000
	JAMESTOWN BR Interim repair	JAMESTOWN	c		"C"	7380			7880
ete	& demolition (const prev.auth		32K30 IVON						
S. RARA	BERKELEY BROG #769	CUMBERLAND	RC	2600					2600
	MARTIN ST BRDG #774 (REPL)	LINCOLN	CROWNED I						98
	I-195 BROG.REH. & SAFETYIMPR				RC	16000	RC	50000	166000
Cher	1-95 to Gano St.	PROVIDENCE				Die 0026	3200	NDSTTMO	
12	EAST PROVIDENCE IND. HGWY	EAST PROVIDENCE	rc	2000	RC	13500	RC	21000	36500
	EAST PROVIDENCE IND. NOW	PAWTUCKET	NOTATOR	2000	~	03.801	38.3	LAIVADER	
15	LEWIS FARM RD BRIDGE #847	COVENTRY	RC	500					500
	REPLACEMENT (OFF SYS)	COTENTAL	Quarter 73						13
17	RTE 138 - NEW LOCATION	SOUTH KINGSTOWN	r	2500	RC	21000	RC	44000	67500
0.0	RTE 2 TO RTE 1 (INCL.URI CONN	ECTOR) EXETER		G 2220	AND A D				
21	ATWOOD AVE	JOHNSTON	rc	6500					6500
	CENTRAL AVE TO RTE 6								
24	MEMORIAL BLVD. EXTENSION	PROVIDENCE	с	7000					7000
	(PART CITY FUNDED)								
24	WHITE ROCK BRIDGE #65	WESTERLY	rc	1750					1750
	WESTERLY/STONINGTON (REPL.)								
25	CHURCH ST RR BRIDGE #943	CUMBERLAND	RC	450					450
	(OFF SYS)								
28	PHENIX AVE BR#413 & approach	CRANSTON	rc	1300					1300
	REPLACEMENT								
33	SEAPOWET BRIDGE #291	TIVERTON	RC	500					500
	REPLACEMENT (OFF SYS)								
38	HEMLOCK BR # 433	FOSTER	RC	400					400
	REPLACEMENT								
39	WASHINGTON BRDG #200 SOUTH	EAST PROVIDENCE	C	1500					1500
40	QUONSET PT/DAVISVILLE CONNEC.	NORTH KINGSTOWN			RC	24700	rc	27200	51900
	RT 4 TO US 1	EAST GREENWICH							
44	ARNOLD ST RR BRDG #944	WOONSOCKET	RC	550					550
	REPLACEMENT								
45	ALBION BRDG #164 & ALBION	LINCOLN	rc	2000					2000
BAN	TRENCH BRDG #163 & APPROACHES								
48	RT 6 UPGRADING	JOHNSTON		1	RC	6000 A	C	45000	51000
0.00	1-295 TO CT S/L	FOSTER							
49	STATE OFFICE TRAFFIC	PROVIDENCE	rc	4000				11 45 1860	4000
	CIRCULATION								
		SOUTH KINGSTOWN	RC	500					500
22		BURRILLVILLE	RC	500					500
E/	SIDEWALKS		Man Stan	114					
34	BARRINGTON BRDG #123	BARRINGTON	RC	1100					1100
		WARREN							
"	COURT ST BROG #959 REPLACEMENT	WOONSOCKET	rc	2500					2500
55		HOPKINTON							
	and the second	RICHMOND	C.	500					500
57	NAME AND ADDRESS OF A DESCRIPTION OF A D	PROVIDENCE	0/313871						
DOLAN N	& BROADWAY RR BRDG #927 (REPL)	- NOTIVERUE	rc	1000					1000
57		WARREN	RC	300					
1 1500	OVER STATE RR - ELIMINATION	the second	The star	300					
57	LANGE AND THE AVERAGE AND A	WESTERLY	RC	550					
20000	REHABILITATION								

			1003	£ 1993	1994 & 95 1996 8	97 TOTAL
RANK			They had a hold of the	5100	1774 6 73 1770 6	5100
6	O RRR - ROBER WILL. WAY	NORTH KINGSTOWN	RC	5100		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	POST RO TO THE END	1992-1993	The Roberts	700		700
6	4 WEST ELMNOOD BRIDGE	PROVIDENCE	rc	700		
	REHABILITATION	ditures (as	00	500		500
6	9 MIANTONOMI BRDG #270	RICHMOND	RC	500		500
166000	REHABILITATION		10492140	500		500
7	O HUNTINGHOUSE BROG #391	SCITUATE	RC	500		
365.04	REPLACEMENT (OFF SYS)	05HCE	RC	7500		7500
7	1 ROCKVILLE ALTON RD	HOPKINTON	RC	7500		7500
5.01	RTE 3 TO RTE 91		A RELATIV			5500
Τ.	3 SHANNOCK RD	RICHMOND	rc	5500		3300
67500	RTE 112 TO RTE 2	CHARLESTOWN		7700		3300
1	APPONAUG CIRCULATOR BY-PASSES	WARWICK	RC	3300		3300
6500	POST RD & RTE 117 EXTENSIONS		ROTERN	5050		5050
1	7 POST RD/US-1	NORTH KINGSTOWN	rc	5050		5050
7000	WEST MAIN St. TO Maxwell Dr.		in summer	1100		1100
12	STILLWATER RD BRDG #949 &	SMITHFIELD	rc	1100		1100
MAL E	APPROACHES					
75	NEW SHOREHAM BRDG #140	NEW SHOREHAM	rc	550		550
124	(OFF SYS)			10		
83	RTE 94	FOSTER	rc	3750		3750
1100	RTE 102 TO RTE 6			the second		
84	MENDON RD	CUMBERLAND	rc	6000		6000
10000	BROAD ST TO CUMB.HILL RD	WOONSOCKET			INC. PARTOR TRACK	17 TT
84	RTE 4 & US 1	NORTH KINGSTOWN	RC	11000 RC	16000 rc 29000	56000
	LAFAY. RD TO WAKEFIELD CUTOFF	SOUTH KINGSTOWN				ter ne es es le se el
80	RTE 138 IMPROVEMENTS	JAMESTOWN	rc	10000		10000
	JAMESTOWN BRDG TO NEWPORT BRD	Long to the long of the second		and the second		Carbon and an a
80	RRR PROGRAM - RTE 216	CHARLESTOWN	rc	3750		3750
	US 1 TO RTE 91	WESTERLY		ak		
90	BURDICKVILLE RD RR BRG #914	CHARLESTOWN	rc	750		750
~	REPLACEMENT (OFF SYS)					
91	UNION AVE RR BRDG #925	PROVIDENCE	RC	1050		1050
	REPLACEMENT			R.A.MARIN		
92	RTE 44/1-295 DRAINAGE IMPROV.		RC	450		450
		SMITHFIELD				
92	RTE 138 UPGRADING - E.MAIN RD			RC	12500 rc 9000	21500
~	RTE 24 TO RTE 114	MIDDLETOWN			BOUTARUSE	
44	WOODRUFF AVE/COLUMBIA ST	SOUTH KINGSTOWN	rc	3200		3200
00	RTE 108 TO NARR T/L			21A	AND LUE SLUISSING	
40	NEWPORT CIRCULATION IMPROV	NEWPORT		RC	4600 C 9200	13800
100	IMPROVEMENTS	MIDDLETOWN	MATTAL SAR			
100	BURR. WW MEN. BRDG #310	BURRILLVILLE	RC	1550		1550
101	REPLACEMENT		10000000			
101	US 1 .:	WESTERLY	RC	4500		4500
102	ROBIN HOLLOW TO PROSSER TRAIL		aprura			
	1 305 10 000 100	GLOCESTER	RC	10000 RC	10000 RC 10000	30000
		SMITHFIELD	BOUDENVE			
105		WEST WARWICK	RC	400		100
105		WARWICK	NROT			
105	RTE 6 TO PLAINFIELD PIKE	SCITUATE	c	3500		1500
109	NETLOON ME LOOP IT.			34 2		
	MA C/1 TO HT HORE	BRISTOL		RC	13000 RC 7000	
	STE TO HT HOPE BROG	WARREN				

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RANK : 101 10 3 4001 20 4 5001				the start of the start of	
			92 & 1993	1994 & 95 1996	& 97 TOTAL
117 WOONSOCKET INDUSTRIAL HOWY	LINCOLN	rc	4000		4000
RTE 146: TO RTE 122	CUMBERLAND				
118 RRR PROGRAM - OLD RTE 102	BURRILLVILLE	RC	1200		1200
RTE 107 TO N. SMITHFIELD T/	L				
123 RRR PROGRAM - POST RD	EAST GREENWICH	RC	6000		6000
FIRST AVE TO N. KINGSTOWN T					
126 RRR-RTE 5/N.Main/Central St	. NORTH SMITHFIELD	RC	1500		1500
Charon Dr. TO MA S/L					
127 ELDER BALLOU MEETING HS. LN	WOONSOCKET	rc	4000		4000
BOUND RD TO MENDON RD					
131 LIME ROCK RD	SMITHFIELD	RC	3000		3000
RTE 123 TO RTE 7					DI OBCORS
134 RTE 102	SCITUATE	RC	6250 rc	12000	18250
OLD PLAIN. PIKE TO BURR. T/L	GLOCESTER				10230
134 RRR PROGRAM-DIVISION RD	EAST GREENWICH	RC	2000		2000
RTE 2 TO RTE 3	WEST GREENWICH		Ta Lugard		2000
135 NORTH RD	JAMESTOWN	rc	2500		2500
ELDRED AVE TO EAST SHORE RD	COVERTEX		2300		2500
136 RRR PROGRAM - RTE 7	SMITHFIELD		5000		19 876 147
1-295 to Prov. Pike		rc	5000		5000
139 STILLWATER RD & CAPRON RD	SMITHFIELD	-	101		
RTE 104 TO LIME ROCK RD	SHITHFIELD	RC	2750		2750
141 RRR PROGRAM - BROAD ST	UESTERIA		TRAVES ATTACT		
MAIN ST TO BEACH ST	WESTERLY	rc	1600		1600
142 RTE 3 & MISHNOCK RD					
INTERSECTION	WEST GREENWICH	rc	500		500
144 POINT ST BRIDGE #980					
149 RRR PROGRAM - SUCCOTASH RD	PROVIDENCE	RC	2600		2600
US 1 TO MATUNUCK STATE BEACH	SOUTH KINGSTOWN	RC	3700		3700
152 WARWICK AVE	NARRAGANSETT				
HOXSIE "4" CORNERS TO SANDY L	WARWICK	RC	5000		5000
153 RRR PROGRAM - HARRIS AVE					3TD 65, 20-1
MAIN ST TO MA LINE	WOONSOCKET	rc	1200		1200
					ADA DISSING
155 RRR PROGRAM - RTE 116	SMITHFIELD	RC	4500		4500
RTE 44 TO RTE 104					
160 RRR PROGRAM - ROGER WMS. AVE	EAST PROVIDENCE		rc	2600	2600
BOURNE AVE TO PAWTUCKET AVE				TE RIJAMARA	2000
161 RRR PROGRAM - BIRCH SWAMP RD	WARREN		rc	1000	1000
RTE 136 TO SCHOOL HOUSE RD			NTUDM21904	12 40140 -	1000
161 RRR PROGRAM - RI RTE 195	JOHNSTON		RC	5000	
RTE 6 TO 1-295	PROVIDENCE		RC	5000	
105 VETERANS SQUARE - RTE 117	WEST WARWICK	RC	2500		1 SONANDESINI
166 RTE 146	PROVIDENCE	RC	5000		2500
1-95 TO MA S/L	NORTH PROVIDENCE		Nakan		5000
166 RRR PROGRAM - MAIN STREET	SOUTH KINGSTOWN	rc	1400		
DALE CARLIA CRNR TO OLD POST R	RC 3000 19		ANT AN		1400
	WEST WARWICK	RC	3250		
PROVIDENCE ST TO MAIN ST			3230		
167 SIX CRNRS INTER - RTE 44	EAST PROVIDENCE		2100		
	WESTERLY		1550		
SHORE RD TO NINIGRET RD		AC.	1330		1550
169 RRR - S. WEST AV/BEAVERTAIL	JAMESTOWN		2300		
NARRAGANSETT AVE TO BATTERY LN			2300		

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RANK:		15	92 & 1993	1994 & 95	14101 79 & 6991
170 SCHOOL MOUSE RD	WARREN	RC	2500		2500
RTE 136. TO MA S/L					
175 1-95 PANT RIVER BR #550	PAWTUCKET	rc	500	501 319 0	500
175 1-95 SERVICE ROADS	PROVIDENCE	rc	3000		3000
177 RRR PROGRAM - WEEKAPAUG RD	WESTERLY	rc	900		900
SHORE RD TO ATLANTIC AVE					
179 RRR PROGRAM - CHARLES ST	PROVIDENCE	rc	3500		3500
BRANCH AVE TO 1-95; & Br.#	973				
179 RTE 14	COVENTRY	RC	2100		2100
CT S/L TO MOOSUP VALLEY					
186 RTE 116/RTE 146 INTERCHANGE	LINCOLN	RC	1750 rc	3500 RC	14000 19250
RTE 116 TO RTE 122	CUMBERLAND				A 318 01 251 318
191 POST RD	NORTH KINGSTOWN	RC	3000		3000
SCHOOL ST TO E. GREEN T/L					OLD PLAIR, PIES
203 RRR - MESHANTICUT INTERCHG.	CRANSTON	rc	8000		8000
Rtes 2,5,33	WARWICK				2 315 01 5 318
217 RRR - RT 96 (RND. TOP RD.)	BURRILLVILLE	rc	2000		2000
SCHOOL ST TO BROOK RD					THE OT EVA COROLE AND
219 RTE 117	WARWICK	RC	3500		3500
1-95 TO GAUVIN Dr.					14
223 RRR PROGRAM - PAWTUCKET AVE	EAST PROVIDENCE	RC	2000		2000
NEWMAN AVE TO PAWT C/L					
230 RTE 110 (MINISTERIAL RD)	SOUTH KINGSTOWN	rc	2500 rc	7000	9500
RTE 138 TO US 1			2300 10	1000	9300
236 RRR PROGRAM - WILLETT AVE	EAST PROVIDENCE		RC	2050	2050
CRES.VIEW AV TO WASHINGTON A	D BARRINGTON			2030	2030
245 SAND HILL COVE RD	NARRAGANSETT	RC	2150		
RTE 108 TO ROGER WHEELER BEA	ICH .		2130		2150
247 RRR PROGRAM - RTE 14	SCITUATE	RC	3000		STANTAN TANA
RTE 102 TO RTE 116					3000
249 RTE 138 RECONSTRUCTION	RICHMOND		RC	14000	1000
1-95 TO RTE 2	SOUTH KINGSTOWN		n.	14000	14000
254 US 1	WARWICK	RC	3500		HALLAN OF TANIAN
APPONAUG "4" COR. TO EG T/L			3300		3500
260 RRR PROGRAM - STAFFORD RD	TIVERTON		RC	1500	
R I AVE TO BULGARMARSH RD			~~	1300	1500
263 RRR PROGRAM - FRANKLIN ST	BRISTOL		RC	750	BOURNE AVE TO PAUL
METACOM AVE TO WOOD ST			A.C.	130	750
267 RRR PROGRAM - UNION ST	PORTSHOUTH		RC	800	ATE 175 TO STRUGG
EAST MAIN RD TO WEST MAIN RD			RC .	000	800
272 WESTERLY BY-PASS &	WESTERLY		rc	8000	875 6.10 1-29S
INTERCHANGE @ US 1			10	8000	8000
275 1-195/DYER ST RAMPS	PROVIDENCE	RC	4000		
276 RRR PROGRAM - VERNON ST	WARREN			77.0	4000
MAIN ST TO METACON AVE	April 2 11		rc	750	750
282 RTE 2 (BALD HILL RD)	WARWICK	RC	8000		CON 8- CARLIA COME T
TOLLGATE RD TO COWESETT RD	ANTE CHANGE STORA				8000
284 RRR PROGRAM - Prospect St.	PAWTUCKET	RC	900		
BEVERAGE HILL AVE TO School S			wanesone and		900
288 1-295 SAFETY IMPROVEMENTS	WARWICK	с	3500		
(Bridges #719 & #722)	West Her				3500
290 COUNTY RD	BARRINGTON	RC	2500		
SULLIVAN TERRACE TO RUNSTICK	8				2500

RHODE ISLAND

Transportation Improvement Program OCTOBER 1, 1991 TO SEPTEMBER 30, 1997

(Cost in \$ Thousands)

RANK	a i Ginaut		1992	\$ 1993	1994 & 95 1996	A PT TOTAL
29	1 RRR PROGRAM - RTE 104	NORTH SMITHFIELD	D RC	3000		3000
	1-295 TO RTE 15	SMITHFIELD			1000 x 1000 1000	
29	3 RRR PROGRAM - US 44 RTE 102 TO CT S/L	GLOCESTER	RC	5250		5250
44	4 URI CIRC. & RI-108 BYPASS STUDY	SOUTH KINGSTOWN		RC	2700	2700
44	4 Quonset Pt. Circulation Improvements	NORTH KINGSTOWN	RC	2000		2000
999	P 1-95 PAVEMENT SETTLEMENT &	CRANSTON	с	2500		2500
	Median Barrier Rehabilitation	003 9	MOTON			
999	Interstate Resurfacing	Statewide	rc	10000 rc	10000 rc 1000	0 30000
87001	PARK AVE TO RTE 6, (Union Ave)	CRANSTON		rc	12900	12900
87001	RTE 10/RI RTE 195 INTERCHANGE	CRANSTON		rc	11000	11000
87002	RTE 3 NOOSENECK HILL RD TO W.W. T/L	COVENTRY		RC	6500	6500
87003	CHAPEL FOUR CORNERS INTERSECTION	CUMBERLAND		rc	550	550
87004	POST RD	WARWICK	RC	11000		
	AIRPORT RD TO STRAWBERRY FIELD		RL	11000		11000 .
87005	RTE 6	JOHNSTON				0201.0
	1-295 TO PROVIDENCE C/L	Sonnaron		rc	4300	4300
87006	PORT OF CHILLES PARA	NARRAGANSETT	rc	3500		3500
	CANOONE DO DOLOGO HOLE	COVENTRY	rc	700		700
87008	Allens Ave. (incl.1-95 Intchg. Eddy St. to Ernest Ave.	PROVIDENCE		rc	11000	11000
87009	COUNTY DO MUDDLEDE	BARRINGTON	rc	570		570
87027	11F11 11F10 011 00	BARRINGTON		RC	2300	2300
87031	Pro 137 (0	LINCOLN		rc	1700	1700
90032	CREENINGOD AN DELESS	EAST PROVIDENCE	rc	400		. 400
	Previous TIP Projects	00a 9	\$ 3	11820 s	266580 \$ 275400	\$ 953800

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RANK			19	92 & 1993	5	1994 & 95	1996 2 97 TOTAL
- Addre	ON DALES STUDIES OF SECTION						
9200	1 1-95/Route 2 Ramps	WEST WARWICK	p	500	rc rc	3000	3500
9200	2 US 44	SMITHFIELD TO PI	ROV.				444 URI CIRC. & RI
	1-295 TO GEORGE WATERMAN RD		Ρ	200	rc	4200	4400
	HIGH SERVICE TO G. WATERMAN	RD DOOS DR	P	350	rc	2950	3300
179 81	ACADENY AVE TO HIGH SERVICE	AV	Ρ	150	rc	1750	1900
9200	3 RTE 108	SOUTH KINGSTOWN	P	400	rc	10300	10700
	RTE 138 TO NARRAGANSETT T/L						
191 90							3000
92004	G RTE 1A (BOSTON NECK RD)	NORTH KINGSTOWN	IP	400	rc	8500	8900
	RTE 102 TO RTE 138						
5 K.	11000 F. C. C. C. C. C.					193 LATERCH	319 IAVOI 378 100
92005	RTE 146A (GREAT RD)	NORTH SMITHFIELD	P	300	rc	3950	4250
	RTE 146 TO RTE 146 PARK SOUA	ARE					
219 822	L 137 W						
92006	RTE S	CRANSTON, WARWICK		CPSERLAS		SHERS	100 FRAPEL POLA COI
	MAYFIELD AVE TO RTE 113		Ρ	300	rc	5400	5700
	JOHNSTON T/L TO CRANSTON ST		Р	300	rc	2950	3250
	Cranston St. TO MAYFIELD AV	Έ.	Ρ	400	rc	5050	5450
02007	ACTIVALENT AND	-		NOTON-D			8 319 200
92007	AQUIDNECK AVE	MIDDLETOWN	Ρ	200	rc	1800	2000
02008	EAST MAIN RD TO GREEN END AV		111	No. NO. NO.		GAON I	DOG PORTION SAULLES
72000		N.PROV., LINCOLN	Ρ	300	rc	4900	5200
02000	PROVIDENCE C/L TO RTE 146 HUNTINGTON AVE/CARTER ST			18TH DVC		(JA84 30)	UD7 CAHOONE RD B210
42004		PROVIDENCE	Ρ	150	rc	1350	1500
02010	CRANSTON ST TO ELMWOOD AVE		_	109 10 10 10 10 10 10 10 10 10 10 10 10 10		Net 29-1.10	ni), eve 200114 000
72010	POST RD TO WARWICK AVE	WARWICK	Ρ	300	rc	2500	2800
92011	Proposed Urban Collector	CUMBERLAND				15021 80	RECARLUA TRUND TW
	Mendon Rd. To Highland Corpor				RC	2000	2000
	(Locally funded Engineering)	ate Park					
	construction and a significant may						
92012	RTE 113 (MAIN AVE)	WARWICK	P	100		2000	
	Rte 5 to Jefferson Blvd	HONHICK	-	400	RC	2800	3200
92013	RTE 3 (COWESETT AVE)	WEST WARWICK	Р	800		5100	the units sives
100	RTE 2 TO COVENTRY T/L	HEST HONHIGH	-	000	RC	5400	6200
92014	BULLOCKS POINT AVE	EAST PROVIDENCE	Р	400		2/00	2800
	Crescent View to Turner Ave			400	RC	2400	- 2800
92015	BLACKSTONE ST	WOONSOCKET	P	250	RC	1200	
	NO MAIN ST TO HARRIS AVE			230	~~	1200	1450
	COBBLE HILL RD	LINCOLN	P	400	RC	3400	750 7000
	RTE 246 TO WEEDEN ST	PAWTUCKET			~~	5400	3800
	OAK HILL RD	NORTH KINGSTOWN	P	400	RC	3000	8000 7/00
	RTE 4 TO.RTE 1					3000	3400
92018	EXETER RD	NORTH KINGSTOWN	P	500	RC	2500	1000
	RTE 2 TO INDIAN CORNER RD	EXETER					3000
	EAST RO/STONE CHURCH RD	TIVERTON	Ρ	150	RC	1200	1750
	INTERSECTION IMPROVEMENTS						1350
	NANAQUAKET RD	TIVERTON	P	350	RC	2875	3225
00000	AND BRIDGE # 126						3223
	PARK AVE	PORTSMOUTH	Ρ	800	RC	4000	4800
	E MAIN RD TO RTE 24						4000

TRANSPORTATION IMPROVEMENT PROGRAM FFY 1992-1997 HIGHWAY PROGRAM SUMMARY (cost in \$ thousands)

Community Participation/Engineering

DRAINAGE STRUCTURE REFURBISHING 1000

SALT STORAGE FACILITIES 500

he hat it enance and enhancement.	1992	£ 199	3 1	994 & 19		19964199	 A101
Previous TIP Projects ("committed")	· \$	311820)	\$ 266580	400	\$ 275400	\$ 853800
92xxx Projects New to the TIP		8700	ind	89375			98075
888,999 Statewide Projects				ay or abili			
Bridge Management Program (including 100 % state bond funds)	prc	25000	prc	25000	prc	25000	75000
Pavement Management (resurfacing) (including 100% state funds)	prc	10000	prc	10000	prc	10000	30000
BICYCLE FACILITIES	prc	4000	prc	4000	prc	4000	12000
RAILROAD HIGHWAY CROSSINGS		1200		1200		1200	3600
BRIDGE INSPECTION & RATING		1600		1600		1600	4800
HIGHWAY SAFETY PROGRAM - STATE		1000		1000		1000	3000
STRATEGIC HIGHWAY RESEARCH PROG		100		100		100	300
TRUCK WEIGH-IN-MOTION PROGRAM		100		100		100	300
PLANE COORDINATE SURVEYS		350		350		350	1050
STAFF TRAINING & EDUCATION		250		250		250	750
LANDSCAPING		600		600		600	1800
SIGNALIZATION		2000	-	2000		2000	6000
CARPOOLING AND VANPOOLING		100		100		100	300
FRINGE PARKING FACILITIES		600		600		600	1800
DAMAGED SAFETY REL. HARDWARE		1300		1300		1300	3900
		600		600		600	1800
STRIPING UPGRADING		2000 ·		2000		2000	6000

E. VERMONT

The State Transportation Improvement Program includes 600 projects in its long-range program. The program is an aggressive one including highway resurfacing and the maintenance and enhancement of the existing system as well as increased capacity. Highway projects are grouped as follows:

System Preservation

- Pariste Projects new toutes tip an per - Resurfacing, rehabilitation, restoration
- Rail-highway crossing projects
- Bridge rehabilitation or replacement with minor roadway approach work System Management

- Signing and pavement marking projects
- Signalization projects
- Projects to improve operational efficiency when the length of the project is 0.2 mile or less and when the cost is \$500,000 or less and the right-of-way impacts are minimal

New Capacity

- Projects including significant widening or additional lanes
 Highway relocation projects COOS LANDECAPTHO E EDITATION
- New interchanges or ramps

Local Aid

- Town highway and bridge improvements
- Projects that are on the Federal-aid system and also under local jurisdiction (urban system projects and Secondary Class II projects)
 - Any other project not on the state system such as the Town Highway Bridge Inspection Program

The maintenance and improvements of roads is extremely important due to the amount of trucks travelling between Vermont and Canada. Truck weight on secondary roads is a point of concern because transportation officials believe that weights often exceed the recommended level. The interstate issue of truck size is also an important one and one that is being considered for stricter state regulations.

Ongoing projects:

- Alberg-Swanton bridge replacement

Purchasing information:

All companies doing contract work must be prequalified for highway and bridge work.

Contacts:

Department of Transportation State Administration Building 133 State Street Montpelier, VT 05602 Tel: (802) 828-3441 Contact: Jeff Squires, Director of Planning

Department of Transportation State Administration Building 133 State Street Montpelier, VT 05602 Contact:George Spilak, Contracts Tel: (802) 828-2641

FY 94 Budget Estimated Expenditures State Funding Source Summary Highways and Bridges

State Funding Sour	<u>ce Total</u>	State	<u>Federal</u>	Local
Transportation- Engineering and Construction	\$52,727,548	6,457,087	46,092,008	178,453
Transportation- Special project un	9,870,413 it	872,635	8,991,814	5,964
Transportation- Town Highway Bridg	9,881,435 es	3,412,853	5,614,026	854,556
Transportation- Town Highways- Match Federal Aid	673,642	43,225	619,128	11,289
Transportation- C.C.C. Highway	3,686,832		3,686,832	canal, and
Transportation- Planning	8,251,733	1,522,622	6,729,111	
Transportation- Paving	<u>23,250,000</u>	<u>3,250,000</u>	20,000,000	eerouting ext-nsion of these
Total	\$108,341,603 \$	\$15,558,422 \$	91,732,919 \$1	,050,262

partial parallel taxiway and pavement reconstruction.

V. AIRPORTS

Purchasing information

This section will outline state airports and plans for their expansion and maintenance. No purchasing information will be provided.

As stated by U.S. Transportation Secretary Pena, the era of bigcity airports is probably over because there is not enough space as determined by land use requirement planners and there is always strong local opposition to airport enlargement. Air quality impact and conforming to Clean Air Act standards are important issues to airport planners.

A. MAINE

There are 37 publicly owned airports (excluding military installations), and over 100 private airports and seaplane bases. Only 6 of the publicly owned airports receive scheduled commercial service.

For 1992 and 1993, the Maine Department of Transportation requested \$2.5 million in state funding for air transportation capital improvements and an airport pavement preservation program. In addition to these two programs, the Air Transportation Investment (ATI) program also pursues smaller projects that are ineligible for federal funding. The ATI follows guidelines from the State of Maine Air Transportation Systems Plan, the State of Maine Airport Pavement Management Program and those stated in the document, "Transportation to the Year 2002: A Capital Improvement Plan for Maine."

Maine trends for air traffic are based on the following:

- Passenger traffic has steadily increased, especially at
- Bangor, Presque Isle and Portland.
 - Commercial traffic has increased at Portland and Bangor in recent years.
 - The number of carriers serving Maine has increased, among them Continental, Delta, United and U.S. Air.

Expansion plans for Portland Jetport and Bangor International Airport:

Portland Jetport: Recent growth has stretched capacity in almost all airport operations and expansion is limited by the Fore River which borders the airport to the north and east. There is potential for airport expansion to the northeast where the airport has acquired land for future aircraft gates, terminal space and additional parking. Presently, the Jetport has plans for roadway rerouting, automobile parking lot construction, terminal apron expansion and relocation of the Delta air cargo facility. The cost of these improvements will be about \$20 million. Future capital improvements include construction of a perimeter road around part of the airport, drainage improvements, the construction of a partial parallel taxiway and pavement reconstruction. **Bangor International Airport:** In 1991, the airport began expansion of the International Building and the Domestic Building at a cost of \$12 million. The construction of a 9,000 foot parallel runway, starting in 1994, is also planned.

From a safety, rather than a geographical coverage standpoint, the Maine Aviation Systems Plan recommends the following:

1) Add one privately-owned airport in the northwest corner of the state to the state system.

2) Determine if the Rangeley Airport can be fully developed to meet the needs of the Franklin/Oxford County area.

3) Consider a system of public heliports to serve remote inland areas and those coastal islands that have a sufficiently large resident population.

As stated in the study "Transportation to the Year 2002," the capital needs/expenditures budget for 1992-2002 is noted below:

\$26,233,000
\$60,072,000
\$28,288,000
\$15,744,000
\$25,035,000
\$23,052,000
\$2,500,000
\$1,000,000

Total

\$181,924,000

Airport revenues are expected to meet capital needs through 2002.

Reliever airports are airports that are specifically designated by the Federal Aviation Administration. They are developed to provide relief for larger airports. Auburn/Lewiston Municipal Airport and Sanford Municipal Airport are reliever airports for Portland Jetport.

Economic development airports are those airports, such as Portland Jetport, Bangor International and Augusta airports which are critical to the economy of the state. These are airports which may be further developed to accomodate commercial or corporate traffic.

Please refer to the following 6 pages for summaries of the Air Transportation Investment Program, General Aviation and Commercial Airports and a Maine airport map.

AIR TRANSPORTATION INVESTMENT PROGRAM

	Total	Federal Share	State Share	Local Share
ENTITLEMENT AIRPORTS:				
Bangor International			teres a caree	
FY92 *FY93	\$4,783,920 5,537,384	\$2,368,040 2,491,823	\$394,673 415,304	\$2,021,206 2,630,257
Portland Jetport				
FY92 FY93	2,830,000 3,600,000	2,547,000 3,240,000	141,500 180,000	141,500 180,000
Presque Isle		Transportat		
FY92 FY93	500,000 500,000	250,000 450,000	125,000 25,000	125,000 25,000
COMMERCIAL SERVICE AIRPORT	<u>rs</u> :			
Augusta State Airport				
FY92 - Design & Construct SRE Bldg.; Land Acquisition	1,341,111	1,207,000	134,111	
FY93 - Entitlement	333,333	300,000	33,333	
Hancock County				
FY92 - Master Plan FY93 - Runway Rehab.	50,000 1,200,000	45,000 1,080,000	2,500 60,000	2,500
Knox County			-	
*FY92/93	672,600	604,928	33,630	33,630

* Reflects increase in previous allocations for runway extension, landing ** Additional funds for International Terminal Project ***Additional funds for Domestic Terminal Project

	Total	Federal Share	State Share	Local Share
RELIEVER AIRPORTS:				
Auburn/Lewiston				
FY93 Pre-engineering/	unded		60,000	60,000
Taxiway Sanford				
1000 10 - 1 2 900 6				
FY92 Land Acq. FY93 Taxiway Const.	950,000 1,800,000	855,000 1,620,000	47,500 90,000	47,500 90,000
GENERAL AVIATION AIRPORTS:				
Belfast				
FY93 Master Plan	37,000	33,300	1,850	1,850
Bethel				
FY92 Land Acq.	120,000	108,000	6,000	6,000
Biddeford				
FY93 Apron Expansion	650,000	585,000	32,500	32,500
Dexter				
FY93 Expand GA Apron	210,700	189,630	10,535	10,535
Fryeburg				
FY93 Pre-engineering/ Runway extension	120,000		60,000	60,000
Jackman				
FY92 Runway drainage	360,750	324,675	18,037	18,038
Machias				
FY92 Master Plan FY93 Land Acq.	30,000 100,000	27,000 90,000	1,500 5,000	1,500 5,000
Norridgewock				
FY92 Master Plan	37,000	33,300	1,850	1,850

Old Town					
FY92 Snowblower		140,000	126,000	7,000	7,000
Oxford County					
FY93 Expand apro taxiway, beacon,		650,000	585,000	32,500	32,500
obstruction light Rangeley	ts 000,00				
FY92 Master Plan		80,000	72,000	4,000	4,000
Discretionary		126,677		126,677	
Preservation Candidates:		500,000		450,000	50,000
Princeton Frenchville					
Houlton Carrabassett Biddeford					

\$27,760,475 \$19,232,696 \$2,500,000 \$5,647,426

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Name of Airport	Owner	Acreage	Runway Length, Surface type, Primary Secon	ength, type, Secondary	Aids to Navigation	Operations 1989	Existing Based
COMMERCIAL SERVICE AIRPORTS			N K OOME		HOR BY 25, HORYDAE AN 52 1	10 10	
Augusta	State of Maine	315	5000 × 150	2703 × 75	CAT 1. FULL ILS	845 54	Ş
Bangor International	City of Bangor	2,553	11439x 300		NDB RU 33, ILS RU 15, ILS RU 15 (CAT II), ILS RU 33, VOR, VOR/DME RU 15, VOR/DME RU 33, ASR	-	54 80
Hancock County	Hancock County	335	5200 × 150	3363 × 75	NDB RW 22, ILS RW 22, LOC/DME BC RWY	41,700	17
Knox County Regional (Rockland)	Knox County	351	4500 × 100	4000 × 100	NDB RU 3 LOC RU 3	61.136	78
Northern Maine Regional	City of Presque Isle	1,489	7440 × 150	5994 × 150	ILS RU 1 VOR RU 19, VOR/DHE RU 1	20,000	2 12
Portland International Jetport	City of Portland	588	6800 × 150	5000 × 150	NDB, ILS RN 11, ILS RN 29, ASR	114,893	87
GENERAL AVIATION AIRPORTS					20.000	5.825	1
Auburn and Lewiston	Cities of Auburn/Lewiston	247	5000 × 100	2750 × 75	NDB RU 4, ILS RUY 4 VOR/DME	55.900	52
Belfast	City of Belfast	320	4000 × 100	-	NDB RU 15	16.300	20
Bethel - Colonel Dyke	Town of Bethel	225	3150 × 60	Participant - Statement	NONE	2,500	10
Biddeford Municipal	City of Biddeford	91	3000 × 75		vor	35,000	25
Caribou Municipal	City of Caribou	75	3400 × 125	3000 × 100	VOR	23,650	21
Central Maine Airport of Norridgewock	Town of Norridgewock	550	3999 × 150	4000 × 150	VOR/DHE RU 3	18,250	61
Charles A. Chase Memorial	Town of Dover-Foxcroft	55	2400 × 90		NONE	3,200	10
Deblois	State of Maine	153	4000 × 150	5 4 000 Y 00	NONE	200	in the
Dewitt Field	City of Old Town	360	3600 × 100	3200 × 100	NDB RU 22, VOR, VOR/DME RU 22, ASR, VOR-A APPROACH	60, 260	37
Dexter	Town of Dexter	311	3000 × 150	1600 × 300	NONE	2,810	16
Eastern Slope Regional	Town of Fryeburg	533	3698 × 75	a dise -	NDB	23,670	30
Eastport	City of Eastport	252	2850 × 86	- dependent	NONE	7.500	8

	and an mandan		020	ton	Say or i		
Vanne of Aireses			Runway Length,	ngth,		27 2000	8
Name of Airport	Owner	Acreage	Primary Secondary	ype, Secondary	Aids to Navigation	Operations	Existing Based
Fort Fairfield	Town of Fort Fairfield	11	1800 × 40	- 1997 - 1999	MONE	1707	Alrcraft
Greenville Municipal	Town of Greenville	241	4000 × 75	2000 76		1,500	3
Houlton International	Town of Houlton	1.615	5200 4 160			7,650	20
Isleboro	Town of Isleboro	17	DCI X 0070	s/ x nnnc	VOR RU 5	20,500	30
Lincoln Regional	Town of Lincoln	222	2800 - 76		NONE	3,000	1 10
Lubec Municipal	Town of Lubec	0		2 anr - 100	VOR/DME	7,650	S1 10
Machias Valley	Town of Machias	38	2000 ~ 60		NUNE	590	\$2 2
Millinocket Municipal	Town of Millinocket	160	4716 v 150	1003 450	36	13,000	15
N. Aroostook Regional (Frenchville)	N. Aroostook Regl. Airport Authority	116	32 × 0007		LOC RU	6,349	31
Newton Field	Town of Jackman	132	UN A 0062	17 × 10 × 10	NUB RU 52	17,535	8
Oxford County Regional (Oxford)	Oxford County	70	2000 - 76		NUNE	2,935	4
Pittsfield Municipal	Town of Pittsfield	202	CI X 0007		NONE	12,045	32
Princeton Municipal	Town of Princeton	130	NCI X DODA		NDB RWY 1	18,221	25
Rangeley Municipal	Town of Rannel av	404	NCI X MONT	4000 × 150	VOR RU 15	4,500	8
Robert Lafleur	City of Waterville	C21	21 X 1012	-	NDB	11, 135	13
Sanford Municipal	Town of Sanford	1,897	6000 x 150	5000 × 150	NDB, LOC RW 5, VOR/DME RW 5 LOC RW 7, VOR RW 7, VOR RWY 25	42,900	45
Stonington Municipal	Town of Stonington	12	21000		RU 7		6 ×
Sugarloaf Regional	Town of Carrabassett Vallav			-	NONE	1,400	8
Viscasset	Town of Wiscasset		2400 × 75			5,000	5
ABBREVIATIONS				59.	· · · · · · · · · · · · · · · · · · ·	39,500	46
ILS - Instrument Landing System					50		des rud

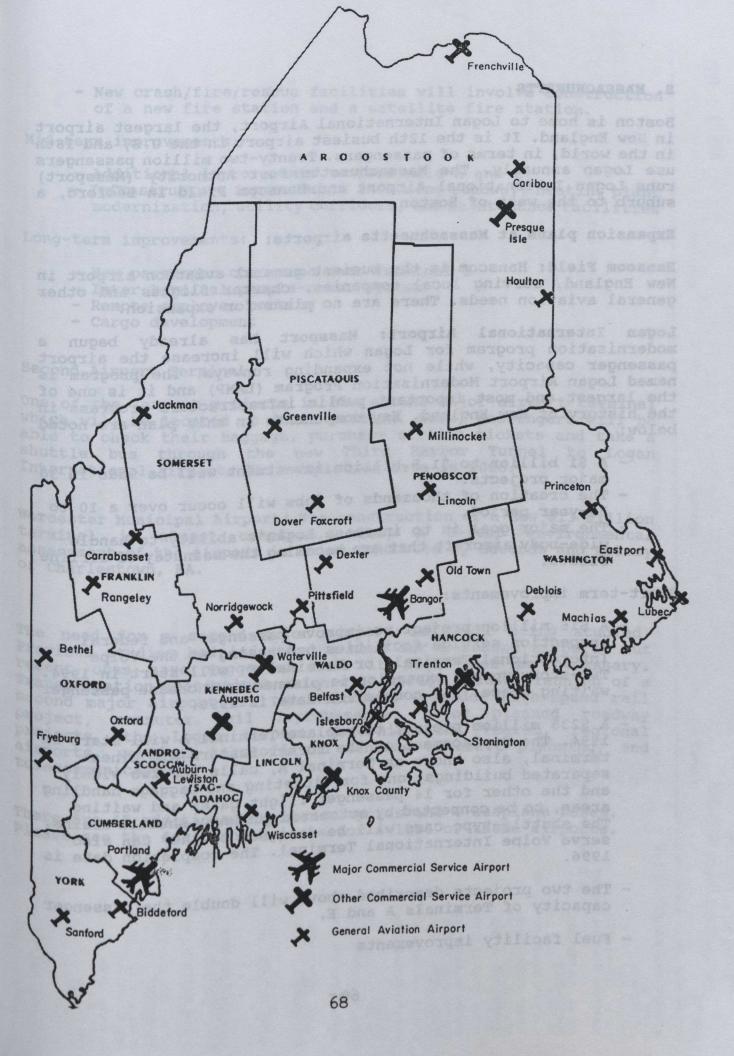
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Very High Frequency Omnidirectional Radio Range
 Non-directional radio beacon
 Instrument landing system for visibility of one-quarter mile

NDB CAT 11 1LS

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B. MASSACHUSETTS

Boston is home to Logan International Airport, the largest airport in New England. It is the 12th busiest airport in the U.S, and 18th in the world, in terms of passengers. Twenty-two million passengers use Logan annually. The Massachusetts Port Authority (Massport) runs Logan International Airport and Hanscom Field in Bedford, a suburb to the west of Boston.

Expansion plans at Massachusetts airports:

Hanscom Field: Hanscom is the busiest general aviation airport in New England, serving local companies, charter flights and other general aviation needs. There are no plans for expansion.

Logan International Airport: Massport has already begun a modernization program for Logan which will increase the airport passenger capacity, while not expanding runways. The program is named Logan Airport Modernization Program (LAMP) and it is one of the largest and most important public infrastructure programs in the history of New England. Key components in this plan are noted below:

- A \$1 billion to \$1.5 billion investment will be made in 30 major projects.
- The creation of thousands of jobs will occur over a 10 to 20-year period.
- The major goal is to increase Logan's ability to handle wide-body aircraft that are becoming the mainstay of airline fleets.

Short-term improvements:

- A \$16 million project to improve passenger and federal inspection service facilities processing at the Volpe International Terminal, or Terminal E, will start in 1994. Two-story upward expansion is planned to increase passenger waiting space. The completion date is 1996.
- A \$235 million project to replace Terminal A will start in 1994. The replacement of the former Eastern Air Lines terminal, also known as Terminal A, calls for two widely separated buildings, one for ticketing and baggage handling and the other for 14 passenger flight gates and waiting areas, to be connected by automated guideway shuttle trains. The shuttle-type cars will be designed so they can also serve Volpe International Terminal. The completion date is 1996.
- The two projects described above will double the passenger capacity of Terminals A and E.
- Fuel facility improvements

- New crash/fire/rescue facilities will involve construction of a new fire station and a satellite fire station.

Mid-term improvements:

- Additional improvements to Terminals A and E
- Infrastructure improvements including roadway, heating plant modernization, utility corridors, and maintenance facilities

Long-term improvements:

- New passenger concourse near Terminal E
- Inter-terminal people-mover system
- Remote employee parking
- Cargo development

Second Airport Terminal:

One of the largest projects is the second major airport terminal which will be located at South Station. Here, passengers will be able to check their baggage, purchase airline tickets and take a shuttle bus through the new Third Harbor Tunnel to Logan International Airport. The completion date is 2000.

Worcester Municipal Airport: The construction of a new \$13 million terminal is almost complete. Also, a 5-year environmental assessment of the airport is being conducted by Edwards and Kelcey of Charlestown, MA.

The need for a second major airport is still being studied. Previous studies had indicated a need for a second airport, but recent ones have suggested that it might not be necessary. Transportation initiatives which will affect future planning of a second major airport are the Northeast Corridor high-speed rail project, commuter rail improvements, major planned roadway projects, the Logan Airport Modernization Program, regional airports, vertical take-off and landing aircraft planning, and telecommunication.

There are 45 additional smaller airports and 4 seaplane bases. Please see the following 7 pages for a list of these airports.

APR 2 1 1993 CONSULTANT	NO CONSULTANT	EDWARDS & KELCEY, INC. ATTN: DAVID B. WEINER, V.P. 529 MAIN STREET BOSTON, MA 02129 617/242-9222	EXPIRES 12/94 NO CONSULTANT			DUFRESNE-HENRY, INC. ATTN: WALTER B.LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207/775-3211	EXPIRED 5/91 - No Reselection NOME	DUFRESNE-HENRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207775-3211 EXPIRED 5,000 - WD BADALDOLLON	
CHAIRMAM	NO AIRPORT COMMISSION	WILLIAM ELKINS, CHAIRMAN BARNSTABLE AIRPORT COMMISSION 480 BARNSTABLE RD., 2ND FL. HYANNIS, MA 02601 508/775-2020	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	ROBERT C. FARMER, CHAIRMAN BEVERLY AIRPORT COMMISSION BEVERLY MUNICIPAL AIRPORT C/O AIRPORT MANAGER BEVERLY, MA 01915	508/921-6072 No Airport Commission	W. THOMAS WHITELEY, CHAIRMAN CHATHAM AIRPORT COMMISSION P.O. BOX 381 W. CHATHAM, MA 02669 508/945-3681 OR 1941	WILLIAM MACCOMBER, CHAIRMAN EDGARTOMN AIRFIELD COMMISSION C/O SELECTMEN'S OFFICE P.O. BOX 158 EDGARTOMN, MA 02539 508/627-8030
1966 Hanager	WALTER J. O'CONNOR, MANAGER AGAWAM-SPRINGFIELD SEAPLANE BASE 1018 RIVER ROAD AGAWAM, MA 01001	BENJAMIN C. JONES, MANAGER 04 BARNSTABLE MUNICIPAL AIRPORT 480 BARNSTABLE RD., ZND FL. HYANNIS, MA 02601	LECWARD A. TANNER, MANAGER TANNER-HILLER AIRPORT P.O. BOX 77 NEW BRAINTREE, MA 01531	BARBARA PATZNER, MANAGER BEDFORD-HANSCOM FIELD CIVIL TERMINAL, 200 HANSCOM DR. BEDFORD, MA 01730	MURRAY RANDALL, MANAGER MYRICKS AIRPORT 168 PADELFORD ST. BERKLEY, MA 02779	GREGORY E. CHAPMAN, MANAGER 9 ARTHUR H. TREPANIER, ASST. MGR. BEVERLY MUNICIPAL AIRPORT BEVERLY, MA 01915 Secretary: Cheryl	BRIAN L. MAGGILLIVARY, MANAGER 11 BOSTON HELIPORT, INC. 31 FARGO STREET BOSTON, MA 02210	FRANK JOY, MANAGER 5 LONNIE K. PICKETT, ASST. MGR. CHATHAM MUNICIPAL AIRPORT GEORGE RYDER RD. CHATHAM, MA 02633	ROY A. NUTTING, MANAGER JAMES D. MITCHELL, ASST. MGR. EDGARTOMM-KATAMA AIR FIELD RFD BOX 326 EDGARTOMM, MA 02539 Secretary: Marilym
Sinte Transportation Building 10 Park Plaza, Room 6620 Roston, Massachusetts 02116-3966 AIRPORT	AGALAM-SPRINGFIELD SEAPLANE BASE NO FAX # - 413/789-0955	BARNSTABLE MUNICIPAL AIRPORT vc 047001020-0004 FAX #: 508/775-0453 508/775-2020	TANNER-HILLER AIRPORT NO FAX # - 508/867-8186 or 2549	BEDFORD-HANSCOM FIELD FAX #: 617/274-0560 617/274-7200	BERKLEY-MYRICKS AIRPORT NO FAX # - 508/822-2457	BEVERLY MUNICIPAL AIRPORT vc 047001030-0009 FAX #: 508/921-6071 508/921-6072	BOSTON HELIPORT, INC. vc 042910264-0001 FAX #: 617/482-2902 617/482-4501	CHATHAM MUNICIPAL AIRPORT vc 047001055-0005 FAX #: (C/O EMILY) 508/255-6700 508/945-9000	EDGARTOWN-KATAWA AIR FIELD NO FAX # - 508/627-9018

DUFRESNE-HENRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207/775-3211 EXPIRED 1/91 - MO Remelection		DUFRESNE-HENRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUCH DRIVE SOUTH PORTLAND, ME 04106 207/775-3211 EXPIRES 3/95	DUFRESNE-HENRY, INC. ATTM: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207/775-3211 EXPIRES 6/94	NONE	NONE	NONE	NONE	NONE	
JANET HUGHES, CHAIRNOMAN FALL RIVER AIRPORT COMMISSION 356 ALBANY STREET FALL RIVER, MA 02720 508/673-6438	NO AIRPORT COMMISSION	KEVIN LEARNED, CHAIRMAN FITCHBURG AIRPORT COMMISSION FITCHBURG MUNICIPAL AIRPORT FITCHBURG, MA 01420 508/342-3769	ANDRE GUERTIN, CHAIRMAN GARDNER AIRPORT COMMISSION 582 PEARL STREET GARDNER, MA 01440 508/632-4932	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	
JAMES TRAVASSOS, MANAGER FALL RIVER MUNICIPAL AIRPORT 1 AIRPORT ROAD FALL RIVER, MA 02720	DAVID J. GARRISON, MANAGER Falmouth Airport Box 691 Falmouth, MA 02541	RICHARD E. WALSH, MANAGER FITCHBURG MUNICIPAL AIRPORT FITCHBURG, MA 01420 Secretary: Brenda	T RUDOLPH F. COUTURE, MANAGER ve 047001105-0006 GARDNER MUNICIPAL AIRPORT P.O. BOX 121 GARDNER, MA 01440	WALTER J. KOLADZA, MANAGER GREAT BARRINGTON AIRPORT P.O. BOX 179 GREAT BARRINGTON, MA 01230	PETER ANNIS, MANAGER HONPONSETT POND SEAPLANE BASE C/O 553 MONPONSETT STREET HALLIFAX, MA 02338	PETER ANNIS, MANAGER HANSON-CRANLAND AIRPORT C/O 553 MONPONSETT STREET HALIFAX, MA 02338	WILLIAM J. SLAVIT, MANAGER Haverhill-Riverside Seaplane Base 72 Coffin Avenue Haverhill, Ma 01830	JOSEPH MENFI, MANAGER HOPEDALE AIRPORT 1 AIRPORT ROAD HOPEDALE, MA 01747	
FALL RIVER MUNICIPAL AIRPORT vc 047001097-0004 NO FAX # - 508/677-1420	FALMOUTH AIRPORT NO FAX & - 508/548-9617	FITCHBURG MUNICIPAL AIRPORT vc 047001099-0005 FAX #: 508/345-9579 508/345-9580	CARDNER MUNICIPAL AIRPORT vc 047001105-0006 M0 FAX # - 508/632-9794	GREAT BARRINGTON AIRPORT FAX #: 413/528-2030 413/528-1010 or 1061	HALLIFAX-HOMPONSETT POND SEAPLANE BASE NO FAX # - 617/293-2181	HANSON-CRANLAND ATRPORT NO FAX # - 617/293-2261	HAVERHILL-RIVERSIDE SEAPLANE BASE NO FAX # - 508/372-3420	HOPEDALE AIRPORT FAX #: 508/478-4632 508/478-1726	72

CONSULTANT

CHAIRMAN

MANAGER

AIRPORT

MANAGER

AIRPORT

CHAIRMAN

CONSULTANT

LAWRENCE MUNICIPAL AIRPORT

RICHARD J. D'AGOSTINO, EXEC. DIR. ROBERT E. SERVERIUS, MANAGER LAWRENCE MUNICIPAL AIRPORT HORTH ANDOVER, MA 01845 492 SUTTON STREET vc 047001152-0002 FAX #: 508/794-5961 508/794-5880

Secretary: Rose

MANSFIELD MUNICIPAL AIRPORT

DAVID V. DINNEEN, MANAGER MANSFIELD MUNICIPAL AIRPORT MANSFIELD, MA 02048 294 FRUIT STREET vc 047001170-0001 FAX #: 508/337-8068 508/339-3624

WRLBORD AIRPORT 508/485-0069 NO FAX #

MARSHFIELD AIRPORT

EDWARD J. NOVAK, JR., MANAGER

VC 047001174-0002 NARSHFIELD AIRPORT

MARSHFIELD, NA 02050

OLD COLONY LANE

FAX #: 617/837-5103 617/837-8521 MARSTONS MILLS-CAPE COD AIRPORT 508/428-8732 NO FAX # -

vc 047001504-0005 MARTHA'S VINEYARD AIRPORT FAX #: 508/693-0407 508/693-7024

METHUEN-MERRIMACK VALLEY SEAPLANE BASE 508/689-3389 NO FAX #

RICHARD KORNHISER, MANAGER MARSTONS MILLS, MA 02648 MARSTONS MILLS AIRPORT P.O. BOX 5

WILLIAM P. REYNOLDS, MANAGER MARTHA'S VINEYARD AIRPORT VINEYARD HAVEN, NA 02568 Secretary: Cindy . RFD BOX 850

JOHN J. WHOLLEY, MANAGER MERRIMACK VALLEY SEAPLANE BASE 474 LOWELL STREET METHUEN, MA 01844

LAWRENCE AIRPORT COMMISSION 01845 RICHARD ZAHN, CHAIRMAN NORTH ANDOVER, MA 508/683-0111 492 SUTTON STREET

JEFFREY J. SIENA, CHAIRMAN MANSFIELD AIRPORT COMMISSION MANSFIELD, MA 02048 508/339-8804 50 WEST STREET FOUN HALL

NO AIRPORT COMMISSION

DOWALD V. LACOUTURE, MANAGER

MARLBORD, NA 01752

MARLBORD AIRPORT

MARSHFIELD AIRPORT COMMISSION GEORGE D. HARLOW, CHAIRMAN FAX #: 617/350-8118 MARSHFIELD, MA 02051 617/956-5414 P.O. BOX 277

NO AIRPORT COMMISSION

MARTHA'S VINEYARD AIRPORT COMMISSION VINEYARD HAVEN, MA 02568 508/693-7022 JOHN S. ALLEY, CHAIRMAN **RFD BOX 850**

EXPIRED 9/92 - Reselecting ATTN: DAVID 8. WEINER, V.P. 529 MAIN STREET EDWARDS & KELCEY, INC. THE SCHRAFFT CENTER BOSTON. NA 02129 617/242-9222

SPOFFORD & THORNDIKE, INC. ATTN: EDWARD A. WELCH, V.P. LEXINGTON, MA 02173-9117 EXPIRES 9/95 191 SPRING STREET 617/863-8300 617/426-8666 P.O. BOX 9117 FAY.

NONE

EXPIRED 9/91 - No Reselection SPOFFORD & THORNDIKE, INC. ATTN: EDWARD A. WELCH, V.P. LEXINGTON, MA 02173-9117 617/863-8300 **191 SPRING STREET** 617/426-8666 P.O. BOX 9117 FAY.

NONE

ATTN: WALTER B. LOVETT, JR., SR. V.P. SOUTH PORTLAND, ME 04106 400 SOUTHBOROUGH DRIVE DUFRESNE-HENRY, INC. 207/775-3211

EXPIRES 7/93 - Reselecting

CONSIST 2 ARE	EDWARDS & KELCEY, INC. ATTM: DAVID B. WEINER, V.P. 529 MAIN STREET THE SCHRAFFT CENTER BOSTOW, MA 02129 617/242-9222 EXPIRES 9/94	EDWARDS & KELCEY, INC. ATTN: DAVID B. WEINER, V.P. 529 MAIN STREET THE SCHRAFFT CENTER BOSTOM, MA 02129 617/242-9222	EXPIRES 9/94 NONE	KONE	GALE ASSOCIATES, INC. 8 SCHOOL ST. P.O. BOX 890021 WETHOUTH, MA 02189-0001 617/337-4253	EXPIRES 1/96 NONE	FAV, SPOFFORD & THORNDIKE, INC. ATTN: EDWARD A. WELCH, V.P. 191 SPRING STREET P.O. BOX 9117 LEXINGTOM, MA 02173-9117 617/863-8300 OR 617/426-8666 EXPIRES 9/95	
	E. FOLEY VAUGHAM, CHAIRMAN NANTUCKET AIRPORT COMMISSION C/O MANAGER'S OFFICE NANTUCKET MEMORIAL AIRPORT MACY LANE MANTUCKET, MA 02554 508/228-7224	ROBERT TWEEDIE, CHAIRMAN NEW BEDFORD AIRPORT COMMISSION NEW BEDFORD MUNICIPAL AIRPORT SHAMMUT AVEMUE NEW BEDFORD, MA 02746 508/994-3452	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	ALFRED DOUGHERTY, CHAIRMAN NORTH ADANS AIRPORT COMMISSION 122 NOTCH ROAD NORTH ADANS, MA 01247 413/662-3231	GARSON FIELDS, CHAIRMAN NORTHAMPTON AIRPORT COMMISSION C/O MAYOR'S OFFICE 210 MAIN STREET NORTHAMPTON, MA 01060 413/584-3853	FAX: 413/584-0243 THOMAS H. JUDGE, CHAIRMAN MORMOOD AIRPORT COMMISSION P.O. BOX 40 NORMOOD, MA 02062-0040	
	FRED H. JAEGER, MANAGER JOHN J. MCDOWALD, 111, ASST. MGR. JOHN J. MCDOMALD, 111, ASST. MGR. MANTUCKET MEMORIAL AIRPORT MACY LANE MANTUCKET, MA 02554 Secretary: Myrl Aldrich	JOHN H. DRURY, MANAGER Neu Bedford Municipal Airport Shammut Avenue New Bedford, Ma 02746 Secretary: Maria	RICHARD HORDON, MANAGER PLUM ISLAND AIPRORT P.O. BOX 528 NEWBURYPORT, MA 01950	JOSEPH MENFI, MANAGER NORFOLK AIRPORT 61 RIVER ROAD NORFOLK, MA 02056	VILLIAM J. BLEIL, MANAGER MORTH ADAMS AIRPORT P.O. BOX 1562 NORTH ADAMS, MA 01247	RICHARD GIUSTO, MANAGER NORTHAMPTON-LAFLEUR AIRPORT P.O. BOX 221 NORTHAMPTON, MA 01061 Secretary: Ginny	THOMAS J. MAHER, MANAGER MICHAEL A. FRISOLI (ASST. MGR.) NORWOOD MEMORIAL AIRPORT NORWOOD, MM 02062 NORWOOD, MA 02062	
and the second of the second se	MANTUCKET MEMORIAL AIRPORT vc 047001200-0002 FAX #: 508/325-5306 508/325-5301 0R 5300	NEW BEDFORD MUNICIPAL AIRPORT J VC 047001204-0004 N FAX #: 508/991-6148 VC 047001204-0004 N 508/991-6160 N	MEMBURYPORT-PLUM ISLAND AIRPORT FAX #: 508/462-2114 508/462-2114 P	MORFOLK AIPRORT J FAX #: 508/478-4632 508/528-5184 6 6	MORTH ADAMS-HARRIMAN & NEST AIRPORT W vc 047001212-0008 N FAX #: 413/663-3764 vc 047001212-0008 N 413/664-4585	MORTHAMPTON-LAFLEUR AIRPORT FAX #: 413/565-0910 413/564-7980 OR 1860	MORMOOD NEMORIAL AIRPORT VC 046001254-0010 VC 046001254-0010 NC 1762-1958 NC 046001254-0010 NC 17762-4750 OR 769-5860 NC 17762-4750 OR 769-5860 NC 1769-5860 NC 1	74

CONSULTANT

MANAGER

CHAIRMAN

AIRPORT

CONSULTANT	DUFRESNE-HEMRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207/775-3211 EXPIRES 12/95	NONE	NONE	NONE	DUFRESNE-HENRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207775-3211 EXPIRES 5/93	DUBOIS & KING, INC. HAMILTON ENGINEERING DIVISION ATTN: DAVID A. FARR, V.P. 100 PERIMETER ROND MASHUA, NH 03063 AATVARTOAT	EXPIRED 11/92 - No Reselection TRA, INC. ATTN: BRYON H. RAKOFF, PRINCIPAL 38 CHAUNCY STREET BOSTON, MA 02111 617/482-1962 FYRIEFD 4/03 - BALLING	SNON
CHAIRMAN	KEITH LARIVIERE, CHAIRMAN ORANGE AIRPORT COMMISSION ONE AIRPORT STREET ONE AIRPORT STREET ONENGE, MA 01364-2031 508/544-6081	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	WILLIAM I. WHEELOCK, JR., CHAIRMAN PITTSFIELD AIRPORT COMMISSIOM 21 FILOMENA DRIVE PITTSFIELD, MA 01201 413/447-6182 FAX #: 413/447-6185	WALTER E. MORRISON, JR., CHAIRMAN PLYMOUTH AIRPORT COMMISSION PLYMOUTH MUNICIPAL AIRPORT SOUTH MEADOW ROAD PLYMOUTH, MA 02360 508/224-7982	DR. LEOWARD ALBERTS, CHAIRMAN PROVINCETOMM AIRPORT COMMISSION P.O. BOX 657 RACE POINT ROAD PROVINCETOMM, MA 02657 508/487-9395	NO AIRPORT COMMISSION
MANAGER	LEOWARD E. BEDAN, MANAGER ORANGE MUNICIPAL AIRPORT AIRPORT STREET ORANGE, MA 01364	RICHARD OLNEY, MANAGER OXFORD AIRPORT BOX 191, FORT HILL ROAD OXFORD, MA 01540	KENNETH N. PINCINCE, MANAGER PALMER METROPOLITAN AIRPORT P.O. BOX 215 THORNDIKE, MA 01079	DOMALD V. MAYER II, MANAGER/OMMER PEPPERELL SPORTS CENTER AIRPORT P.O. BOX 279 PEPPERELL, MA 01643	LYNN D. LYON, MANAGER PITTSFIELD MUNICIPAL AIRPORT TAMARACK ROAD PITTSFIELD, MA 01201	WARREN SMITH, MANAGER PLYMOUTH MUNICIPAL AIRPORT So. MEADOW ROAD PLYMOUTH, MA 02360 Secretary: Jeanette	URPORT ARTHUR W. LISENBY, MANAGER vc 047001246-0003 PROVINCETOWN MUNICIPAL AIRPORT P.O. BOX 657 RACE POINT ROND 260 Commercial StPROVINCETOWN, NA 02657 etown, MA 02657 Secretary: Cindy or Joy	ROWALD J. FLORIO, MANAGER SHIRLEY AIRPORT 130 LANCASTER ROAD SHIRLEY MA 012424
AIRPORT	084NGE MUNICIPAL AIRPORT vc 047001226-0004 508/544-8189	OXFORD AIRPORT FAX #: 508/967-2220 508/987-2676	PALMER METROPOLITAN AIRPORT NO FAX # - 413/283-5792 OR 413/583-5008	PEPPERELL SPORTS CENTER AIRPORT NO FAX # - 603/673-5867 OR 508/433-9222	PITTSFIELD MUNICIPAL AIRPORT vc 047001239-0005 413/443-6700	PLTHOUTH MINICIPAL AIRPORT VC 047001242-0001 FAX #: 508/747-4463 508/746-2020	PROVINCETOWN MUNICIPAL AIRPORT VC 047001246-0003 PROVINCETOWN MUNICIPAL FAX #: 508/487-4110 508/487-0241 OR 0240 508/487-0241 OR 0240 Checks only: Town Hall, 260 Commercial StPROVINCETOWN, MA 02657 Provincetown, MA 02657 Secretary: Cindy or	SHIRLEY AIRPORT FAX #: 508/425-4549 508/425-4742

DUFRESNE-HENRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 2077775-3291	EXPIRES 6/94 NONE	NONE	NONE	DUFRESNE-HENRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207775-3211 EXPIRED 1/90 - Reselecting JANE KIRKWOOD, AIRPORT COUNSEL	NONE		EXPIRED 1/90 - No Reselection DUFRESME-HENRY, INC. ATTN: WALTER B. LOVETT, JR., SR. V.P. 400 SOUTHBOROUGH DRIVE SOUTH PORTLAND, ME 04106 207/775-3211 EXPIRES 10/94
LLOVD POTE, CHAIRMAN SOUTHBRIDGE AIRPORT COMMISSION P.O. BOX 507 STURBRIDGE, MA 01566 508/347-3232	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	NO AIRPORT COMMISSION	ROBERT CURRAN, CHAIRMAN TAUNTON AIRPORT COMMISSION P.O. BOX 441 EAST TAUNTON, MA 02718 508/823-8141 OR IN BOSTON AT MA. REHAB. COMM. 617/727-4592	NO AIRPORT COMMISSION	EDWARD GILLESPIE, CHAIRMAN MONTAGUE AIRPORT COMMISSION 1 AVENUE A TURNERS FALLS, MA 01376 413/773-7626 OR 413/863-8398	ROBERT A. GREENLEAF, CHAIRMAN VESTFIELD AIRPORT COMMISSION C/O AIRPORT MANAGER'S OFFICE WESTFIELD-BARNES MUNICIPAL AIRPORT WESTFIELD, MA 01085 413/572-6275
JAMES V. LATOUR, MANAGER Southbridge Municipal Airport P.O. Box 827 Southbridge, Ma 01550 Secretary: Marsha	GREGG ANDREWS, MANAGER SPENCER AIRPORT PAXTON ROAD SPENCER, MA 01562	JAMES J. DAVITT, MANAGER STERLING AIRPORT 121 GREENLAND ROAD STERLING, MA 01564	DOWALD G. MCPHERSON, MANAGER STOW AIRPORT (MINUTE MAN AIR FIELD) 302 BOXBORO ROAD STOW, MA 01775	DOWALD A. DINNEEN, MANAGER JOWATHAN EDWARD DINNEEN, ASST. MGR. TAUNTOM MUNICIPAL AIRPORT P.O. BOX 157 EAST TAUNTON, MA 02718	WARREN F. HUPPER, MANAGER TEWKSBURY AIRPORT (TEW-MAC) P.O. BOX 204 TEWKSBURY, MA 01876	vc 04.7001195-0007 TURNERS FALLS AIRPORT P.O. BOX 88 TURNERS FALLS, MA 01376	AIRPORT GEORGE E. GIFFORD, MANAGER 04.7001333-0006 WESTFIELD-BARNES MUNICIPAL AIRPORT AIRPORT MANAGER'S OFFICE WESTFIELD, MA. 01005 Secretary: Eileen
SOUTHBRIDGE MUNICIPAL AIRPORT FAX #: 508/347-1248 508/765-0226	SPENCER-ANDREWS AVIATION NO FAX # - 508/885-5060	STERLING AIRPORT FAX #: 508/753-5541 508/422-8860	STOW-MIMUTE MAN AIR FIELD FAX #: 508/897-3935 508/897-3933	TAUNTON MUNICIPAL AIRPORT vc 047001247-0001 FAX #: 508/822-9617 508/823-3682 08 0747	TEWKSBURY (TEW-MAC) AIRPORT FAX #: 508/851-3401 508/851-9338	TURNERS FALLS AIRPORT vc 047001195-0007 FAX #: 413/863-3125 413/863-9391	WESTFIELD-BARNES MUNICIPAL AIRPORT vc 047001333-0006 FAX \$: 413/572-6275 0R 6294 Secretary: Kerry 92

CONSUL TANT

CHAIRMAN

MANAGER

AIRPORT

CONSULTANT	CALOCERIMOS & SPINA ATTW: FRANCIS P. KULKA AIRPORT PLANNER 1020 SEVENTH MORTH STREET LIVERPOOL, NY 13088 315/455-7781 EXPIRED 7/91 - Reselecting EXPIRED 7/91 - Reselecting EXPIRED 7/91 - Reselecting ATTW: DAVID B. WEINER, V.P. ATTW: DAVID B. WEINER, V.P. S29 MAIN STREET THE SCHMAFT CENTER BOSTOM, MA 02129 617/242-9222 EXPIRED 4/92 - Reselecting	AND A DAY AND A
CHAIRMAN	JOSEPH D. LOBELLO, CHAIRMAN ALLEN BLAIR, PRESIDENT MMDC 3911 PENDLETON AVENUE CHICOPEE, MA 01022 413/593-6421 413/593-6421 413/593-6421 6122 413/593-6421 A1700000000000000000000000000000000000	
MINAGER	MICHAEL V. BOLTON, MANAGER MESTOVER METROPOLITAN AIRPORT 255 PADGETTE ST. CHICOPEE, M. 01022 CHICOPEE, M. 01022 DEBORAH S. LEDWELL, MANAGER O THOMAS P. NOLAN, ASST. MANAGER WORCESTER MUNICIPAL AIRPORT 375 AIRPORT DRIVE WORCESTER, M. 01602 Secretary: Lucy	MUM AND
AIRPORT	WESTOYER WETROPOLITAM AIRPORT VE 042553520-0000 FAX #: 413/593-5546 413/593-5543 VE 042553520-0000 FAX #: 508/754-4266 FAX #: 508/754-4266 508/754-7441, 792-0610 OR 799-1350	

C. NEW HAMPSHIRE

In 1992, there were 23 registered commercial airports. Nine are privately owned. Also, 25 percent of the airports do not have paved runways or runway lights, and half have runways of 3,000 feet or less. Only 3 airports have control towers and 3 have more than 100 based aircraft. Many of these airports have deteriorated as a result of limited investment in improvements.

Manchester Airport: This airport serves approximately 600,000 passengers each year. Existing landside facilities are currently at capacity.

Ongoing project:

- A \$40 million terminal improvement program is underway to accommodate an anticipated doubling in air traffic from 1992 to 2010.

Pease Air Force Base: This military base was closed in 1991. Pease will soon begin commercial airline activity. Cargo airlines, package express, and general aviation will operate here. The Pease Development Authority is seeking to expand the area as an industrial, retail, office and international trade center.

Other commercial airports are in Keene, Laconia and Lebanon.

Air transportation needs through 2010, as reflected in the "Transportation in the 21st Century" study, are indicated below.

Airport	access:	\$120,000,000
Airport	capacity	\$29,000,000
Airport	preservation	\$18,000,000
Airport	standards	\$16,000,000
Airport	upgrades	\$42,000,000

Total \$225,000,000

Airport revenues are projected to total \$73 million through 2010, resulting in a \$153 million shortfall.

Please refer to the next page for Demand/Capacity Relationship of New Hampshire commercial airports.

DEMAND/CAPACITY RELATIONSHIP more thank too EXISTING AIRFIELD CAPACITY AND FORECAST DEMAND SUMMARY

runways or runway lights, and hal

AIRPORT	EXISTING CAPACITY	T	FORECASTE	States and the second of the second states in the		PERCENT OF CAPACITY					
	Local VY 6	1992	1997	2002	2007	1992	1997	2002	200		
Berlin	110.000	9,989	11,416	12,843	13,795	9.1%	10.4%	11.7%	12.5		
Claremont	110,000	10,421	11,414	12,406	13,399	9.5%	10.4%	11.3%	12.2		
Concord	300,000	80,651	93.613	106,575	118,817	26.9%	31.2%	35.5%	39.6		
Errol	65.000	1,761	1,761	2,348	2,348	2.7%	2.7%	3.6%	3.6		
Franconia	50,000	7,308	8,352	9,396	10,440	14.6%	16.7%	18.8%	20.9		
Gorham	50,000	4,500	5,500	6,000	7,000	9.0%	11.0%	12.0%	14.0		
Hampton	65,000	39,418	45.824	52,229	58,142	. 60.6%	70.5%	80.4%	89.4		
Haverhill	65.000	3,040	3,344	3,952	4,256	4.7%	5.1%	6.1%	6.5		
Hillsboro	100,000	10,500	11,500	12,000	13,000	10.5%	11.5%	12.0%	13.0		
Jattrey	105,000	19,640	22,662	25,306	28,327	18.7%	21.6%	24.1%	27.0		
Keene -	175.000	54,592	68.740 ·	86,175	111,212	. 31.2%	.39.3%	49.2%	63.5		
Laconia	170,000	73,192	87.084	100,546	113,008	43.1%	51.2%	59.1%	66.5		
Lebanon	235.000	102,452	121,920	144,166	161,690	43.6%	51.9%	61.3%	68.8		
Manchester	295,000	211,105	248,041	283,591	321,142	71.6%	84.1%	96:1%	108.9		
Moultonboro	.90,000	10,569	13,211	- 15,853	18,495	11.7%	14.7%	17.6%	20.6		
Nashua	220,000	278,763	323,427	368,090	411,984	126.7%	147.0%	167.3%	187.3		
Newport	65.000	13,469	15,393	17,959	19,883	20.7%	23.7%	27.6%	30.6		
Plymouth	65,000	12,663	13,814	14,966	16,117	19.5%	21.3%	23.0%	24.8		
Rochester	110.000	25,813	29,373	33,230	36,791	23.5%	26.7%	30.2%	33.4		
Salem	50,000	3,900	3,900	3,600	3,300	7.8%	. 7.8%	7.2%	6.6		
Twin Mtn	65,000	6,388	7,370	8,353	9,336	9.8%	11.3%	12.9%	14.4		
Whitefield	110,000	8,415	9.993	11,307	12.885	7.7%	9.1%	10.3%	11.7		
Wolfeboro	75,000	12,665	• 14,127	15,588	17,050	16.9%	18.8%	20.8%	22.7		
Totals	2,745,000	1,001,214	1,171,779	1,346,479	1,522,417	36.5%	42.7%	49.1%	55.5		

Takeoffs\Landings

D. RHODE ISLAND

The Transportation Improvement Program for airports calls for planning, design, acquisition and construction of airfield facilities such as runways, taxiways, lighting, public terminals, safety equipment and noise abatement. There are 6 state airports, the largest being Green State Airport. Airport improvement projects total \$125 million for 1992 and 1993.

Green State Airport: This airport served 2.5 million passengers in 1990. The \$176 million improvement program in general aviation, Cargo and terminal facilities is scheduled to start by summer 1993. It will include the following:

- New parking garage
 - Curb improvements
- Ticketing and baggage claim facilities
- New jet gates
- New cargo areas
- New charter/commuter terminal

Financing for the new terminal depends on airlines agreement to pay a 40% rent increase.

Please refer to the following page for the TIP funding for 1991-1997.

OCTOBER 1,1991 to SEPTEMBER 30, 1997 (COST IN THOUSANDS OF DOLLARS)

FUNDING CATEGORY: AIRPORT IMPROVEMENT PROGRAM

SUMMARY OF TOTAL COSTS

						1992 -
AIRPORT	1992	1993	1994	1995	1996	1996
BLOCK ISLAND	1,500	400	200	1,200	450	3,750
T F GREEN	25,370	7,520	7,825	7,400	5,400	53,515
Terminal costs	50,000	20,000	0	0	0	70,000
NEWPORT	1,425	2,460	1,150	2,050	1,750	8,835
NORTH CENTRAL	2,195	2,750	1,800	875	500	8,120
QUONSET	3,660	3,375	175	4,375	1,600	13, 185
WESTERLY	560	3,450	1,500	1,675	500	7,685
				12 500		a os dibano
terminal costs	50,000	20,000	0	0	0	70,000
other costs	34,710	19,955	12,650	17,575	10,200	95,090
estate for				*******	******	
TOTAL COSTS	84,710	39,955	12,650	17,575	10,200	165,090

SUMMARY OF STATE COSTS

-	-				~	1	-	~	-	-	-	9	3	
-	•	•		•										

AIRPORT	1992	1993	1994	1995	1996	1992 - 1996
BLOCK ISLAND	776	40	200	120	45	1,181
T F GREEN terminal costs	2,536 39,602	752 20,000	1,503 0	740 0	540 0	6,071 59,602
NEWPORT	143	246	115	205	175	884
NORTH CENTRAL	220	1,355	270	88	50	1,982
QUONSET	366	837	175	438	160	1,976
WESTERLY	96	905	150	303	50	1,504
terminal costs other costs	39,602 4,136	20,000 4,135	0 2,413	0 1,893	0 1,020	59,602 13,596
TOTAL COSTS	43,738	24,135	2,413	1,893	1,020	73, 198

E. VERMONT

Expenditures for state airports for fiscal year 1994 are estimated to be \$5,660,664.

The largest state airport is E.F. Knapp Airport. The following expenditures are planned for fiscal year 1994:

- \$60,000 for airport system improvements (snow removal equipment)
- \$350,000 for hangar renovation
 \$238,000 for taxiway improvement
- \$17,000 for new fueling system

State airports:

Caledonia County State Airport RFD #1 Lyndonville, VT 05851 Tel: (802) 626-3353 Contact: Thomas Winans

Edward F. Knapp State Airport **RFD #3** Barre, VT 05641 Tel: (802) 223-2221 Contact: John Roberti

John H. Boylan Airport Island Pond, VT 05846 Tel: (802) 723-4343 Contact: Edmond Contwell

Morrisville-Stowe State Airport Morrisville, VT 05661 Tel: (802) 888-5453 Contact: Paul Cutting

Rutland State Airport RR #1, Airport Road North Clarendon, VT 05759 Tel: (802) 773-9644 Contact: Joe Love

Franklin County RFD #2, Airport Road Swanton, VT 05488 Tel: (802) 868-2145 Contact: Ted Meunier

Hartness Airport Route 1, Box 88 North Springfield, VT 05150 Tel: (802) 886-8594 Contact: George Kemner, Jr.

Middlebury Airport 25 Airport Road Middlebury, VT 05753 Tel: (802) 388-0733 Contact: Byron Danforth

Newport State Airport Airport Road Newport, VT 05855 Tel: (802) 334-5001 Contact: Alden Blanchard

Bennington State Airport Bennington, VT 05201 Tel: (802) 442-3219 Contact: David German

Please see the following 3 pages for information on enplanements at selected New England airports.

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SELECTED NEW ENGLAND ENPLANEMENTS
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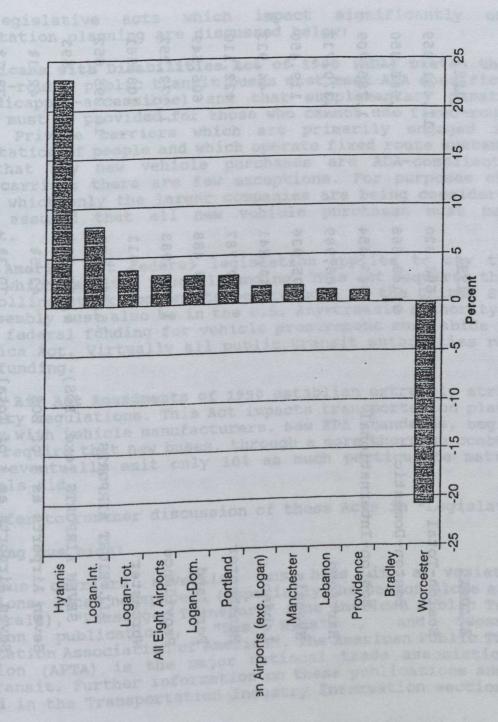
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Calendar 1971 to Calendar 1992

Regionals	es fot	Logan									35.6	33.6	0.00	257	27.9	29.5	32.1	35.5	38.4	40.5	43.3	43.9	43.5	42.3	
3	All	Airports									10.301.019	9.833.423	9.564.137	9.972.138	11.416.970	12,569,964	13,505,622	14,809,905	16,113,957	16,618,246	15,919,224	16,419,966	15,352,156	16,295,652	
	Regional	Total									2.703.045	2.472.241	2.150.295	2.038.277	2.492.571	2,860,978	3,279,541	3,878,546	4,472,433	4.787.724	4.811.007	5,012,932	4.655,835	4,844,593	
	Wore-	ester	11.968	12.277	16.420	18,678	19,805	17,333	23,787	29,192	37,360	24,083	13,929	8,630	20,734	18,228	29,022	52,700	109,527	163,075	169,063	145,299	114,411	108,561	
	Prov-	idence	404.923	443.866	450.721	401.639	377,459	422,588	465,362	502.715	523,584	500,557	400,135	363,197	398,337	494,943	664,828	831,392	1,004,033	1,111,819	1,124,477	1,232,740	1,117,983	1,172,257	
1005		Portland	129,624	148.284	159,910	173,153	181,374	201,895	223,783	261,096	286,977	278,427	243,724	238,391	362,450	493,344	525,489	602,933	604,628	619,934	604,066	565,180	555,488	606,549	
	Man-	chester	Na	69,174	51,102	39,402	35,412	36,905	55,043	57,580	93,560	176,126	244,614	328,223	391,655	410,787	422,110								
2		Lebanon	15,738	17,473	22,552	24,077	23,626	25,532	32,024	37,763	36,075	34,498	27,321	22,483	26,423	34,187	37,293	40,649	39,127	37,796	39,367	43,365	44,241	44,933	
		Hyannis	na	na	na	na	43,234	51,017	67,669	80,849	79,630	92,355	88,239	94,479	126,848	136,704	156,687	139,610	108,486	113,424	107,540	112,291	105,936	119,450	
ACT IN A		Hartford	na	na	1,221,319	1,272,056	1,228,285	1,371,021	1,445,771	1,530,730	1,670,245	1,491,219	1,337,545	1,275,685	1,520,874	1,628,529	1,808,642	2,117,702	2,430,506	2,497,062	2,438,271	2,522,402	2,306,989	2,370,733	
	Boston	Inter'I.	572,340	668,783	725,414	737,957	693,005	757,361	817,505	918,818	1,054,743	1,079,303	1,008,706	978,947	1,065,131	1,066,987	1,108,748	1,029,343	1,343,764	1,546,815	1,617,916	1,679,472	1,546,456	1,785,709	
	Boston	Domestic	4,211,258	4,568,173	4,626,079	4,617,017	4,564,690	4,940,408	5,242,931	5,852,713	6,543,231	6,281,879	6,405,136	6,954,914	7,859,268	8,641,999	9,117,333	9,902,016	10,297,760	10,283,707	9,490,301	9,727,562	9,149,865	9,665,350	
	Total	Boston	4,783,598	5,236,956	5,351,493	5,354,974	5,257,695	5,697,769	6,060,436	6,771,531	7,597,974	7,361,182	7,413,842	7,933,861	8,924,399	9,708,986	10,226,081	10,931,359	11,641,524	11,830,522	11,108,803	11,407,034	10,696,320	11,451,059	
	:	Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	-	1985	1986	1987	1988	1989	1990	1991	1992	

Source: Individual airport data.

S REGIONAL ENPLANEMENT CHANG 4th. QTR. 1992 vs. 4th. QTR. 1991



ENPLANEMENTS AT SELECTED NEW ENGLAND AIRPORTS

Calendar 1992 versus Calendar 1991

Airport	1991	1992	<u>% Change</u>
Boston-Total	10,696,320	11,451,059	7.18
Boston-Domestic	9,149,866	9,665,350	5.6
Boston-International	1,546,454	1,785,709	15.5
Hartford	2,306,989	2,370,733	2.8
Hyannis	105,936	119,450	12.8
Lebanon	44,241	44,933	1.6
Manchester	410,787	422,110	2.8
Portland	555,488	606,549	9.2
Providence	1,117,983	1,172,257	4.9
Worcester	114,411	108,561	-5.1
ALL EIGHT AIRPORTS	15,352,155	16,295,652	6.1
SEVEN AIRPORTS (exc. BOS)	4,655,835	4,844,593	4.1
Seven Airports as % of BOS	43.5%	42.3%	
Seven Airports as % of Total	30.3%	29.7%	

Source: Individual Airport Data.

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VI. BUSES and purchased of the they with the planned purchase and the planned purchase of the they with the planned provides the they with the planned This section will look at the status and future of public transit and public and private carriers. The list of carriers is not comprehensive, but comprises the larger bus companies and public transit authorities in each state. Issues that are central to each state transit planning are traffic congestion, air quality and public transit access to the elderly and handicapped.

Three legislative acts which impact significantly on bus transportation planning are discussed below:

The Americans with Disabilities Act of 1990 (ADA) states that all new fixed-route, public transit buses must meet ADA specifications (be handicapped-accessible) and that supplementary paratransit services must be provided for those who cannot use fixed-route bus service. Private carriers which are primarily engaged in the transportation of people and which operate fixed route systems must ensure that any new vehicle purchases are ADA-compliant. For private carriers there are few exceptions. For purposes of this study in which only the larger companies are being considered, it must be assumed that all new vehicle purchases must be ADAcompliant.

The Buy America Act federal legislation applies to any transit provider which receives federal funding. This act requires that 60% of any rolling stock components be produced in the United States. Final assembly must also be in the U.S. Any transit authority which receives federal funding for vehicle procurement must abide by the Buy America Act. Virtually all public transit authorities receive federal funding.

The Clean Air Act Amendments of 1990 establish extremely stringent air quality regulations. This Act impacts transportation planning, primarily with vehicle manufacturers. New EPA standards, beginning in 1994, require that new buses, through a more thorough combustion process, eventually emit only 10% as much particulate matter as 1987 models did.

Please refer to further discussion of these Acts in "Legislation."

Advertising bus bids:

Public bus carriers advertise bus bids in a variety of Publications- local newspapers (especially the Boston Globe and the Boston Herald), "Passenger Transport" (the American Public Transit Association publication), "Bus Ride", and "Community Transportation Association of America". The American Public Transit Association (APTA) is the major national trade association for Public transit. Further information on these publications and APTA is listed in the Transportation Industry Information section.

The planned purchases of public transit providers depend on the amount of federal funding that they ultimately receive. The purchasing amounts noted under each provider assume approved funding for their purchases.

state transit planning are traffic congestion, air qu

Definitions: eo ers tent severil etsta does al esistrondus tienert

Transit bus: Full size bus; no lavatory; 41 to 48 passengers

Motor coach: luxury, full-size bus; with lavatory; from 41 to 48 passengers

<u>Paratransit</u>: vehicles used for door-to-door service for the elderly and handicapped. There is no standard passenger capacity, since a paratransit vehicle can be of varying sizes.

A. MAINE system of the state of

State transportation officials place a great deal of importance on public transit. They believe that transportation alternatives to private automobiles must be provided. There are 14 fixed-route transit systems which provide regularly scheduled local service. A growing network of vanpool and commuter bus service is available.

State purchasing is carried out by the Maine Department of Transportation if federal funding is involved. This is most often the case, since public transit providers receive most of their funding through federal grants. Specifications and applications are written by the individual transit authorities. Bids are advertised in "Passenger Transport," local newspapers and bus trade publications, such as "Community Transportation Association of America."

Future planning:

According to estimates in the study "Transportation to the Year 2002," the Multiple Occupancy Highway Vehicle Budget (1992-2002) will be:

Capital Needs: Revenue: Shortfall:	\$36,879,000 <u>\$32,879,000</u> \$4,000,000	
Contacts		

Contact: Contact: Contact and the begins States and the begins of the be

Maine Department of Transportation State House Station #16 Augusta, ME 04333 Tel: (207) 287-2841 Contact: Raymond K. Burdzel, Transportation Services Specialist

Please see the following 3 pages for information on the Mass Transportation Investment Program for 1992-1993.

TRANSPORTATION INVESTMENT PROGRAM ELEMENTS

A. UMTA SECTION 3 GRANT ME-03-0025

Section 3 is a discretionary Federal capital assistance (75%) grant for transit. Funds may be used to purchase rolling stock and support equipment and, to buy, build or refurbish facilities.

Aroostook Regional Transportation Systems, Inc.	Total	Federal 75%	Local
Two Buses 14+1 with lift	\$ 72,000	\$ 54,000	\$ 18,000
Radio Equipment base station & equipment	20,540	15,405	5,135
Eastern Transportation Services, Inc.			
Three Modified minivans (7+2) with lifts	84,000	63,000	21,000
New Office Garage Facilities	800,000	600,000	200,000
City of Bath			
20-passenger buses	80,000	60,000	20,000
City of Bangor			One gas-pose
Three small transit buses	435,000	326,250	108,750
^{Biddeford-Saco Old Orchard Beach Transit Committee}			One dual when
Two 30-foot Orion Transit Buses, Four radios and antennas and 2 fareboxes	306;000	229,500	76,500
Coastal Transportation			
One list	240,000	180,000	60,000
raised roof 15-passenger vans with lifts			
Rennebec Valley Community Action Program			
8+1 passenger modified van with lift	54,000	40,500	13,500
Wiston-Auburn Transit Committee			
Four 30-32 passenger transit buses	600,000	450,000	150,000

Downeast Transportation, Inc.			
Two 18-passenger lift equipped buses	91,000	68,250	22,750
One Laser printer from MacIntosh			
Regional Transportation Program			
Five buses 18+2 with lift Two station wagons, 1 service truck One tire changer, 1 phone system			
Eighteen radios	320,000	240,000	80,000
ashington-Hancock Community Agency			
One 15-passenger van	18,000	13,500	4,500
Two minivans modified	54,000	40,500	13,500
estern Maine Transportation Services, Inc.			
Twelve 17-24 passenger lift buses Three 5-10 passenger lift buses Three personal computers w/hard-drive printer	762,950	572,213	190,737
One copy machine One insulated door with opener			
One gas-powered air compressor			
One air/manual service jack One air grease pump			
One transmission jack			
One dual wheel dolly			
One gas emissions analyzer w/printer	alisportation		
ork County Community Action Program			
Two buses with lifts 16+2 passengers	80,000	60,000	20,000

Totals

\$4,056,491 \$3,042,368 \$1,014,123

B. UMTA Section 16(b)(2) GRANT ME-16-0014

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Section 16(b)(2) is a Federally funded discretionary grant designed to supplement other capital assistance programs by funding (80%) transportation projects for the elderly and handicapped in all areas -- urbanized, small urban and rural. Capital acquisitions authorized under this program include rolling stock, communication equipment; wheelchair lifts, ramps and restraints; computer hardware and software.

	Total	Federal	Local
Aroostook Regional Transportation Systems, Inc.			
One school bus with Lift	\$ 38,571	\$ 30,857	\$ 7,714
Washington-Hancock Community Agency			
Two vans with Ramps	sendersi	29,203	7,301
Eastern Transportation Services, Inc.			
One bus less than 30' with lift & mobile radio	39,947	31,958	7,989
Kennebec Valley Community Action Program			dev .
One bus less than 30' with lift	39,947	31,958	7,989
Coastal Trans, Inc.			
One station wagon	17,943	14,354	3,589
One van with ramps	19,550	15,640	3,910
Two mobile radios	2,800	2,240	560
Regional Transportation Program, Inc.			
One bus less than 30' with lift Mobile radio and farebox	38,227	30,581	7,646
Western Maine Transportation Services, Inc.			
One bus less than 30' with lift Mobile radio and farebox	44,080	35,264	8,816
York County Community Action Corp.			
One bus less than 30' with lift and mobile radio			61,988
Cuntact: Gary Planondon			

Public Carriers

Company/authority name: Bath Shuttle Bus Address: 104 Front Street Bath, ME 04530 Telephone: (207) 443-6258 Fax: N/A Contact: Bud Shepard, Transportation Director Territory: Bath Vehicles in fleet: 5 20-passenger shuttle buses Thomas- body TMC- engine Vehicle purchasing needs: Replacement of all 5 buses by 1995 Comments: Receive federal, state and local funding Company/authority name: The Bus Address: 481 Maine Avenue Bangor, ME 04401 Telephone: (207) 947-0536 Fax: (207) 945-4449 Contact: Joseph McNeil Territory: Bangor, Hampden, Brewer, Old Town, Orono, Beazie Vehicles in fleet: 2 shuttle buses (Thomas) 9 transit-size buses (Bluebird and Orion) Vehicle purchasing needs: 1993- 3 transit buses 1994- Uncertain Comments: Receive federal and state funding. The Maine Department of Transportation is responsible for The Bus vehicle procurement.

stack, communication equipment, characterist size, races and restraints

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Company/authority name: Kennebec Valley Transit Address: P.O. Box 1529 Waterville, ME 04903-1529 C/O KVCAP Telephone: (207) 873-2122 Fax: (207) 873-0158 Contact: James Wood Contact: James Wood Territory: Augusta, Waterville Vehicles in fleet: 4 midsize buses (19 passengers) (3 GMC Thomas; 1 Champion) Vehicle purchasing needs: 1993- possibly 3 buses 1994- possibly 2 buses Comments: Receive federal and state funds. Address:" Company/authority name: The Metro Address: P.O. Box 1097 Portland, ME 04104 Telephone: (207) 774-0351 Fax: (207) 775-1431 Contact: Sara deDoes, General Manager Territory: Portland, Westbrook, and part of South Portland Vehicles in fleet: 2 transit buses (Flexible) Vehicle purchasing needs: minibuses (uncertain quantity) Company/authority name: Diness Bus Lines Walks adding of the company of the States of also have a charter division. Sincertrer state, local and fader Company/authority name: Shuttle Bus Address: Biddeford, Saco, Old Orchard Beach Transit Committee P.O. Box 584, City Hall Biddeford, ME 04005 Telephone: (207) 282-5408 Fax: N/A Contact: Gary Plemondon Territory: Saco, Old Orchard Beach, intercity run between Biddeford, Old Orchard Beach, Scarborough, Portland, South Portland Vehicles in fleet: 3 transit buses (Orion); 2 trolleys Vehicle purchasing needs: 1993- 1 transit bus over next 5 years- 2 transit buses Comments: Federal funding involved; State DOT purchases vehicles. s years, they intend to construct a control maintenance and

Company/authority name: South Portland Bus Service 42 O'Neil Street Address: P.O. Box 9422 South Portland, ME 04116-9422 Telephone: (207) 767-5556 Fax: (207) 767-7620 Contact: Leroy Beaver Territory: South Portland Vehicles in fleet: 6 transit buses (Bluebird); 1 transit bus (Orion) Vehicle purchasing needs: 1993- 3 transit buses; 1 paratransit bus Comments: Not restricted by Buy America Act since company does not receive federal funds. ______ Company/authority name: West Transportation Address: P.O. Box 82 Milbridge, ME 04658 Telephone: (207) 546-2823 Fax: N/A Contact: Emery West Territory: western Washington County w. Gld Deets, Stone, Bearin Vehicles in fleet: 1 bus (GMC); 1 van (Ford) Vehicle purchasing needs: 1994- 1 bus; 1 van Comments: They are the only bus company in Washington County. They also have a charter division. Receive state, local and federal funds. _____ of Transportation is percessing definitions Company/authority name: Western Maine Transportation Service Address: 54 Pine Street Mexico, ME 04257 Telephone: (207) 364-3639 Fax: N/A Contact: Eugene Skibitsky, General Manager/CEO Territory: Androscoggin, Oxford and Franklin counties Vehicles in fleet: 36 airport buses (Ford) Vehicle purchasing needs: 7 replacement vehicles per year Comments: WMTS wishes to turn over fleet every five years. Within 5 years, they intend to construct a control maintenance and administration facility.

Private Carriers

Company/authority name: Brunswick Transportation Company, Inc. Address: 184 Main Street South Portland, ME 04116 Telephone: (207) 799-8527 Fax: (207) 799-5656 Contact: Robert Ouellette, President Territory: U.S. and Canada Vehicles in fleet: 10 transit buses (Ceneral Motors@21 Vehicles in fleet: 34 motor coaches (MCI); 6 school buses Vehicle purchasing needs: 1993- 4 transit buses (28-34 pa Vehicle purchasing needs: 1-2 buses per year Comments - Regeive fed-----1994. Passeridente content to dente integed enter anucant ench at Company/authority name: Cyr Bus Lines Address: 160 Gilman Falls Avenue Old Town, ME 04468 Telephone: (207) 827-2335 Fax: (207) 827-6763 Contact: Michael Cyr Territory: U.S. and Canada Contact: James (As Hit or, Jaxeesti ve Dissiption te J Vehicles in fleet: 13 motor coaches (MCI and Kassbohrer) Territory: Comberland County Vehicle purchasing needs: 1993- possibly 1 bus fleet by the and of second Fortechershood salesdown algidev Company/authority name: Dineen Bus Lines Address: 40 Old Post Road Kittery, ME 03904 Telephone: (207) 439-4440 Fax: N/A Contact: James M. Dineen Company/authority name: VIP Charter Cosches Territory: North Essex County in Massachusetts; York, Cumberland and Oxford counties in Maine; Rockingham, Stratford and Bellnap, New Hampshire Vehicles in fleet: 12 school buses (Bluebird) 4 motor coaches 2 vans (handicapped-accessible) 2 Cadillac limousines Vehicles in fleet: 20 motor coaches (MCI and Freybitty-628 billender Vehicle purchasing needs: Uncertain

Comments: This company is largely a charter carrier. They also have ³ regular commuter routes.

Company/authority name: Hudson Bus Lines Address: 280 Bartlett Street Lewiston, ME 04240 Telephone: (207) 783-2033 South Portland, MESSAIES Fax: N/A Contact: Arnold Pinsley (serves on the Lewiston/Auburn Transit Pax: (207) 799-5656 Committee) Territory: Lewiston, Auburn Vehicles in fleet: 10 transit buses (General Motors) Vehicles in fleet: 34 motorndos Vehicle purchasing needs: 1993- 4 transit buses (28-34 passengers) 1994- 4 transit buses Comments: Receive federal, state and local funding. Most purchasing is done through Maine Department of Transportation. Company/authority name: Cyr Bus Lines Company/authority name: Regional Transportation Program, Inc. 127 St. John Street Address: Portland, ME 04102-3072 Telephone: (207) 774-2666 Fax: N/A Contact: James A. Hilly, Executive Director Vanicles in fleet: 13 motor coaches (MCI Territory: Cumberland County Vehicle purchasing needs: 1993- possibly 1 b Vehicles in fleet: 18 buses (average capacity of 18 passengers) Vehicle purchasing needs: 1993- 7 buses 1994- 4 buses 1995- 2 buses 1996- 3 buses Delephone: (207) 439-4440 Company/authority name: VIP Charter Coaches Address: 129-137 Fox Street Portland, ME 04102 Telephone: (207) 772-4457 Fax: (207) 772-7020 Contact: Ray Penfold, Owner Territory: U.S. and Canada Vehicles in fleet: 20 motor coaches (MCI and Prevost); 27 passenger capacity capacity Vehicle purchasing needs: Uncertain Comments: WHTS wishes to turn over fleet.astegyfiseumzeosraWare in a

B. MASSACHUSETTS

Major bus projects (all involve the Massachusetts Bay Transportation Authority, otherwise known as the MBTA):

 MBTA new bus procurement is a continuous program which proceeds at an annual rate in order to reduce gradually the average age of the bus fleet to an ideal average age of 6 years. In continuing this reinvestment program, the MBTA plans to procure/lease up to 200 buses with an option for 180.

- South Station Intermodal Bus Terminal

MBTA plans to complete a \$81.4 million bus station project by 1994. Passengers going to Logan Airport will be able to buy airline tickets and check their baggage at South Station. The South Station Intermodal Transportation Center of 1994 will connect bus, rail, subway and airport services. A 10-minute bus ride will take passengers from South Station through the Third Harbor Tunnel to Logan Airport. The bus terminal, to be built over South Station tracks, will include 29 berths and a central ticketing and baggage handling area. The second level of the terminal will provide parking for up to 250 cars and a support structure for the new Tufts University complex.

- New automatic fare equipment

Electronic fare boxes are planned for the entire MBTA bus fleet by the end of 1993. Fareboxes that accept magnetic strip passes are now being used only on buses out of the Lynn, MA, garage. The compilation of ridership data is very important to the MBTA for planning and procurement purposes.

When the State purchases and develops the specifications for paratransit vehicles for the public transit authorities listed on the following pages, the transactions take place at the Executive Office of Transportation and Construction at the address below.

Executive Office of Transportation and Construction 10 Park Plaza, Transportation Building Boston, MA 02116 Tel: (617) 973-7011 Contact: Paul Anderson

Public Carriers

Company/authority name: Berkshire Regional Transit Authority Address: 67 Downing Parkway Pittsfield, MA 01201

Telephone: (413) 499-2782 Fax: N/A Contact: Richard Jacob

Territory: Williamstown to Great Barrington

Vehicles in fleet: 22 transit buses

Vehicle purchasing needs: Uncertain

Comments: Receive federal, state and local funding

airline tickets and these their daggage at South Station. The South Station Intermoder Transportation Center of 1994 will

Company/authority name: Brockton Area Transit Authority (BAT) Address: 70 School Street Brockton, MA 02401-4097

Telephone: (508) 588-2240 Fax: (508) 584-1437 Contact: Reinald LeDoux, Deputy Administrator

Territory: Brockton, Stoughton, Ashmont

Vehicles in fleet: 55 transit buses (General Motors Corporation)

Vehicle purchasing needs: possibly 11 buses by 1994

Comments: Baystate Bus Corporation is a division of BAT. They receive federal funding. Their bus bids are advertised in the Boston Globe, the Boston Herald, and "Passenger Transport."

Company/authority name: Cape Ann Transit Authority Address: P.O. Box 511 Gloucester, MA 01931-0511 Telephone: (413) 774-5195 Telephone: (508) 283-7916 Fax: (508) 283-9456 Contact: Gene Wallace, Vehicle Acquisition Territory: Cape Ann, Gloucester Vehicles in fleet: 8 transit and minibuses Vehicle purchasing needs: 1993-4 transit buses (29', 22-30 passengers) 4 transit buses (35', 32 passengers) 1 Eldorado 16-18 passenger bus Connents: Receive federal and state Kondiago ylduorT --1994-1 van, 1 Eldorado 16-18 passenger bus Next VI93-97 Capital Spending-Infrastructure Investment Projects 2 vans, 2 Eldorado 16-18 passenger buses Telephone: (208% 365 service), MA 01852 Company/authority name: Cape Cod Regional Transit Authority Address: 585 Main Street, P.O. Box 2006 Dennis, MA 02638 Telephone: (508) 385-8311 Fax: N/A Contact: Joseph G. Potzka, jr. Territory: 15 towns from Bourne to Provincetown Vehicles in fleet: 9 vans Vehicle purchasing needs: 1993- 7 minibuses, 6 intercity coaches 1994- 5 minibuses, 3 motor coaches 1995- 7 minibuses 1996- 7 minibuses 1998- 7 minibuses Comments: Receive federal and state funding Aufparenenting istatus 7 this carmons at 0411 as the ton-towards

Company/authority name: Greenfield and Montague Transportation Area Address: 382 Deerfield Street Address: Greenfield, MA 01301 Telephone: (413) 774-5195 Fax: N/A Contact: Thomas Chilik, General Manager Territory: Greenfield, Montague Vehicles in fleet: 28 mini-buses, transit buses, and vans Vehicle purchasing needs: 1993- 4 minibuses 1994- 3 transit buses 1995- 2 vans Comments: Receive federal and state funding. aud repropasa 81-81 observit services Company/authority name: Lowell Regional Transit Authority Address: 145 Thorndike Street Lowell, MA 01852 Telephone: (508) 385-8311 Fax: N/A Contact: Thomas Henderson, Deputy Administrator Territory: Lowell and 10 surrounding towns Vehicles in fleet: 38 buses and 15 paratransit vans Vehicle purchasing needs: 1993-13 transit buses Territory: 15 towns from Bourne.to Provincetown Comments: Baystate Bus Correction Land division of BAT. They Company/authority name: Massachusetts Bay Transportation Authority edosoo vitoretal a (MBTA) Address: 10 Park Plaza, Rm. 2810 Boston, MA 02116 Telephone: (617) 722-5000 Fax: (617) 722-6180 Contacts: Christopher Collins, Deputy Director of Materials for Procurement Karen McGann, New Vehicle Procurement-Tel: (617) 722-5194 Tel: (617) 722-5502 Joseph Feiner, Private Contractor Services-Tel: (617) 722-5759 David Reynolds, Senior Buyer- Tel: (617) 722-3298 Michael DeAngelis, Manager of Revenue- Tel: (617) 722-3254 Territory: 78 towns and cities surrounding metropolitan Boston Vehicles in fleet: 1,007 transit buses (General Motors- RTS, A.M.General, Flyer Industries, General Motors-Canada, General Motors)

Vehicle purchasing/1993- up to 200 buses (\$6.8 million)lease needs:1994- up to 200 buses (\$6.8 million) 1995- up to 200 buses (\$13.6 million) le Lenhonest, (All's historick and and a destrict bas

At present, there are 25 private bus carriers providing services in and outside of the MBTA 78-town district. These contractors include the following:

- Bloom Bus Lines
 - Brush Hill Transportation
- Hudson Bus Lines
 - Interstate Bus Lines
 - Peter Pan Bus Lines
 - Plymouth and Brockton
- Trombly Commuter Lines Bars : Intent Strain and an all the same as the same with 952 general state

MBTA FY93-97 Capital Spending-Infrastructure Investment Projects

Bus Project

FY93-97 Spending (State and Federal) a tustot age

Bus Procurement \$110.2 million Bus Retrofit/Rehabilitation Maintenance Facilities Upgrade <u>\$0.2million</u>

\$59.9 million

Total: \$170.3 million

Comments: The goal of the MBTA is to attain the industry-wide standard of 6 years for its bus fleet age.

In 1992, MBTA bus ridership on a typical weekday was approximately 362,000 passengers on 155 bus routes. Please note the following bus information for fiscal year 1992:

Round trips:	2,086,000
Revenue miles:	21,976,433
Non-revenue miles:	2,915,074
Total miles:	24,891,507

The MBTA Automotive Equipment Maintenance Department handles the maintenance, safety, cleanliness and deployment of the bus fleet. This department maintains 7 bus garages as well as the non-revenue fleet vehicles, such as police cruisers, motorcycles, trucks and heavy equipment.

Please see the following page for MBTA Fiscal Year 1994 budget for Automotive Equipment Maintenance.

AUTOMOTIVE EQUIPMENT MAINTENANCE FY94 PROGRAM BUDGET

ROGRAM	OUTPUT	RESOURCE
Bus Preventive Maintenance	Annual preventive maintenance includes 1,600 inspections of air conditioned units and 8,076 inspections of wheel-chair lifts. In addition, 9,600 tire changes and 310 suspension	6,785,20
	system replacements are also completed. Standard preventive maintenance checks are conducted on 8,268 bus	
	components.	
us Corrective Maintenance	Body Repairs on buses include the replacement of 1,560	12,670,32
	panels, 1,200 windows and 500 doors. Painting of doors and	
	bumpers as well as 41,430 interior bus repairs are also completed under this maintenance program.	
	Maintenance on the powertrain system includes the	
	replacement of: 2,067 air filters, 260 transmissions, 4,760	
	engine components and 258 exhaust systems. Fuel system	
	repairs are done on 1,504 units along with 952 general	
	tuneups.	
The second second	Undercarriage maintenance requires repairs on 3,808	
	suspension systems and 310 steering systems.	
addroad w the atatol ar	Maintenance on the electrical system requires 1,654	
	destination sign repairs and 9,250 miscellaneous electrical	
	repairs. Annually, 3,120 destination signs have to be	
	reprogrammed.	
	an, Deputy Administration State 111051 Sonshis.	5,589,64
as and Diesel Fuel	 Provide the fuel requirements to power the Authority's buses 	2,2071
Territory: Laspidimic. (and ancillary non-revenue fleet.	
	1:	2,163,84
Bus Cleaning	 Annual interior bus cleaning consists of 314,160 sweeps, 49,504 window washes, 11,424 floor and stairwell washes 	brieda
	and 3,808 body washes. 219,259 exterior body washes are	
	also completed on an annual basis.	
	also completed on an annual basis.	
note the following bus	 Production of bus specifications for the purchase of 200 new 	382,4
Develop Specifications for Bus	air conditioned buses.	
Achabilitaion/Procurement and Non-Revenue Vehicle Procurement	 Definition of programs to test and evaluate alternative fuel 	
ion-Revenue venicie Procurement	sources that are cost-effective and environmentally safe.	
MULLEDDE	 Complete bus rehabilitation program for 200 buses and 	
	initiate a program to rehabilitate an additional 180 buses.	
	induo a program de construction de la construction	
erform Maintenance on	Non-revenue vehicle fleet repairs are performed on 190	2,619,3
Von-Revenue Fleet	powertrain systems, 544 undercarriages and 202 electrical	
	systems. In addition, 1,332 preventive maintenance	
	inspections as well as repairs to an average 53 vehicles	
	involved in accidents are performed on an annual basis.	
	Buyer-	
	Long to A Table of a sure for Mark and Long	
DIVISION TOTAL:		30,210,8

Company/authority name: Montachusett Area Regional Transit (MART) R1427 Water Street Address: Fitchburg, MA 01420 Telephone: (508) 345-7711 Fax: (508) 345-9867 Contact: Kathleen Kelley Territory: Fitchburg and 14 surrouning towns Vehicles in fleet: 30 transit buses the day and hussing Vehicle purchasing needs: 1994- 5 buses Vehicle purchasing needs, 1994 5 buses Comments: Divneyth and amendants a refer and Company/authority name: Pioneer Valley Transit Authority (PVTA) Address: Market Place, 1365 Main Street Springfield, MA 01103 Telephone: (413) 732-6248 Fax: (413) 737-2954 Company authority namet Ametican Hagientor Contact: Marlene Connor Territory: Hampshire and Hamden counties Vehicles in fleet: 180 transit buses (RTS, TMC, Flexible) Vehicle purchasing needs: 1993- 35 transit buses due in May 1993 1994- 60 transit buses 1995- 40 transit buses 1995- 40 transit buses Comments: University of Massachusetts Transit Authority, a division of PVTA, operates 40 transit buses. ------Commentative New Decision and the space chates of the state of the sta Company/authority name: Southeastern Regional Transit Authority P.O. Box B-946 Address: New Bedford, MA 02741 Telephone: (508) 999-5211 Fax: (508) 997-2341 Contact: John George Territory: 11 towns and cities in southeastern Massachusetts Vehicles in fleet: 100 transit buses (A.M. Genereal, Flyer Industries, RTS, GMC); 19 demand-response vehicles; 7 trolley-type coaches Vehicle purchasing needs: 1994- 30 transit buses; 10 demandresponse vehicles

Private Carriers

Company/authority name: Airways Transportation 10 Gainesborough Street Address: Boston, MA 02115

Telephone: (617) 442-2700 Fax: (617) 424-0199 Contact: Marcel Boone

Territory: Logan Airport and greater Boston

Vehicles in fleet: 15 Ford Eldorado minibuses (21-28 passenger capacity)

Vehicle purchasing needs: 1993- 4 minibuses Company / and heard townshime (# Company

Comments: They renew their fleet every 3 years. One minibus is ADAcompliant.

Address:

Company/authority name: American Eagle Motor Coach 12 Sycamore Street Fairhaven, MA 02719

Telephone: (508) 993-5040 Fax: (508) 994-0781 Contact: Dennis Lyons 1994- 60 transit buses

Territory: Boston

Number of vehicles: 11 MCI motor coaches (47-passenger capacity)

Vehicle purchasing needs: 1994- 2 buses (possible)

Comments: New buses might be purchased by the state. They provide service to the MBTA.

Company/authority name: H and L Bloom Address: 10 Oak Street Taunton, MA 02780 Telephone: (508) 248-0094 (508) 822-7377 Fax: (508) 824-7439 Contact: Mark Bloom Territory: U.S. and Canada Vehicles in fleet: 20 motor coaches (MCI) Vehicle purchasing needs: none at present

Comments: They provide service to the MBTA.

Company/authority name: Brush Hill Address: 435 High Street Randolph, MA 02368 Telephone: (617) 986-6100 Contact: Larry Anzuoni, Jr. 1409 Century Circle, Sulte del synodiret Irving 1x 75062 Territory: U.S. Vehicles in fleet: 150 motor coaches (47-passenger capacity) (MCI, Prevost, GM and Mirage) Vehicle purchasing needs: Uncertain Comments: Plymouth and Brockton Bus Company, Brush Hillmand McGinn Bus Company are owned by the same company. The 150 vehicles represents the fleet for all 3 companies. Plymouth and Brockton Bus Company and Brush Hill are private contractors for the MBTA. Telephonet (508) 865-4660 Company/authority uses: Hudson Bus Linus Company/authority name: Cavalier Bus Company Address: P.O. Box 318 Medford, MA 02155 Telephone: (617) 391-3331 Fax: (617) 391-2830 Contact: Joan Libby, President Vehicle purchasing needs: 1994- 2 Prevent bub Territory: U.S. Vehicles in fleet: 6 motor coaches 2 minibuses 2 school buses and interest and vehicles Vehicle purchasing needs: 1 motor coach, 1 mini-bus, 1 school bus Company/authority name: Crystal Transport Address: 77 Guest Street Brighton, MA 02134 Telephone: (617) 787-1544 Fax: (617) 787-8133 Contact: Linda Carroll, owner Territory: U.S., primarily east coast Vehicles in fleet: 60 vehicles including a combination of motor coaches (Prevost and MCI), standard and mini coaches, RTS and transit buses (GMC) Vehicle purchasing needs: uncertain aicle purchasing meade: nor

Company/authority name: Fiore Bus Service, Inc. Rear 24, Bennett Highway Address: Saugus, MA 01906 Telephone: (617) 233-1127 Fax: (617) 233-3849 Contact: Catherine Fiore Territory: U.S. Vehicles in fleet: 70 school buses (Bluebird) 5 motor coaches (Eagle) 2 limousines (Ford) Vehicle purchasing needs: Partial fleet replacement every 4 years Conventa: Elyeouth and ------Bus Company are owned by the same company Company/authority name: Fox Bus Lines Address: P.O. Box 1042 Worcester, MA 01613 Telephone: (508) 865-4660 Fax: N/A Contact: Steve Fox Territory: Eastern U.S. and southern Canada Vehicles in fleet: 23 motor coaches (MCI, VanHoll) Vehicle purchasing needs: 1994- 2 Prevost buses Vehicles in stantant without Company/authority name: G & W Transportation Address: 31 Baker Street Foxboro, MA 02035 Telephone: (508) 543-8853 Fax: (508) 543-2742 Contact: George Sweezey, Owner Territory: U.S. Vehicles in fleet: 8 motor coaches (MCI, Prevost); 1 minibus (28-passenger) Vehicle purchasing needs: 1993- 1 minibus, 2 coaches (already ordered)

Company/authority name: Greyhound Bus Lines Address: 10 St. James Avenue Boston, MA 02116 Telephone: (617) 292-4712 Corporate headquarters purchasing address: 3409 Century Circle, Suite 101 Irving, TX 75062 Telephone: (214) 554-5038 Fax: (214) 554-5032 Contact: Al Penedo, Director of Maintenance Control and Management Territory: U.S. Vehicles in fleet: 2,200 motor coaches (2,100 MCI and 100 Eagle) Vehicle purchasing needs: uncertain -----Company/authority name: Hudson Bus Lines Address: 70 Union Street Medford, MA 01301 Telephone: (617) 395-8080 to double in order to pressive the bighter Fax: N/A Contact: James Marignoto Territory: eastern U.S. coast Vehicles in fleet: 10 charter/coaches (49-passengers); 8 buses (35-passengers) (GMC and MCI) Vehicle purchasing needs: Always looking for used vehicles Comments: They provide service to the MBTA. Telephone: (617) 776-5640 Company/authority name: Interstate Coach Address: 1139 Washington Street Stoughton, MA 02072 Telephone: (617) 344-2231 Contact: Richard Unda Territory: U.S. Fax: (617) 341-2290 ys, Grayhound/Vermont Tranait, Coach Company and Pater Vehicles in fleet: 85 school buses (International Harvester); 20 special needs vehicles (Ford); 11 motor coaches (MCI) Vehicle purchasing needs: none Comments: They provide service to the MBTA.

Company/authority name: People Care-iers, Inc. 1211 Hyde Park Ave. Address: Hyde Park, MA 02136 Telephone: (617) 361-1515 Fax: N/A Contact: Robert White, Owner 1409 Century Circle, Suite 1 Territory: U.S. Vehicles in fleet: 15 transit and minibuses (Grumman and A.M. General) General) Vehicle purchasing needs: uncertain Vehicles in fleet: 2 - 200 - 200 - 200 - 200 Mol and 100 Englat Company/authority name: Peter Pan Trailways 1776 Main Street Springfield, MA 01103-1776 Address: Telephone: (413) 781-2900 Fax: (413) 731-9721 Contact: Thomas Picknally, Purchasing Manager Territory: U.S. Vehicles in fleet: 151 motor coaches (MCI) Vehicle purchasing needs: 20-25 buses per year Comments: They provide service to the MBTA. Company / auchority name Company/authority name: Vocell Bus Company Address: 321 Washington Street Somerville, MA 02176 Telephone: (617) 776-5640 Fax: (617) 776-3766 Contact: Paul Goodman, President Territory: greater Boston Vehicles in fleet: 25 school buses (International Harvester) Rax: (Shirt Harts Vehicle purchasing needs: uncertain

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C. NEW HAMPSHIRE

New Hampshire transit planners are seeking to develop and fund a mass transit program which includes modernization of the transit fleet. Planners, however, have a formidable task since there are no state or federal funds for bus operations and costs are rising. Due to lack of funds, many public transit vehicles are in serious disrepair. oc: Van Chesnut, Executiveshirectes vod Jase

Goals are noted in the "Transportation in the 21st Century" study. They include:

1) Providing capital and operating assistance to local transit systems and intercity carriers, and where appropriate, to sustain and improve their services and increase the transit share of the transportation market.

2) Coordinating the funding and operations of human services and specialized transportation (paratransit) that is supported by state or federal funds.

Future Demand:

The Federal Highway Administration has projected that transit ridership will have to double in order to preserve the highway network at acceptable levels. New Hampshire must expand its transit services.

Company/authority name: Congend Aredernantt

Transit needs and revenues 1993 through 2010, as portrayed in the study, are noted below: a fleet: 21 transit buges (or

Needs

Transit capital assistance Transit operating assistance Transportation alternatives	\$58 million \$54 million \$14 million
Revenues	\$66 million
mts: Bids and apprest isomono Passan	\$60 million

Shortfall

Pax: (603) 228-2724 Local public transit systems provide 1,689,000 passenger trips each Year. The systems are listed under "Public Carriers."

Five private carriers service 600,000 New Hampshire residents annually to intercity destinations. They are Concord Trailways, C & J Trailways, Greyhound/Vermont Transit, Coach Company and Peter Pan Bus Lines.

Public Carriers

Company/authority name: Advance Transit, Inc. Address: RR 1, Box 120-E Pershing Street Lebanon, NH 03766

Telephone: (603) 448-2815 Fax: N/A Contact: Van Chesnut, Executive Director

Territory: 9 towns surrounding Lebanon, NH

Vehicles in fleet: 12 buses (Wayne Chaperone and Bluebird); 1 van

Vehicle purchasing needs: 1994- 13 buses

Comments: Their purchase plan is to recycle buses per federal legislation. Purchases are handled by the federal Department of Transportation in Washington. state or federal funds. 0295-187 (514) tenodgelei

ontact: Thomas Picknally, Pi Company/authority name: Concord Area Transit Address: P.O. Box 611 Concord, NH 03302

Telephone: (603) 225-1989 Fax: N/A Contact: Nancy Kilbride, Director Transit needs and revenues 1993 through

Territory: Concord and 14 surrounding towns

Vehicles in fleet: 3 Orion buses (30-passenger) 3 minibuses (20-passenger)

Vehicle purchasing needs: 1994- 2 minibuses (if awarded grant)

Comments: Purchasing handled by City of Concord Purchasing Dept. 41 Green Street Faxe (1) Timerseng and Concord, NH 03302 Tel: (603) 225-8530 Fax: (603) 228-2724 Contact: Joseph Musumeci

systems and intercity carriers, and where appr

To be put on the bidders list, a request for a vendor application should be made. Bids are advertised in the Concord Monitor. should be made. 224

Company/authority name: COAST (Cooperative Alliance for Seacoast Transportation) Address: 213 Main Street Durham, NH 03824 Telephone: (603) 862-1931 Fax: (603) 862-2030 Contact: Joseph Follansbee Contact: Faul Newman, Urban Programs Blag Territory: southeast New Hampshire Vehicles in fleet: 16 transit buses 6 minibuses Vehicle purchasing needs: 1993- 2 minibuses 1998- 13 transit buses Comments: They have an annual budget of \$1.5 million. Bids are advertised in "Passenger Transport" and are sollicited directly. ------Pelephone: (603) 382-6699 Company/authority name: Manchester Transit Authority Address: 110 Elm Street Manchester, NH 03101 Telephone: [802] 296-2143 Telephone: (603) 623-8801 Contact: Richard Pollak Territory: Manchester Vehicles in fleet: 21 transit buses (Orion) 71 school buses (under contract with school department) 3 minibuses (demand-response vehicles) William Bruzzese, Vehicle purchasing needs: 1993- 2 minibuses 1994- 2 transit buses (possible) Comments: Bids are advertised in "Passenger Transport." Territory: Portland and Bound

Company/authority name: Nashua Transit System Address: City of Nashua, Community Development Division 229 Main Street Nashua, NH 03061-2019 Telephone: (603) 594-3358 Fax: (603) 594-3375 Contact: Paul Newman, Urban Programs Director Territory: southeast New Hennehisseviluosy, tunsed Territory: Nashua Vehicles in fleet: 7 buses; 10 paratransit vans Vehicle purchasing needs: 1993- 4-5 replacement vans 1994- 3-4 vans Comments: Bids are advertised in local newspapers, "Passenger Transport," and are sollicited directly from bus manufacturers. Company/authority name: Vermont Public Transit Authority Address: P.O. Box 1169 Burlington, VT 05001 Telephone: (802) 296-2143 Fax: N/A Contact: Donna Bate (802) 479-1071 Territory: Vermont, New Hampshire Comments: They are the administrator of several public transit programs. They submit a capital request to: Vermont Department of Transportation William Bruzzese, Rail, Air, Public Transit 133 State Street Montpelier, VT 05602 Tel: (802) 828-2657 Commante: Bids argo ange the "Pass oner Transport

Private Carriers Company/authority name: C & J Trailways Address: P.O. Box 190 Dover, NH 03820 Telephone: (603) 749-2301 ext. 105 Fax: (603) 749-6821 Contact: James Jalbert, President Territory: seacoast New Hampshire, Boston to Newburyport Vehicles in fleet: 15 transit buses (MCI and Prevost) Vehicle purchasing needs; none at present Vehicle purchasing needs: 1-2/year for next 2 years (used vehicles) Company/authority name: Lessard Bus Company, Inc. Company/authority name: Coach Company Address: 11 Wentworth Ave., Box 423 Plaistow, NH 03865 Telephone: (603) 382-4699 Fax: (603) 382-6637 Contact: Cabot Smith, Vice President Territory: New Hampshire Vehicles in fleet: 32 Prevost motor coaches (46-passengers) Vehicle purchasing needs: 2-3/year Vehicle purchasing needer Uncertain CRAINING BUD CRAINI SCONE .C. Company/authority name: Concord Trailways Address: 7 Langdon Street Concord, NH 03301 Telephone: (603) 639-3317 Fax: (603) 228-3524 Contact: Harry Blunt, Owner Territory: Portland and Bangor Vehicles in fleet: 26 motor coaches (MCI) Vehicle purchasing needs: 1993- 2 buses

Contact: 018.0 millim 0.818 : 5401 1995: 518.6 million

Company/authority name: Dail Transportation Address: Route 107 Epsom, NH 03234 Telephone: (603) 736-9682 Notites, 1981, 93967-2019 Fax: N/A Contact: Philip Dail, Owner Territory: New Hampshire Vehicles in fleet: 62 International Harvester school buses (77-passenger) Vehicles in fleet First this with this Vehicle purchasing needs: none at present Vehicle purchasting consent and stypesteries bankers signified Company/authority name: Lessard Bus Company, Inc. Address: 156 Lowell Road Hudson, NH 03051 Telephone: (603) 881-5231 Fax: N/A Contact: Daniel Lessard, Owner Contact: Cabot Smith. Vice Probligents 0.9 Territory: U.S.

Vehicles in fleet: 4 motor coaches (MCI and GMC)

Vehicle purchasing needs: Uncertain

D. RHODE ISLAND

The Rhode Island Public Transit Authority (RIPTA), a quasi-state agency, is responsible for all public bus transportation. Federal funding for RIPTA has remained fairly stable for the past several years. Their bus replacement objective is to replace buses over 12 years old. RIPTA utilizes fare collection equipment that accepts dollar bills, RIPTIKS (a book of 10 tickets worth \$7.65) and change.

The Rhode Island Transportation Improvement Program for 1991-1997 specifies the following funding for RIPTA:

1992: \$16.7 million 1993: \$17.3 million 1994: \$18.0 million 1995: \$18.8 million 1996: \$19.6 million 1997: \$20.4 million

Public Carriers

Company/authority name: Rhode Island Public Transit Authority Address: 265 Melrose Street Providence, RI 02907 Telephone: (401) 784-9500 Fax: (401) 784-9595 Contact: Richard Lilly, Director of Maintenance Territory: Rhode Island subcostract to private carriers. CVTA also Vehicles in fleet: 235 motor coaches (Volvo, Neoplan, RTS-GM or ourchasing genter 1993 - Bases (Orion 11). They will Vehicle purchasing needs: 1993- 25 minibuses (Bids are currently out.) ments: CVTA is part sessitisistaghel dimits T Comments: Bids are advertised in "Passenger Transport" and local newspapers, such as the Providence Journal. RIPTA runs hourly service to the University of Rhode Island from Providence and Newport. Contact: Stephen Arhoambault Overview of present service (as of February 1993): Canada 10020 TV . notenil TW Total number of routes: 67 Trips: Weekdays- 3,193 Saturdays- 2,027 Sundays- 805 Total per week- 18,797 Total vehicle miles operated: 7.6 million per year "spany/authority name: MatedolEanlas Official Transit Distrigation Private Carriers Company/authority name: Bonanza Bus Lines, Inc. Telephone: (802) 254-4541:0720 TV , bnaltur Address: P.O. Box 9527 Teleph Providence, RI 02940 Telephone: (401) 331-7500 (800) 343-9330 Fax: (800) 343-9330 Cont. (401) 331-7537 Contact: George Hunter Territory: Rhode Island, Connecticut, southern New England, Albany, Vehicle purchasing needs; 1994- 1 20-passengerthus Ny Vehice Vehice (MCT) Vehicles in fleet: 53 motor coaches (MCI) Vehicle purchasing needs: 4-10 buses in the next 2 years (MCI)

Company/authority name: Conway Bus Service 10 Whipple Highway Address: Cumberland, RI 02864 Telephone: (401) 658-0620 Fax: (401) 658-3411 Contact: Robert Conway Territory: U.S. and Canada, but mostly southern New England Vehicles in fleet: 20 motor coaches (MCI, Eagle and GMC) Vehicle purchasing needs: steadily increasing with 1-2 buses/year Vehicle purchasing needs: none at present Vehicle purchasing needer 1999-95 minimases (Bide are currently Company/authority name: Pawtuxet Valley Bus Lines Address: 76 Industrial Lane West Warwick, RI 02893 Telephone: (401) 828-4100 Fax: N/A set of the state to the state of th Contact: Stephen Arhcambault Territory: northeastern U.S., Prince Edward Island, Nova Scotia, Canada Vehicles in fleet: 19 motor coaches (MCI) 4 mini coaches (Champion) Weekdays- 3,193 Vehicle purchasing needs: 1994- 1-2 motor coaches Sundays- 805 lotal per week- 18,797 E. VERMONT The Lhode Island, manifed middles and there your melim ofolder, feet Public Carriers Company/authority name: Town of Brattleboro Address: 230 Main Street Brattleboro, VT 05301 Telephone: (802) 254-4541 Fax: N/A Contact: Robert Riley

Territory: Brattleboro

Vehicles in fleet: 1 minibus (Ford Eldorado)

Vehicle purchasing needs: 1994- 1 20-passenger bus Ericory: Rhode

Comments: Bids are advertised in local newspapers- the Brattleboro Reformer, Bennington Banner, Greenfield Recorder and Keene Moles in fleet: .3 motor coaches (MCI) Centinel.

Dalling and the and the second

Company/authority name: Central Vermont Transit Authority (CVTA) Address: 6 Depot Square Barre, VT 05641 Telephone: (802) 479-1071 Fax: (802) 479-5779 Contact: Donna Bate, Executive Director Ms. Bate is also the contact person for Vermont Public Transit Authority. Territory: Washington County Vehicles in fleet: They subcontract to private carriers. CVTA also has 2 vans and 1 bus. Vehicle purchasing needs: 1993- 5 buses (Orion II). They will receive them by July 1993. Comments: CVTA is part of the Vermont Public Transit Authority. Bids are advertised in local papers. Contace (Contace (Con allaington, DE Company/authority name: Chittenden County Transportation Authority Address: Telephone: (802) 864-0211 Fax: (802) 864-5564 Contact: Catherine Debo, General Manager Territory: greater Burlington Vehicles in fleet: 29 transit buses (RTS); 5 buses are leased. Vehicle purchasing needs: 1993/1994- 9 transit buses Company/authority name: Marble Valley Regional Transit District Address: 158 Spruce Street Rutland, VT 05701 Telephone: (802) 773-3244 Fax: N/A Contact: Lawrence Dreier Territory: Rutland County Vehicles in fleet: 27 transit buses and vans (Bluebird, Dodge, Vehicle purchasing needs: uncertain. Marble Valley is awaiting delivery of 6 Thomas buses presently. instance in trade. Please see the following peak for a sap of New

Company/authority name: Vermont Public Transit Authority Address: P.O. Box 1169 Burlington, VT 05001 Telephone: (802) 296-2143 Fax: N/A Contact: Donna Bate (802) 479-1071 Ms. Bate is also Executive Director of Central Vermont Transit Authority.

Territory: Vermont, New Hampshire

Comments: They are the administrator of several public transit programs, one of which is the Central Vermont Transit Authority. Vermont Public Transit Authority submits capital requests to:

Vermont Department of Transportation 133 State Street Montpelier, VT 05602 Tel: (802) 828-2657 Contact: William Bruzzese, Rail, Air, Public Transit

Private Carriers

Company/authority name: Vermont Transit (a division of Greyhound) Address: 135 St. Paul Street Burlington, VT 05401

Telephone: (802) 864-6811 Fax: N/A Contact: Robert Burgisson, General Manager

Territory: New England

Vehicles in fleet: 50 motor coaches (MCI)

Vehicle purchasing needs: 1993- 4-5 motor coaches

VII. CARGO SHIPPING- PORTS

Although this section is cargo-related, it will also briefly discuss large cruise ships and port efforts to accomodate and attract them.

New England ports face stiff competition from other North Atlantic ports in both cargo shipping and cruise ship traffic.

The following table summarizes 1992 short ton figures for the largest U.S. North and South Atlantic ports:

LOFT and 200 from 1991.	Exports	Imports	<u>Total</u>
		(in 000's)	
Hampton Roads, VA New York/New Jersey Baltimore, MD Philadelphia, PA Wilmington, DE Boston, MA Charleston, SC Miami, FL Camden & Gloucester City Portsmouth, NH Providence, RI Searsport, ME Eastport, ME	58,956 7,480 14,065 860 641 699 5,742	8,354 34,762 11,777 24,614 10,440 9,365 3,065 1,968 2,042 2,203 2,176 484	67,310 42,242 25,842 25,474 11,081 10,064 8,807 5,854 3,063 2,549 2,474 531
Eastport, ME	203	29	232

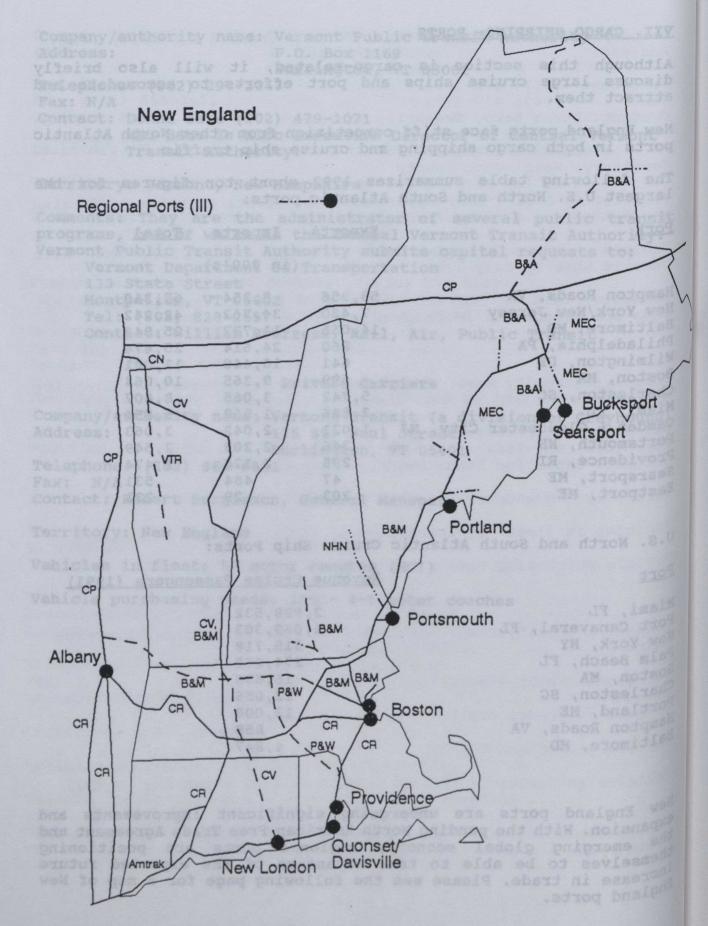
Pont

U.S. North and South Atlantic Cruise Ship Ports:

Por+

is among the deepert	Revenue Cruise Passengers (1991)
Miami, FL Port Canaveral, FL	2,928,532
TEW I	1,069,303
Falm INI	315,718 274,260
Charl, MA	16,689
	12,056
Hampton Roads, VA Baltimore MD	12,000 858
Baltimore, MD	4,847

New England ports are undergoing significant improvements and expansion Free Trade Agreement and expansion. With the pending North American Free Trade Agreement and the the emerging global economy, regional ports are positioning themselves to be able to take advantage of the expected future increases to be able to take following page for a map of New increase in trade. Please see the following page for a map of New England ports.



A. MAINE project: the rebuilding of the Internationalithicat

nal. The rehabilitation of this terminal will serve to better The importance of the ports continues to grow, with the role of the State Department of Transportation increasing. The ports of Bucksport, Eastport, Portland, Searsport and Winterport offer proximity to the Canadian maritime provinces. According to port officials, very good labor relations exist with the longshoremen's unions, resulting in lower labor rates and increased productivity.

Shipping lines: Atlantic Gross LineardessatoBeitzsig bus Isnimit The three dry cargo ports, Eastport, Portland and Searsport, experienced a record year in 1992 in which dry cargo short tons increased 28% from 1991. These three ports are also in an expansion mode. cargo mendlede fusismyigismite, logs, bleached hardwood kraft p

1992 dry cargo tonnage figures are listed below:

Portland Fish Pi	Je jarob are risced below:
Port tot salog	Short tons
Portland Searsport Eastport	592,000 390,000 <u>212,000</u>
Total	Ratport Portrantionistora

1,194,000 Total

Liquid cargoes moving through Maine ports are dominated by petroleum. Since 1985, petroleum imports have steadily increased. In 1990 they totalled 90.4 million barrels.

The Ports

Frill's Marine Terminal Eastport wing nood also have a seven to be land a basis of

Eastport is among the deepest and most sheltered ports on the east coast of the U.S. and is one of the fastest growing cargo ports in New England. Cargo traffic increased from 15,000 tons in 1981 to over 200,000 tons in 1990. The Eastport Port Authority was created by an act of the State of Maine Legislature in 1977. Its mandate is to develop and manage property and provide services to accomodate transportation commerce and maritime activities.

Port operator: Federal Marine Terminals, Inc., a subsidiary of FEDNAV, Ltd., of Montal Marine Terminals, Inc., a subsidiary of FEDNAV, Ltd., of Montreal. In 1984, a new terminal was built in Eastport and another New terminal is in the planning stages. Federal Marine Terminals, Inc.

P.O. Box 261 Eastport, ME 04631 Tel: (207) 853-6096 Contact: Skip Rogers provided Maine businesses improved accessibility to international

Facilities:

- 90' wide by 415' long open wharf for berthing vessels up to 700' in length.
- 40' low tide depth (accessible to ocean carriers)
 84-ton crane

- 84-ton crane

Port access: Trucks

Shipping lines: Atlantic Cross Lines (Great Britain) Forest Lines (North Europe) Star Shipping (Far East) FEDNAV (worldwide)

Cargo handled: lumber, granite, logs, bleached hardwood kraft pulp, machinery and project cargo.

In 1991, Eastport reached its saturation point for handling additional cargo. Consequently, a new terminal is planned for construction in the mid 1990's.

For further information, contact: Eastport Port Authority P.O. Box 278 Eastport, ME 04631 Tel: (207) 853-4614 Port Director: Brian Nutter

Portland:

Portland is comprised of several terminals, both privately and publicly owned.

In recent years, the city of Portland has focused much of its finances on revitalizing the port. In 1982 a privately owned new terminal, Merrill's Marine Terminal, was built in Portland. The city owns and operates three waterfront facilities: a commuter ferry terminal, which serves the Casco Bay Islands (discussed in the Water Transit section), a fish pier, and the International Terminal. This port handled 14 million tons of petroleum shipments in 1992, much of it going through the pipeline which extends from Montreal to Portland.

One major recent development was the commencement of container ship calls in Portland. In March 1991, Hapag-Lloyd added Portland to its container feeder service for a 6-month trial and now Portland is one of its permanent stops. The Yankee Clipper, another feeder service, arrives in Portland on a weekly basis after first being loaded in Halifax with containers arriving in larger ships from Europe. The Yankee Clipper serves Portland and Boston and returns to Halifax. The establishment of this container feeder service has provided Maine businesses improved accessibility to international markets. Ongoing project: the rebuilding of the International Marine Terminal. The rehabilitation of this terminal will serve to better accomodate the cruise ships.

Port access: The Guilford Rail System and the St. Lawrence & Atlantic railways service Merrill's Marine Terminal. Guilford also services Koch Terminal. All other terminals are serviced by motor carriers.

Terminal and pier information:

International Terminal

Operator:

City of Portland Two Portland Fish Pier Suite 307 Portland, ME 04101 Tel: (207) 773-1613 Fax: (207) 773-0285 Contact: Thomas F. Valleau, Director Transportation and Waterfront

Merrill's Marine Terminal

Operator:

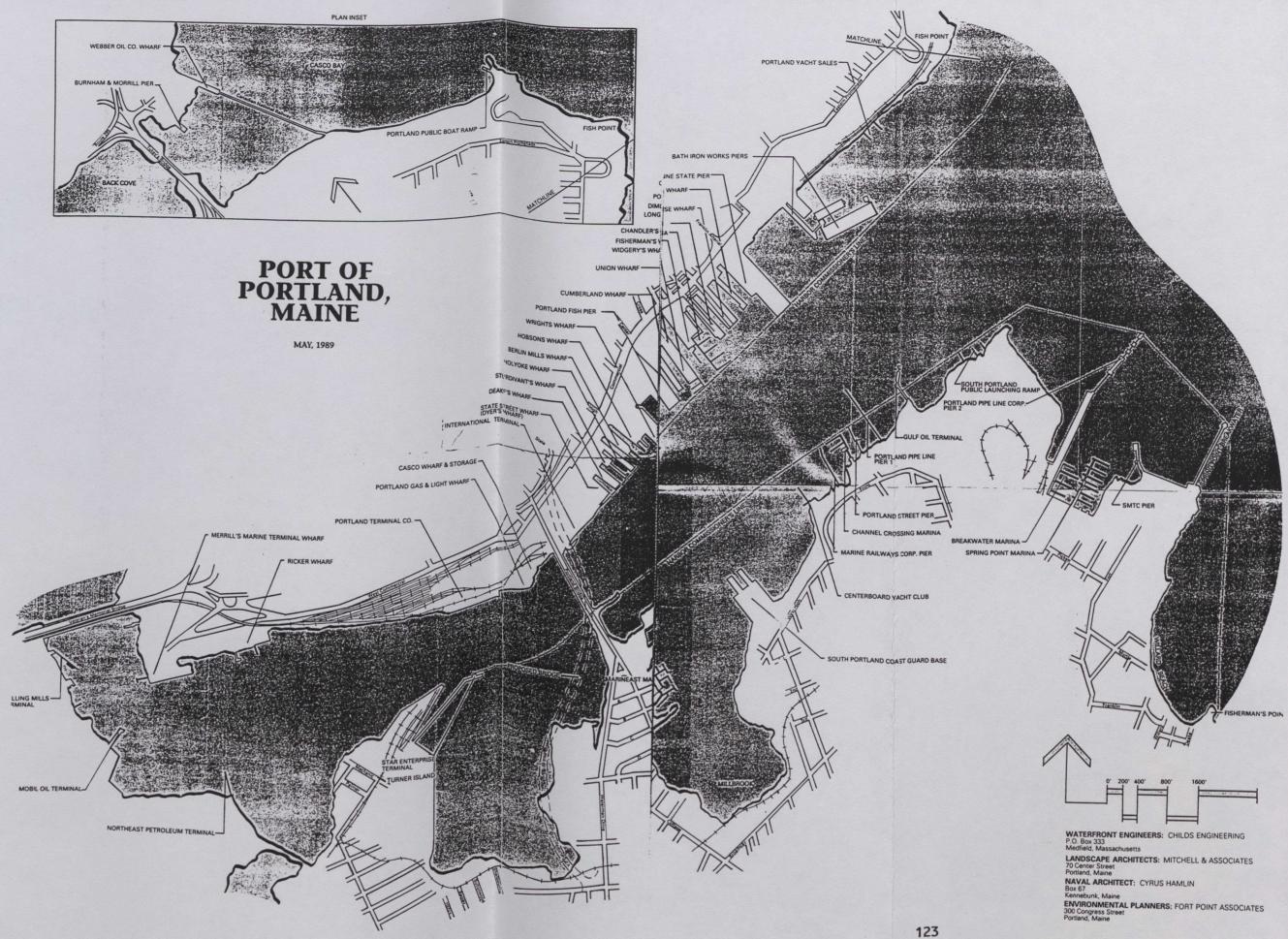
Merrill Industries, Inc. 601 Danforth Street Portland, ME 04102 Tel: (207) 772-3254 Fax: (207) 772-3156 Contact: Michael Kane

Pier Information

Length of berth: 730' Minimum water depth: 35' Apron width: 60' Open area: 12 acres Shed area: No Heated space: passenger terminal and customs inspection area Truck bays: No Access: Truck Floodlights: No Cranes: No Additional information: Fresh water year-round, fuel available by truck or barge

Length of pier: 900' berth; 450' Ro/Ro berth Minimum water depth: 35' Apron width: 135' Open area: 600' by 135' concrete marginal wharf; 50+ acres of open storage Shed area: 150,000 square feet of covered storage Access: 50-car siding with direct access to the Guilford Rail System and the St. Lawrence & Atlantic railways Cranes: Shore cranes with capacity up to 175 tons Floodlights: yes Truck bays: 7

Please see the following page for a map of the port of Portland.





Oil terminals:

B.P. Oil Terminal Getty Terminal (Rolling Mills Terminal) Gulf Oil Terminal Koch Terminal (Rolling Mills Terminal) Mobil Oil Terminal Northeast Petroleum Terminal Portland Pipe Line Pier 1 Portland Pipe Line Pier 2 Star Enterprise Terminal

Ship repair:

Bath Iron Works Ship Repair Facility

Penobscot Bay Area Ports:

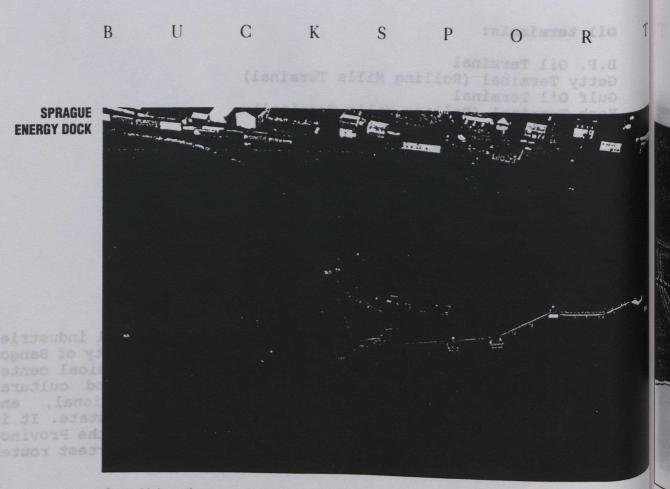
These ports connect local, state, regional and national industries and businesses to the marketplaces of the world. The city of Bangor is only 30 miles away, with Maine's second largest medical center and numerous service providers and recreational and cultural options. Bangor is the major financial, eductional, and distribution core for the northern two-thirds of the state. It is the New England gateway to the Atlantic Provinces and the Province of Quebec. Penobscot Bay Area ports also offer the shortest routes to Europe.

Port access: Rail services are either at or near each of the ports; I-95 is nearby and Bangor International Airport is not more than 30 miles away from any of the ports.

Bucksport

Bucksport has been greatly fueled by the presence of Champion International, one of the 21 pulp and paper mills in Maine. Bucksport is comprised of a north and south terminal, with the south terminal being predominant. The south terminal was upgraded in 1991. The cargo handled is jet fuel, fuel oil, gasoline and kerosene.

Please see the following 5 pages for pier and terminal information and a map of Penobscot Bay Area ports, respectively.



General Information	TA SECTORIZATE BODIVICE THE	Operator
Approach Tidal range Water density Pier Information	36' mhw, 29' mlw approach channel 11' mean range Depends on tide. Water is fresher on low water, saltier on high water (e.g., average density at high tide is 1.022, at low tide 1.016).	Sprague Energy Corporati P.O. Box 727 Bucksport, ME 04116-07 Telephone
Length of pier	900'	(207) 469-7946
Width of pier	Cellular construction, not applicable.	Fax
Length of berth	700' if less than 50,000 dwt; 680' if greater than 50,000 dwt	(207) 469-2461
Bow to center	comprised of a gone the south	Contact
manifold	Approximately 1/2 LOA	Ron Patterson
Water depth	35' mlw downriver	
Docking	Ships, daylight only. Docking at high water and low water slack only. Barges can dock at any high or low water slack.	
0	water stack.	
Construction	Five breasting dolphins plus two dolphins upriver and two dolphins downriver for stern and bow mooring lines. All dolphins connected by catwalks.	
Air draft	135' mhw	
Access	Pedestrian. Limited access for loading/unloading stores.	
Gangway	Ships need to provide.	

Term Acce

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Bunl Fres



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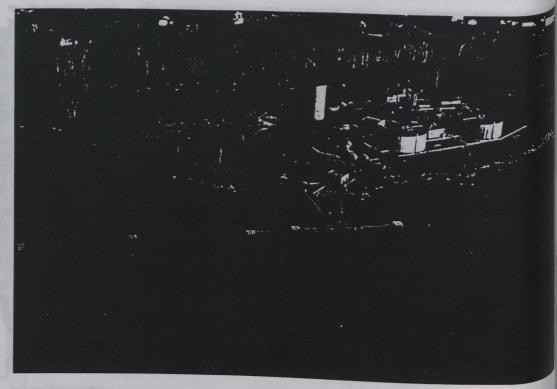
erminal Informatio		10
In The Street For	Road access to Maine Route 15. Rail access to Maine Central Railr	road Company/
^{rgo} handled	Springfield Terminal Railway Company on site. Gasoline, #2 oil, #6 fuel oil, kerosene and jet fuel.	
^{go handled} Pping times ^{scharge} hoses	24-hours daily, year-round.	
marge hoses	C.H. Sprague has one 12" #6 oil line with one 65'x8" hose from shoreline	Pipe line runs
	4,000' to storage tanks. Maximum pressure of 100 lbs on line; 700-800 tons,	
	rate. Webber Tanks has two pipe lines on the pier: one 12" gasoline line	the second s
	hoses; one 14" pipe line for heating oils with two 50'x8" hoses. Both lines r	
vedoring	one mile away.	
rage tanks	Sprague Energy Corporation.	
CallKS	Sprague has four storage tanks which hold up to 341,000 bbls; Webber ha	is seven storage
d area	tanks which hold up to 897,000 bbls.	
^{en} area	No	
Days	No manufacture service service and the service	
-0		
nes Odlights urity	One small derrick Yes	
inty	Yes Available	
arfage fees	Yes	
^{sh} water	Available	
water	Available by arrangement only.	
	Available	

litional Pier User

bber Tanks, Inc. er Road cksport, ME 04416 7) 469-3165

U C K B S р 0 R

SPRAGUE ENERGY DOCK



General Information

Approach	19' mlw approach channel	Uperator
Tidal range	11' mean range. Water is brackish with day	Sprague
117 · · ·	changing with the stage of the tide	P.O. Box Buckspo
Water density	Depends on tide. Water is fresher on low water, saltier on high water (e.g., average density at high tide is 1.022, at low tide1.016).	Telephon (207) 469
Pier Information		Fax

Length of pier	900'
Width of pier	Cellular construction, not applicable
Length of berth	715'
Bow to center	
manifold	Approximately 1/2 LOA
Water depth	24'6" at pier
Docking	Ships, daylight only on mean water slack. Barges can dock any time on high or low water.
Construction	Five main dolphins plus two mooring dolphins and one shore mooring dolphin upriver, and three moor- ing shore points downriver. Dolphins connected by catwalks.
Air draft	135' mhw
Access	Pedestrian. Limited access for loading/unloading stores.
Gangway	Ships need to provide.

e Energy Corporation bx 727 bort, ME 04116-0727

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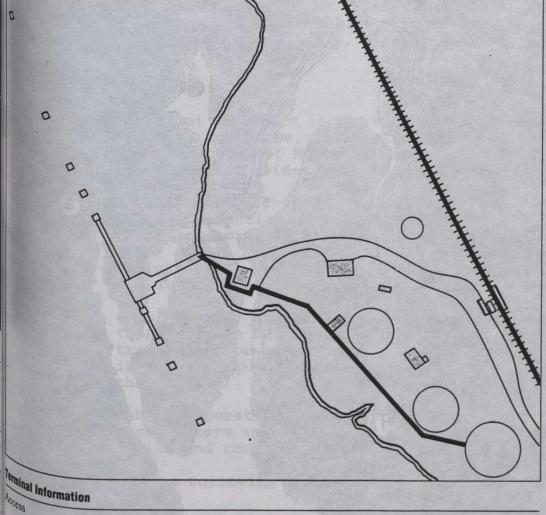
ne

59-7946

(207) 469-2461

Contact Ron Patterson



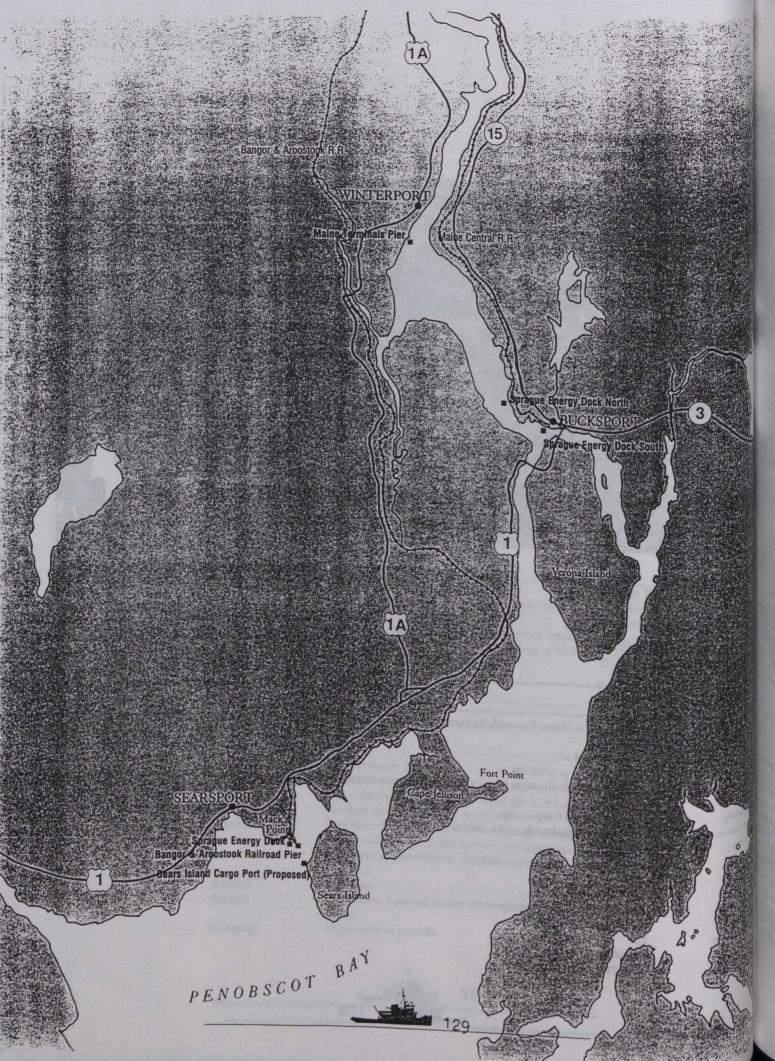




Cargo handled Shipping times Discharge hoses

Stevedoring Storage tanks Shed area Open area Thuck bays Cranes Floodlights Security Wharfage fees Bunkering Fresh water

and a		
1.81	Road access to Maine Route 15. Rail access to Main on site.	e Central/Springfield Terminal
	#2 and #6 fuel oil.	
	24 hours daily, year-round.	
	One 8" #6 fuel oil discharge hose located on main p to dock.	ier. Storage tank is located close
	Sprague Energy Corporation.	
	Three storage tanks can hold a total of 160,000 bb	ls.
	No	
	Seven acres	
	2	
	No	
	Yes	
	Available	
	Yes	
	Available	
	Available by arrangement only.	



Searsport

Searsport handled more than 50% of the Maine dry cargo in 1990 and has also been the leading Penobscot Bay Area port for oil traffic. The Bangor and Aroostook Railroad and Sprague Energy Corporation are the port operators. Bangor and Aroostook owns 2 railroad lines and covered warehouse space which handles forest and paper products, tapioca flour, jet fuel, heating oil, and fuel oil. Sprague Energy owns 3 moveable bulk discharging towers and a Conveyor system to unload salt, gypsum, potash, bauxite and coal.

Port information:

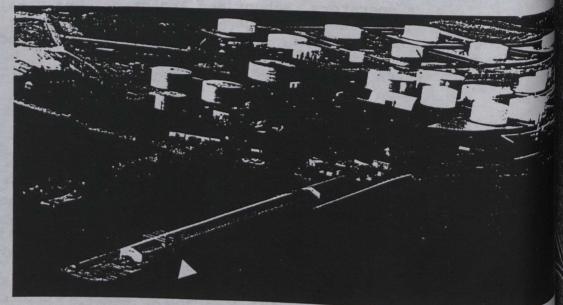
- Location: Searsport is the second closest deep water port in the U.S. to Europe. It is also closer by rail to the Canadian ports of Montreal and Vancouver than the port of Halifax. It provides central access to all points in Maine.
- Development potential: The proposed Sears Island Cargo Port has the potential of making Searsport one of the most efficient ports in the northeastern U.S.
- Navigational ease: The approach to Searsport is straight-on and is not restricted by hazards like bridges or bars.
- Clear access: Shipping lanes in Searsport are less crowded than those in metropolitan ports. With the good intermodal transportation connections that are in place, cargo can move in and out rapidly. The Bangor and Aroostook Railroad serves the port.
- Labor cooperation: Labor strife is rare in Searsport where dock workers and management are known for their strong work ethics and cooperative efforts.

Please see the following 4 pages for pier and terminal information.

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S E A R S P O R

BANGOR AND AROOSTOOK RAILROAD PIER



Operator

Company

Bangor & Aroostook Railro

Northern Maine Junction P

pen ar

nuck b tanes loodlig curity harfag unkeri tesh w

udition inform

Genera	I Int	forma	tion
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Approach:	
Fidal range	
Water density	

34' mlw dredged channel and turning basin 10' mean range About 1.024

Pier Information

I v

W B

D C

A G

	RR = 2, Box 45
752'	Bangor, ME 04401
100'	
600' on east side; 550' on west side	
100' (East Berth); 70' (West Berth)	Telephone
	(207) 848-4363
389' (Continental Services); 347' (Irving Oil)	
of miw (Last Berth); 32' mlw (West Dont)	Fax
24-nour docking, vear-round	(207) 848-4343
Wood piling with heavy wooder doub	(207) 040-4343
	Contact
	Ronald S. Cote or
to its fitted with steel bollardo on 1	James Garrity
podestriali.	
Ships need to provide.	
	 100' 600' on east side; 550' on west side 100' (East Berth); 70' (West Berth) 389' (Continental Services); 347' (Irving Oil) 34' mlw (East Berth); 32' mlw (West Berth) 24-hour docking, year-round. Wood piling with heavy wooden decking. Strength of dock is 250 lbs./square foot. Dock covered largely by covered storage areas. Vertical storage height in ware- houses is 12'. From roof peak to pier deck is between 26' and 27'. Pier is fitted with steel bollards on both sides. Rail and pedestrian.

Terminal Information

Access	Road access to U.S. Coastal Route 1 Di
	Road access to U.S. Coastal Route 1. Direct rail access; two tracks run full length of performance of the cargo can be loaded directly between shine and the second
Cargo handled	Paper, tapioca flour, #6 fuel oil, jet fuel, gasoline, diesel, and heating oil Forest Production
Shipping times	Generally, 8-4:30 pm Monday E is commodities could be handled.
Stevedoring	Generally, 8-4:30 pm, Monday-Friday. Weekends and evenings possible. ITO Corporation of New England and others.
Storage	Four warehouses covering and others.
	Four warehouses, covering a total floor area of 37,800 square feet, can hold up to $11,800^{10}$ of cargo. Three warehouses are on the pier; one is on the pier approach, connected by enclosed ramp. All warehouses are well lighted and have sprinkler systems.



Four petroleum product tanks available for discharge. Two-four acre pile down area, generally used for lumber exports.

No Yes Dock protected by a sensor alarm system. Yes Available Available through a 2 1/2" line, with an average rate of 50 tons/hour.

ank storage

en area

uck bays

odlights

arfage fees

urity

Inkering

esh water

Additional

by an information

1

nes

Bangor and Aroostook Railroad provides direct access to central, western and eastern Maine,

and connects to Maine Central Railroad Company/Springfield Terminal Railway Company, Canadian National Railway, and Canadian Pacific Railway.

Additional Pier Users

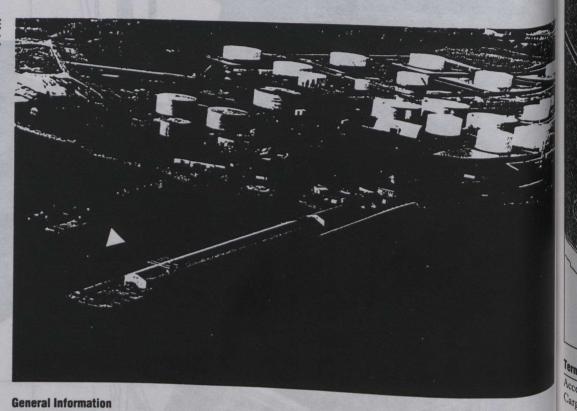
Continental Services P.O.Box 295 Searsport, ME 04974 (207) 548-2201

Irving Oil Corporation P.O. Box 80 Mack's Point Searsport, ME 04974 (207) 548-2541

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S E A R S P 0 R

SPRAGUE **ENERGY DOCK**



General Information

Length of berth

Bow to center

manifold

Water depth

Construction

Docking

Approach Tidal range Water density	34' mlw dredged channel and turning basin 10' mean range About 1.024	
Pier Information	///	
Length of pier	614'	
Width of pier	67' (concrete portion): 40' (outer and)	

67' (concrete portion); 40' (outer end) 850'

320'

34' mlw

24 hours daily, year-round. Wood piling with concrete top and heavy steel frame which rises from top to support three moveable bulk discharging towers and a conveyor system. Truck and pedestrian.

Ships need to provide.

Access Gangway

perator

prague Energy Corporation .O. Box 435 earsport, ME 04974

Ship

Bull

Disc

Disc

Stev

Stor Tan Ope True Floc

Wha Bun Free Add

elephone

(207) 548-2531

(207) 548-6592

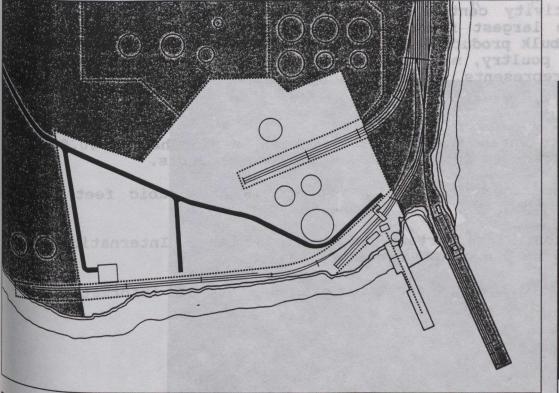
Contact

Fax

Duane Seekins

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Finterport





Terminal Information

Cargo handled Shipping times

tion

Bulk discharge

Discharge rates Discharge hoses

Stevedoring Storage Tank storage Open area Truck bays Cranes Floodlights Security

Wharfage fees Bunkering Fresh water Additional information Road access to U.S. Coastal Route 1. Access to Bangor and Aroostook Railroad on site. Salt (solar, rock, and vacuum), gypsum, potash, bauxite, coal, #6 fuel oil, chemicals such as sodium sulfate and liquid chemicals including caustics.

Road salt, 5 am-5 pm, Monday-Friday. Oil, caustics and coal, 24 hours daily, year-round.

Three steel 100' towers with clamshell type diggers. Cargo is transported through a conveyor system directly into open-top railroad cars and trucks, or stored in open or covered storage facilities. Seven belts run from dock to storage areas.

The system is set up for 1,000 tons/hour; the average rate is 700-800 tons/hour. One heated 16" #6 oil line with two 50'x8" hoses from shoreline to ship. Maximum pressure is 100 lbs; discharge rate is 10,000-12,000 bbls/hour. Hose connection is 200' from outer end of dock. One 10" caustic soda line with one 50'x8" hose from shoreline to ship; discharge rate is 500 tons/hour.

Sprague Energy Corporation. One covered warehouse holds 8,000 tons of road salt. Three oil tanks hold 340,000 bbls. One caustics tank holds 10,000 tons.

26 acres can hold up to 200,000 tons. 5 3 front-end loaders Yes 24-hour protection through two watchmen — one stationed at office, the other by storage tanks. Yes

#6 oil available for bunkers; light diesel available via tank truck. Available through one 3" line; average discharge rate is 50 tons/hour. Terminal has self-unloading hopper for ships which can unload themselves.



Winterport

Shipping activity centers on the Maine Terminals Pier, which contains the largest freezer warehouse in the area. Fresh and frozen breakbulk products handled include cheese, eggs, potatoes, blueberries, poultry, meat and fish. With I-95 only 9 miles away, Winterport represents a convenient location for transporting commodities to nearby and distant markets.

Facilities:

- Freezer warehouse: The Maine Terminals Pier has a 340,000 cubic foot warehouse for storing frozen food products.

- Dry storage: The dock has about 180,000 cubic feet of covered, dry storage.

- Location: Winterport is close to I-95, Bangor International Airport, and the Bangor and Aroostook Railroad.

Please see the following 2 pages for pier and terminal information.

W I N Т E R р 0 R Т

MAINE **TERMINALS PIER**



General Information

Approach

Tidal Range Water Density

Pier Information

270'

40'

Up to 550'

24.5' mlw

Pedestrian.

24 hours daily, year-round.

Floating, steel barge.

Ships need to provide.

Length of dock Width of dock Length of berth Water depth Docking Construction Access Gangway

27' mhw dredged channel and turning basin in the Penobscot River. 10'-12' About 1.020

Winterport, ME 04496 Telephone (207) 223-5011

Operator

P.O. Box 136

Maine Terminals, Inc.

Fax (207) 223-4057

Contact

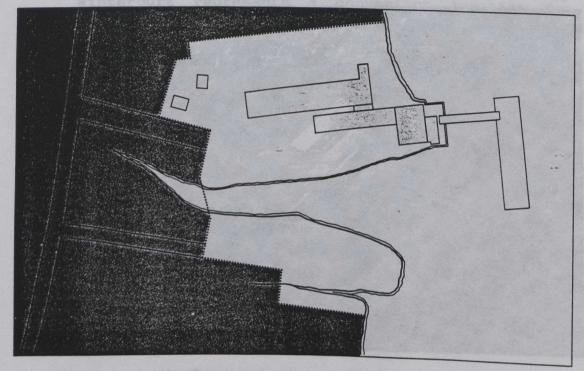
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Rick (Gibbs		

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Winterport

Shipping activity centers on the Maine Desains Plan, which contains the largest fractor warehouse in the tree. Thich and frozen breakbulk products Mandles incluse chases, aspa, potatoes, blueberries, poultry, mest and fish with the set





Terminal Information

Road to Route 1A. Bangor and Aroostook Railroad is located less than three miles Access away from dock via Route 69. Fresh and frozen food products such as poultry, meats, fish, potatoes, blueberries, Cargo handled cheese, and eggs, for import or export. Loading and unloading using pallets. Cargo handling Shipping times 24 hours daily, year-round. Stevedoring Maine Terminals, Inc. 400,000 cubic foot freezer warehouse with four individually controlled rooms Storage capable of -10 F to +55 F. 180,000 cubic feet of dry storage. Shed area 3.5 acres Open area Truck bays 6 Cranes No Floodlights Yes Available Security Wharfage fees Yes Sprague Energy Corporation Bunkering Available Fresh water



For all Maine ports:

Ongoing projects:

- Rebuilding of International Marine Terminal at Portland

Planned projects:

- New terminal at Eastport

A multi-use marine industrial park with warehousing, open storage and processing facilities, and a new cargo pier to provide access for vessels with a draft of up to 60 feet. The new terminal is scheduled for completion in the mid 1990's. The present terminal will also continue to be used.

- \$21 million Sears Island Cargo Port

The state of Maine is in the process of constructing an international cargo port on Sears Island. The environmental study is ongoing. A new terminal offers the prospect of world-class facilities. Among the commodities expected to be unloaded at the cargo port are bulk wood products, such as wood chips, agricultural products and container cargo. Bangor and Aroostook Railroad will service the cargo port via an onsite rail spur. The project's development plan includes a cellular steel pier with backfill, transit sheds, a parking area, and an administrative building.

- Priority Harbor Projects

Please see the following 4 pages for a diagram and information on the proposed Sears Island Cargo Port and a list of priority harbor projects, respectively.

S E P O R A R S

SEARS ISLAND CARGO PORT (PROPOSED)



General Information

Approach Tidal range Water density

Pier Information

Width of pier Length of berth

Construction

45' mlw dredged channel 10' mean range About 1.024

Length of pier

Water depth

Access Gangway

780' 280'

1200' (initial permit is for two berths, 1300' in length) 45' mlw Solid fill marginal wharf of cellular steel with sand to gravel backfill. Rail and road. Ships will need to provide.

Operator

To Be Determined

Contact

Division of Ports and Marin Transportation Maine Department of Transportation Transportation Building Station #16 Augusta, ME 04333

emi

loces

Cargo

Addin

Telephone

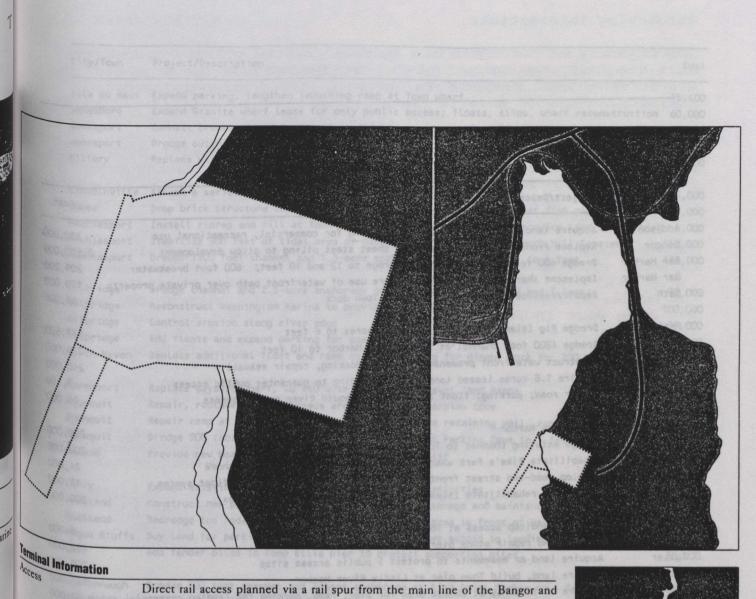
(207) 289-2841

Fax (207) 289-2896

Contact

Robert D. Elder, Director Division of Ports and Marine Transportation





Cargo handled Additional information Direct rail access planned via a rail spur from the main line of the Bangor and Aroostook Railroad across a causeway to the terminal site on the western end of the island. Access to Coastal Route 1 via a connector road, also along causeway. Forest and agricultural products, frozen products, containers and assorted general cargo, and bulk commodities like wood chips.

The Sears Island Cargo Port is proposed by the Maine Department of Transportation. Construction has been suspended pending the completion of additional environmental reviews. That work is largely being done as a result of litigation challenging the issuance of federal permits for the project. It is anticipated that the review process will be completed in late 1992 or early 1993. For more information on the proposed cargo port, contact the Maine Department of Transportation.





TABLE 5-2

PRIORITY HARBOR PROJECTS

City/Town	Project/Description	Cost
Addison	Acquire land at South Addison Town Landing for commercial, recreational use	
Bangor	The server buckliggy with sheat steel oiling	\$80,000
Bar Harbor		2,500,000
Bar Harbor	The second and the state of watertroot math	209,200
Bath	Repair/replace ramps and 4 floats at Town dock	150,000
Beals	Dredge Pig Island Gut channel and 3.3 acres to 6 feet	
Biddeford	Dredge 4200 foot channel at Wood Island Harbor to 10 for	567,500
Biddeford	Construct Waterfront promenade: install docking	224,000
Bowdoinham	Acquire 1.0 deres leased land at Tour Landing to	240,000
Bristol	Repair road; parking; float system for Pemaquid River public access	7,500
		15,000
Bristol	Dredge New Harbor	
Bristol	Dredge existing channel to Town float at Round Pond Harbor	200,000
Calais	Kendbilitate Pike's Park Wharf substances .	200,000
Camden		24,000
Cranberry I.	Repair and rehabilitate Islesford and Big Cranberry Town wharves	15,000 200,000
Cranberry I.	Install handicap access at Town Wharf	200,00
Cumberland	Restore and repair stone pier on Chebeague Island	8,000
Cutler	Acquire land or easements to protect 5 public and	50,000
Cutler	Acquire Lang, build lown oter at lists a:	200,000
Deer Isle	Acquire 15-18 acres at Sunset area for pier ramp sould	115,000
	Acquire 15-18 acres at Sunset area for pier, ramp, parking for landing commercial ca	tch 60,000
East Machias	Build new boat ramp to provide alletide and	
Eastport		25,000
Eastport	Construct ramps, floats for commercial fishermen at Central Business District Repair fenders at municipal fish pier; new vessel account	3,600,000
Eastport	Repair fenders at municipal fish pier; new vessel access i	100,000
armingdale	Repair fenders at municipal fish pier; new vessel access; install cathodic protection Acquire 2.75 acres for park and boat access at river	n 220,000
		40,000
ranklin	Acquire land for public boat ramp	
eorgetown	Repair, expand Town pier at Five Islands	70,000
iouldsboro	Provide Commercial fishing pier at Gouldsboro Point, parking, and ramp Acquire 2 acres on water plus upland area for	300,000
iouldsboro	Frank Grea IOF COmmercial	52,000
arrington	Restore wharf for commercial users	280,000
		80,000

Purchasing Information:

City/Town	Project/Description	Cos
Isle au Haut	Expand parking, lengthen launching ramp at Town wharf	15,400
Jonesboro	Expand Granite wharf lease for only public access; floats, slips, wharf reconstruction	60,000
Jonesport	Connect breakwater to land; slips, floats, gangway at Town pier	200,000
Jonesport	Dredge outer harbor where 95% of commercial boats are moored	200,000
Kittery	Replace existing float system with fixed pier	18,000
Lincolnville	Attach a series of floats to the West Pen Bay Wharf	15,000
Lubec	Drop brick structure to create Johnson's Bay breakwater to protect fish pier	60,000
Machiasport	Install riprap and fill at Town boat ramp to close eroded gap; acquire land for parkin	g 6,000
Machiasport	Stabilize 300 feet of tidal area of Machias River to protect Church Hill Cemetery	150,000
Machiasport	Dredge 1500 foot channel and 1.3-acre anchorage at Bucks Harbor to 8 feet	478,000
Milbridge	Dredge channel and 2.5-acre anchorage on Narraguagus River to 9 and 7 feet;	70,000
Milbridge	Reconstruct Washington Marina to provide boat tie-up	100,000
Milbridge	Control erosion along river edge	15,000
lilbridge	Add floats and expand parking for commercial fishing access	15,000
North Haven	Replace additional float and ramp at Town landing for dinghy dock for 200 boats	15,000
Northport	Replace Bayside wharf, 40'x40'with solid rock/gravel, and ramps	90,000
gunquit	Repair, replace, add bulkheads around edges of Perkins Cove	115,000
gunquit	Repair ramp at Ogunquit River boat launch; remove retaining wall, replace with riprap	15,000
Ogunquit	Dredge 900 foot channel and 2.1-acre anchorage at Perkins Cove to 7 feet	517,000
Drland	Provide new boat ramp for only access to salt water	60,000
Perry	Expand existing pier; add floats and ancillary facilities	100,000
Portland	Construct new pier for commercial fishing gear storage and maintenance	900,000
lockland	Redredge the Federal channels; dredge a mooring area in front of Harbor Park	400,000
Roque Bluffs	Buy land for parking at Bare Cove landing; improve access to landing, mooring area	40,000
aco	Add fender piles to Camp Ellis pier to protect supporting piles	30,000
carborough	Dredge 700 foot channel and 3-acre anchorage at Pine Point Harbor to 6 feet	377,000
outh Bristol	Dredge at South Bristol Harbor	200,000
outh Bristol	Build new skiff dock at Hunters Landing for Walpole residents	15,000
Portland	Acquire land for public access and passive recreation at Breakwater Point	600,000
W Harbor	Dredge at Southwest Harbor	200,000
teuben	Dredge harbor to provide adequate depth for draggers	200,000
remont	Dredge 1700 foot channel and 5-acre anchorage at Bass Harbor to 10 feet	600,000
inalhaven	Dredge 26 acres at Carver Harbor	200,000
ells	Expand, rehabilitate pier for new building for clam cultivation, research	60,000
hiting	Acquire land at Whiting River for parking ramp	20,000
inter Harbor	Repair two floats at Town pier	15,000
interport	Dredge channel for cargo vessels at Winterport docks	400,000
armouth	Buy property at Madeleine Point to construct ramp and parking	50,000
armouth	Dredge harbor for commercial fishermen and recreational boaters	500,000
ork	Acquire Varrell Wharf and Land	500,000

Source: Planning Study of Maine Coastal Port and Harbor Needs

Purchasing Information:

The majority of terminals are operated by the private operators, that are indicated on each of the terminal pages. The exception is the International Marine Terminal in Portland which is operated by the city.

Cruise Ship Activity

The cruise ship industry is considered one of the fastest growing leisure travel businesses in the world. This growth is also projected for Maine where it is expected that tourism will be the largest industry in Maine by the year 2000.

In the summer of 1992 seventy-five cruise ships called in Maine. Maine is working closely with Canada to increase this business.

The Scotia Prince, one of the heavily traveled cruise ships, makes its home port in Portland. The ports of Portland and Bar Harbor would like to expand their facilities in order to accomodate the large cruise ships which range from 300' to 1,200' in length.

Eastport is looking forward to increased future cruise ship activity because of the bottleneck now in Calais.

Future trends: The most significant trends in the industry are proliferation of cruise packages, larger ships and shorter cruises (4 to 7 days).

Further inquiries should be made at:

Ports and Marine Transportation Division State of Maine, Department of Transportation State House Station #16 Augusta, ME 04333 Contact: Robert D. Elder, Director Tel: (207) 287-2841

Cruise ship activity in Maine is further discussed in Water Transit (Maine).

CARGO IN THE PORT of BOSTON

B. MASSACHUSETTS

The port of Boston, as well as much of the waterfront, is operated and managed by the Massachusetts Port Authority (Massport). As mentioned previously, the director of Massport, Alden Raine and Governor William Weld are making great efforts to improve the port and increase its trading capacity.

The port terminals connect the region to the trade routes of Europe, via Latin America and Canada. Feeder service is provided several times weekly to the ports of Halifax and New York.

Massport General Cargo Terminals:

Conley Terminal is the first port of call inbound for vessels serving northern Europe. It handles over 35,000 containers annually and serves as the Toyota terminal in New England. Last year, Massport invested \$1.5 million in terminal expansion.

Facilities:

- 101-acre multi-user facility
- One 1,000' and one 600' berth
- 40 acres of storage space (with expansion capability)
- Two 40-ton and one 30-ton Paceco container gantry cranes

Moran Terminal is a state-of-the-art terminal with new cranes and a computerized yard system.

Facilities:

- 1,100' berth with 50 acres
- 70-ton Hitachi and 40-ton Paceco container gantry cranes
- Neutral chassis pool

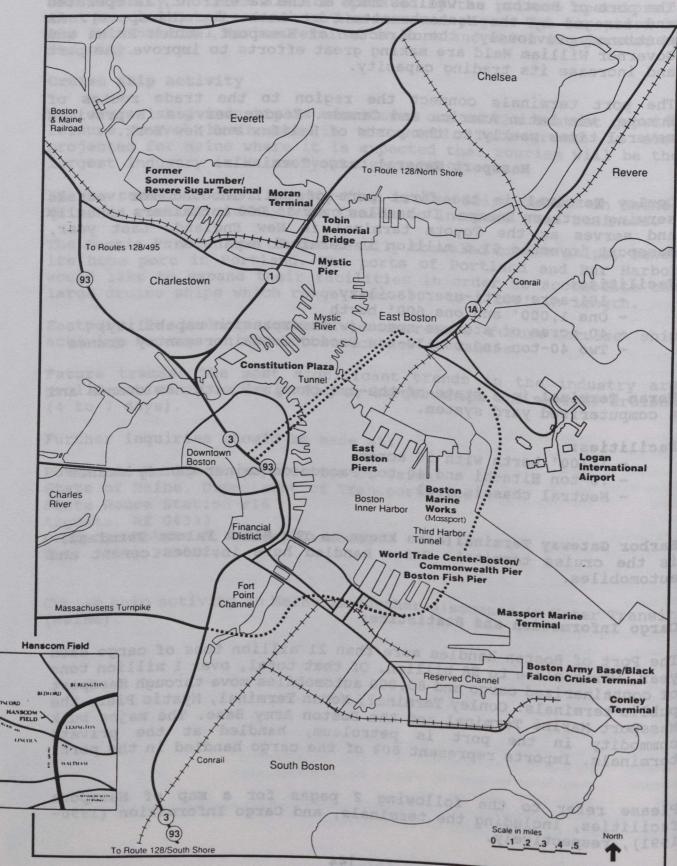
Harbor Gateway Terminal (also known as The Black Falcon Terminal) is the cruise terminal. Cargo handled here includes cement and automobiles.

Cargo Information and Statistics:

The Port of Boston handles more than 21 million tons of cargo each Year, worth close to \$8 billion. Of that total, over 1 million tons of containerized cargo and 80,000 automobiles move through Massport Public terminals: Conley Terminal, Moran Terminal, Mystic Pier, the Massport Marine Terminal and the Boston Army Base. The major bulk Commodity in the port is petroleum, handled at the private terminals. Imports represent 60% of the cargo handled in the port.

Please refer to the following 2 pages for a map of Massport facilities, including the terminals, and Cargo Information (1990-1991), respectively.

MASSPORT FACILITIES



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CARGO IN THE PORT of BOSTON (in short tons)

1991 1990 % Change CONTAINERIZED Import 594,358 665,527 -10.7% Export 400,209 379,904 5.3% Sub-total containerized cargo: 994.567 1,045,431 -4.9% NON-CONTAINERIZED GENERAL CARGO Automobile imports 43,808 57.227 -23.4%Plywood, fish & other imports 44,796 17,551 155.2% Sub-total non-containerized cargo: 88,604 74,778 18.5% TOTAL GENERAL CARGO 1,083,171 1,120,209 -3.3% BULK CARGO Imports: Petroleum products 12,508,762 15,918,265 21.4% Liquid natural gas 1,447,108 1,260,000 14.8% Cement 468,664 453,390 3.4% Salt 329,206 310,871 5.9% Gypsum 175,617 173,677 1.1% Other Exports: Petroleum products 88,565 2,258 * 1,374,101 2,204,055 -37.7% Scrap metal 397,471 477,262 -16.7% TOTAL BULK 16,789,494 20,799,778 -19.3% TOTAL PORT of BOSTON CARGO 17,872,665 21,919,987 -18.5%

VESSEL ARRIVALS IN THE PORT of BOSTON

Fuel barges	rain, No railros	be shipped by	n Allston to
Tant	1,404	1,364	2.9%
Tankers & LNG vessels	260	450	-42.2%
- Ullainer feeder barges	181	epness 171bas d	5.8%
Container vessels	169	210	-19.5%
Clieral cargo vessals	77	89	-13.5%
Ty Dulk vessels	44	59	-25.4%
Passenger vessels	39	15	160.0%
CONTAINER UNITS			ene dis that kug
Conta:			
Container Boxes	71,644	80,685	-11.2%
Container TEUs	124,859	141,805	-13.6%

Massport Maritime Department, East Bldg. II, Fish Pier, Northern Avenue, Boston, MA 02210 617-973-5354 Telex 94-0365 Fax 617-973-5357

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CARGO IN THE PORT of BOSTON

Major import and export general cargoes shipped through the port:

IMPORTS

Automobiles Aluminum products Beer & wine Canned food items Ceramic tiles Fish & shellfish

Footwear Furniture Hardware Paper Sporting goods Toys & games

EXPORTS

Abrasives Fish & products

Fruits & berries Hides & skins Household goods Logs & lumber Metal waste & scrap Newsprint & waste Paper Paper & products Photo equipment Resins & acids Sound equipment & components

In 1992, total general cargo volume handled at the terminals amounted to 1.053 million tons, a 1.2% increase from 1991. Export cargo decreased by 12%.

Of the 1.041 million tons of waterborne general cargo (valued at \$3 billion) that was handled through Massport in 1991, 92% was shipped in containers on regularly scheduled direct, barge, and feeder shipping lines.

Port access:

All cargo is trucked to its destination or to the Conrail terminal in Allston to be shipped by rail. No railroads service the piers, though there are considerations by Conrail to service the piers, plans of Boston and Maine to service Moran Terminal, as discussed in the Freight and Passenger Rail (Massachusetts) section.

Further plans for access to the port of Boston include a rail distribution center at Fort Devens in Ayer, MA. Springfield Terminal Railway Company, owned by Guilford Transportation working as partners in this agreement. CP, Rail Systems are western Massachusetts, will operate Boston & Maine vehicles (owned track in eastern Massachusetts. According to Colin Pease, Executive Vice President of Springfield Terminal Railway Company, the distribution center will soon be in operation.

Massport stands to benefit directly from this project in that the project is expected to increase the flow of goods through the Port

of Boston and permit the Port to expand its market area. The Springfield Terminal Railway will serve Moran Terminal only. CP does not have many customers in New England. It is not expected that Boston will become a major port in the northeast in the near future. CP plans to do direct marketing of their service. Thus, Canadian shippers will become aware of New England markets for their goods, and of the possibility of shipping through New England to other destinations.

For some years, Massport has sought improved rail links with the Midwest. A major obstacle has been the low bridges between the Port of Boston and main line rail connection in the western part of the state. The bridges are too low to permit passage of double stack containers which are the principal mode of freight cargo shipment by rail.

A second major obstacle that has impeded development of freight links between Massport and points inland is competition from the Port of New York, which has offered less costly and more efficient freight service from the east coast to the Midwest. Massport's stated objective is to offer freight service which can reduce by 2 days the shipment time from Europe to Chicago if goods transit via the Port of Boston rather than via other east coast port cities, thus positioning Boston as the key transfer point for North American/European commerce.

Container Service Boston/Halifax:

Three steamship lines run between Boston and Halifax. The steamship lines are all headquartered elsewhere and operate the service via agents with offices in or near Boston. Information on these lines is given below.

1. A.B.C. Container Lines Trade routes: Australia, New Zealand, UK, Continental Europe, Mediterranean Agent: Global Trade Associates, Inc. 5 Mount Royal Avenue Marlboro, MA 01752 Tel: (508) 485-6000 Fax: (508) 485-0564 Contact: Peggy Keeling

Global Trade Associates is the agent for both ABC Container Lines, whose headquarters office in New York City is Deep Sea Marketing Services, and also for Zim America Israeli Shipping Company, whose headquarters office of the same name is also located in New York City.

ABC Container Lines imports from Halifax to Boston via a small feeder vessel called the Yankee Clipper. Imports come via this vessel with no exceptions. Exports from Boston to Halifax may go onto the Yankee Clipper only if space is available. If there is no

space, cargo goes from Boston via overland to Philadelphia, providing weight restrictions have been met. Cargo then loads in Philadelphia onto a mainliner ABC vessel at Holt Terminal.

2. Hapag-Lloyd Trade routes: U.K., Continental Europe Agent: Boston Overseas, Inc. 475 C Street Boston, MA 02110 Tel: (617) 423-3444 Fax: (617) 423-0706 Contact: Kevin O'Donnell, President

Hapag-Lloyd operates the Yankee Clipper, which is under full charter for Hapag-Lloyd. The vessel is owned by a German company. The vessel goes to Halifax, discharges, and services cities as follows:

Portland, ME: arrives Thursday and sails Thursday Boston, MA: arrives Friday and sails Friday Halifax, NS: arrives Sunday and sails Thursday

Cargo space on the Yankee Clipper is shared on a fee basis with other lines, such as ABC Container Lines.

3. Atlantic Container Line Trade routes: U.K., Continental Europe Agent: Southern Steamship, Inc. 217 Beacham Street Everett, MA 02149 Tel: (617) 387-7486 Fax: (617) 389-4634 Contact: Joseph O'Brien 57

Office in Halifax: Tel: (902) 425-3711 Contact: Janet Perrin

Southern Steamship is the agency for Atlantic Container Line throughout the U.S. ACL is headquartered in Plainfield, NJ. Import and export cargo goes via the Yankee Clipper.

Atlantic Container Line serves Canada from Moran Terminal. It is stable with no plans for expansion.

In Contact Baccy A The following is a list of steamship lines, agents, trade routes

Steamship Line/agent Trade Route Frequency of Service

A.B.C. Container N.V. Australia, U.K. Weekly feeder via Global Trade Associates New Zealand, Halifax 507 Mount Royal Ave. Europe, Marlboro, MA 01752 Tel: (508) 485-6000 Contact: Peggy Keeling

Mediterranean

Atlantic Container LineU.K., EuropeWeekly feeder via217 Beacham StreetHalifax Everett, MA 02149 Tel: (617) 387-3357

China Ocean Shipping Co. Far East/ Barge via New York Patterson Wylde & Co., Inc. Japan Boston Fish Pier West Bldg., Suite 305 Boston, MA 02210 Tel: (617) 428-6000 Contact: Norman Tasgal

Columbia Coastal Feeder barge via Twice weekly Transport Service New York 100 Terminal St. Charlestown, MA 02129 Tel: (617) 241-7465 Contact: Thomas Delaney

Evergreen Line 1 International Pl. & Red Sea, U.K., Suite 735 Boston, MA 02110 Tel: (617) 261-0735 Contact: Jay Buckley

Hale IntermodalFeeder barge viaTransport CompanyNew York 100 Terminal St. Charlestown, MA 02129 Tel: (617) 242-5099 Charlestown, MA 02129 Contact: Jerry Powthier

Hanjin Shipping Co., Ltd. Japan/ Barge via New York 150 Wood Road Far East Braintree, MA 02184 Tel: (617) 849-3130 Contact: Fran Coholan

Hapag-Lloyd (America) Inc.U.K./Weekly feeder via475 C StreetEuropeHalifax Boston, MA 02110 Tel: (617) 261-0600 Contact: Kevin O'Donnell

Italian Line Mediterranean, Barge via New York Inchcape Shipping Levant & Red Sea Service/SSI 217 Beacham Street Everett, MA 02149 Tel: (617) 389-1714 Contact: Joseph O'Brien

Contact: Joseph O'Brien

Mediterranean Caribbean, Levant Europe, Japan, Far East

Barge via New York

Twice weekly senid byoilban

Ivaran Line South America Barge via New York Patterson Wylde & Co. (east coast) Boston Fish Pier West Bldg. II, Suite 305 Boston, MA 02110 Tel: (617) 428-6000 Contact: Norman Tasgal

Maersk Line U.K., Europe Direct weekly 401 Edgewater Place Suite 260 Wakefield, MA 01880 Japan/Far East, Barge via New York Tel: (617) 246-8211 Mediterranean/ Contact: Michael Walsh Middle East

Mediterranean Shipping Co. U.K, Europe Direct weekly Peabody & Lane, Inc. 1 Constitution Plaza Boston, MA 02129 Tel: (617) 241-3710 Middle East/Africa Transhipped cargo Contact: Arthur Lane Mediterranean

Mitsui O.S.K. Lines Japan/Far East Barge via New York 21 Custom House Street Suite 910 Boston, MA 02110 Tel: (617) 330-9295 Contact: Karen Overton

Nedlloyd Lines U.K., Europe Direct weekly 451 D Street, Suite 304 Boston, MA 02210 Tel: (617) 737-1515 Contact: Kevin Murphy

Neptune Orient Lines Peabody & Lane, Inc. 1 Constitution Plaza Boston, MA 02129 Tel: (617) 241-3711 Contact: Arthur Lane

Netumar Line 125 Maiden Lane New York, NY 10038 Tel: (212) 344-4020 Contact: Tony Demeri en are stra

NYK Line 745 Atlantic Ave. Suite 400 Boston, MA 02111 Tel: (617) 695-0666 Contact: Joseph Brebbia

Pelantia Costals ve handeader hargene

100 Terminal St.

Tel: (617) 24362455allas tas yabirg estin

Coston, MA 02110

the Jack Star Inter

Japan/Far East Barge via New York Lancie cobros beog ga

too terningi st.

apag-Lloyd (America) Inc. D.S. . South America Barge via New York (east coast)

Japan/Far East

Barge via New York Halifax 122\solvre

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West Bldg., Suite 305

P & O Containers Ltd. U.K., Europe Direct weekly
Patterson Wylde & Co.
Boston Fish Pier
West Bldg.II, Suite 305
Boston, MA 02210
Tel: (617) 428-6000
Contact: Joseph Murray

Pan AmericanSouth AmericaBarge via New YorkIndependent Line(east coast)Consail Internationalof Mass., Inc.475 C StreetBoston, MA 02210Tel: (617) 423-3444Contact: John Hudson

Sea-Land Service, Inc. U.K., Europe Direct weekly 125 Summer Street Suite 1210 Boston, MA 02210 Tel: (617) 261-1908 Contact: Walter Gillespie

Yang Ming Line Japan/Far East Barge via New York Moran Shipping Agencies, Inc. 141 Pearl Street Boston, MA 02210 Tel: (617) 338-6810 Contact: Ed McKenny

Zim Container Service Japan/Far East, Barge via New York Global Trade Associates Mediterranean 5 Mount Royal Avenue Levant & Red Sea Marlboro, MA 01752 Tel: (508) 485-6000 Contact: Peggy Keeling

Lykes Lines announcement:

In February 1993, Lykes Lines announced that it would begin direct, non-stop, outbound service from Boston to Europe, beginning in mid-March. This export-related development is very important for the port of Boston, since the new service will shave up to six days off the trip. Lykes' decision was the result of months of efforts by Massport and the New England Shippers Council. One of the damaging issues to the port is the disproportionate number of Food and Drug Administration (FDA) cargo samplings that take place in Boston. The FDA inspects more cargo in Boston than in other major Atlantic seaboard ports to verify that FDA regulations are being met. Because it is known that Boston is a stricter port than its competitors, shippers route their goods through other ports, not wanting to be subject to shipping delays caused by FDA cargo sampling. Massport Marketing estimates that Boston loses \$1.2 million to \$2 million (representing at least 3,000 containers) in direct revenue each year because of strict FDA standards.

Massport Cruise Terminal:

- Black Falcon Cruise Terminal, a state-of-the-art facility, can berth 5 cruise ships at once. Massport is actively recruiting more cruise ships. Thirty-three cruise ships called on Black Falcon Cruise Terminal in FY92.

The Massport major capital construction agenda includes:

Ongoing projects:

- A \$50 million, 5-year expansion project at Conley Terminal was started in 1992. Two of the cranes will be raised to 20' for the larger cargo vessels. Two more cranes will be purchased in the next 10 years. Also, the berth area will be doubled to accomodate the larger cargo vessels simultaneously. The expected completion date is late 1994.

Planned projects:

- Local sponsorship in the Boston Harbor Dredging Project is scheduled to begin in 1995 in cooperation with the Army Corps of Engineers. The controversial issue of this project is the containment and what should be done with this material. The expected completion date is 2005.
- Improvement of truck access through the construction of the Third Harbor Tunnel/Central Artery's Seaport Access Road
- Improvement of rail connections and service to the port

Future Trends:

Cargo vessels are becoming larger. The vessels of the future are referred to as post Panamax and are extremely large. The port of Boston accomodates these vessels at Conley Terminal. Cruise ships are also increasing in size.

Purchasing information:

Massport operates as a private company and is not under any state procurement laws. Their bidding system is used for tangible products over \$5,000 in value.

Purchasing contact:

General contact:

Massachusetts Port Authority Logan Airport East Boston, MA 02128 Tel: (617) 561-1690 Fax: (617) 561-1773 Contact: Ralph DeOrsay, Manager of Purchasing

Massachusetts Port Authority 10 Park Plaza, 4th Floor Boston, MA 02116 Tel: (617) 973-5757 Contact: Lana Razdan, Senior Public Affairs Manager

C. NEW HAMPSHIRE

run Administration (FDA) dargo samplings that The medium-size Port of New Hampshire consists of the tidal waters stretching from Newington to Portsmouth. The New Hampshire Port Authority operates the only public cargo pier in the state. There are 9 private terminal operators and the state of New Hampshire operates the tenth terminal, the Portsmouth State Fish Pier. Halifax and Montreal have acted as co-load centers for New Hampshire air, surface and maritime traffic for many years.

The port is one of 185 Free Trade Zones (FTZ) in the U.S. The following is a brief explanation of a Free Trade Zone.

While the merchandise is within the zone, it can be stored, tested, cleaned, sampled, relabeled, repackaged, displayed, repaired, manipulated, mixed, processed, assembled, manufactured, salvaged, destroyed and even re-exported. The port, which is FTZ #81, also has FTZ sites in Dover and Manchester.

The State Port Authority which operates the port is an autonomous state agency overseen by a board of directors appointed by the Governor. It is responsible for harbor management, port development, port marketing, trade development and foreign trade zone operation.

State Port Facility:

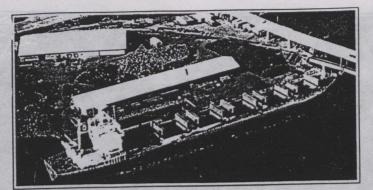
- located on the Piscataqua River
- ice-free, 35' deep port
 - good rapport with International Longshoreman's Association
- waterside open storage in excess of 11 acres
 - 600' concrete and steel wharf with 35' draft - 50,000 square feet of warehouse

Port operator: New Hampshire State Port Authority 555 Market Street, Box 506 Portsmouth, NH 03801 Tel: (603) 436-8500 Fax: (603) 436-2780 Contacts: Ernest Connor, Executive Director Henry McKay, Marketing Representative

Terminal operator: J.T. Clark & Son of N.H., Inc. State Pier, 555 Market Street Portsmouth, NH 03801 Tel: (603) 431-8500 Contact: William Horohoe, President

Port access: Boston and Maine Railroad operates the rails to the pier, but 95% of the cargo is handled by truck. A heliport is on site and Pease International Tradeport is one mile away.

Please see the following 6 pages for pier and terminal information.



NEW HAMPSHIRE STATE PORT AUTHORITY (NHPA)-12

OPERATOR: J.T. Clark & Son of N.H., Inc. (603) 431-8500

ADDRESS: NHPA

555 Market Street Portsmouth, NH 03801 (603)436-8500 Fax (603)436-2780

LOCATION: 3 miles (1.9 km) from outer Anchorage (Buoy 2KR); 0.5 miles (.3 km) off Interstate-95 Portsmouth, NH

PIER CONSTRUCTION: Concrete and steel pile with precast concrete deck-load limit 600 ft. (182.9 m)

LENGTH: 600 ft (182.9 m), Maximum vessel size 700 ft. (213.4 m) LOA DEPTH: 35 ft. (10.6 m) WAREHOUSE: Metal buildings; 50,000 sq.ft. total (4646 sq. m) Concrete/asphalt floor

Drive-through doors Certified weighing system

RAIL: Boston & Moine Line on premises

TUGS: Service Available

CARRIERS ACCOMMODATED: Feeder vessels/Barge/Charter vessels HELIPORT: Dockside

DOCKSIDE SERVICES: Potable water, telephone, stores, and marine bunkers

CARGO HANDLING CAPACITY: (1) 225-ton mobile crane (1) 165-ton mobile crane 35-ton yard cranes ILA Longshore Labor

OPEN STORAGE AREA: 5+ Acres

FOREIGN TRADE ZONE(NO. 81): 10-acre site total (one of four in NH); 50,000 sq.ft (4646 sq. m) in transit sheds Contact: NHPA (603)436-8500

U.S.CUSTOMS: Portsmouth Office (603)433-0737 District Office, Portland, ME (207)780-3328 PORT CHIEF HARBORMASTER: Full Time (603)436-8500 1002822; 126 University 1002822; 126 University Newsystem, HB 03801 (603) 431-5131

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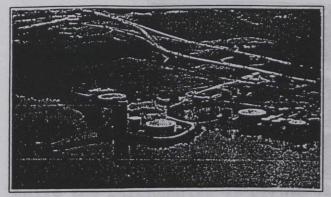
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ACCESS 10 YESSELS (for store and repairs): 5

PRODUCT HANDLED Versions, Direct Fool, 41 SIZT AND HUMULE OF PIPETINES, 1-16 M., 1-DISCHARGE RATE, 7, 000-20,000 bbb / hour W MAXUMUM VESSEL SIZE, 7, 000-20,000 bbb / hour M STORAGE CAPACITY, 1, 700,000 bbb / hour M

> Spropole s Wavington Feminal centers of workfront/ undustrationand land. The Fill storage engating for local birk products 01HER PACILISHES ARIS SERVICES



C.H. SPRAGUE & SON CO., NEWINGTON TERMINAL- 1

OPERATOR: C.H. Sprague & Son Co. ADDRESS: 126 River Road Newington, NH 03801 (603) 431-5131 Fax (603) 431-2675

OFFICE: One Parade Mall Portsmouth, NH 03801 (603) 431-1000

TYPE OF PIER: Steel piled cells (2) and (3) cement mooring dolphins DEPTH ALONGSIDE AT MLW: 35 ft.

NORMAL SHIP SIDE TO DOCK: Port

LINE HANDLING: Motorized capstans on all dolphins

ACCESS TO VESSELS (for stores and repairs): 5-ton vehicle or less to shipside.

5-ton vehicle or more, cart or hand to shipside

PRODUCT HANDLED: Kerosene, Diesel Fuel, #2

SIZE AND NUMBER OF PIPELINES: 1-16 in., 1-14 in., 3-10 in., 1-8 in., 1-6 in. DISCHARGE RATE: 7,000-20,000 bbls/hour (varies on product and tank size) MAXIMUM VESSEL SIZE: 736 ft. overall length

STORAGE CAPACITY: 1,200,000 bbls.

DOCKSIDE: Potable water, pay telephone, marine bunkers (light oil only)

NEWINGTON TERMINAL

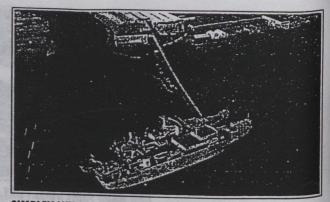
Sprague's Newington Terminal consists of approximately 80 acres of waterfront/industrial-zoned land. The terminal has over 1,000,000 bbls. of storage capacity for liquid bulk products.

OTHER FACILITIES AND SERVICES

Sprague operates a dry bulk material handling conveyer system capable of handling self-unloading vessels. Receipt rate approximately 2,500 tons/hour.

PRODUCTS HANDLED

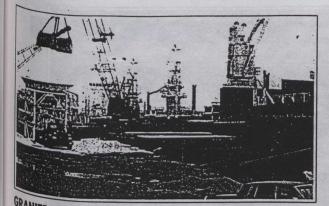
Petroleum: #2 fuel oil, diesel fuel, kerosene. Dry Bulk: Cement, gypsum, salt, aggregate. Chemicals: Caustic soda, tallow, calcium chloride, asphalt. Also, 30 acres of readily developable storage areas available.



SIMPLEX WIRE & CABLE - 7

OPERATOR: Simplex Wire & Cable ADDRESS: 2073 Woodbury Avenue Newington, NH 03801 (603) 436-6100 Fax: (603) 437-0701 TYPE OF PIER: T-Shape (permanent) DEPTH ALONGSIDE AT MLW: 36 Ft NORMAL SHIP SIDE TO DOCK: Port (bow upstream) LINE HANDLING BOAT REQUIRED: Yes ACCESS TO VESSEL (for stores & repairs): Yes PRODUCT HANDLED: Ocean Cables

Simplex Wire and Cable Company is the world's leading manufacturer of longdistance undersea fiberoptic telecommunications and surveillance cables. From its Newington, New Hampshire, waterfront plant, Simplex has shipped more than 50,000 miles of undersea cable out of the Port of Portsmouth since 1955. Recent shipments have included TAT-9 which crosses the Atlantic providing 80,000 additional voice circuits. Simplex has also deployed an additional 32,000 km of optical ocean cable for service in the North Atlantic, the Caribbean basin, and the Pacific Ocean. While most deliveries are to cableships or to cable transport ships, at Simplex's deep-water pier, Simplex can also ship from its own rail siding or by truck. Simplex is a wholly owned subsidiary of Tyco Laboratories, Inc., of Exeter, New Hampshire.



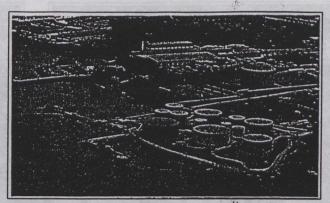
GRANITE STATE MINERALS - 14 OPERATOR: Granite State Minerals ADDRESS: 227 Market Street Portsmouth, NH 03801 (603) 436-8505 LOCATION: 3 miles from Outer Anchorage (Buoy 2KR) DEPTH AT DOCK: 36 Ft. (M.L.W.) TYPE OF PIER: Steel pile with wood deck NORMAL SHIP SIDE TO DOCK: Port PRODUCT HANDLED: Dry bulk products DISCHARGE CAPABILITY: Two shoreside mobile cranes STORAGE AREA: 4 ocres DOCKSIDE: Water, bunker, no shoreside electric MAXIMUM VESSEL DIMENSIONS: 735 ft. overall length Granite State Minerals and its affiliated terminals have been in the marine

terminal business for over 35 years. Granite State Minerals offers thruput of products such as cement, stone, gypsum, lumber and other dry bulk products and arranges transportation from point of origin to point of destination for most moterials.

Innovation and flexibility are Granite State Minerals' hallmark when evaluating customers' needs. The reason is quite straightforward. Since the cost of trans of transportation is a large component in the price of the delivered product, biopin of transportation is a large component in the price of the delivered product, Granite State Minerals explores all alternatives of customers' bulk handling requirements.

Granite State Minerals owns and operates all of its terminals, and takes an Citye role in making sure that all products are handled in an environmentally sole making sure that all products are handled in an environmentally safe manner and that degradation, spillage and damage is kept at an absolute minimum. Since you are dealing directly with the terminal owners, our pricing policy in Policy is among the most competitive in this business.

Granite State Minerals is pleased to be located in a port where the state and the community recognize what an asset the Port of New Hampshire is in contribute contributing to the economic vitality of the region.



STORAGE TANK DEVELOPMENT CORP., FUEL STORAGE CORP. AND SEA-3, INC. - 2

OPERATOR: Fuel Storage Corp. and Sea-3. Inc.

ADDRESS: 78 Patterson Lane Newington, NH 03801 (603) 431-6000

OFFICE: 889 Elm Street, P.O. Box 1032 Manchester, NH 03105-1032 (603) 622-7133

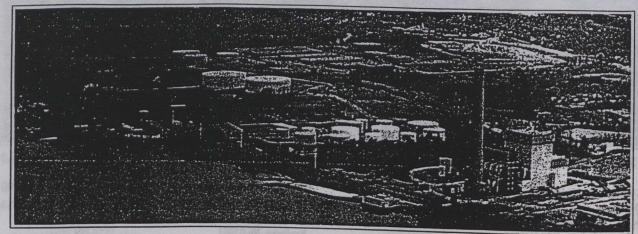
SEA-3 TERMINAL: 103 Old Dover Road Newington, NH 03801 (603) 431-5990

OFFICE: 144 Washington Street Portsmouth, NH 03801 (603) 436-6225

TYPE OF PIER: Steel piled cells offshore 125 ft. DEPTH ALONGSIDE AT MLW: 38 ft. NORMAL SHIP SIDE TO DOCK: Port LINE HANDLING: Motorized Shore Bollards

ACCESS TO VESSEL (for stores and repairs): Trucks to shoreside, cart or hand to ship

PRODUCT HANDLED: #2 oil, #6 oil, Asphalt, JP-4, MMA, Propane SIZE AND NUMBER OF PIPELINES: Multiple 4 in. - 16 in. MAXIMUM VESSEL DIMENSIONS: 44,000 DWT OTHER DOCK USERS: Belcher Oil, U.S. Government, Trimont International, Cyro



PUBLIC SERVICE CO. OF NH MOBIL DOCK - 9

OPERATOR: Mobil Oil Corp.

ADDRESS: Gosling Road Newington, NH 03801 DEPTH ALONGSIDE AT MLW: 32.6 ft. NORMAL SHIP SIDE TO DOCK: Port ACCESS TO VESSEL (for stores and repairs): Limited PRODUCT HANDLED: Gasoline and distillates SIZE AND NUMBER OF PIPELINES: Various DISCHARGE CAPACITY AT BBLS: 6000 bbls/hr. AVERAGE DISTANCE TO STORAGE TANKS: .75 mile

PUBLIC SERVICE CO OF NH SCHILLER & NEWINGTON STATIONS - 8

OPERATOR: C.H. Sprague & Son Co. LOCATION: 1.5 miles above the Interstate Bridge DISTANCE SEABUOY TO DOCK: 7.1 miles CONTROLLING DEPTH IN APPROACHES: 35 ft. CONTROLLING DEPTH AT DOCK MLW: 37 ft., ledge bottom RISE AND FALL OF TIDE: 8 ft. PRODUCT HANDLED: #4, #6 fuel oil, coal, dry bulk DOCKING AND UNDOCKING CONDITIONS: Docking is restricted to a high

water operation—Pilot starting ship in anchorage area at high water only.

UNDOCKING: Low water slack at the dock, and one hour before high water slack at the dock.

LENGTH OF DOCK AND CONSTRUCTION: 700 ft. with dolphins, concrete pile, concrete decked T-head wharf with a 100-by 20-foot approach.

TUGS AND LINEHANDLERS: Two or three tugs used to dock and undock. Terminal personnel used as linemen.

BUNKERS: Available through 6 in. line at 2000 bbls./hour WATER: Supplied through 2.5 in. line

PORTSMOUTH TERMINAL

Sprague's Portsmouth Terminal consists of approximately 8.55 acres of industrial-zoned land abutting Public Service Company of New Hampshire's (PSNH) Schiller Generating Station. The terminal has 342,000 bbls. of liquid storage capacity.

OTHER FACILITIES AND SERVICES

Siwertell dry bulk material unloading system rated at 1000 tons/hour. Vessels of up to 700 ft. length and 36 ft. draft can be accommodated.



GOLD BOND BUILDING PRODUCTS, DIVISION OF NATIONAL GYPSUM COMPANY - 11

OPERATOR: Gold Bond Building Products

ADDRESS PLANT: Freeman's Point Portsmouth, NH 03801 (603) 436-4840

MAILING: P.O. Box 270 Portsmouth, NH 03802 TYPE OF PIER: Two (2) Circular Marine Cells, Forty (40) feet diameter

at shore side

DEPTH ALONGSIDE AT MLW: 40 ft.

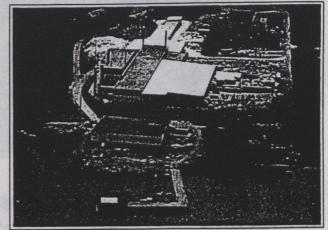
NORMAL SHIP SIDE TO DOCK: Port

LINE HANDLING BOAT REQUIRED: Motorized shore bollards

ACCESS TO VESSEL (for stores and repairs): Truck to shoreside

PRODUCT HANDLED: Gypsum ore through a conveyor system designed for self-unloading ships

OTHER DOCK USERS: Northeast Petroleum Corp.

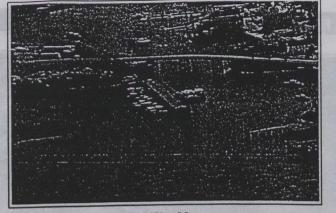


LORDCO PIER ASSOCIATES - 5

OPERATOR: Little Bay Lobster Co., Shafmaster Fishing Co. ADDRESS: Old Dover Road Newington, NH 03801 (603) 431-3170 Fax (603) 431-3496 CORPORATE OFFICE: P.O. Box 1070 Exeter, NH 03833 (603) 778-8484 Fax (603) 778-0374

TYPE OF PIER: 220 ft L-shaped concrete on steel pilings DEPTH ALONGSIDE AT MLW: 25 ft SERVICES: Diesel Fuel, Bulk Ice, Potable Water, Shore Power, Small Crane





PORTSMOUTH STATE FISH PIER - 18

OPERATOR: State of NH Dept. of Resources and Economic Development

LOCATION: Pierce Island, Portsmouth, NH ADDRESS: P.O. Box 1355 Portsmouth, NH 03802 (603) 431-1170

MONITOR CHANNEL: 16 VHF

TYPE OF PIER: 400 ft. wooden-piled and planked with float system on inside

DEPTH: 11 ft. MLW

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BOAT ACCESS: Direct from Pier

SERVICES: Diesel Fuel, Gasoline, Lobster Bait, Hoists, Fresh Water, Shore Power, Transient Berthing

FISH BUYER: Portsmouth Fisherman's Co-op located on Pier.

1. **PORTSMOUTH**: The New Hampshire Department of Resources and Economic Development, under the guidance of the Commissioner, acts as a service agency to the New Hampshire fishing and recreational boating industries through its management and operation of the three State Fish Piers.

2. **RYE:** 85 ft. Commercial fishing pier and float system. Gasoline and Diesel available. 100 ft. Recreational Boating Dock Facility; Launching ramp and ample parking

3. HAMPTON: 350 ft. Commercial fishing pier and float system; 80 ft. Recreational Boating Dock Facility; Launching ramp and ample parking; Gasoline, Diesel, bait and tackle shop.



PRESCOTT PARK - 17

OPERATOR: Prescott Park Trustees

ADDRESS: Prescott Park P.O. Box 1103 Portsmouth, NH 03802 (603) 431-8748

TYPE OF PIER: Floats (seasonal)

DEPTH ALONGSIDE AT MLW: 8 ft.

NOTE: The floats are provided for the temporary docking of pleasure and pocking time limited (by City Ordinance) to 72 hours with no return for 1 hours, except for an emergency. Size of craft permitted is limited to 70 km under. Floats are available from May through September. Water and powe available at dockside.

Cargo Information and Statistics:

4.2 million tons of cargo were handled in 1992, primarily oil. Scrap metal is the major export. Other cargoes include fresh produce, lumber and logs, wines and liquors.

> Imported cargo breakdown: Oil 52% Propane 7% Gasoline 5% Coal 5% Salt/Other N/A

Dry bulk materials accounted for 601,937 tons and were handled by the private terminals. In addition, petroleum products also handled by private terminals amounted to 2,592,885 tons. Sprague Energy, originally a fuel oil and coal terminal, now provides dry bulk terminal services for normal conveyor transportable materials, including coal, gypsum and salt. Public Service Company of New Hampshire receives fuel, coal and oil at its Schiller Pier.

Future cargoes to be shipped through the port include recycling products such as plastics and paper, and a wide range of manufactured products and precision equipment.

Ongoing projects:

- Work has commenced on a \$16.5 million expansion plan for the port. It will consist of an addition to the existing 600' deep Water pier, two additional 700' berths and a 357' long 25' deep Container/barge berth. The first phase, the container/barge berth, is expected to be on-line late this year or early 1994.

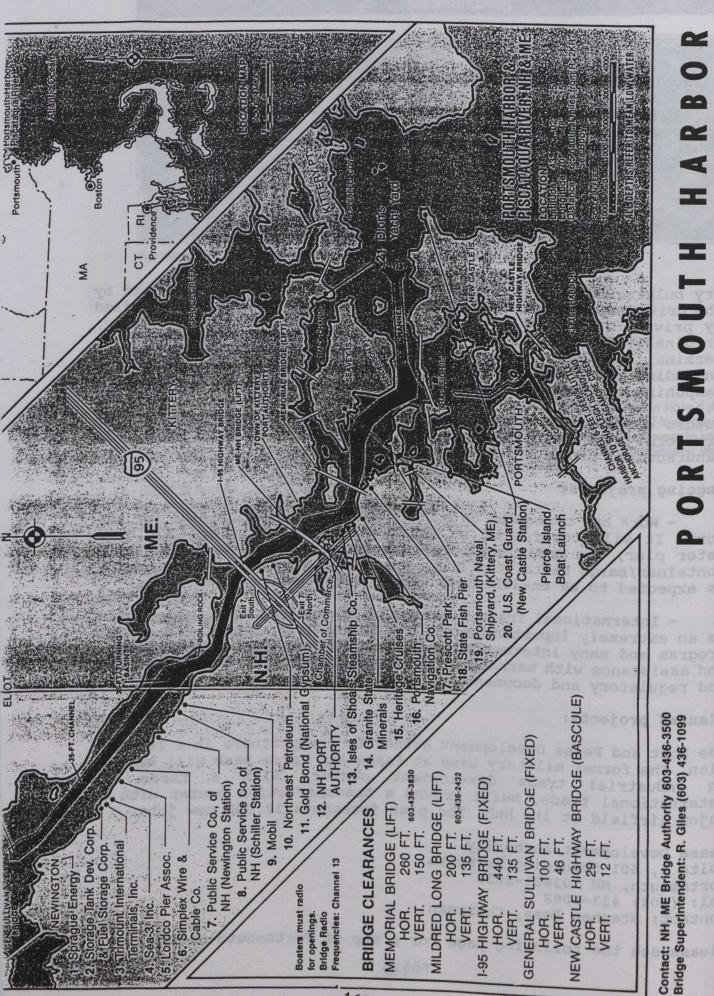
- International Trade Development at the Port of New Hampshire is an extremely important activity. There is an Export Management Program and many international trade policy educational workshops and assistance with marketing, research, logistics, communications and regulatory and documentary aspects of trading overseas.

Planned projects:

The Port and Pease Development Authority are partners in a 20-year plan. The former military base at Pease Air Force base will become an industrial trade development center, with a theme of international trade, built around a transportation center with a major airfield at its hub. The plan forecasts 12,000 new jobs.

Pease Development Authority Suite 1, 601 Spaulding Turnpike Portsmouth, NH 03801-2833 Tel: (603) 433-6088 Contact: Stephen Foss, Chairman

Please see the following page for a map of Portsmouth Harbor.



Purchasing information:

All capital purchases for the State Port Authority are transacted through the state purchasing office. Bids are advertised in the local papers through the Department of Transportation. Please see address below:

Department of Transportation Bureau of Public Works John O. Morton Building Concord, NH 03302-0483 Contacts: Matthew Moore, David Soper Tel: (603) 271-3516

The private terminals conduct their own purchases.

D. RHODE ISLAND

The Port of Rhode Island is not used as a major shipping route. Consequently, there are no plans for expansion or any capital equipment purchases.

At Davisville Port, which was formerly a naval base, there are a number of business entities, among them Electric Boat, Sea Freeze (a fish processing plant), Norad (a vehicle importer) and Torre Plastics. Norad is the sole shipper at this port.

Rhode Island Port Authority Marine Terminal Building 2 Municipal Wharf Providence, RI 02905 Tel: (401) 781-4717 Port Director: Thomas F. O'Connor

State of Rhode Island Department of Economic Development 7 Jackson Walkway Providence, RI 02903 Tel: (401) 277-2601 Fax: (401) 277-2102 Contacts: Thomas F. O'Connor, Port Director Earl F. Queenan, Associate Director, Financial Services

Purchasing information:

Any purchasing by the state is transacted through the State Office: Department of Administration State Office One Capitol Hill Providence, RI 02903 Tel: (401) 277-2324 Contact: John Young

E. VERMONT

Vermont has no ports. The only commercial shipping activity occurs across Lake Champlain from Burlington to Plattsburgh, NY. Trucks cross on the Lake Champlain ferry. No cargo figures are available. Please see further information under Water Transit (Vermont).

VIII. COMMUTER RAIL

A. MAINE

Presently, there is no commuter rail service in Maine. In November 1992, Maine Department of Transportation Engineer Michael Murray said that service should resume on the Boston to Portland 114-mile rail run by November 1993. There has been no service on this run for several years.

The Federal Transit Act provides \$30 million (not yet appropriated) for restoration of a rail link between Portland and Boston. Amtrak would fund \$20 million in equipment purchases. The state of Maine would purchase the equipment and Amtrak would run the trains on tracks that are owned by the MBTA.

Purchasing contact:

Russell Spinney Maine Department of Transportation State House- Station 16 Augusta, ME 04333 Tel: (207) 287-2841

B. MASSACHUSETTS

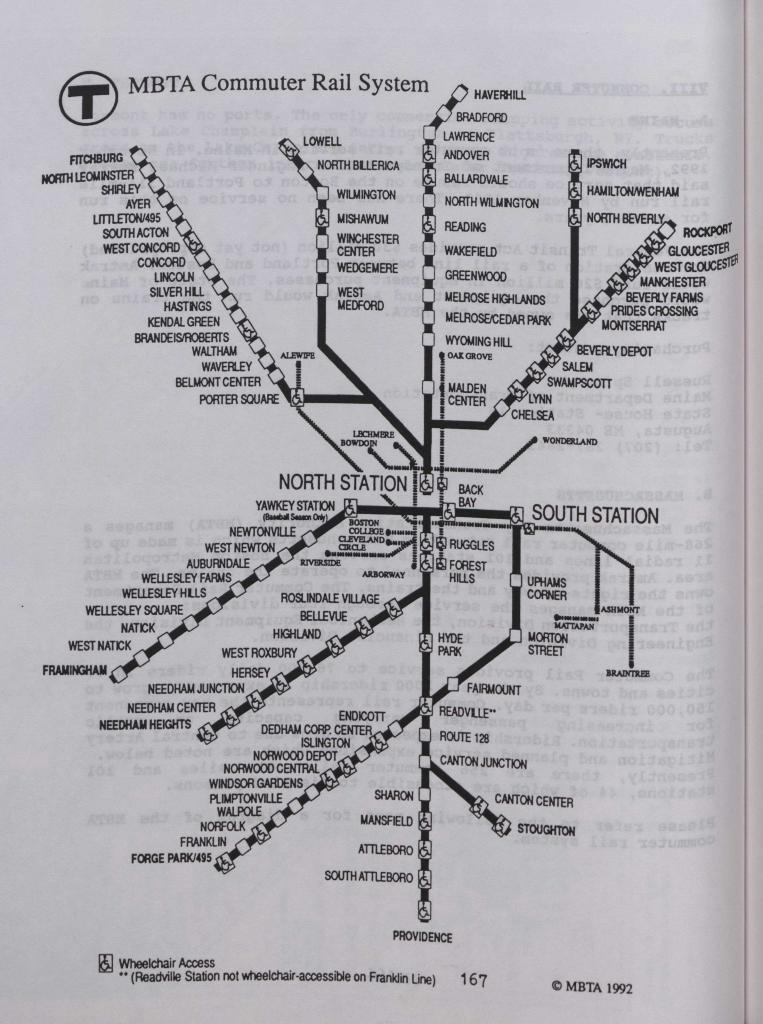
The Massachusetts Bay Transportation Authority (MBTA) manages a 268-mile commuter rail network in Massachusetts which is made up of 11 radial lines and 101 stations serving the Boston Metropolitan area. Amtrak provides the personnel to operate the trains. The MBTA owns the rights-of-way and the trains. The Commuter Rail Department of the MBTA manages the service through four divisions: the Transportation Division, the Mechanical Equipment Division, the Engineering Division and the Financial Division.

The Commuter Rail provides service to 76,000 daily riders in 77 Cities and towns. By the year 2000 ridership is expected to grow to 150,000 riders per day. Commuter rail represents the key component for increasing passenger carrying capacity on public transportation. Ridership is expected to grow due to Central Artery Mitigation and planned service expansions which are noted below. Presently, there are 256 commuter rail route miles and 101 stations, 44 of which are accessible to disabled persons.

Please refer to the following page for a diagram of the MBTA Commuter rail system.

166 (Martin 166

2001 ATRM 00



Current Inventory:

Locomotives

Coaches

Make	Quantity	Make	Quantity
F40PH	18	Bombardier	146
F40PH-2C	25	Bilevel	75
F40PH-2M	9	MBB	67
		Pullman	11*

* Pullman coaches are pending overhaul. Listed are the active spares.

Ridership counts indicate that the base service (246 coaches) is Operating at 85% of capacity.

Planned projects/purchases:

Extension of commuter rail to following locations:

- Old Colony to Middleboro Old Colony to Plymouth
- Old Colony to Greenbush
- Worcester to Framingham
- Newburyport to Ipswich

The following fleet requirements are based on the assumption that the above extensions will be constructed and operated, and that the Pullman Overhaul of 57 coaches will be completed by mid-1996.

Ouantity Required

	1995		2000	
	Expected Likely	Maximum Market	Expected Likely	Maximum Market
Coaches	13	30	104	157
Locomotives	11	14	24	32

Bi-level coaches (capacity 186) are needed in order to meet future ridership needs due to capacity restriction at several locations.

Two levels of ridership are planned. One level is the Expected Likely Market for ridership taking into consideration the likely impact from Central Artery and Third Harbor Tunnel projects. The Other level, the Maximum Market, plans for the maximum amount of riders who will be using these lines.

Please refer to the following 8 pages, respectively, for the Commuter rail projected vehicle needs. The first 4 pages are needs and a procurement schedule for the expected likely requirements. The second 4 pages are needs and a procurement Schedule for the maximum requirements.

	2000	246	41	102	389	345	60	449	104	
	1999	246	37	102	385	335	59	444	109	
	1998	246	33	102	381	325	58	439	114	
	<u>1997</u>	246	29	102	377	345	57	434	89	
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Footnotes: =: F40PH-2C scheduled for overhaul to begin, approx. 18 months for completion	for over	haul	to be	gin, a	bbu	x. 18	nom	iths f	or co	mplet	lon.		ü	Nine	F40F	c: Nine F40PH-2M locomotives scheduled for overhaul, approx. 1 year for completion.	M loc	omot	Ives :	sched	Juled	for o	recha	ul, ap	prox.	1 ye	ar for	scheduled for overhaul, approx. 1 year for completion.	pletlo	ċ.			

b: F40PH-2 scheduled for overhaul to begin, approx. 1 year for completion.

d: Three F40PH-2M locomotives scheduled for overhaul, approx. 3 months for completion.

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MBTA COMMUTER RAIL

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a: Overhauled Pullmans begin to enter fleet. b: Twelve year overhaul for MBB cars to begin, approx. One year for completion.

c: Twelve year overhaul for Bombardier cars to begin, approx two year for completion.

MBTA COMMUTER RAIL LOCOMOTIVE PROJECTED NEEDS MAXIMUM PENETRATION BOARDINGS

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MBTA COMMUTER RAIL

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The following list gives the status of planned commuter rail extensions:

Extensions

Old Colony to Middleboro and Plymouth Old Colony to Greenbush Worcester to Framingham Newburyport to Ipswich New Bedford to Fall River Lowell to Nashua, NH Haverhill to Plaistow, NH Needham to Dover/Millis Franklin to Milford Status

Under construction

Environmental review underway Under design Under design Feasibility study completed Preliminary planning underway Preliminary planning underway Feasibility study completed Design underway

Old Colony Rail Restoration project

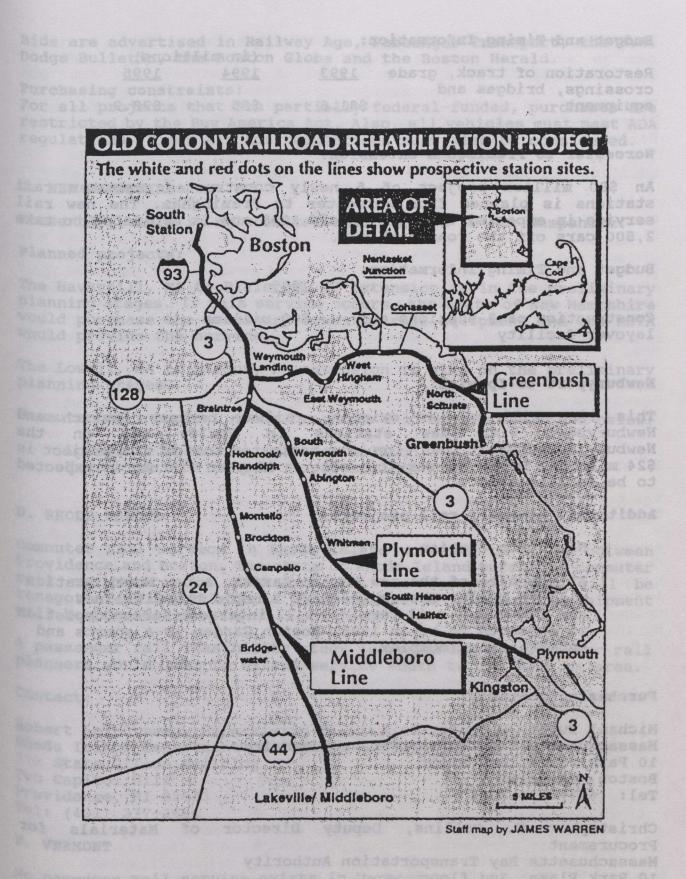
Presently, the South Shore of Boston is the only Metropolitan Boston area which is not served by commuter rail. Consequently, the main route leading to Boston from the South Shore, the Southeast Expressway, is extremely congested.

This \$480 million project will return commuter rail service from the South Shore to South Station in Boston after a 34-year hiatus. Work on this project is second in size only to the Central Artery depression and Third Harbor Tunnel. This rail restoration project will result in less congested highways, cleaner air, and greater economic development opportunities for area residents.

There will be a total of 3 lines. Two of the lines will lead to the Plymouth/Kingston area and the Middleboro/Lakeville area. The Plymouth-Kingston line will have 9 stops. The Middleboro/Lakeville area will have 7 stops. Construction is underway and should be finished sometime in 1996. The third line, the Greenbush Corridor, has been delayed by residents of Hingham who claim that the Options are currently being considered. There will be 8 stops on this line. The 3 lines would service an estimated 25,000 passengers

Overall, the project calls for the replacement of more than 60 miles of rail bed, ties and tracks; construction of 14 stations; 2 layover facilities; 4 park-and-ride lots for bus passengers; a highway underpass in Braintree and traffic and intersection improvements in communities throughout the region.

For a detailed map of the Old Colony Line, please see the following page.



Budget and Timing Information:

· 但其实得到最大的目标。		(IN MII	lions)
Restoration of track, grade crossings, bridges and	<u>1993</u>	<u>1994</u>	<u>1995</u>
equipment	\$81.6	\$85	\$78.9

Worcester to Framingham extension:

An \$80 million project of 5 newly constructed commuter rail stations is planned from Worcester to Framingham. The new rail service is expected to begin in mid 1995 and is estimated to take 2,500 cars off the road each day.

Budget and Timing Information:

1995

Construction of 3 stations and \$80 million layover facility

Newburyport to Ipswich:

This line will run on existing railway between Ipswich and Newburyport with new stations in Rowley and on the Newbury/Newburyport town line. The estimated cost of the project is \$24 million. Return of service, after a 20-year hiatus, is expected to be in late 1995.

Additional commuter rail projects:

- New North Station

At the site of the new Boston Garden, a new North Station will be built. The expressway, 2 rapid transit lines and a commuter rail terminus will intersect here. Completion is expected to be in 1996. Boston Garden is a sports and entertainment complex.

Purchasing contacts:

Michael Burns, Commuter Rail Massachusetts Bay Transportation Authority 10 Park Plaza, 2nd Floor Boston, MA 02116 Tel: (617) 722-3433

Christopher W. Collins, Deputy Director of Materials for Procurement Massachusetts Bay Transportation Authority 10 Park Plaza, 2nd floor Boston, MA 02116 Tel: (617) 722-5194 Bids are advertised in Railway Age, Passenger Transport, the F.W. Dodge Bulletin, the Boston Globe and the Boston Herald.

Purchasing constraints:

For all projects that are partially federal-funded, purchases are restricted by the Buy America Act. Also, all vehicles must meet ADA regulations. Clean Air Act regulations must also be considered.

C. NEW HAMPSHIRE

Presently, there is no commuter rail service in New Hampshire. steremothed aspecially closely with the additional

Planned projects: ass I railroads have average operating revenues of

The Haverhill, MA to Plaistow, NH extension is in the preliminary planning stages. If this service occurs, the state of New Hampshire Would purchase the necessary commuter rail equipment and the MBTA Would provide the service.

The Lowell, MA to Nashua, NH extension is also in the preliminary planning stages.

Commuter rail capital needs for these 2 lines are estimated below:

Lowell to	Nashua	\$40	million
Haverhill	to Plaistow	\$8	million

D. RHODE ISLAND

Commuter rail service in Rhode Island consists of a run between Providence and Boston. The state of Rhode Island purchased commuter rail equipment. The MBTA provides the service which will be renegotiated in 1993-1994. The purchase of additional equipment Will be considered.

A passenger rail feasibility study is now underway. Commuter rail planners would like to extend service south to the Warwick area.

Contact:

Robert LeTourneau, Supervising Planner Rhode Island Department of Transportation 372 State Office Building Two Capitol Hill Providence, RI 02903 Tel: (401) 277-2694 E. VERMONT

No commuter rail service exists in Vermont.

IX. FREIGHT AND PASSENGER RAIL

A. RAIL DEFINITIONS

This study will refer to Class I, II and III freight railroads. Please refer to definitions below which are from the Comprehensive Railroad Dictionary. requistions, Clean Air Act requistions

Railroad Classification

Annual Revenue (in millions)

Class I

\$96.1 minimum Class II over \$19.1 but under \$96.1 Class III \$19.1 maximum

Class I railroads have average operating revenues of \$250 million or more. They account for more than 93% of total rail freight revenues. Amtrak and Conrail are Class I railroads.

Main line railroad: a railroad which uses primary or most heavily used railroad track.

The Lowell, MA to Magnus, MD extension is als Short line railroad: a railroad company which may originate or terminate freight on its track that is usually less than 100 miles in length.

B. INTRODUCTION

The twentieth century has seen the decline of railroads in the U.S. The decline in the quality and quantity of rail service is due to a number of factors, including decreased demand, increased competition from motor carriers, inadequate railroad response to change, increasing labor costs and unequal treatment of modes. The unequal treatment of modes refers to the fact that the railroad industry is regulated completely differently from other transportation industries. This different regulation is illustrated by the following facts:

- passanger rail feasibility and - The railroad industry is presently contributing to deficit reduction and the trucking industry is not contributing.
- Strikers' rights are more liberal in the railroad industry than in other industries. For example, union workers are allowed to do secondary picketing. - The railroads do not belong to Social Security. Their
- retirement plans are more burdensome to the employee as well
- Railroad payroll taxes are greater than those of other
- Railroad workmen's compensation is a riskier compensation method than found in other industries.

The 1990's, however, are seeing a rebirth and revitalization of the railroad industry, in New England and the nation, as a whole. This is due, partially, to President Clinton's favorable view of the railroad industry. On March 16th, 1993, at the annual meeting of the New England Railroad Club, Edwin Harper, Director of the American Association of Railroads (AAR) briefly assessed the railroad industry at present, as follows:

United States Railroad Industry

The new railroad industry of the 1990's is one that is restructured, revitalized and customer-driven. AAR's slogan is "Growth through Quality." Freight was up 40% in 1992 to 1.03 billion ton miles.

The railroads are working especially closely with the automobile industry to meet their needs and improve the quality of service to that industry.

Intermodal traffic is the wave of the future and the railroad industry is positioning itself to take advantage of this trend. Intermodal freight traffic increased 7% in 1992. Business with the trucking industry, the main railroad competition, is up dramatically.

Like many industries, the railroads face a challenging period in the future. The railroad industry is the leading carrier (in ton miles) of freight in the U.S., accounting for 36% of the freight traffic versus 25% for truck, 16% for waterways and 23% for pipelines. The following facts are in their favor:

- Railroads are more environmentally sound than trucks since they emit less carbon dioxide and fewer pollutants into the atmosphere.
- Trains are more fuel-efficient than trucks.
- Railroads relieve traffic congestion- a public policy issue of the 1990's. - Railroads could benefit from the following in President
- Clinton's 1993 tax program
- 1) Investment tax credit.
- 2) British Thermal Unit (BTU) tax impact on the trucking industry. The BTU will be the energy unit that will be used in the energy tax in President Clinton's Economic/Deficit Reduction Plan that is now being presented to the U.S. Congress for approval. If this energy tax is instituted, its impact will be greater for the trucking industry than the railroad industry because of the larger amount of fuel used by trucks. 3) Increase in waterway fees.
- North American Free Trade Agreement (NAFTA) could increase trade 6-fold. NAFTA is also spurring ports to upgrade their rail facilities.
- U.S. budget projections released in February 1993 suggest \$646 million for high-speed rail or magnetic-levitation systems over 5 years, in addition to \$725 million already authorized. avery car in North America primarily for accounting purposes

Issues that could prove detrimental to the industry are noted below: generating and the second seco

- Increase in corporate income tax.
- British Thermal Unit (BTU) tax increase on fuel. All energy sources, including coal, would be subject to the BTU tax. If the tax is instituted, U.S. railroads would be priced out of the international coal market. Coal is a major export transported by the U.S. railroads.
- Restrictions on coal, the bedrock industry to the railroads. Coal is the primary commodity that is transported by the railroad industry, representing 25% of freight tonnage. Restrictions may be placed on the burning of coal due to its possible cause of the "Greenhouse effect" (the warming of the earth's atmosphere).
- A shift of traffic to the trucking industry.
- Increasing portion of railroad payrolls to unemployment compensation, pensions and workmen's compensation. laternodal freitht tratel samtested av in 1992. Buennes tit

Tucking industry, the main railroad compact iem if 1990 trends in the industry:

- of contrast which hay cricinate of - Use of alternative fuels.
- Use of engines producing higher horsepower and better tractive effort. - Use of radial trucks on locomotives.

 - Use of a.c. power generation.
- Development of cab systems that provide even more useful information to the locomotive engineer. of suitary controlers darson discusses and investigating yesting

Buy America Act:

the second standard wind and sheet a sheet fear The If federal funds are involved in rail procurement, any rolling stock (including train control, communication, and traction power equipment) must have 60% of components manufactured in the U.S. Final assembly of the vehicle or equipment must take place in the U.S. In general, the private railroads do not receive any federal funding. This Act would apply more to the state purchasing offices and public transit authorities.

Car tracing: Another important railroad activity is that of car tracing. According to the Association of American Railroads (AAR) there are 4 car tracing methods. They are briefly explained below.

- Individual car tracing is done by each railroad on its own property.
- TRAIN 2 (Telerail Automated Information Network) is a national and international tracing activity. It is used for every car in North America primarily for accounting purposes

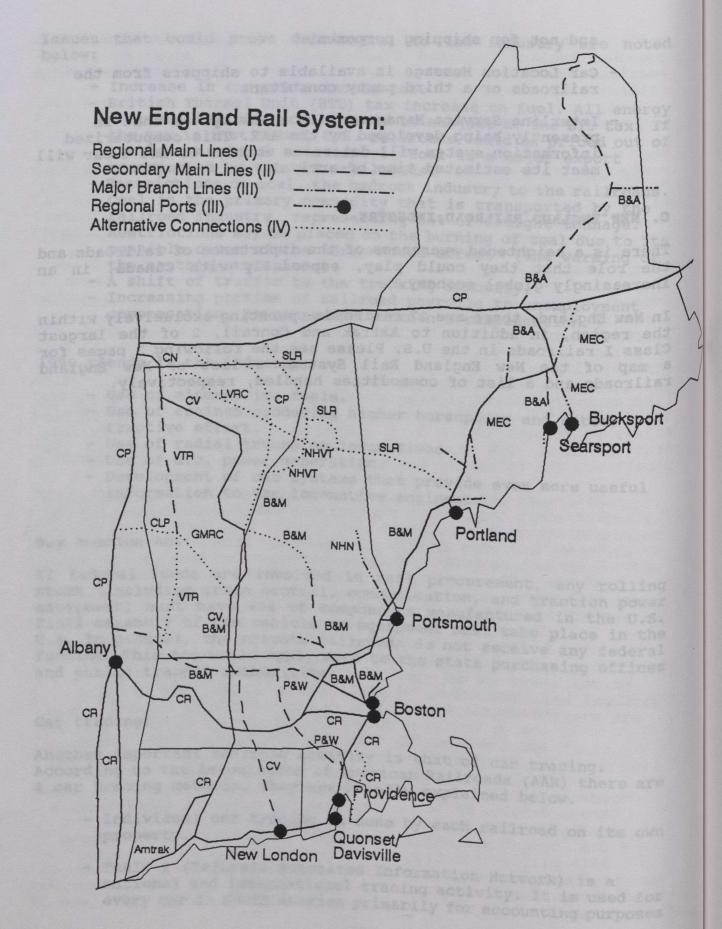
and not for shipping purposes.

- Car Location Message is available to shippers from the railroads or a third party consultant.
- Interline Service Management is a new system that is presently being developed by the AAR. This computerized information system will determine whether or not a car will meet its estimated time of arrival.

C. NEW ENGLAND RAILROAD INDUSTRY

There is a heightened awareness of the importance of railroads and the role that they could play, especially with Canada, in an increasingly global economy.

In New England, there are 27 railroads operating exclusively within the region, in addition to Amtrak and Conrail, 2 of the largest Class I railroads in the U.S. Please see the following 3 pages for a map of the New England Rail System, a list of New England railroads and a list of commodities handled, respectively.



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	E, RA
Railroad Name Amtrak Canadian National (CN) Canadian Pacific (CP) Consolidated Rail Corp. (CR) Bangor and Aroostook RR (BAR) Consolidated Rail Corp. (CR) Bangor and Aroostook RR (BAR) Central Vermont Railway (CV) Guilford Transportation Industries (GTI) Providence and Worcester RR (PW) Bay Colony RR (BCLR) Bay Colony RR (BCLR) Bay Colony RR (BCLR) Bay Colony RR (BCLR) Bay Colony RR (BCLR) Deffast and Moosehead Lake RR (BML) Claremont Concord Railway Corp. (CCRR) Claremont Concord Railway Corp. (CCRR) Clarendon and Pittsford RR (CLP) Fore River Railway Corp. (CCRR) Clarendon and Pittsford RR (CLP) Fore River Railway Corp. (GMRC) Grafton and Upton RR (GU) Lamoille Valley RR (LVRC) Maine Coast Railroad (MCR) New Hampshire and Vermont RR Co, Inc. (NEGS) New Hampshire and Vermont RR Co, Inc. (NHN) New Hampshire and Vermont RR Co, Inc. (NHN) Pioneer Valley RR (AVL) Pioneer Valley RR (AVL) Aroostook Valley RR (AVL)	Massachusetts Central RR Corp. (MCER) Massachusetts Central RR Corp. (MCER) Seaview Transportation Corp. (STC) Twin State Rail RR Company (TSRD) Washington County RR Corp. (WACR)

"Includes State-Owned Mileage; Numbers in Parentheses include total miles of road operated (trackage rights). Source: Profiles of U.S. Railroads -- 1990 Edition, Association of American Railroads C1.2 C1.2 ALL STANDARD NAME AND ALL OF A

Exhibit 2-1 - New England Railroads

Exhibit 2-2 - Commodities Handled in New England (1989)

Railroad	Most Important Commodities
Amtrak	Small Package Service
AVL	Pulp/Paper (62%), Lumber/Wood (14%) Chaminals (11%)
BAR	Luniver Wood (40%) Phill Paper (200) Det 1/2 1 (12)
BCLR	Lumoul Would 1/01 Waste/Scrap (7607) OL 101 10
BML	Nonmet Minerals (30%), Lumber/Wood (30%), Food/Kindred (9%) Puln/Paper (57%), Waste/Some (12%)
BMS	Pulp/Paper (57%), Waste/Scrap (12%)
CN	Lumber/Wood, Pulp/Paper
СР	Not Available
CCRR	Nonmet Minerals (67%), Lumber/Wood (19%), Pulp/Paper (10%) Not Available
CLP	Not Available
CR	Automobiles, Containers, Lumber
CV	Lumber/Wood (33%), Pulp/Paper (27%), Clay/Glass/Stone (10%) Fuel
DH	
FRY	Chemicals (92%), Food/Kind (4%), Nonmet Minerals (2%)
GMRC	- Connect Minicials (09/0), Petrol/(02) (5%)
GU	Nonmet Minerals (100%)
LVRC	Prim Metal (53%), Lumber/Wood (20%) Form D. 1 (15%)
STC	
MCER	Misc Mixed Shipmnt (83%), Chemicals (8%), Coal (8%)
NEGS	
NHN	
NHVT	Pulp/Paper (70%) Chemicals (20%)
PVRR	Lumber/Wood (35%) Chemicale (21%)
PW	Chemicals (13%), Pulp/Paper (7%), Nonmet Minerals (4%) Lumber/Wood (33%), Pulp/Paper (7%), Nonmet Minerals (4%)
SLR	
MCR	
ST (GTI)	Not Available
TSRD	Lumber/Wood (65%), Pulp/Paper (15%)
VTR	Clay/Glass/Stone (26%) Petrol/Cool/25 m
WACR	Transp. Equip (55%), Lumber/Wood (27%), Nonmet Minerals (12%)
	(-, , ,)

Source: Profiles, State Rail Plans, and Individual Railroads

Intermodal Facilities in New England

The following is a list of railroads and their intermodal terminal locations.

Railroad

Boston & Maine/Maine Central

Bangor & Aroostook

Conrail

Massachusetts Central Railroad

Providence & Worcester

Vermont Railway

Terminal location(s)

Bangor, ME Portland, ME Boston, MA Ayer, MA

Caribou, ME Madawaska, ME Millinocket, ME Bangor, ME Oakfield, ME Presque Isle, ME

Boston, MA Springfield, MA Worcester, MA

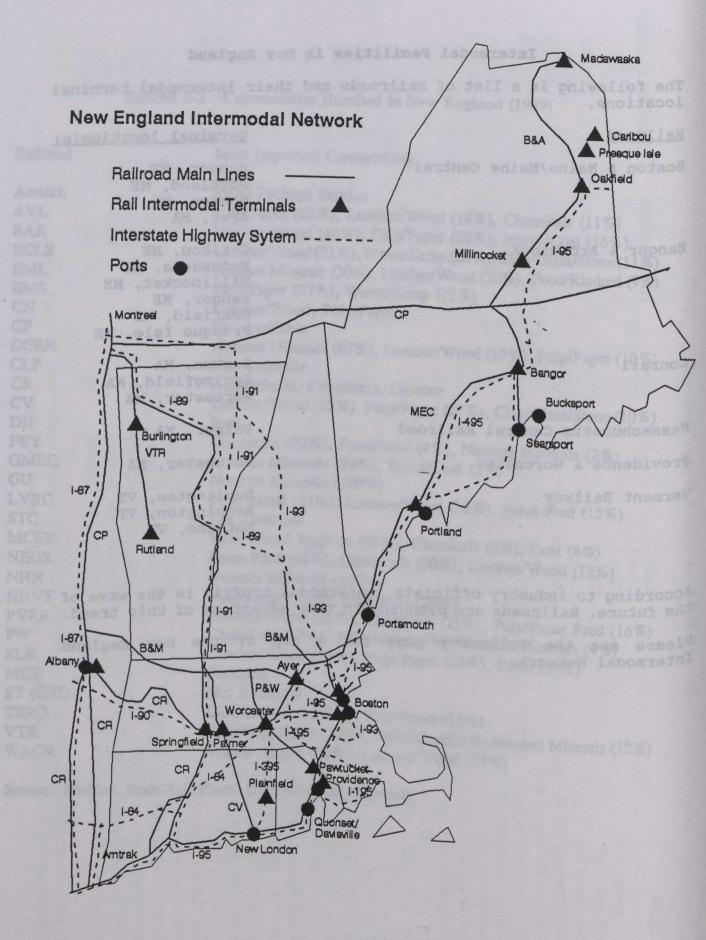
Palmer, MA

Worcester, MA

Burlington, VT Bennington, VT Rutland, VT

According to industry officials, intermodal traffic is the wave of the future. Railroads are planning to take advantage of this trend.

Please see the following page for a map of the New England Intermodal Network.



Only brief information on Amtrak and Conrail will be furnished in this study since their headquarters are not located in New England.

Amtrak (Passenger Railroads Inter-City) 400 North Capitol Street, N.W. Washington, DC 20001 Tel: (202) 906-3000 (Headquarters location)

Contacts:

David Carol, Project Director, Northeast Corridor Improvement Program Amtrak 455 Boston Post Road Old Saybrook, CT 06475 Tel: (203) 395-3015

John Baesch, Assistant General Superintendent, Commuter Rail Amtrak One South Station Boston MA 02110 Tel: (617) 345-7420

Amtrak is the largest U.S passenger railroad and offers service between major metropolitan areas. Amtrak also owns the Northeast Corridor rail line, the most direct route from New York and points south and west from Boston, Worcester and Springfield to Washington, DC. Further discussion of the Northeast Corridor will be in the Massachusetts rail section. The only freight service offered by Amtrak is for small packages on their passenger runs. Amtrak personnel operate the MBTA commuter rail trains in Boston.

D. MAINE

The Maine railroad system has long been an important part of the state economy and has recently undergone a number of changes, including a restructuring of railroad companies. The state role has increased in shaping the future of railroads and in increasing support for the establishment of rail passenger service.

The Transportation Investment Program for 1992-1993 calls for focus on the following capital investment elements:

- The preservation and enhancement of the rail transportation alternative in Maine (the assessment of rail properties which have been earmarked for possible abandonment by the owning railroad.)

- The development and implementation of a comprehensive rail safety inspection program (track and motive power and equipment). - The promotion of greater safety within the rail-highway grade crossing environment.

The following is a list of rail studies and tr projects to be undertaken in this Rail Transpo Program in fiscal year 1993:	ack rehabilitation rtation Investment
Rail property evaluations and/or assessments	
Mt. Sub-division, Foxcroft Branch and Belfast and Moosehead Lake Railroad	\$25,000
Studies 1) Rail plan update 2) Railroad passenger service	\$6,300 \$35,700
Rehabilitation 1) Rockland Branch-Lower Road (Brunswick-Augusta) track rehabilitation * Contingent on federal grant approval	\$275,000*
2) Calais Branch track rehabilitation (brush control)	\$50,000
Crossing reconstruction, new AWCD and signal modernization	\$1,000,000
Crossing maintenance sharing	\$1,000,000
01 prei ing men hannenten treining molt	

Purchasing Information:

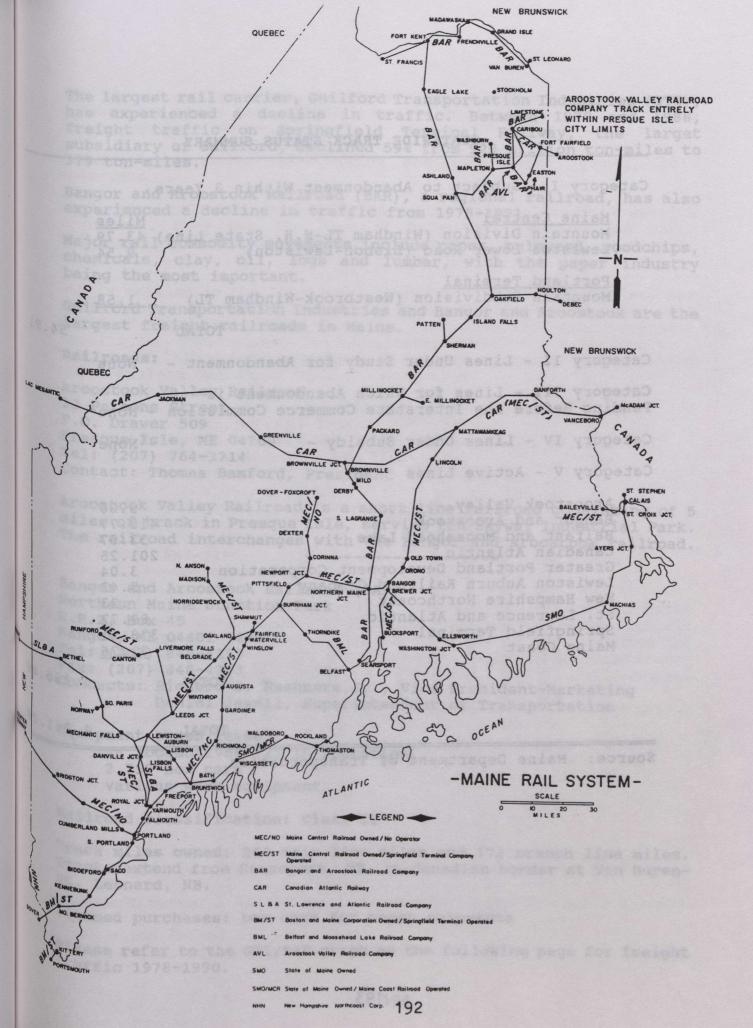
Department of Transportation State House- Station 16 Augusta, ME 04333 Contact: Alan Bartlett, Acting Rail Director Tel: (207) 287-2841

Freight rail:

All freight rail in Maine is run by private railroads. A statute prohibits the state from running railroads. State involvement in rail planning has increased significantly. The state also owns 228 miles of track on the following lines:

- Calais Branch
- on the following capital investment elene - Brunswick/Rockland Branch
- Brunswick/Augusta Branch
- Cobbosseecontee Branch
- Lewiston Lower Road

- The development and implement atto Please see the following 2 pages for a Maine rail system map and and for a Statewide Track Status summary.



STATEWIDE TRACK STATUS SUMMARY

Source: Maine Department of Transportati	on	and the second	
solution rail is an in the second second	TOTAL		1,241.79
	TOTAL		1,186.88
Greater Portland Development Corporat Lewiston Auburn Railroad Company New Hampshire Northcoast St. Lawrence and Atlantic Springfield Terminal Maine Coast	ion	201.25 3.04 5.43 .33 89.72 378.51 <u>51.76</u>	aß
Aroostook Valley Bangor and Aroostook Belfast and Moosehead Lake Canadian Atlantic		5.00 418.77 33.07	
Category V - Active Lines			
Category IV - Lines Under Subsidy -		None	
Category III - Lines for Which Abandonmer Pending Before the Interstate Commerce Co	nt is mmission	- None	
Category II - Lines Under Study for Aband	lonment -	None	
	TOTAL	Cooo*	54.91
<u>Portland Terminal</u> Mountain Subdivision (Westbrook-Windh	nam TL)	_1.58	
<u>Maine Central</u> Mountain Division (Windham TL-N.H. St Lewiston Lower Road (Lisbon-Lewiston)	ate Line	<u>Miles</u> 43.79 9.54	

The largest rail carrier, Guilford Transportation Industries (GTI), has experienced a decline in traffic. Between 1978 and 1988, freight traffic on Springfield Terminal Railway, the larget subsidiary of Guilford, declined 59% from 925 million ton-miles to 379 ton-miles.

Bangor and Aroostook Railroad (BAR), a regional railroad, has also experienced a decline in traffic from 1978-1991.

Major rail commodity movements include paper, pulpwood, woodchips, chemicals, clay, oil, logs and lumber, with the paper industry being the most important.

Guilford Transportation Industries and Bangor and Aroostook are the largest freight railroads in Maine.

Aroostook Valley Railroad 32 Parsons Street P.O. Drawer 509 Presque Isle, ME 04769 Tel: (207) 764-3714 Contact: Thomas Bamford, President

Aroostook Valley Railroad is a short line railroad consisting of 5 miles of track in Presque Isle, serving the Skyway Industrial Park. The railroad interchanges with the Bangor and Aroostook railroad.

Bangor and Aroostook Railroad (BAR) Northern Maine Junction Park R.R.2, Box 45 Bangor, ME 04401-9602 Tel: (207) 848-4263 Fax: (207) 848-4343 Contacts: Richard J. Rushmore, Jr., Vice President-Marketing Daniel Jewell, Superintendent of Transportation

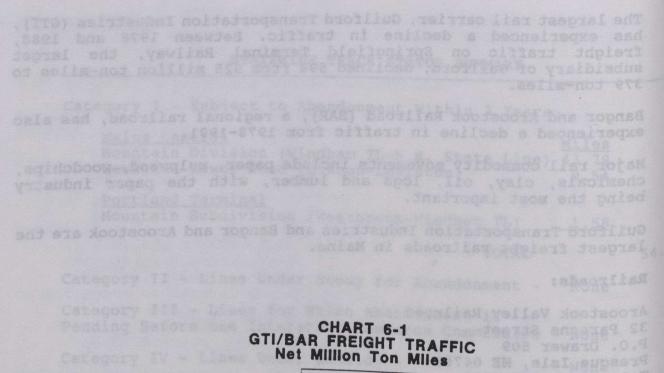
Equipment owned/leased: 38 locomotives (23 in operation) 2,758 box cars various work equipment

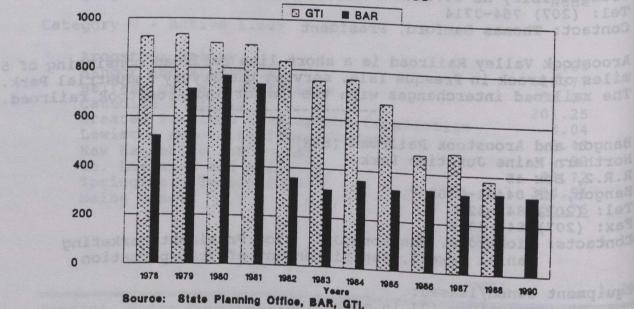
Railroad classification: Class II

Track miles owned: 264 main line miles and 172 branch line miles. Tracks extend from Searsport, ME, to Canadian border at Van Buren-St. Leonard, NB.

Planned purchases: box cars for paper shipments

Please refer to the GTI/BAR graph on the following page for freight traffic 1978-1990.





2,758 box cars various work equi

IT cash classification: Class II

Track miles owned: 254 mais line miles and 172 branch line miles. Tracks extend from Searsport, ME. to Canadian porder at Van Buren-St. Leonard, MB.

Lanned purchases: box cars for paper shipsents lasse refer to the GTI/BAR graph on the following page for freight BAR has no restrictions in buying from Canada. They do receive federal and state funding for track rehabilitation on their branch lines and crossing projects.

Commodities handled: Wood (logs and pulp wood), paper, oil, chemicals

Ports serviced: Searsport, ME. BAR is the only railroad to service Searsport. They own the pier at this port. Please see Cargo Shipping- Ports (Maine) for more information on BAR at Searsport, ME.

BAR is skilled in the intermodal transfer of bulk commodities. BAR interchanges with Canadian Pacific at Brownville Junction and with Guilford at Northern Maine Junction. They have rail-truck transfer facilities at Van Buren, Northern Maine Junction and Searsport. BAR is affiliated with Logistics Management Systems, a warehousing and transload operation in the Bangor area.

Canadian Atlantic Railway (owned by Canadian Pacific Railroad) Further information is not available.

oction approval for a branchering facility on Real

Guilford Transportation Industries (GTI) Iron Horse Park North Billerica, MA 01862 Tel: (508) 663-1186 Contact: F. Colin Pease, Executive Vice President

GTI owns 3 railroads that operate in Maine: the Boston and Maine Corporation, the Maine Central Railroad Company and the Springfield Terminal Railway Company. Springfield Terminal Railway operates the rights-of-way of the other two companies and has abandoned many miles of low-volume branch lines in order to operate efficiently.

For further information please see Guilford Transportation Industries under Massachusetts Freight Rail section.

Maine Coast Railroad 41 Massachusetts Avenue Longmeadow, MA 01006 Tel: (413) 567-2325 Contact: W. Robert Bentley, President (Mr. Bentley is also President of Massachusetts Central Railroad.) Equipment owned: 3 locomotives, 2 switchers, 1 caboose, 13 freight cars Track miles owned: 92 Railroad classification: Class III Planned purchases: Information not available

General information: Maine Central hauls freight on the state-owned Rockland branch.

St. Lawrence and Atlantic Railroad Company (formerly Canadian National/Grand Trunk Eastern Railroad) Owned by Emons Holdings Inc. of Pennsylvania Further information is not available.

Possible future developments in the Maine railroad system:

1) The Maine Department of Transportation may purchase from GTI several lines that are either abandoned or considered for abandonment.

2) Construction approval for a trans-shipment facility on Twin Road has been made. The facility will transfer goods shipped to the area by the St. Lawrence and Atlantic Railroad to trucks for delivery elsewhere. In 1991, Hapag-Lloyd American, Inc., announced the establishment of a container shipping center at the International Marine Terminal facility in Portland. There are no immediate plans for a container rail facility, but rail lines exist nearby and have the potential to provide an intermodal link.

Future capital needs:

Within the next 10 years, major capital investments will have to be made to support the Maine rail system. Future capital needs as set forth in the "Transportation to the Year 2000" study are noted below. This is a partial listing of publicly funded capital needs.

- Rockland Branch - Additional rehabilitation (\$500,000) and annual maintenance cost.

- Calais Branch - If a short-line operator can be found, rehabilitation costs (\$4 million, minimum) and annual maintenance costs.

- Portland, ME to Haverhill, MA - Upgrade the line (\$30 million), purchase equipment (\$20 million), and operate a passenger rail service.

- Support facilities for passenger service - If a Portlandbased passenger service is established, passenger stations, parkand-ride lots, and highway/rail connections.

- Intermodal facilities - Investments in intermodal facilities where there would be a public benefit by diverting heavy hauls from roads, and where private investment is not feasible. - Purchase additional lines - The purchase of additional lines (\$9 million) from Guilford Transportation Industries.

- Brunswick/Augusta Branch - If a short-line operator can be found, rehabilitation costs (\$1 million) and annual maintenance costs.

- Passenger rights - Possible purchase of rail passenger rights from Guilford Transportation Industries between Kittery and Mattawamkeag.

Passenger rail:

VIA rail service: Canadian passenger trains cross Maine 3 times per Week traveling between Montreal, Quebec, and Saint John, New Brunswick. Maine station stops include Greenville Junction, Brownville Junction, Mattawamkeag, Danforth, and Vanceboro.

Maine Department of Transportation anticipates beginning discussions with the Maine Coast Railroad to provide commuter/passenger service on the Rockland Branch.

Please refer to Commuter Rail (Maine) section for information about proposed train service between Boston and Portland.

E. MASSACHUSETTS

According to state rail transportation officials, the revised State Rail Plan will be available in June 1993. With an improved rail System, transportation planners and political leaders hope to revive the Massachusetts and New England economy. In Massachusetts, there are several major rail projects in process, which are specified below:

- Northeast Corridor Inititative

The Northeast Corridor Initiative, Inc., is a group of business and Political leaders from the Northeast, who have worked intensively during the past four years to reverse the long decline of ground transportation infrastructure investment in the U.S., particularly in the Northeast. Their primary focus, high-speed rail between Boston and New York, has been in the planning stage for many years. At present, plans are to institute high-speed train by the end of 1995 and cut travel time between Boston and New York to less than two hours and thirty minutes, a time competitive with air transportation. Permanent high-speed service is not planned until late 1998. At this point, \$448 million has been appropriated for electrification of the rail system and related work. Another \$900 million is required. The \$1.25 billion Northeast Corridor project breaks down as follows:

 \$400 million for major projects such as electrification and high-speed signalling, which would save 30-45 minutes travel time.
 \$400 million for smaller projects which would save 30 minutes travel time.

- \$400 million for new rolling stock which, if tilt equipment is chosen, would save an additional 20 minutes. These purchases include 26 high-speed trains at approximately \$15 million each.

A high-speed train should decrease the impact of traffic congestion anticipated during construction of the huge Central Artery/Third Harbor Tunnel (CA/T) project.

Amtrak, which receives federal funding, will manage and operate the high-speed train and is expected to write its own specifications for the new train after test runs of other high speed trains. In January 1993 Amtrak tested a high-speed train, the X2000, manufactured by A.B.B. Traction, Inc. of Sweden. Amtrak will test a Siemens high-speed train in the summer of 1993. High-speed train characteristics include the ability to "tilt" and lean into curves without slowing down.

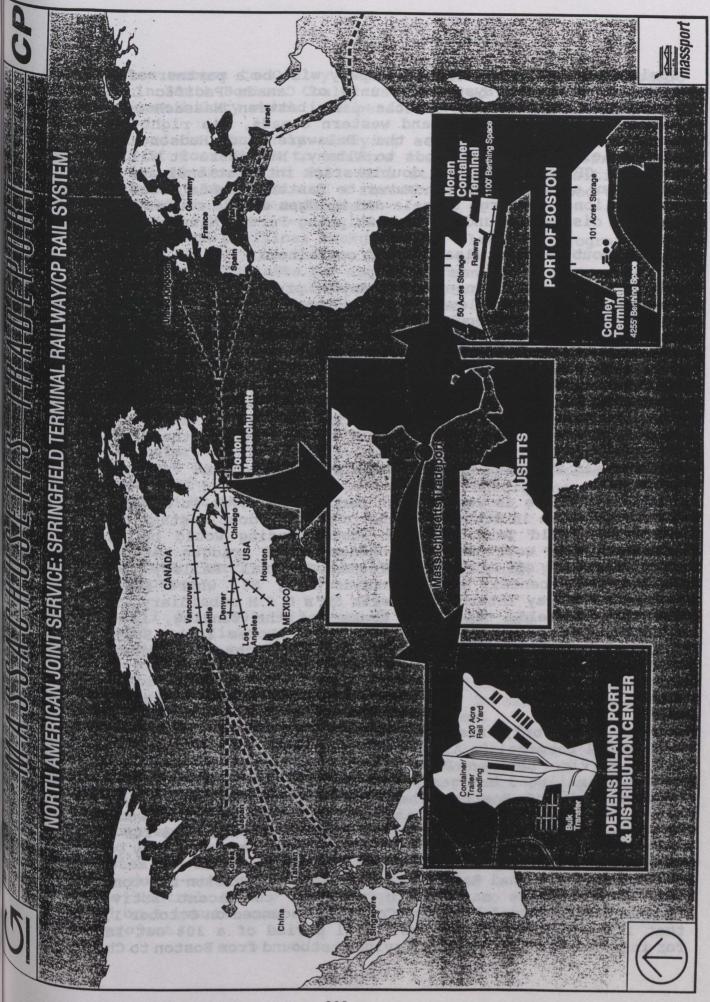
Freight railroads will also take advantage of the Northeast Corridor by using the electified railway. Amtrak is currently conducting computer simulations that, according to Amtrak officials will determine the fate of freight rail daytime operations on the track. Amtrak restricts freight trains to a maximum of 30 miles per hour, while high-speed trains would operate at speeds up to 150 miles per hour. The differences in speed between freight and operations only.

In addition to the Boston to New York run, there is also public and private interest in a high-speed run between New England and Canada. A public policy advocacy group will be formed for this initiative.

- Fort Devens Rail Distribution Center

The conversion of the former military base, Fort Devens, in Ayer, Massachusetts, to a rail distribution center, is almost complete. According to Springfield Terminal Railway Executive Vice President, Colin Pease, the environmental review is almost finished. Springfield Terminal Railway Company, a subsidiary of Guilford Transportation Industries, will operate the intermodal terminal. With this development, Massachusetts Governor Weld hopes to increase the Boston role as a port linking Europe and the midwest, utilizing the Massport Moran Terminal in Boston.

Please refer to the following page for a diagram of the Springfield Terminal Railway and Canadian Pacific operation.



Springfield Terminal Railway Company will be a partner of Canadian Pacific (CP) Rail Systems, a unit of Canada Pacific Limited of Montreal. CP will provide the link between Massachusetts, the midwestern U.S., Ontario and western Canada, via right-of-way it acquired last year from the Delaware and Hudson Railroad. Springfield will carry goods to Albany, NY, where it will connect with CP. CP recently began double-stack international and domestic container service from Vancouver to Eastern Canada after spending \$15 million to enlarge tunnels and bridges on its route. Please see further discussion under Cargo Shipping-Ports (Massachusetts).

- Double-stack clearance of containers

Double-stack clearance is a major problem for railroads in Massachusetts due to low bridge and tunnel heights. Currently, the state has only one double-stack rail line, Conrail's, which has clearance of 19'6" from Selkirk, NY to Framingham, MA. The doublestack heights in use in New England are 8'6" and 9'6". The new double-stack height is 9'6" which requires clearance from 21'4" to 21' 6" to accomodate tunnels and snow accumulation on the containers.

The following is an explanation of the issues and the players.

Springfield Terminal Railway and Canadian Pacific:

Currently, there is legislation pending approval in Massachusetts for \$95 million in state spending to provide double-stack clearance for Springfield Terminal. The state funding would be used for Hoosick Tunnel work near North Adams and 29 bridges between Ayer, MA (location of the Springfield Terminal Railway new rail distribution center) and Mechanicsville, NY, where Springfield Terminal Railway interchanges with CP's D & H subsidiary. The goal of Governor Weld, the prime backer of the funding, is to make Boston more competitive with the port of New York. Springfield Terminal Railway will have direct shipside access at Moran Terminal in Boston.

Conrail:

Conrail, the only freight railroad servicing Boston with its intermodal terminal in Allston, MA, is only able to provide singlestack service between Boston and Worcester because of the low height of railroad bridges and a hotel that straddles its mainline just outside of Boston. The cost to provide the needed 21'2" about \$40 million in improvements to provide clearance for doublestack movement of international containers between Albany, NY, and Worcester, MA.

Springfield Terminal Railway poses major competition for Conrail in the Massachusetts market. In response to recent activity of Springfield Terminal Railway, Conrail announced on October 1, 1992, that it would begin a 6-month trial period of a 30% cut in rates for international containers moving westbound from Boston to Chicago. Conrail has access to Conley Terminal, the major Massport cargo terminal in South Boston. Conley is preferred by shippers because of its accessibility which is superior to that of Moran Terminal.

The railroad is currently studying access potential at Conley Terminal. If Conrail is to restore its rail line, known as the "Castle Island Lead," it will face stiff local opposition. The tracks run down the middle of a residential neighborhood and have not been used in almost a decade.

Public policy and political background of clearance programs:

- There are 2 requests for state rail money currently pending. They are the following: the Conrail proposal to double-stack to Conley Terminal via Framingham and the Springfield Terminal Railway/CP joint proposal to double-stack from Fort Devens in Ayer to Moran Terminal.

- The ramifications of raising bridges include roads and the approach to them, wetlands, rights-of-way and road intersections. If the bridges are raised to the new domestic height of doublestack containers, then the approach to bridges must be longer.

- Secretary of Transportation James Kerasiotes has not yet made his views known regarding the double-stack clearance issue. The Department of Transportation is undergoing a major reorganization at this time.

Proposal: Artery rail link between North and South Stations in Boston

As of April 23, 1993, a proposal has been set forth for an underground rail link between North and South Stations in Boston. This proposal will require the approval of several transportation entities and Governor Weld, before any action is taken. The proposal for a rail link is one of several alternatives studied in the past several years for linking the 2 stations. Another alternative proposed is a people-mover system.

It is believed that this \$1.6 billion rail link would provide the "missing link" between the Boston northern and southern commuterrail lines and eventually connect Amtrak service between northern New England and the Washington and New York areas. The project would involve laying 4 tracks beneath the Central Artery after completion of construction to depress the Artery, and providing electricity from the rest of the Boston area commuter rail system to the New Hampshire border. The proposal indicates that the north-south link would remove about 20,000 automobiles from the Central Artery daily. Opposition to the project has centered on 2 issues: cost and any potential effect on the Central Artery project.

Freight Railroads:

Consolidated Rail Corporation (Conrail) Conrail Building, Holiday Drive Pittsburgh, PA 15220 Tel: (717) 541-2175 (Headguarters location)

Contact: David Stephenson, Customer Service Manager, Albany, NY Tel: (518) 767-6266

Conrail is the largest Class I railroad operating in New England. In Massachusetts, Conrail operates intermodal yards in Worcester and Allston and has yards in West Springfield and Framingham. Ninety-seven percent of their business is inbound cars. Among Conrail customers are the Boston Globe, the Boston Herald and Massport (Conley Terminal). Conrail also transports weekly 3,000 to 4,000 cars of perishable food to the Chelsea food markets. Other large customer bases include the Foxboro food and beer distribution center, Stop and Shop in Readville, Cape Cod businesses and several warehouses.

Guilford Transportation Industries (GTI) Iron Horse Park North Billerica, MA 01862 Tel: (508) 663-1130 Fax: (508) 663-1143 General contacts: F. Colin Pease, Executive V.P. Purchasing contact: Stewart Park, V.P. Purchasing and Stores

Guilford is a holding company for the following railroads: Boston and Maine, Maine Central Railroad Company and Springfield Terminal Railway.

Railroad classification: Class I

Equipment owned/leased: 4,500 box cars, 140 locomotives

Track miles owned: 379

Planned purchases: uncertain; ongoing locomotive purchases

Freight handled: paper and forest products (40%), coal, automobiles, food products, plastics, and grain

ve proposed 14 a people-sov

GTI's Boston & Maine Railroad terminal is located in East Deerfield, MA. Massachusetts Central Railroad Corporation 1 Wilbraham Street Palmer, MA 01069 Tel: (413) 283-2911 Fax: (413) 283-2910 Contact: W. Robert Bentley, President (Mr. Bentley is also President of Maine Coast Railroad.)

Equipment owned/leased: 5 locomotives, 5 switchers, 4 freight cars, 1 caboose, 4 miscellaneous vehicles

Category: Short line railroad

Track miles owned: 26

Planned purchases: information unavailable

Recent capital improvements include a \$600,000 installation of flashing light warning signals at 5 grade crossings along its route between Palmer and Barre. Additional signal installations are planned for 1993. Over \$1.5 million was invested in other track maintenance and highway crossing surfaces on their line in 1992.

Massachusetts Central Railroad provides both carload and intermodal service, much of which is worldwide container shipments. It connects at Palmer with both Conrail and Canadian National.

Pinsly Railroad Westfield Executive Park 53 Southampton Road Westfield, MA 01085 Tel: (413) 568-6426 Contact: Marjorie P. Silver, President and Treasurer. Ms. Silver is also President of the New England Railroad Club.

Pinsly owns 6 short line railroads, one of which is in New England-Pioneer Valley Railroad.

Pioneer Valley Railroad One Depot Street Westfield, MA 01086 Tel: (413) 568-3331 Fax: (413) 568-6941 Contact: Marc R. Levine, General Manager Track miles owned: 26 Equipment owned: 4 locomotives

Freight handled: plastics and lumber

Pioneer Valley Railroad is a connecting carrier that travels to Holyoke, where it connects with Springfield Terminal Railway, and to Westfield where it connects with Conrail. Providence and Worcester Railroad Company (P & W) P.O. Box 1188 75 Hammond Street Worcester, MA 01601 Tel: (508) 755-4000 General contact: Heidi Eddins, General Counsel and Secretary (ext. 365) Purchasing contact: Ronald Chrzanowski, V.P. Engineering and Real Estate (ext. 352)

Railroad classification: Class III

Track miles owned: 470

Equipment owned/leased: 18-19 locomotives

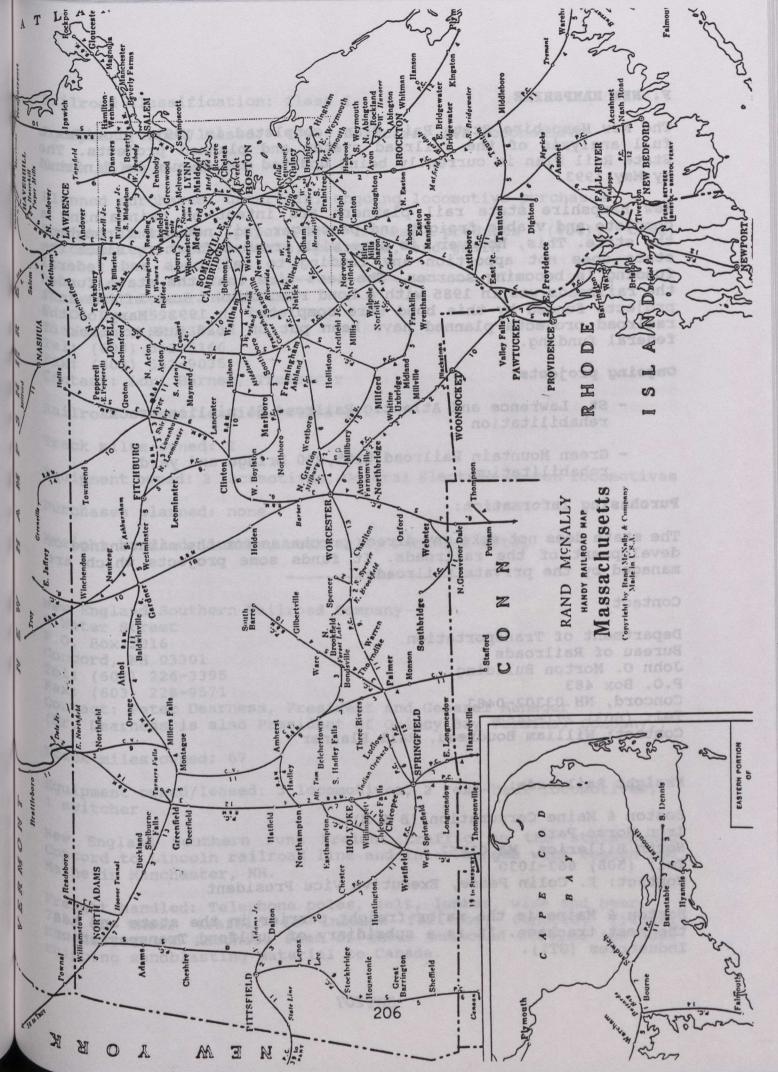
Primarily a termination carrier, P & W operates an intermodal yard in Worcester on the Conrail line, in addition to a branch which connects the yard with the B & M Fitchburg route in Gardner, MA. They have double-stack capacity in Worcester. P & W handles incoming freight to New England and is the sole active freight connection from Rhode Island to the national network. The company has a contract guaranteeing its use of the tracks on the Northeast Corridor, which is owned by Amtrak.

Freight handled: chemicals, scrap metal, food products, paper, petroleum.

Recent controversy involves bridge clearances that Amtrak will modify. The electrification of the Northeast Corridor high-speed rail requires installation of power lines above the tracks which would reduce the clearance in the 300 structures that cross the railroad tracks between New Haven, CT, and Boston. P & W charges that reducing the clearances would make it more expensive to make modifications neded to operate double and triple-stack rail freight cars. P & W wants Amtrak to ensure that the same amount of clearance exists after construction of high-speed rail as is available now.

Quincy Bay Terminal Company 8 Water Street Concord, NH 03301 Tel: (603)226-3395 Contact: Peter Dearness, President and General Manager (Mr. Dearness is also President of New England Southern Railroad Company.) This railroad operates in Quincy, MA, with 75% outbound traffic from the Procter and Gamble Company and the Massachusetts Water Resources Authority sludge treatment plant at the Fore River Shipyard. Further information is not available.

Please see a map of the Massachusetts rail system on the following page.



F. NEW HAMPSHIRE

The New Hampshire State Rail Plan, completed in 1991, provides a full analysis of the railroad system and planned projects. The State Rail Plan is currently being updated and should be finished by May 1993.

New Hampshire state rail planners are intent on maintaining a complete and viable freight and passenger rail network throughout the state. This, however, is done with great difficulty since the state does not apportion any funding to railroads and federal funding is becoming scarcer. The last time that the state funded the railroads was in 1985 with a bond resolution. Some of the last projects funded by this bond were completed in 1992. Many of the railroad projects planned have been put on hold due to lack of federal funding.

Ongoing projects:

- St. Lawrence and Atlantic Railroad \$1 million track rehabilitation
- Green Mountain Railroad \$105,000 bridge and yard rehabilitation

Purchasing Information:

The state does not make any direct purchases for the maintenance or development of the railroads. It funds some projects which are managed by the private railroads.

Contact:

Department of Transportation Bureau of Railroads John O. Morton Building P.O. Box 483 Concord, NH 03302-0483 Tel: (603) 271-2468 Contact: William Boudreau, Rail Planner

Freight Railroads:

Boston & Maine Corporation (B & M) Iron Horse Park North Billerica, MA 01862 Tel: (508) 663-1030 Contact: F. Colin Pease, Executive Vice President

Boston & Maine is the major freight carrier in the state and has the most trackage. It is a subsidiary of Guilford Transportation Industries (GTI). Railroad classification: Class I Equipment owned/leased: 4,500 box cars, 140 locomotives

Track miles owned: 379

Planned purchases: uncertain; ongoing locomotive purchases

Freight handled: paper and forest products (40%), coal, automobiles, food products, plastics, and grain

Claremont Concord Railroad P. O. Box 1598 Claremont, NH 03743 Tel: (603) 542-5166 Fax: (603) 542-9035 Contact: Lori Barnes, Treasurer Hanpshire, additioned whereastican an and

Railroad classification: Class III

Track miles owned: 2

Equipment owned: 2 locomotives, General Electric 44-ton locomotives

Purchases planned: none

Freight handled: lumber, rock salt, recycled metal

New England Southern Railroad Company ⁸ Water Street P.O. Box 2016 Concord, NH 03301 Tel: (603) 226-3395 Fax: (603) 228-9571 Contact: Peter Dearness, President and General Manager (Mr. Dearness is also President of Quincy Bay Terminal Company.)

and Portland Line-Gae Calegory 1) 1.61 Track miles owned: 67

Equipment owned/leased: 3 locomotives, 2 road-haul locomotives, 1 Switcher

New England Southern runs freight traffic on the state-owned Concord to Lincoln railroad line and interchanges with Boston and Maine in Manchester, NH.

Freight handled: Telephone poles, salt, lumber, wine and beer. 75% of their traffic is inbound for Bow, Concord, Tilton, Manchester and Laconia. Some of their outbound service includes shipping sandblasting material to Canada.

Planned purchases: 1993- track construction 1994- 1 locomotive

New England Southern also owns Quincy Bay Terminal in Quincy, MA. Another railroad is one year away from completion. This new railroad, New England Northern, will operate in Maine.

Passenger rail:

The only interstate passenger rail service is The Montrealer, operated by Amtrak, with 1 daily round trip between Montreal and Washington. The New Hampshire stop is in Claremont Junction.

There are 6 tourist excursion railroads operating in the state.

Please see the following 11 pages for rail mileage in NeW Hampshire, additional information on carriers operating in NeW Hampshire and industry information.

OPERATING RAILROAD MILEAGE-JANUARY 1991

STATE-OWNED LINES:	Mottoe M	LEAGE
Concord to Lincoln Railroad Line	71.56	
Lakeport Spur (inactive)	1.05	
Franklin-Tilton Branch (inactive)	2.39	
North Stratford to Beecher Falls	STABLES	
Railroad Line (inactive)	22.49	
Hillsboro Branch (Wilton to Bennington)	18.61	
State-owned Lines Sub-Total	th the	116.10
		surningand acts
PRIVATELY OWNED LINES:		
BERLIN MILLS RAILWAY:		
Berlin Mills Yard - owned by James		
River Corp., all yard track, serves		
mills in Berlin and Cascade	12.71	
Berlin Mills Railroad Sub-Total	STATANE	12.72
Biling agreement to correspind the bioghigh agreement	Monahho .	
BOSTON AND MAINE CORPORATION (GUILFORD TRANS	PORTATI	ON)
Berlin Branch-VT Border to Berlin (See		KX CHEAN ho
Category I)	60.82	
Concord and Claremont Branch - Concord		
(See Category I-inactive)	1.75	
Conway Branch-Rollinsford to Rochester	9.00	
Conway Branch-Ossipee to Mt. Whittier		
(inactive)	10.44	
Farmington Branch-Rochester to Farmington	7.39	
Gonic Branch-Rochester to Gonic(inactive)	2.00	
Groveton Branch-Waumbeck Jct. to Groveton		
(See Category I)	19.34	
Hillsboro Branch-Nashua to Wilton	16.36	
Main Line-East (Hampton Branch)-Portsmouth		
(See Category I)	14.85	
Main Line-West-MA border to ME border	34.81	•
Manchester/Lawrence Branch-MA border to		
Salem	3.92	
Manchester/Lawrence Branch-Londonderry		
to Manchester (See Category I)	6.14	
Nashua (Segment of the old Worcester,		
Nashua and Portland Line-See Category I)	1.61	
Navy Yard Branch - Portsmouth to ME border	0.88	
New Hampshire Main Line-MA border to		
Concord	38.98	
Newington Branch-Portsmouth to Newington	3.50	
Northern Railroad-Concord to VT border		
(See Category I)(3 miles in Concord &		
Lebanon active, balance inactive)	69.35	
Portsmouth Branch-Manchester to East		
Manchester	2.30	
Portsmouth Branch-Newfields to Portsmouth		
White Mountain Branch-Concord	1.16	
Boston and Maine Corporation Sub-Total		314.60

MILEAGE

CENTRAL VERMONT RAILWAY: Connecticut River Main Line-North Walpole to Cornish Central Vermont Railway Sub-Total	<u>24.19</u>	24.19
CLAREMONT CONCORD RAILROAD: Claremont Concord Line-Claremont Jct. to Claremont Claremont Concord Line Sub-Total	<u>3.85</u>	3.85
CONWAY SCENIC RAILROAD: Conway Scenic Line-N. Conway to Conway Conway Scenic Railroad Sub-Total	<u>7.50</u>	7.50
GREEN MOUNTAIN RAILROAD: Green Mountain Line-N. Walpole to VT border Green Mountain Railroad Sub-Total	<u>1.00</u>	1.00
MAINE CENTRAL RAILROAD (GUILFORD TRANSPORTATION) Mountain Division - ME border to VT border (See Category I) - inactive ME border to Whitefield Maine Central Railroad Sub-Total) <u>58.06</u>	58.06
MOUNT WASHINGTON COG RAILWAY: Base to the Summit of Mt. Washington Mount Washington Cog Railway Sub-Total	<u>3.20</u>	3.20
NEW HAMPSHIRE NORTHCOAST CORPORATION: New Hampshire Northcoast line-Rochester to Ossipee New Hampshire Northcoast Sub-Total ST. LAWRENCE AND ATLANTIC RAILROAD CO:	<u>30.70</u>	30.70
SI. LAWRENCE AND AILANIIC KAILKOAD CO: St. Lawrence and Atlantic Line-ME border to VT border St. Lawrence and Atlantic Sub-Total	<u>52.07</u>	52.07
SPRINGFIELD TERMINAL RAILWAY: (GUILFORD TRANSPO Springfield Terminal Line-Charlestown to VT border (inactive) Springfield Terminal Railway Sub-Total	RTATION) <u>0.80</u>	0.80
WHITE MOUNTAIN CENTRAL RAILROAD: White Mountain Central Line-Lincoln at Clark's Trading Post White Mountain Central Sub-Total	<u>1.50</u>	1.50
TOTAL OPERATING MILEAGE AS OF JANUARY 1991		626.29

CARRIERS OPERATING IN NEW HAMPSHIRE

ON STATE-OWNED LINES:

New England Southern Railroad Co. (NEGS)

New England Southern has operated rail freight service on the Concord to Lincoln Railroad Line since September 1982, under contract with the State of New Hampshire. Non-subsidized freight service is provided between Concord and Lochmere. New England Southern interchanges with the Boston and Maine Corporation in Manchester which is also the source of car supply and acts as agent for New England Southern with respect to division, rates, and other matters such as maintaining interchange and per diem records.

in the water for the tain

Milford-Bennington Railroad Co. (MBR)

In 1989, the Milford-Bennington Railroad successfully obtained an operating agreement to conduct rail freight service on the State-owned Wilton to Bennington Section of the Hillsboro Branch. The railroad anticipated its primary customer would be Granite State Concrete, who requires the transportation of rock from their quarry in Wilton to their Processing plant in Milford. For the railroad to transport from their quarry in Wilton into Milford, a Trackage Rights Agreement with the Boston and Maine Corporation would be required but it has been unsuccessful in obtaining to date. Subsequently, the railroad has filed a Feeder Line Application with the Interstate Commerce Commission requesting acquisition of the Milford to Wilton Section of the Hillsboro Branch from the Boston and Maine Corporation. A ruling from the Interstate Commerce Commission is expected late in 1991.

The Berlin Mills Railvay, owned by James River Corporation yard trackage between their Berlin and Carsada Kabing in Raming

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Plymouth and Lincoln Railroad (PLR)

The Plymouth and Lincoln Railroad, (HOBO), offers a 14 mile round trip along the Pemigewasset River at the north end of the State-owned Concord ^{to} Lincoln Railroad Line. The train departs and returns daily throughout the summer months from the HOBO Station located on Route 112 in Lincoln. Private charters, special connections with the MV Mt. Washington, Fall Foliage and Christmas Specials are offered.

The Plymouth and Lincoln Railroad, (W&PV), offers an 18 mile round trip along the shore of Lake Winnipesaukee on the State-owned Concord to Lincoln Railroad Line. The train departs throughout the summer months from the Laconia Station with a stop at Weirs Beach and then continues to Meredith where it begins its return trip. Private charters, special connections with the MV Mt. Washington, Fall Foliage and Christmas Specials are offered.

Winnipesaukee Railroad (WRR)

The Winnipesaukee Railroad, which operated a passenger excursion service since 1984 in the Lakeport-Meredith area on the State-owned Concord to Lincoln Railroad Line, had their Passenger Excursion Agreement terminated on January 2, 1991, as a result of non-compliance of the agreement.

"Request for Proposals" were sought to provide passenger excursion service on that portion of the line. Three proposals were submitted and the Department of Transportation, with the approval of the Governor and Executive Council selected Plymouth and Lincoln Railroad.

ON PRIVATELY OWNED LINES:

Berlin Mills Railway (BMS)

The Berlin Mills Railway, owned by James River Corporation, operates yard trackage between their Berlin and Cascade Mills in Berlin and Gorham.

Boston and Maine Corporation (B&M)

The Boston and Maine is the major freight carrier in the State and has the most trackage. The Boston and Maine Corporation was organized in 1964 as a successor to the Boston and Maine Railroad which had been incorporated in 1919 as a reorganization of an 1835 New Hampshire Corporation. The Boston and Maine system was formed, for the most part, through a series of mergers of smaller companies. On March 12, 1970, the railroad entered into reorganization under Section 77 of the Bankruptcy Act. Guilford Transportation Industries submitted an application to the Interstate Commerce Commission to acquire the Boston and Maine in 1981. Approval to acquire the Boston and Maine was granted in 1983.

The daily operations of the Boston and Maine have been taken over, through a labor agreement, by the Springfield Terminal Railway Company, a subsidiary of Guilford Transportation Industries, on most of the lines located in New Hampshire. Exceptions to this are a portion of the New Hampshire Main Line, from Manchester to Concord, which is operated under agreement with New England Southern Railroad and the Berlin and Groveton Branch Lines which are operated under an agreement with New Hampshire and Vermont Railroad.

Central Vermont Railway (CV)

The Central Vermont Railway owns the Connecticut River Main Line. They acquired it in 1988 from AMTRAK which had acquired it from the Boston and Maine Corporation earlier in the year as a result of condemnation - proceedings. The Boston and Maine Corporation was granted trackage rights and retained their former customers.

The Connecticut River Main Line runs along the New Hampshire/Vermont border. The line enters New Hampshire at North Walpole and exits at Cornish. Central Vermont, utilizing Federal funds, has done extensive rehabilitation on the line and AMTRAK's Montrealer was reestablished in July of 1989. Central Vermont currently operates two through-freight trains daily over this line.

Claremont Concord Railroad Corporation (CCRR)

The Claremont Concord Railroad operates approximately 3.85 miles of line between Claremont Jct., the interline connecting point with the Boston and Maine Corporation and the Central Vermont Railway and downtown Claremont. The Claremont Concord Railroad basically transfers cars between these Points. The line is served by a switching crew Monday through Friday.

Conway Scenic Railroad (CONV)

The Conway Scenic Railroad offers an 11 mile round trip through the Mount Washington Valley. The train departs from the historic 1874 depot in North Conway Village, stops in Conway and then returns. The train runs from Mid-June to the end of October. Special weekend runs occur in May and November.

Green Mountain Railroad (GMRC)

The Green Mountain Railroad's operations in the State are limited to its North Walpole Yard. The primary use is as a repair facility for their locomotives, cars and other railroad equipment, for equipment storage and for public delivery on a site available basis.

Maine Central Railroad Company (MEC)

The Maine Central Railroad is owned by Guilford Transportation Industries. Application to acquire the Maine Central was submitted to the Interstate Commerce Commission by Guilford in 1981. Approval to acquire the Failroad was granted in 1982.

The "Mountain Division" of the Maine Central cuts across the northern Part of the State for approximately 58 miles. The single-track main line links the Rigby Yard in Portland, ME with St. Johnsbury, VT. A section of this line from the Maine border to Whitefield has been identified as this line from the Maine border to Twin State Railroad operates on the Category I by the carrier. The Twin State Railroad operates on the remaining portion from Whitefield to St. Johnsbury, VT, under a lease agreement with Maine Central Railroad.

Mount Washington Cog Railway (MTWS)

The Mount Washington Cog Railway offers a 3.2 mile ride from the base ^{t0} the summit of Mount Washington. The Cog Railway runs from mid-April to ^{mid-}October and has been climbing the northeast's highest peak since 1869 under steam power.

New Hampshire and Vermont Railroad (NHVT)

The New Hampshire and Vermont Railroad, which purchased the Twin State Railroad, operates on a portion of the Mountain Division, from Whitefield ^{to} St. Johnsbury, VT., under a lease agreement with the Maine Central Railroad.

The New Hampshire Vermont Railroad also operates, the Berlin and Groveton Branch Lines under a lease agreement with the Boston and Maine Corporation. They provide the switching of cars at the James River Corporation's mill in Groveton.

New Hampshire Northcoast Corporation (NHN)

New Hampshire Northcoast acquired approximately a 30 mile section of the Conway Branch, Ossipee to Rochester, from the Boston and Maine Corporation in 1986.

The line has been extensively rehabilitated over the years with the aid of State, Federal and private funding and completion of the most recent project should be completed in the spring of 1992. The primary purpose for the rehabilitation was to insure the continued shipping of sand and gravel to the Boston area via rail. Currently, one round trip per day from Ossipee to Rochester occurs five days per week.

St. Lawrence and Atlantic Railroad Co. (SLR)

The former Grand Trunk Eastern of Canadian National Railways once linked Portland, ME with Montreal, Quebec. In May 1989, the Canadian National Railways sold the portion from Portland, ME to Island Pond, VT to the St. Lawrence and Atlantic Railroad, a subsidiary of Emons Holdings, Inc. This single-track main line that crosses the northern part of the State is still considered an important rail corridor between Canada and the New England States with freight trains running daily over this line.

Springfield Terminal Railway Company (ST)

The Springfield Terminal Railway is located at the New Hampshire/Vermon¹ border in Charlestown. There is approximately 1 mile of track in the State but serves no industry within the State. Its principle operation was in Vermont performing switching functions between Springfield, VT, and the Connecticut River Main Line. However, the line has been inactive since 1984.

The Springfield Terminal Railway Company, also a subsidiary of Guilford

Transportation Industries, has taken over the daily operations, through a labor agreement, of running most of the railroads lines owned by the Boston and Maine Corporation.

White Mountain Central Railroad (WMCR)

The White Mountain Central Railroad offers a 3 mile round trip at Clark's Trading Post in Lincoln. The woodburning steam locomotive operates from spring to fall while the Trading Post is open.

CATEGORIES OF LINES AS OF JANUARY 1991

In accordance with the Code of Federal Regulations 49, Part 1152. Section 1152.10, each rail carrier shall prepare a diagram of its rail system on a map for submission to the Interstate Commerce Commission designating all rail lines in its system by categories as listed below:

CATEGORY I

All lines or portions of lines which the carrier anticipates will be the subject of the abandonment or discontinuance application to be filed within three years following the date of filing of the System Diagram Map with the Interstate Commerce Commission. d.) No agancy or terminal station is loca

Boston and Maine Corporation (as per System Diagram Map, June 1990) ilread Company (as per System Diag

1.) Manchester/Lawrence Branch

- a.) Located wholly in New Hampshire.
 - b.) Located wholly in Rockingham County.
- c.) From Milepost S.L. 20.93 to Milepost S.L. 22.14 all in Londonderry.
- d.) No agency or terminal station is located on this line.
- 2.) Concord and Claremont Branch
 - a.) Located wholly in New Hampshire.
 - b.) Located wholly in Merrimack County.
 - c.) From Milepost 0.00 to Milepost 1.75, all in Concord.
- d.) No agency or terminal station is located on this line.
 - 3.) Hampton Branch

losses or excessive reheatilitation costs, as compared to potential revenues

- a.) Located wholly in New Hampshire.
- b.) Located wholly in Rockingham County.
- c.) From Milepost 42.70 in Seabrook to Milepost 55.84 in Portsmouth.
- d.) No agency or terminal station is located on this line.
- 4.) Worcester, Nashua and Portland Line
 - a.) Located wholly in New Hampshire.
 - b.) Located wholly in Hillsborough County.
 - c.) Milepost W. 44.39 to Milepost W. 46.00, all in Nashua.

d.) An agency station is located on this line in Nashua.

Berlin Branch 5.)

- a.) Located wholly in New Hampshire.
- b.) Located in Grafton and Coos Counties.
- c.) From Milepost C.94.01 in Haverhill to Milepost C.154.34 in Berlin.
- 6.) Groveton Branch d.) An agency station is located on this line in Whitefield.

- a.) Located wholly in New Hampshire.
- b.) Located wholly in Coos County.
- c.) From Milepost C.126.93 in Jefferson to Milepost C.147.22 in Groveton.
- d.) No agency or terminal station is located on this line.
- 7.) Northern Railroad
 - a.) Located in New Hampshire and Vermont.
 - b.) Located in Merrimack and Grafton Counties in New Hampshire and Windsor County in Vermont.
 - c.) From Milepost 73.70 in Concord, NH to Milepost 142.98 in White River Jct., VT.
 - d.) No agency or terminal station is located on this line.

Maine Central Railroad Company (as per System Diagram Map December 1986)

- 1.) Mountain Division
 - a.) Located in New Hampshire and Maine.
 - b.) Located in Carroll and Coos Counties in New Hampshire and Cumberland and Oxford Counties in Maine.
 - c.) From Milepoint 24.48 in Standish, ME to Milepoint 103.41 in Whitefield, NH.
 - d.) Non-agency stations are located in New Hampshire on this line in Redstone, North Conway, Intervale, Bartlett and Fabyan.

CATEGORY II

All lines or portions of lines potentially subject to abandonments are those which the carrier has under study and believes may be the subject of a future abandonment application because of either anticipated operating losses or excessive rehabilitation costs, as compared to potential revenues.

NO LINES IN THIS CATEGORY

CATEGORY III

All lines or portion of lines for which an abandonment or discontinuance application is pending before the Interstate Commerce Commission on the date upon which this diagram is filed with the Commission.

NO LINES IN THIS CATEGORY

CATEGORY IV All lines or portions of lines which are being operated under the Rail Service Continuation Provisions of the Regional Rail Reorganization Act of 1973, as amended.

Boston and Maine Corporation

-Navy Yard Branch - operating with a Portsmouth Navy Yard subsidy.

parasita improprietades 22-

-St. saurence and -Atlantian

CATEGORY V

All other lines or portions of lines which the carrier owns and operates, directly or indirectly.

STATE-OWNED LINES

-Concord to Lincoln Railroad Line -North Stratford to Beecher Falls Railroad Line. -Wilton to Bennington Section -Hillsboro Branch (Wilton to Bennington Section)

PRIVATELY OWNED LINES

D

Berlin Mills Railroad

-Berlin Mills Yard Track

Boston and Maine Corporation

-Conway Branch -Farmington Branch -Gonic Branch -Hillsboro Branch (Nashua to Wilton Section) -Main Line - West -Manchester/Lawrence Branch -New Hampshire Main Line -Newington Branch -Portsmouth Branch -White Mountain Branch

Central Vermont Railway

-Connecticut River Main Line

Claremont Concord Railroad

-Claremont Concord Line

Green Mountain Railroad

-Green Mountain Line

Maine Central Railroad

-Mountain Division (from Whitefield to the VT border)
<u>New Hampshire Northcoast Corporation</u>

-Navy Yard Branch - operating with a Portsmouth Navy Yard

-New Hampshire Northcoast Line

St. Lawrence and Atlantic Railroad

-St. Lawrence and Atlantic

Springfield Terminal Railway

-Springfield Terminal Line

The following is a list of area planning councils and commissions, operating railroads in New Hampshire and special interest groups which the Department maintains open lines of communications as part of the overall planning process.

PLANNING COUNCILS AND COMMISSIONS

North Country Council 65 Main Street Littleton, NH 03561 Southern N.H. Planning Commission 400 Commercial Street Manchester, NH 03103

(603) 444-6303

(603) 669-4664

Lakes Region Planning Commission Humiston Building Meredith, NH 03253

(603) 279-8171

Upper Valley-Lake Sunapee Council Heater Road RR 1, Box 123 Lebanon, NH 03766

(603) 448-1680

Southwest Regional Planning Commission 12 Court Street Keene, NH 03431

(603) 357-0557

Central N.H. Planning Commission 329 Daniel Webster Highway Boscawen, NH 03303

(603) 796-2129

RAILROADS OPERATING IN NEW HAMPSHIRE

Berlin Mills Railway, Inc. 650 Main Street Berlin, NH 03570 Boston and Maine Corp. Maine Central Railroad Co. Springfield Terminal Railway Co. Iron Horse Park North Billerica, MA 01862

(508) 663-1030

(603) 752-5570

Nashua Regional Planning Commission 115 Main Street P.O. Box 847 Nashua, NH 03061

(603) 883-0366

Rockingham Planning Commission 121 Water Street Exeter, NH 03833

(603) 778-0885

Strafford Regional Planning Commission County Farm Road Dover, NH 03820

(603) 742-2523

RAILROADS OPERATING IN NEW HAMPSHIRE (continued)

Green Mountain Railroad Corp. P.O. Box 498 Bellows Falls, VT 05101-0498

(802) 463-9531

Central Vermont Railway, Inc. 2 Federal Street St. Albans, VT 05478

(802) 527-3432

Claremont Concord Railroad Corp. 15 Main Street P.O. Box 1598 03743 Claremont, NH

ISOUS, MH 03061

(603) 542-5166

Conway Scenic Railroad, Inc. P.O. Box 947 North Conway, NH 03860

(603) 356-5251

New Hampshire and Vermont Railroad Co. RFD #1, Box 790 Morrisville, VT 05661

(802) 888-4255

Plymouth and Lincoln Railroad Corp. P.O. Box 9 Lincoln, NH 03251

(603) 745-2474

Milford-Bennington Railroad Co., Inc. 62 Elm Street Milford, NH 03055

(603) 673-7181

Mount Washington Cog Railway Mt. Washington, NH 03589

(603) 846-2256

N.E. Southern Railroad Co., Inc. P.O. Box 2106 Concord, NH 03302-2106

(603) 228-8580

N.H. Northcoast Corp. P.O. Box 429 Ossipee, NH 03864

(603) 539-2789

St. Lawrence and Atlantic Railroad Co. Exchange Street Berlin, NH 03570

(603) 752-4425

White Mountain Central Railroad P.O. Box 1 03251 Lincoln, NH

(603) 745-8913

SPECIAL INTEREST GROUPS

Nashua Passenger Rail Advisory Committee % RD #1, Box 185 Wilton, NH 03086

Plaistow Area Transit Advisory Committee % Plaistow Town Offices 145 Main Street Plaistow, NH 03865

(603) 654-9647 (603) 382-5200

TrainRiders/Northeast P.O. Box 4869 Portland, NH 04112

(207) 879-7245

G. RHODE ISLAND

Federal funds for rail projects have remained at relatively low levels for the past several years. For fiscal year 1993, it appears that there will be no federal funds available, according to state rail planners.

The state does not have a rail operating division. Rail planners are currently conducting a feasibility study which focuses on passenger rail.

Contact:

Department of Transportation Bureau of Planning 210 State Office Building Providence, RI 02903 Tel: (401) 277-2694 Contacts: Thomas Conboy, Supervising Planner Thomas Queenan, Planning Division

Please see the following page for the Local Rail Freight Assistance Program as outlined in the Rhode Island Transportation Improvement Program. These projects rely solely on federal support.

All of the fiscal year 1992 projects are either ongoing, close to beginning or completed, with the exception of Pocasset River Bridge project which has been eliminated due to railroad line abandonment. Fiscal year 1993 projects are uncertain since there will be almost no federal funding available.

LOCAL RAIL FREIGHT ASSISTANCE (LRFA) PROGRAM

				PSHIRE (continued)
PROJEC	Green Hou	RAIL LINE	LOCATION	DESCRIPTION EST. COI
			Piscal 92	
Re-tie Woon. Vladuct		P&W Main	Woonsocket	Re tie three spans (phase II) \$100.00
Shore Line lead track (SE		QP/D Ind. Track	N. Kingstown	Rehab. Shore Line Interchange with the \$50.00 QP/D Industrial Track
Blackstone R. Bridge (mp	5.83)	P&W Main	Valley Falls	Renew steel \$250.00
Pocasset River Bridge		Pontiac Sec.	Cranston	Bridge reconstruction \$300.00
E. Junction track rehab.		E. Junction Sec.	East Providence	Track rehabilitation and bridge work \$230.000
Bridge reconstruction (mp	12.33)	P&W Main	Manville	Bridge reconstruction \$50.000
Bridge rehab. (mp 10.88)		P&W Main	School St. Cumb.	Replace bridge deck \$50.000
			Fiscal 93	Contacts: Thomas: Contacts:
Davisville "Y"		QP/D Ind. Track	N. Kingstown	Reconstruction of switch, replace \$650.000 light rail (80-90#) retie
Culverts & drainage		Slatersville Br.	N. Smith. & Woon.	Rehab. culverts \$50.000
			Fiscal 94	theory Co.
Yard track bridge		P&W Main	Valley Falls	Replace bridge deck \$85.000
Davisville spur track		QP/D Ind. Track	N. Kingstown	Construct spur track to service new \$100.000 industrial customer.
Patriot Metals spur track		Harbor Junc. •	Port/Prov.	Construct spur track to improve \$17.000 access to existing rail user
Ace Warehouse spur track		Harbor Junc. *	Port/Prov.	Construct spur track to improve \$10.000 access to existing rail user
				43-8453

TOTAL \$2.142.000

* The Harbor Junction line is currently undergoing Phase II improvements

Freight railroads:

Providence & Worcester (P & W) P.O. Box 1188 75 Hammond Street Worcester, MA 01601 Tel: (508) 755-4000 General contact: Heidi Eddins, General Counsel and Secretary (ext. 365) Purchasing contact: Ronald Chrzanowski, V.P. Engineering and Real Estate (ext. 352)

Railroad classification: Class III

Track miles owned: 470

Equipment owned/leased: 18-19 locomotives

P & W is the only active freight connection from Rhode Island to the national network. It serves the Port of Providence (Quonset Point) and has freight operating rights to the Rhode Island section of the Amtrak Shore Line, but only for pick-up and delivery.

Passenger Rail:

The only passenger rail operating is the commuter rail service between Providence and Boston. Please see further information under Commuter Rail (Rhode Island).

H. VERMONT

The Vermont Rail Council was recently formed to study a number of passenger and freight-related rail issues. At stake in Vermont are 400 miles of core railroad track that are owned by the state. After 50 to 80 years of neglect, the rail network is in dire need of repair. If not repaired, the railroads may disappear.

Vermont Rail Council study initiatives:

1) One of the initiatives called for involves the Central Vermont (CV) Railway which would like to gain double-stack capabilities. Requirements would include raising the height of the tunnel in Bellows Falls and 2 bridges in order to gain 23' clearance. With a Boston to Montreal route, CV would be able to ship west to Vancouver more competitively.

2) Another initiative calls for improved institutional relations With New England motor carriers in order to decrease truck shipping time. 3) On the passenger side is the prospect of increasing Vermont tourism by running an excursion train in a 250-mile loop in the central part of the state. An investment in passenger trains would benefit freight carriers because of the improvements that would be made in tracks and bridges.

4) An initative to institute commuter rail in the Burlington area has been discussed. The train would be run by a private contractor.

The updated State Rail Plan will be available in April 1993.

Purchasing information:

The state leases the railroad tracks it owns to private railroads. It purchases rails and railroad ties. Private railroads install them.

Vermont Department of Transportation Rail, Air, Public Transit (RAPT) 133 State Street Montpelier, VT 05602 Contact: William Bruzzese, Director Tel: (802) 828-2093

Freight railroads:

Central Vermont Railroad (owned by Canadian National North America) 2 Federal Street St. Albans, VT 05478 Tel: (802) 527-3411 Contact: Christoper Burger, General Manager

Track miles owned: 366

Equipment owned/leased: 8 locomotives, 20 road haul

Further information is not available.

One of the initiatives called for involves the Central Vermont (CV) Rallway which would like to gain double-stack capabilities. Sequirements would include raising the height of the tunnel in ellows Falls and 2 bridges in order to gain 23' clearance. With a carcon to Montreal route, CV would be able to ship west to vancouver more competitively.

Another initiative calls for improved institutional relations alth New England motor carriers in order to decrease truck shipping Green Mountain Railroad Corporation 8 Depot Street, P.O. Box 498 Bellows Falls, VT 05101-0498 Tel: (802) 463-9531 Fax: (802) 463-4084 Contact: Jerome Hebda, President and General Manager Line: scotted

Railroad classification: Class III

Track miles owned: 50

Wi hereiter oberg team Equipment owned/leased: 6 locomotives, 8 passenger cars, 150 freight cars

Purchases planned: They are "always in the market for bargain passenger cars."

Freight handled: talc, limestone, lumber, oil, paper products

Green Mountain connects in Bellows Falls and Rutland, VT. It also Operates a tourist excursion railroad in the summer and fall. Tourist business is increasing. Peter beginess is increasing.

New Hampshire and Vermont Railroad Company R.R. 1, Box 790 Stafford Avenue Morrisville, VT 05661 Tel: (802) 888-4255 Contacts: Clyde Forbes, President Kenneth Williams, Operation Manager Track miles owned: 81

Freight handled: pulp/paper (70%), chemicals (20&)

New Hampshire and Vermont Railroad Company operates 4 railroads, among them Washington County Railroad Corporation with 14 track miles. Further information is not available.

Vermont Railway, Inc. One Railway Lane Burlington, VT 05401 Tel: (802) 658-2550 Fax: (802) 658-2553 Contact: John Pennington, President

Track miles: 131

Equipment owned/leased: 8 locomotives, 4 road-haul,2 caboose, 2,500 trailers, 14 freight cars

Purchases planned: Uncertain

A recent order for 5,000 ties is in progress. Vermont Railway recently purchased 2 CSX locomotives.

Freight handled: road salt, grain products, limestone, ballast, plastics.

Vermont Railway is state-owned. It connects at Burlington with Canadian National North America, at White Creek, NY, with Boston and Maine, and at Rutland with Green Mountain Railroad and Clarington and Pittsford Railroad.

Further information is not available.

X. LIGHT RAIL AND TRACKLESS TROLLEYS

A. MASSACHUSETTS

The light rail and trackless trolley industry consists of the Massachusetts Bay Transportation Authority (MBTA) Green Line on Which there are 5 routes and 70 stations. The Green Line, located in Boston, carries the most passengers each day (200,000) and is the oldest and longest of the 4 subway lines (Blue, Orange, Red and Green Lines). It is the oldest subway line in the U.S., which Presents great challenges to its operating team. n Hattanes and Staintroom Eablagementdetso tagen

Current inventory:

- 97 1976 Boeing Vertol light rail vehicles
 - 100 1986-1987 Kinki Sharyo No. 7 light rail vehicles
- 12 1944-1951 Presidential Conference Cars
- 50 1976 Flyer Industries trackless trolleys

The FY 1994 request for Light Rail Equipment Maintenance is \$15,600,132 which includes corrective and preventive maintenance and vehicle cleaning.

Planned projects:

- 100 low-floor light rail vehicles are planned for purchase in 1993. Low-floor access will comply with ADA requirements. Specifications have not yet been advertised.
- The South Boston Transitway Project has received federal funding for a portion of the recommended route. The complete recommended route stretches from Boylston Street in downtown Boston to the World Trade Center. The approved portion would run from South Station to the World Trade Center. The South Boston Transitway will be a tunnel in which a single lane of electric trolley will run with overhead wire. The plan is to convert these light rail vehicles to electric.

The \$343 million Transitway Project is scheduled for completion in 1998 and is part of the Central Artery Mitigation and Clean Air Act projects.

The design portion of the project has already been sent out for bids and is now closed. Equipment needs are unknown at this time, but it is known that the vehicles will be dual mode, i.e., capable of using two sources of fuel.

- Orange Line Replacement Service is planned for Washington Street in Boston. The 2 options for vehicles are low-floor electric trackless trolley or diesel bus. dase refer to the following page for a disgree of the Nora Repis ansit system. (The Green Line which is discussed in the Line

Purchasing information:

Bids for these projects will be advertised in the various trade journals such as Passenger Transport, F.W. Dodge Bulletin, Massachusetts Central Register, and local newspapers, such as the Boston Globe and the Boston Herald. Contacts:

the oldest and longest of the 4 subway lines (Blue, Orange, Red and

Massachusetts Bay Transportation Authority (MBTA) 10 Park Plaza Transportation Building Boston, MA 02116 Tel: (617) 722-5502 Contact: Karen McGann, Vehicle Procurement

Contact: Nancy Polcari, Assistant Director of Construction Tel: (617) 722-6122 South Boston Transitway Project

B. OTHER STATES

and Meine, and at Rutland with Green Mountain Baidig Sentit Vermont

Light rail: 10 becasic ers seloider lies sepil roots-wol 001 in 1993. Low-floor access will comply with ADA requirements.

Planned project: basistants dead day too aved most solitional

- \$50 million project in Burlington for an overhead catenary or cable system from downtown Burlington to the airport. Funding for this project has not yet been approved. Contact:

Boston Transitvey will be a tunnel in which a single lane of

Vermont Department of Transportation Rail, Air and Public Transit Rail, Air and Public Transit State Administration Building 133 State Street Montpelier, VT 05602 Tel: (802) 828-2093 Contact: William Bruzzese, Director

In Rhode Island, New Hampshire and Maine, there is no light rail or trackless trolley usage.

MBTA Subway System

XI. RAPID TRANSIT/HEAVY RAIL

Technically speaking, the term "rapid transit" may be equated with the term "heavy rail." Rapid Transit cars run on electricity.

A. MASSACHUSETTS

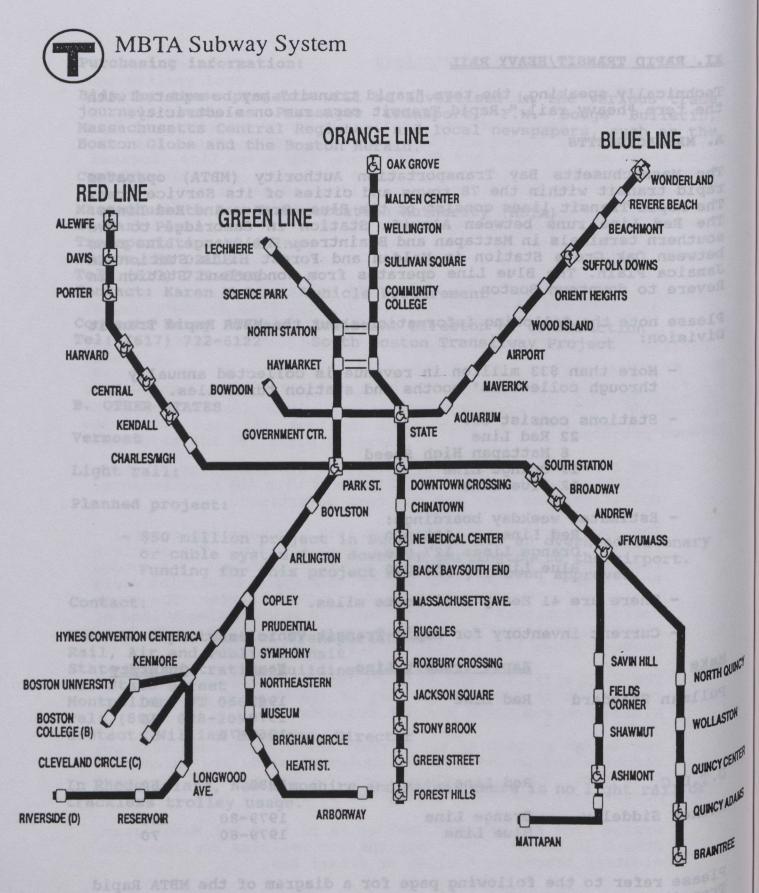
The Massachusetts Bay Transportation Authority (MBTA) operates rapid transit within the 78 towns and cities of its Service Area. The Rapid Transit lines consist of the Blue, Orange and Red Lines. The Red Line runs between Alewife Station in Cambridge to two southern terminals in Mattapan and Braintree. The Orange Line runs between Oak Grove Station in Malden and Forest Hills Station in Jamaica Plain. The Blue Line operates from Wonderland Station in Revere to downtown Boston.

Please note the following information about the MBTA Rapid Transit Division:

- More than \$33 million in revenue is collected annually through collectors' booths and station turnstiles.
 - Stations consist of: 22 Red Line
 - 8 Mattapan High Speed
 - 19 Orange Line
 - 12 Blue Line
 - Estimated weekday boardings: Red Line: 185,000 Orange Line: 127,000 Blue Line: 54,000
 - There are 41 Heavy Rail route miles.
 - Current inventory for Rapid Transit Vehicles:

Make	Rapid Transit Line	Year	<u>Quantity</u>	
^{Pullman Standard}	Red Line	1963 1970 1969-70	90 20 52	
U.T.D.C.	Red Line	1988	58	
Hawker Siddeley	Orange Line Blue Line	1979-80 1979-80	120 70	

Please refer to the following page for a diagram of the MBTA Rapid Transit system. (The Green Line which is discussed in the Light Rail/Trackless Trolley section is also illustrated on this diagram.)



Wheelchair Accessible

E

© MBTA 1992

Planned purchases:

- 40 Orange Line cars and 30 Blue Line cars before the year 2000.

Planned projects:

- Blue Line extension to Newburyport, MA. of the netion's goods.

The extension of the Blue Line is one of the options that is being considered in the North Shore Transportation Study by the MBTA. By the end of 1993 a decision should be made about which option will be recommended.

TON ETUC - Two rapid transit lines at the new North Station which is scheduled for completion at the end of 1996. s a resource for closely and insights

Purchasing information:

noused and wated trucking revenues and All purchases for rolling stock are restricted by the Buy America Act if federal funding is involved. All new cars procured must be accessible to disabled persons. Bids are advertised in Passenger Transport, the Boston Globe, the Boston Herald, the F.W. Dodge Bulletin and other trade publications. Contacts:

Massachusetts Bay Transportation Authority 10 Park Plaza, Room 2810 Boston, MA 02116 Tel: (617) 722-5502 Airline: 7.5 million tons Contact: Karen McGann, Manager of Car Procurement In the third quarter of 1992, t

Massachusetts Bay Transportation Authority 10 Park Plaza Boston, MA 02116 Tel: (617) 722-3126 Contactor of Planning Contact: Anthony Palmere, Director of Planning

B. OTHER STATES

No rapid transit operates in the states of Maine, Rhode Island, New Hampshire or Vermont. Are lagal topp and a long and a long and the state of the lage of

XII. TRUCKING

A. INTRODUCTION

The trucking industry earns \$272 billion annually in gross freight revenues, representing 78% of the nation's freight bill and 5% of the Gross National Product. With the decline of the railroads since World War II, trucks have taken on the role of the primary shipper of the nation's goods.

Total revenues by transportation industry: by the Marn. By the end of 1990

Trucking: \$272 billion Railroads: \$30 billion Water: \$21 billion Airlines: \$13.7 billion

(1990 figures)

For-hire trucking revenues account for \$104 billion (38%) and inhouse (private) trucking revenues account for \$168 billion (62%) of trucking revenues.

Trucks carry 2.6 billion tons of freight annually, representing 41% of the total tonnage carried by all modes.

Total tonnage hauled by transportation industry:

2.6 billion tons Trucking: Railroads: 1.7 billion tons Water: 1.0 billion tons Pipeline: 1.0 billion tons Airline: 7.5 million tons

(1990 figures)

In the third quarter of 1992, the financial condition of the trucking industry continued to improve. Modest gains in freight volume combined with tight controls over costs helped most motor carriers improve their bottom lines despite a basically stagnant national economy.

The 12 largest U.S. trucking companies and their 1991 gross revenues are listed below.

(in thousands)

1) United Parcel Service (Ohio), Atlanta, GA	\$8,524,001
2) United Parcel Service (New York), Atlanta, GA	\$3,198,740
3) Yellow Freight System, Shawnee Mission, KS	\$2,323,288
4) Consolidated Freightways Corp., Portland, OR	\$2,045,250
5) Roadway Express, Inc., Akron, OH	\$2,041,341
6) Overnite Transportation Company, Richmond, VA	\$799,769
7) ABF Freight System, Inc., Fort Smith, AR	\$783,024
8) North American Van Lines, Fort Wayne, IN	\$752,608
9) J.B. Hunt Transport, Inc., Lowell, AR	\$731,584
10) Schneider National Carriers, Inc., Green Bay, W	
11) Carolina Freight Carriers, Inc., Cherryville, N	
12) Con-Way Transportation Services, Portland, OR	\$534,496

Political Issues:

service Canada, Irucklead (TL) is a shipment over'l One of the most important political and economic issues facing the trucking industry today is President Clinton's Economic Plan for deficit reduction. In the plan, there is a proposal for an energy tax which would affect all industries. The trucking industry would be especially impacted because of their fuel usage which totals 36 billion gallons of fuel annually. This energy tax will be based on British Thermal Units (BTU's).

With the deregulation of the trucking industry, statistical cargo information has become quite scarce. Before deregulation, the Interstate Commerce Commission had sampling done of truck freight. Now, truck cargo sampling is virtually non-existent.

One resource for the trucking industry is Transportation Technical Services (TTS). TTS is a resource for timely and insightful information on transportation trends and developments. TTS Publishes the National Motor Carrier Directory which contains over 26,000 U.S. and Canadian carriers. They also publish the TTS Blue Book of Trucking Companies and the Private Fleet Directory. Their address is listed below.

Transportation Technical Services 500 Lafayette Boulevard Fredericksburg, VA 22401 Tel: (703) 899-9872 Fax: (703) 899-1948 Contact: Thomas Fugee

New England Trucking Industry

Trucks are the principal carriers to and from the ports, railroads and airports, serving local businesses.

Maine, New Hampshire and Vermont have 190 carriers headquartered in their states, Massachusetts has 190 carriers and Connecticut and Rhode Island have 188 carriers. The largest and most important Companies headquartered in New England are St. Johnsbury Trucking Company of Vermont and Cole Express of Maine.

One of the most important issues about the trucking industry in New English the most important issues about the highways and bridges. Highway England is the condition of the highways and bridges. Highway Maintenance is vital to the success of the trucking industry. The routes which connect Maine and Vermont to Canada are especially Crucial to the economies of New England and Canada. Another issue about which transportation planners are concerned is truck weights On secondary roads. For example, Vermont transportation planners are considering limiting truck weights on secondary roads in order to better preserve the condition of those routes.

Listed below are New England for-hire trucking companies which service Canada. Truckload (TL) is a shipment over 10,000 pounds and less-than-truckload (LTL) is less than 10,000 pounds.

B. MAINE

Bluebird Ranch, Inc. P.O. Box 160 Jonesboro, ME 04648-0160 Tel: (207) 434-5223 Contact: James Prout, President

No./Type of units: 30 tractors, 70 trailers (vans, reefers)

Commodities handled: Paper, fish

Type of shipments: LTL; TL

Year established: 1977

States served: states east of the Mississippi River; Canadian provinces of Ontario, Quebec, New Brunswick, Nova Scotia

Kansportation Technic----

C and J Transport, Inc. P.O. Box 267, Western Avenue Fairfield, ME 04937-0267 Tel: (207) 453-7121 Contact: W. Carr Hussey, President

No./Type of units: 50 tractors; 60 trailers (vans, reefers)

Commodities handled: General freight, refrigerated foods, paper products

Type of shipments: LTL; TL

Year established: 1974

States served: 48 states; Montreal, Quebec

Chet's Transport One Lakeview Drive Charlotte, ME 04666 Tel: (207) 454-3300 Fax: (207) 454-8763 Contact: Chester Sherrard, President No./Type of units: 15 tractors, refrigerated, flat, van trailers. Commodities handled: General freight Type of shipments: LTL; TL Year established: 1960 States served: 48 states; maritime provinces of Canada

Cole Express P.O. Box 918 444 Perry Road Bangor, ME 04402-0918 Tel: (207) 942-7311 Fax: (207) 947-8307 Contact: Garret E. Cole, Treasurer

No./Type of units: 2 trucks; 85 tractors; 443 trailers (vans) Commodities handled: General freight Type of shipments: LTL Year established: 1917

States served: MA, RI, NH, VT, ME, NY, CT; Nova Scotia, New Brunswick, Prince Edward Island, Canada

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Merrill Transport Company P.O. Box 739, 1037 Forest Avenue Portland, ME 04104-0739 Tel: (207) 761-2416 Fax: (207) 761-3782 Contact: Clifton E. Halacy, President No./Type of units: 60 liquid bulk; 30 pneumatic; 30 flat beds Commodities handled: Tankers (liquid and dry bulk); petroleum; chemicals; flatbeds. Type of shipments: truckload (TL) Year established: 1929 States served: Northeastern states; provinces of Quebec, Ontario, New Brunswick, Nova Scotia, Canada tates served: states east of the Misslesippi River&ICoxeSaign Northeast Transport, Inc. P.O. Box 619 Union, ME 04862 Tel: (207) 832-7300 Fax: (207) 785-2223 Contact: Bruce Gleason or Jeff Payson No./Type of units: 5 reefers (42'); 3 reefers (45'); 1 straight truck. Commodities handled: Refrigerated transport; fresh or frozen Type of shipments: LTL; TL Year established: 1986 States served: Northeast U.S. R and P Industries, Inc. RFD #1, Box 135 Bridgewater, ME 04735 Tel: (207) 429-8500 Contact: Robert or John Melton No./Type of units: 6 reefers; 1 van Commodities handled: Refrigerated freight Type of shipments: LTL; TL Year established: information not available States served: Maine to Florida; New York to California; Canada

Sunbury America, Inc. P.O. Box 349, Coldbrook Road Hampden, ME 04444-0349 Tel: (207) 862-6000 Fax: (207) 862-2871 Contact: Cheryl Drew, Customer Service No./Type of units: 28 vans; 6 flatbeds Commodities handled: General freight Type of shipments: TL Year established: 1985 States served: 48 states; Provinces of New Brunswick and Quebec, Canada C. MASSACHUSETTS 83 Egleston Road Westfield, MA 01085 Tel: (413) 562-5491 Contact: John Patrick No./Type of units: 5 Mac tractors; 1 48' dry van (second an entering of the states Commodities handled: General freight; paper Type of shipments: TL States served: New England, mid-Atlantic, Ontario, Canada Yest obserilisted ispy Year established: 1973 States served: 48, intratate Massechusette: 3066bel dangda T.F. Boyle 15 Riverhurst Road Billerica, MA 01821-3425 Tel: (508) 663-9068 Contact: Elisabeth Boyle, Vice President No./Type of units: 2 trucks; 35 tractors; 45 trailers Commodities handled: General freight Type of shipments: LTL; TL Year established: 1971 States served: 48 states; Quebec, Ontario, New Brunswick, Nova ^Scotia, Canada

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Forward Express Trucking Company, Inc. 150 Linus Allain Avenue Gardner, MA 01440 Tel: (508) 630-2100 Fax: (508) 632-4944 Contact: Mark E. Plante, President No./Type of units: 32 trucks; 31 dry vans (48' x 102") Commodities handled: auto parts, paper and plastic Type of shipments: TL Year established: 1986 States served: 48 states; Canada ------

John Marchisio Trucking 1274 East Street P.O. Box 558 Pittsfield, MA 01202 Tel: (413) 447-7607 Fax: (413) 445-5319 Contact: John Marchisio

No./Type of units: 6 tractors; 15 trailers (5 flatbeds; 2 stretch flats (75'); 4 single drops; 1 stretch drop; 3 regular lowbeds)

Commodities handled: Heavy and specialized; oversized machines

Type of shipments: TL

Year established: 1973

States served: 48, intrastate Massachusetts; Quebec, Canada

D. NEW HAMPSHIRE

USX International Route 111, Village Square Hampstead, NH 03841 Tel: (603) 329-6200 Contact: Customer Service

No./Type of units: 20 various

Commodities handled: air freight

Type of shipments: LTL

Year established: 1987

States served: 48 states; New England states; Canada through brokerage

E. RHODE ISLAND

C-Line, Inc. 303 Jefferson Boulevard Warwick, RI 02888-3811 Tel: (401) 739-8420 Contact: David L. Roche, President

No./Type of units: 1 truck; 6 tractors; 53 trailers (vans, open tops, flatbeds, reefers)

Commodities handled: General freight, bulk commodities, tanks, ^refrigerated products

Type of shipments: LTL/TL

Year established: 1966

States served: 48 states; Quebec, Ontario, Canada

F. VERMONT

B-D-R Transport, Inc. P.O. Box 888, Route 5 Bellows Falls, VT 05101-0888 Tel: (802) 463-0606 Contact: Nelson E. Withington, President No./Type of units: 5 trucks; 8 tractors; 50 trailers Commodities handled: General freight Type of shipments: LTL; TL Year established: 1962 States served: CA, CO, CT, MA, ME, NH, OR, RI, VT, WA; Canada through an interline carrier

Richard I. Green, Inc. P.O. Box 506 Enosburg Falls, VT 05450-0506 Tel: (802) 933-6693 Contact: Richard Green, President

John Marchisio Trucking -----

No./Type of units: 19 tractors; 31 trailers (vans, reefers, flatbeds, and tanks)

Commodities handled: Ice cream, milk, produce, dry goods

Type of shipments: LTL; TL

Year established: 1985

States served: 48 states; Quebec, Ontario, Canada

St. Johnsbury Trucking Company, Inc. 38 Main Street St. Johnsbury, VT 05819 Tel: (802) 748-7600 Contact: Robert Hussey

16 Jeffrey Avenue Holliston, MA 01746 Tel: (508) 429-5920

No./Type of units: 165 road straight trucks, 996 local tractors; 672 line haul tractors; 620 local trailers; 3,438 line haul trailers; 104 refrigerated trailers.

Commodities handled: General freight te Provident of International Divisio

Type of shipments: LTL; TL 22 tractors: 12,220 trailers; 101 trucks gret thedelidates teey

Year established: 1932

States served: eastern seaboard to Virginia and west to Ohio; Quebec, Ontario, Canada

St. Johnsbury is the eighteenth largest trucking company in the U.S. with \$304,721,000 in 1991 gross revenues. saine Massachugatis New Hampshice

New England terminals:

Maine	Massachusetts	New Hampshire	Rhode Island
Bangor Gardiner	Boston	Manchester	Providence
Presque Isle	Reading Springfield Worcester		

Vermont

Burlington Rutland St. Johnsbury

St. Johnsbury operates 54 terminals in the Northeast, the Canadian Provinces of Ontario and Quebec and Puerto Rico. Commodifies handled: Gameral freight

G. ADDITIONAL TRUCKING COMPANIES

The following is a list of trucking companies not headquartered in New England, but which have terminals in the region and service Canada.

ABF Freight System, Inc. 301 South 11th Street Fort Smith, AR 72901 Tel: (501) 785-8700 Contact: Maryann Byrne

No./Type of units: 14,169 trailers; 1,385 tractors; 100 vans

Commodities handled: General freight; hazardous waste

Type of shipments: LTL; TL

Year established: 1935

States served: 50 states; Canada, Mexico, Puerto Rico, Virgin Islands

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New England terminals:

Maine	Massachusetts	New Hampshire	Vermont
Portland	Boston Brockton	Manchester	Brattleboro
	Salisbury Springfield Worcester		

APA Transport Corporation 2100 88th Street North Bergen, NJ 07047 Tel: (201) 869-6600 Contact: Calvin Groves, Traffic Manager

No./Type of units: 353 tractors; 876 trailers; 368 trucks

Commodities handled: General freight

Type of shipments: LTL; TL

Year established: 1940

States served: mid-Atlantic; Ontario, and Maritime Provinces of Canada

New England terminals: Maine Massachusetts Vermont Bangor Canton Bellows Falls Portland North Reading Burlington Terminals in Montreal, Toronto and Maritime Provinces of Canada Depodities handled: Ganetil Contract Diellastig Carolina Freight Carriers Corporation P.O. Box 697 Cherryville, NC 28021 Tel: (704) 435-6811 Contact: James Justiss, Vice President of International Division No./Type of units: 4,042 tractors; 12,220 trailers; 181 trucks Commodities handled: General commodities, refrigerated and Contact: John Barille, Manager specialized service Type of shipments: LTL; TL Year established: 1932 States served: AL, AR, CT, DC, DE, FL, GA, IA, IL, IN, KY, LA, ME, MD, MA, MN, MO, MI, MS, NH, NJ, NY, NC, NE, PA, RI New England terminals: Maine Massachusetts Rhode Island Vermont Providence Brattleboro Burlington Portland Boston Waterville Brockton Worcester Sugart Pick-up Depai -----5 707 brasinger 133 strainbrad Type of units: 798 tractore: Consolidated Freightways Corporation 175 Lindfield Menlo Park, CA 94025 Tel: (415) 326-1700 Contact: Doug Klein No./Type of units: 10,000 tractors; 29,000 trailers Commodities handled: General freight Type of service: LTL; TL Year established: information not available States served: 48 states; Canada 244

New England terminals:

Cherryville, NC 28021

Maine	Massachusetts	<u>New Hampshire</u>	Rhode Island
Augusta Bangor Portland	Chelsea Chicopee Fall River	Manchester	Providence
301 South Fort Smit Tel: (501 Contact:	Framingham Lowell Pittsfield Woburn	Vermont	
	Worcester		

Commodities handled: General freight; hasardous (1882-1818); (204) Kingsway Transport of America, Inc. 1480 Military Road Kenmore, NY 14217 Tel: (716) 876-2239 Fax: (716) 877-6987 Contact: John Barille, Manager

No./Type of units: 905 tractors; 1,085 trailers, 155 city trucks; 611 converters: 204 forklifts

Commodities handled: General freight

Type of shipments: LTL; TL

Year established: 1950

States served: 48 states; Canadian provinces of Alberta, British Columbia, Manitoba, Ontario, Quebec, Saskatchewan

New England terminals:

Massachusetts forth Hergen, My 57667 mem

Boston Consolidated Freightwoys Corponation of Frent . sevent niviso ittated

Roadway Express 1077 Gorge Boulevard Akron, OH 44310 Tel: (216) 384-1717 Contact: Clark Breuls, Toronto Terminal Manager (416-624-5660) No./Type of units: 9,142 tractors; 28,445 trailers; 279 straight trucks Commodities handled: General freight alb driv bedeisgo alusd-oner ais nolicer Type of shipments: LTL; TL Year established: 1930 States served: 48 states; Canada; Mexico; Latin America liderahip is highly seasonal, due to the too New England terminals: Massachusetts New Hampshire Rhode Island Maine Augusta Providence Concord Boston Bangor Brockton Manchester Portland Fall River Nashua Portsmouth Hyannis Vermont Lawrence Leominster Bellows Falls Pittsfield Burlington Springfield St. Johnsbury Worcester Telebde eerved: Vindinder references and marinitiene TNT Red Star Express 400 Delaney Street Tel: (201) 344-7700 Contact: Pick-up Department No./Type of units: 798 tractors; 1,707 trailers; 133 straight trucks Commodities handled: General freight Type of shipments: LTL; TL Year established: 1932 States served: U.S; Canada New England terminals: Maine New Hampshire Portland Massachusetts Londonderry Boston West Bridgewater 246

XIII. WATER TRANSIT

In recent years, there has been considerable growth in the usage of passenger ferries. The reasons for this growth include the need for alternative transportation for mitigating traffic congestion, and the rise in tourism and activities such as office functions, weddings and parties taking place on boats.

Unless otherwise noted, none of the companies was able to provide any information on planned purchases. All vessels mentioned in this section are mono-hauls operated with diesel gas.

A. MAINE

With the many islands and bays, residents and tourists depend heavily on the ferry operations as well as the private boats. Ridership is highly seasonal, due to the tourist season from late spring to early fall. The state is charged with evaluating and planning ferry and ferry terminal needs along with intermodal development and island shuttle service.

Eleven ferry systems provide service along the Maine coast to the islands and Yarmouth, Nova Scotia. Of these services, 1 is operated by the State, 1 by Casco Bay Island Transit District (a quasimunicipal entity), 3 by Canadian entities, and 6 by private companies. They are described below.

Maine State Ferry Service

This service has experienced 5% growth annually in recent years.

Islands served: Vinalhaven, North Haven, Islesboro, Swans Island, Frenchboro and Matinicus.

Vessels: five vessels, including one new 17-car ferry. All vessels carry both vehicles and passengers. Please see the following page for vessel specifics.

	Nor <u>Hav</u>	the state that when the set of the		t Gov. <u>Curtis</u>	Margaret Chase <u>Smith</u>	Captain Henry Lee
Length	90	· 90'	105'	130'	166'6"	130'
Width	28'7'	' 28'7"	28'7"	36'	40'	36'
Centerline Tonnage	30tons	30tons	38tons	108tons	161tons	112tons
Year Built	1959	1959	1960	1968	1987	1992
	\$163,000	\$163,000	\$188,000	\$450,000	\$3,100,000	\$2,800,000
Shipyard	Wiley Mfg, Co Port Deposit,	Same	Same	New Bern Shipyard James City NC	Atlantic Marine Ft George Island,FL	Washburn & Doughty East Boothbay Maine
Spèed	10knots	10knots	10knots	12knots	14knots	12knots
Passengers	125	125	175	250	226	250
Vehicles	9	9	12	17	30	17
Passenger Seating	26	26	50	62	176	60

Served have Islands served by the Maine State Ferry Service - Vinalhaven, North Haven, Islesboro, Swans Island, Frenchboro and Matinicus Casco Ney Taland Transit District Contact: Jeanette Hemilton

Passels: 2 passanger ferries; 1 banne

Ongoing projects:

- New 17-car ferry under construction erries. The reasons for this growth include the need for

Planned projects:

- New vessel purchases are planned. (No further information is available.)

Contacts:

Ports and Marine Transportation Division State of Maine, Department of Transportation State House, Station #16 Augusta, ME 04333 Tel: (207) 287-2841 Fax: (207) 287-2896 Contact: Robert Elder, Director cry terminel names granne with intermodulat

Maine State Ferry Service P.O. Box 645 517 A Main Street Rockland, ME 04841 Tel: (207) 596-2202 Contact: Walter Wotton

Casco Bay Island Transit District (CBIT)

CBIT runs commuter and tourist boats to the following islands from Portland: Peaks, Little Diamond, Great Diamond, Long, Chebeague and Cliff.

Vessels: 2 double-decker ferry boats with 300 passenger capacity;

- 1 commuter boat with 290-passenger and 1 car capacity;
- 1 three-decker ferry boat with 350-passenger and 13-14 vehicle capacity

Ongoing project:

- Replacement of 1 boat is expected in 1995.

Contact:

orch Haven, Islesboro, Swans Island, Frenchboro and Matinicus Casco Bay Island Transit District Casco Bay Ferry Terminal Commercial & Franklin Streets Portland, ME 04101 Tel: (207) 774-7871 Pat Christian, General Manager William Neily, Operations Manager Shirley Richards, Sales and Tour Director

International Services

The following three ferry services operate between the Maine coast and Canada: y: betweensfauringsannamibin styferradingewiganarymedir or

Lion Ferry International (LFI) P.O. Box 4216 Portland, ME 04101 Tel: (800) 482-0955 President: Henk Pols Territory: between Portland and Yarmouth, N.S. Vessel: The Scotia Prince ferry run by Prince of Fundy Cruise Lines Capacity: 1,200 passengers and 200 vehicles Cranberry Tsles, ME 04525 Season: May to October

and Community of the set of the s

Marine Atlantic Moncton, New Brunswick, Canada B2A 3M3 Tel:(902) 341-7981 Marketing Manager: James Frost Territory: between Bar Harbor and Yarmouth, N.S. Vessel: the Bluenose Capacity: 1,000 passengers and 250 vehicles Monhegan Island Sorvice Pier 8 Boothbay Barbor, ME Conc. Season: year-round

East Coast Ferries, Ltd. (ECF) Deer Island, New Brunswick Tel: (506) 717 0100 Tel: (506) 747-2168 Territory: between Deer Island, New Brunswick and Eastport, and Deer Island and Campobello, New Brunswick during summer months only. Vessels: 2 ferry boats Capacity: 31 passengers. One vessel can carry 12 vehicles. offshore Freight and Passenger Company Season: year-round and seasonal

Private Excursion Boat Companies

Chebeague Transportation Company P.O. Box 7 Chebeague Island, ME 04017 Tel: (207) 846-2700 Tel: (207) 846-3700 Territory: from Cousins Island (connected by bridge to Yarmouth, Maine) and Chebeague Island. Vessels: 2 passenger ferries; 1 barge Capacity: Ferries: 58 and 120 passengers, respectively; barge: 5 automobiles. Season: year-round

Monhegan Boat Line P.O. Box 238 Port Clyde, ME 04855 Tel: (207) 372-8848 Tel: (207) 372-8848 Territory: between Port Clyde and Monhegan Island Lion Ferry International (LFI) Vessel: 1 Capacity: 93 passengers Season: year-round Tel: (800) 482-0955 President: Henk Pols

Beal and Bunker P.O. Box 33 Cranberry Isles, ME 04625 Tel: (207) 244-3575 Contact: David Bunker Territory: between Northeast Harbor, Great Cranberry Island, Little Cranberry Island (Isleford) and Sutton Island. Vessels: 3 passenger vessels; 1 barge Capacities: 40, 49 and 68, respectively; barge: 3 automobiles. Marketing Manager: James Frost Season: vear-round

S17 A Mein Street . R. M. Hiuomisy bus indush iss neswied : yiojiite

Monhegan Island Service Pier 8 Boothbay Harbor, ME 04538 Tel: (207) 633-2284 Contact: Diane Campbell Territory: between Boothbay Harbor and Monhegan Island and Squirrel Island Vessels: 2 ferries Capacity: 150 and 67 passengers, respectively Season: summer months only Season: year-round and seasonal strained the definition of the seasonal se

Offshore Freight and Passenger Company Matinicus Island, ME 04851 Tel: (207) 366-3700 Contact: Richard Moody Territory: between Rockland and Matinicus Island .0. Box 7 Vessel: 1 ferry Capacity: 28 passengers Season: summer months only

Isle au Haut Company Tel: (207) 367-5193 Contact: Captain Herbert Aldrich Territory: between Stonington, Isle au Haut and Duck Harbor Vessels: 2 ferry boats Capacity: 60 and 70 passengers, respectively Season: year-round and seasonal

In Boston, there or is points in Boston Harbor of to Minered add The below-mentioned planned project is not directly related to any of the above operators:

A feasibility study is planned for a Cruise Ferry Service along the North Atlantic coast. Presently, the Maine Department of Economic and Community Development is waiting for grant approval from the Federal Economic Development Administration. The vessel could be a high-speed, 600' to 700' semi-planing ferry. Contact: Mary Fay Lefaver 193 State House- Station 59

Department of Economic and Community Development Augusta, ME 04333 Tel: (207) 287-2656 Tel: (207) 207-2030 Vessele: 3 triple-deckers; 3 double-deckers; 3 double-deckers; 4 double-deckers;

B. MASSACHUSETTS

Numerous ferry and commuter boat services operate in Massachusetts, mainly in Boston Harbor and from Cape Cod to the islands of Nantucket and Martha's Vineyard. Harbor cruises and island ferry business have increased dramatically in recent years and continue to do so. All of the boats carry passengers. Only the Martha's Vineyard Steamship Authority vessels carry freight.

In Boston, there are 3 companies which operate commuter/shuttle service either to other points in Boston Harbor or to Hingham, a town located 20 miles south of Boston. These companies are Bay State Cruise Company, Boston Harbor Commuter Services and Boston Harbor Cruises, with the latter 2 being private contractors of the MBTA and/or Massport.

Water ferry operators/commuter boats/private excursion boats:

Bay State Cruise Company, Inc. 67 Long Wharf Boston, MA 02110 Tel: (617) 723-7800 Fax: (617) 720-5738 Port captain: Richard Moore Territory: Boston Harbor and Hull to Boston (commuter boat) Vessels: 3 triple-deckers; 3 double-deckers Capacity: 149 - 1,100 passengers Season: late spring to early fall except for 1 year-round commuter boat

Boston Harbor Commuter Services 60 Rowes Wharf Boston, MA 02110 Tel: (617) 439-4755 Contact: James Craig Territory: Boston Harbor and Hingham to Rowes Wharf (commuter service) Vessels: 9 Capacity: 28 - 300 passengers Season: year-round They are a private contractor of the MBTA for commuter services. Boston Harbor Cruises 63 Long Wharf Boston, MA 02110 Tel: (617) 227-4320 General Manager: Mark Nolan Territory: Boston Harbor and Long Wharf to Charlestown Navy Yard (shuttle/commuter service) Vessels: 4 Capacities: 200 - 500 passengers Season: Commuter boat is year-round; sightseeing boats are seasonal. They are an MBTA private contractor for the shuttle service.

Logan Airport Water Shuttle Massachusetts Port Authority 10 Park Plaza Boston, MA 02116 Tel: (617) 973-5500 Contact: Robert Reyes Massport contracts with Beacon Management Company which, in turn, leases boats from Boston Harbor Commuter Services. Territory: Boston Harbor (Rowes Wharf to Logan Airport) Vessel: converted Navy vessel Capacity: 28 Season: year-round This water shuttle runs from Rowes Wharf to Logan Airport.

Martha's Vineyard/Nantucket Steamship Authority P.O.Box 284 Woods Hole, MA 02543 Tel: (508) 548-5011 Contact: James M. Murray, Purchasing Manager Territory: Woods Hole to Martha's Vineyard and Nantucket Vessels: 5 double-deckers; 1 double decker; 1 new vessel will be delivered by June 1993; 2 of the vessels are primarily for freight. Capacity: 750 - 1,450 passengers; 30-60 vehicles Season: year-round

Massachusetts Bay Lines 60 Rowes Wharf Boston, MA 02110 Tel: (617) 542-8000 President: William Spence Territory: Hingham to Boston (1 boat only) Vessels: 4 Capacity: 150 - 450 passengers Season: 1 boat is year-round. The remaining boats are seasonal. Odyssey 88 Broad Street, 5th Floor Boston, MA 02110 Tel: (617) 654-9720 Contact: Thomas Johnson Territory: Boston Harbor Vessel: 1 ultra-modern 4-decker Capacity: 800 passengers Season: year-round

Spirit of Boston 60 Rowes Wharf Boston, MA 02110 Tel: (617) 569-4378 Operations Manager: Joseph Silva Territory: Boston Harbor Vessel: 1 ultra-modern triple-decker Capacity: 600 passengers Season: April to January

MBTA Commuter Boat Services are run from 2 locations: Hingham and Long Wharf. For FY 92, there were 232,361 riders from Hingham to Boston. Joseph Feiner is the Manager at the MBTA for Private Contractor Services, including water transit. Please see his address below:

Massachusetts Bay Transportation Authority 10 Park Plaza Boston, MA 02116 Tel: (617) 722-5759 Joseph Feiner, Private Contractor Services

Planned projects:

- Water transit in Boston Harbor as part of mitigation planning for the Central Artery/Third Harbor Tunnel (CA/T) project

The Executive Office of Transportation and Massport are planning to increase water shuttle usage during and after the construction of the CA/T.

One plan for mitigation has already been approved by the Massachusetts Highway Department which is responsible for the CA/T project. They have dedicated funding for 2 new water shuttle stops: Russia Wharf (or a nearby location) and North Station.

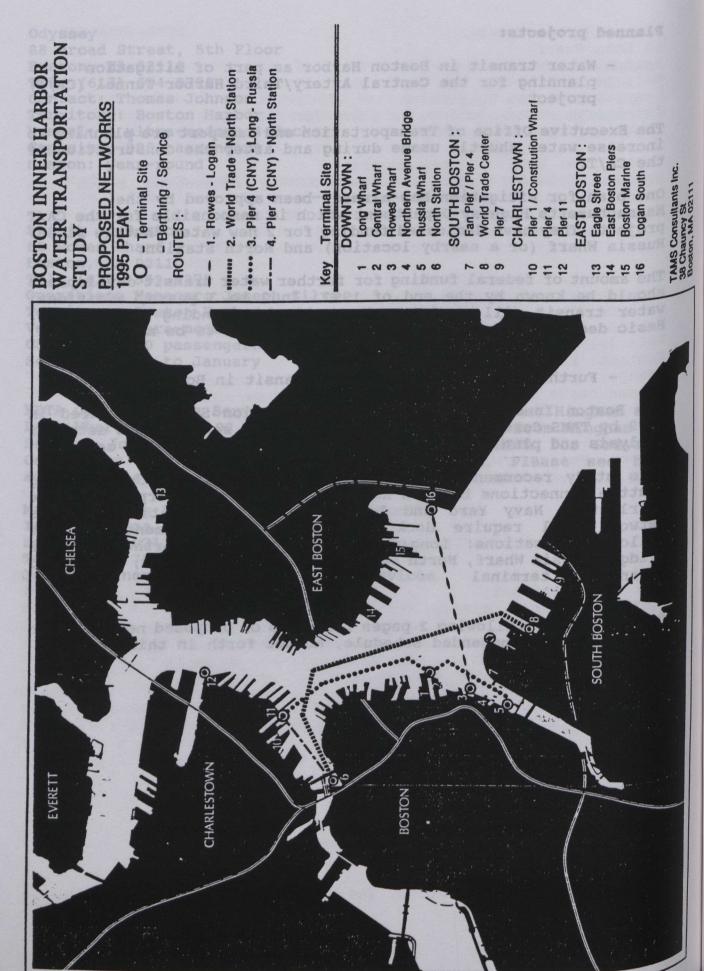
The amount of federal funding for further water transit development should be known by the end of 1993. In 2 to 3 years, additional water transit will go into effect if this funding is approved. Basic decisions such as dock location are yet to be made.

- Further development of water transit in Boston Harbor

The Boston Inner Harbor Water Transportation Study, prepared in 1989 by TAMS Consultants and Charles Norris, sets forth a detailed analysis and plan for water transportation into the 21st century.

This study recommends a network that would expand the existing shuttle connections between Rowes Wharf and Logan Airport and the Charlestown Navy Yard and Long Wharf. Implementation of this network will require dock and terminal improvements at the following locations: Long/Central Wharf, Rowes/Northern Avenue Bridge, Russia Wharf, North Station, World Trade Center, Pier 4 and Logan South terminal

Please see the following 2 pages for a map of proposed networks for 1995 and the Recommended Schedule, as set forth in this study.



	ty: 200 1: May 1 oumpany ticut. tate He ndon, 0 2031 4	Period(1)	(minutes)	Required	Capacity (pass.)	Da11y Boardings	1989 \$	Operating Cost 1989 \$ (4)	Fare Revenue 1989 \$	Annual Operating Surplus (Subsidy) 1989 \$ (4)
	Rowes Wharf-Logan Airport	AM, PM & Off Peak	10 Peak 15 Off Peak	3 Peak 2 Off Peak	49	1,250	\$7.00	\$1,520,000	\$2,310,000	\$790,000
100 - C - C - C - C - C - C - C - C - C -	World Trade Center- North Station	AM & PM Peak Only	12.5	e	49	650	\$1.00	\$ 620,000	\$ 162,000	(\$458,000)
	Pier 4 (Navy Yard)-Long/ AM & PM Central-Russia Mharf(2)(6) Peak Only	AM & PM) Peak Only	12	e	49	1,075	\$1.00	\$ 970,000	\$ 333,000	(\$637,000)
	North Station-Pier 4 (Navy Yard)	AM & PM Peak Only	12.5	8	49	425	\$1.00	\$ 420,000	\$ 106,000	(\$314,000)
5.	Pier 4 (Navy Yard)- Long/Central-Morid Trade Center(2)	Off Peak Only	15	R	49	175	\$1.00	(2)	(5)	(5)
	SYSTEM TOTALS	With Air Without A	With Airport Service Without Airport Service	13 (3) 10 (3)		3,575 2,325		\$3,530,000 \$2,010,000	\$2,911,000 \$ 601,000	(\$619,000)
	 AM Peak = Weekdays only 6:30 - 9:30 PM Peak = Weekdays only 3:30 - 6:30 PM Peak = Weekdays 9:30 AM - 3:30 PM, and 6:30 PM - 7:30 PM Off Peak = Weekdays 9:30 AM - 3:30 PM, and 6:30 PM - 7:30 PM Weekends and Holidays 9:30 AM - 7:30 PM Weekends and Holidays 9:30 AM - 7:30 PM Uning the tourist season, this route is augmented by a 149-passenger Aquarium/NPS Shuttle connecting the Charlestown Navy Yard to Long/Central, and carrying approximately 800 passengers per day (costs are not included). Includes two spare vessels. Includes tosts and revenue for Doute 5 Includes tosts and revenue for Doute 5 	y 6:30 - 9:3 y 3:30 - 6:3 30 AM - 3:30 dd Holidays 9 ison, this ro ying approxi isels. g costs, but	eekdays only 6:30 - 9:30 eekdays only 3:30 - 6:30 Weekdays 9:30 AM - 3:30 PM, and 6:30 PM Weekends and Holidays 9:30 AM - 7:30 PM tourist season, this route is augmented 1, and carrying approximately 800 passe o spare vessels. issel leasing costs, but no terminal lea i Route 3.	PM - 7:30 PM PM ted by a 149-passenger Aquarium/ ssengers per day (costs are not leasing or capital amortization.	assenger / lay (costs ital amori	Aquarlum/NP are not in tization.	S Shuttle cluded).	connecting the	Charlestown Nav;	y Yard to

Purchasing information:

All bids will be advertised in either the Boston Globe, Boston Herald, and the Central Register. Requests for proposals will be sent out.

Purchasing restrictions:

All new vessels and docks must be ADA-compliant and meet the needs of disabled persons. All vessels must be constructed in the U.S., in compliance with the Jones Act, unless Congressional exemption is obtained.

Contacts:

Robert Reyes Massport 10 Park Plaza Boston, MA 02110 Tel: (617) 973-5390 Curtis Davis One South Station Mail Stop 014W01 Boston, MA 02114 Tel: (617) 951-6111

C. NEW HAMPSHIRE

The State does not run any public water transit. All service is operated by private excursion boats. The principal location for water transportation is in Portsmouth. Service is for passengers only. The two largest vessel operators are listed below.

Isle of Shoals Steamship Company
315 Market Street
P.O. Box 311
Portsmouth, NH 03802-0311
Tel: (603) 431-5500
Contact: Captain John Hunnewell
Territory: Portsmouth Harbor, Isle of Shoals and Great Bay
Vessels: 1 double-decker; 1 triple-decker
Capacity: 148 and 348 passengers, respectively
Season: summer months only

Portsmouth Harbor Cruises One Harbor Place, Suite 10 Portsmouth, RI 03801 Tel: (603) 436-0915 Purchasing Manager: Kimberly R. Varney Territory: Portsmouth Harbor Vessels: 1 Capacity: 49 passengers Season: summer months only

D. RHODE ISLAND

The state does not run any public water transit. All service is performed by private operators and occurs mainly in Narragansett Bay (Newport area) and from Point Judith to Block Island.

The state is presently conducting a feasibility study for highspeed vessels to operate from Newport to Providence, Newport to Martha's Vineyard, MA, and Newport to Long Island, NY. The study is expected to be finished by December 1993. King Street Dock Barlington, VT 65491

State Contact:

Contacts: David SchermerhormonMarkatingo Dirers Robert LeTourneau, Supervising Planner for Transit Department of Transportation 372 State Office Building Providence, RI 02903 The Lake Champlain Transportation Company operat Tel: (401) 287-2694

There are several private operators of excursion boats in Newport. Two of the larger cruise companies are listed below.

461 Water Street Warren, RI 02885 Tel: (401) 245-1350 Contact: Captain Andrew Kinzie Territory: Narragansett Bay Vessel: 1 triple-decker Capacity: 360 passengers -----

Spirit of Newport Newport Navigation, Inc. Newport, RI 02840 Tel: (401) 849-3575 Contact: Mary Rolando Territory: Narragansett Bay Vessel: 1 double-decker Capacity: 200 passengers Season: May to October

The company which runs the Block Island ferry is located in Connecticut. It is listed below.

Interstate Navigation Company New London, CT Tel: (203) 442-9553

E. VERMONT

D. REODE ISLAND

The State does not run any public water transit. All service is performed by private operators. The primary location for water transportation is Lake Champlain in Burlington. All vessels, with the exception of the Lake Champlain ferry, carry passengers only. Two of the largest excursion companies are listed below.

Lake Champlain Transportation Company King Street Dock Burlington, VT 05401 Tel: (802) 864-9804 Contacts: David Schermerhorn, Marketing Director William Dumbleton, Port Engineer Territory: Lake Champlain Vessels: 7 double-deckers Capacity: 120-300 passengers; 30-50 vehicles Season: year-round and seasonal, depending on the route

The Lake Champlain Transportation Company operates vessels on three routes. All of their vessels carry both passengers and vehicles. In 1992, their traffic increased by 1% - 2% from 1991. Please see information on the three routes below:

- Grand Isle, VT to Plattsburg, NY. Travel time on this yearround route is 12 to 15 minutes. This crossing is the shortest and has the largest traffic volume. Two primary vessels are used and one back-up. The vessel capacity is for 200 passengers and 45 to 50 vehicles. In 1992, 660,000 vehicles made this crossing. This crossing is mainly for commercial truck traffic, which represents 85% of its business.

- Burlington to Port Kent, NY. Travel time on this seasonal route (May to October) is one hour, the longest of the 3 crossings. Two boats operate in the spring and 3 in the summer. The doubledeckers carry up to 300 passengers and 45 to 50 vehicles. In 1992, 80,000 vehicles made this crossing which is primarily for tourists.

- Charlotte, VT to Essex, VT. Travel time on this seasonal route (May to January) is 20 minutes. Two boats operate from May to October and one boat for the remaining months. The 2 double-deckers carry up to 120 passengers and 25 vehicles. This crossing is primarily for tourists. Spirit of Ethan Allen Green Mountain Boat Lines, Ltd. P.O. Box 2033 South Burlington, VT 05401 Tel: (802) 862-8300 (802) 862-9685 Contact: Michael Shea Territory: Lake Champlain Vessel: 1 double-decker Capacity: 149 passengers Season: May to October

Ridership in 1992 was 25,000 passengers.

XIV. COMPETITION AND MARKET INFORMATION

A. BUS INDUSTRY

Market information

Market size: Information below regarding vehicles delivered in 1991 and vehicles built in 1992 was obtained from the American Public Transit Association (APTA). APTA compiles statistics from U.S. and Canadian public transit systems. The figures are low estimates since not all public transit authorites report their figures to APTA.

	Delivered <u>in 1991</u>	Built <u>in 1992</u>	On order in 1993
Buses	4,942	3,000	2,207
Demand-Response vehicles	674	1,000	273
Trolley buses	114	0	60
Van pool vans	ortatic0 Com	660	ssels on O 19

"On order in 1993" figures are for the first quarter of 1993.

Number of bus manufacturers: 41 U.S. and Canadian companies

Number of bus components manufacturers: Of the larger components, such as engines, there are a few companies which dominate the industry. These companies include Detroit Diesel and Cummins Manufacturing. The smaller components industry is extremely fragmented with thousands of manufacturers.

With the renewed interest in transportation planning and an increased emphasis on public transit, the bus market is likely to have steady, if not slightly increased sales. However, according to industry experts, only two-thirds of the apportioned federal funding was authorized in 1992. Also, according to the ISTEA legislation, federal funds will cover 75% of transportation program expenditures. State funds must cover the remaining 25% of costs. If states cannot fund this 25%, they are not eligible for the federal portion.

Two pieces of federal legislation will force the procurement of new buses for public and private bus operators. As a result of the Americans with Disabilities Act, carriers will be obligated either to convert their vehicles to be ADA-compliant or to purchase new buses which meet the ADA requirements. As a result of the Clean Air Act Amendments, buses must meet new emissions standards by 1994. New bus procurement will most likely be a necessity for carriers because of these 2 legislative acts.

Competition

Companies listed in this section include manufacturers of transit buses, motorcoaches, vans, shuttle and mini-buses, school buses, parantransit vehicles, low-floor vehicles and trolleys.

In recent years there has been significant industry restructuring and consolidation. General Motors Corporation (GMC) ceased bus manufacturing approximately 10 to 15 years ago. GMC sold their bus operation to TMC which was in turn bought by Dial Corporation. Dial Corporation of Phoenix, Arizona, is also the parent company of the Canadian company, MCI. American Motors Corporation no longer manufactures buses. Volvo no longer markets their buses in the U.S. As of late 1992, the MCI Classic bus is no longer manufactured.

Unlike 1991, new buses and new models were introduced in 1992. Below is a list of 41 U.S. and Canadian manufacturers. Certain Companies such as Ikarus USA and Van Hool are owned by foreign Companies.

22) New Goshen 1) Allen-Ashley 23) Neoplan 2) Bluebird 24) New Flyer 3) Cable Car Concepts 25) South Florida Trolley 4) Canadian Foremost 26) Prevost Car 5) Carpenter 27) Orion 6) Champion 28) Specialty Vehicles 29) Sabre Bus & Coach 7) Chance Coach 8) Collins 30) Stratus 9) Coach & Equipment 31) SuperBus 10) Eagle 32) Supreme 11) Flexible 33) Setra (Kassbohrer) 12) ElDorado National 34) Stewart & Stephenson 35) Thomas Built Buses 13) Flexible 14) Gillig 36) Wayne 15) Diamond Coach 37) TMC RTS 16) Girardin 38) TAM-USA 17) Ikarus USA 39) Wide One 18) MCI Classic 40) Turtle Top 19) Murray/Seattle 41) Van Hool 20) MCI 21) Metrotrans

Please see the following 24 pages for information on these companies.

Allen-Ashley



Allen-Ashley Pioneer

Allen-Ashley, Inc. manufactures a complete line of vans and small buses designed for shuttle service, church, tour and many specialty applications.

The product lineup of the Pioneer, Apollo, Atlantis, Gemini and Columbia are all available on either Dodge or Ford chassis.

The Pioneer, newly introduced for 1992, features an interior allowing for multiple paratransit alternatives meeting ADA requirements, while maintaining the maneuverability of a single-wheel rear axle. Conventional wheelchair lifts and "in-entry step" wheelchair lifts are offered. The Pioneer is available in a variety of seating arrangements, with multiple entry door and luggage capacity options.

Spe	cifications
Model	Pioneer
Seating capacity	up to 17
Length	20' Dodge, 21' Ford
Width	
Height	109"
Wheelbase	138" Dodge, 127.6" Ford
Step height	10-12"
Overhang, front	_ 29"
Overhang, rear	77" Dodge, 80" Ford
Headroom	* 75*
Aisle width	*12-18"
Door width, front	30-45"
Door width, rear	46" (wheelchair)
Turning radius	24'
Tire size-LT245 75	5R 16E
Engine-Dodge 360	Ford 351, 460, 7.3L diesel
Transmission-4-sp	d. automatic
Suspension-leaf, s	pring coil
Steering-power	A State of the second second second
Rear axle-6200 Do	odge
Brakes-power disc	front, drum rear
Fuel tank capacity-	
Weight-6,600 lbs.	
GVWR-10,100 lbs	
Air conditioning A	C Industries or Trans/Air
Wheelchair lift optio	
	The state of the second s

For further information, circle No. 201 on the Bus Ride Bus Equipment InfoCard or contact Allen-Ashley, Inc., Dept. B, P.O. Box 532, Evergreen, Ala. 36401; (205) 578-2402, FAX (205) 578-2469.

AmTran

AmTran Corporation's Genesis[©] is a new pupil transportation vehicle offering custom engineering and a complete line of options to produce a bus custom-built for the operating conditions of individual customers.



AmTran Genesis

With its flat face and panoramic windshield, the Genesis enhances the driver's visibility and control of the surrounding environment. Oversized windshield wipers, extra-strong bumpers, handrails at all entrances and exits, and other special safety features abound on the Genesis. Lighted stop arms and high-visibility

Cable Car Concepts



Cable Car Concepts Mini Trolley

Cable Car Concepts, Inc. produces the Mini Trolley, a colorful vehicle that has reportedly increased ridership in several communities.

The Mini Trolley features a solid oak interior, brass trim, etched glass and a clanging bell. Seating for 18 adult passengers is standard. A stereo tape deck and PA system are also part of the basic package.

The vehicle is mounted on a GMC chassis with a 454-cubic-inch V8 gasoline engine and a 3-speed automatic transmission. An easy-access swing door at the front of the vehicle simplifies maintenance.

Air conditioning, wheelchair lift exterior speakers, diesel power and 265 flashers give the Genesis extra visibility, even in adverse weather. F

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Cooperatively designed by the chassis specialists at International[®] and AmTran body engineers, the Genesis meets or exceeds all federal, state and provincial safety standards.

· · · · · · · · · · · · · · · · · · ·	
Specificat	tions
Model	Genesis
Seating capacity	72
Length	350"
	- 120*
Height	the second state of the se
Wheelbase	196
Overhang, front	95°
Overhang, rear	97"
Interior headroom	.74"
Tire size	11 R 22.5H/G
Engine	DTA 360, DT, 466
Transmission-Allison AT	-545 4-speed auto
Steering	power
	Spicer 1550;
Drive axle	
Brakes	hydraulic
Fuel tank capacity	65 gal.
Underfloor baggage cap.	21.75 cu. ft
the day was the	A REAL PRINTING AND

For further information, circle No. 203 on the special Bus Ride Bus Equipment InfoCard or contact AmTran Corporation, Dept. B, Hwy-65B, Conway, Ark. 72032, (501) 327-7761, FAX (501) 327-3156.

a rear luggage compartment are available as options.

Cable Car's Mini Trolley has been built to Federal Motor Vehicle Safety Standards.

Specifica	tions
Model	Mini Trolley
Seating capacity	18-22
Length	20'10"
Width ·	7'8"
Height	9'2"
Wheelbase	-137"
Step height	14"
Overhang (front/rear)	48"/65"
Interior headroom	74"
Door width	30
Aisle width	16
Turning radius	26' GMC 454 CID
Engine	GM automatic
Transmission	GM autome
Suspension	leaf spring
Steering	Saginaw Dana 70
Drive axle	In advantic the
Brakes	LT215 85R16D
Tire size	40 gal.
Fuel tank capacity GVWR	10 300 lbs.
Air conditioning	make optional
Wheelchair lift option	manoop
wheelchan in option	and the second second

For further information, circle No. 205 on the special Bus Ride Bus Equipment InfoCard or contact Cable Car Concepts, Inc., Dept. B, P.O. Box 6500, Deltona, Fla. 32728; (407) 860-0333, FAX (407) 574-3600.

Blue Bird

Blue Bird Body Company's ^{90al} of providing greater durability and service longevity in a Mid-size bus has been realized with the introduction of its Q-Bus.

Available in both the QBFC 2701 (27 feet, 1 inch long) forward-engine, and the QBRE 2903 (29 feet, 3 inches) or ³⁷⁰⁵ (37 feet, 5 inches) rearengine models, the Q-Bus is deally suited for service in such applications as airport shuttle, campus transportaton, church travel, hospital or retirement center transit,

Private industry, rural community tranand single-point tour operations. The Q-Bus is built to stand up to heavy usage in these applications over the ong haul, according to Blue Bird.

With more than 200 million miles in actual fleet operations, the proven Blue Bird chassis serves as the backbone for the Q-Bus. Component integration, including the use of Cummins diesel engines and Allison transmissions, is carefully engineered. Heavyduly front and rear axles are used, and



the chassis frame incorporates 14 eross members. Air-ride suspension

and air brakes are also available. Construction of the Q-Bus body Consists of one-piece arch bows, full-Iside Side States of the state ^{side} and roof panels, full-width "U" ^{channel} galvanized floor panels, and



Blue Bird Q-Bus

a weather-sealed plywood subfloor. Combined with a full complement of customer-specified seating, floorplan, restroom, rear/under luggage compartments and other equipment options, the Q-Bus can meet many

specific usage requirements.

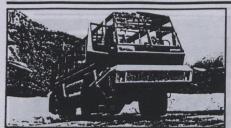
Blue Bird provides an extensive local parts and service network backed by company parts inventories, complete documentation, and expert technical support.

Specifications

TODAL TRANSPORT	27' Forward E	ng. 37' Rear Eng.	
Model	24	36	24
Seating capacity	27'	37'/449"	29'/352"
Length	96"	96"	96°
Width	120"	120"	120"
Height	146"	249"	151"
Wheelbase	13"	13"	13"
Step height	81.48"	81.48"	81.48"
Overhang, front	102.53"	118.5"	118.5
Overhang, rear		76"	76"
Interior headroom	76"	15°	15"
Atolo width	15"	27"	27"
Door width (clear opening	27"	40.8'	27.1
Turning radius (CC)	26.5'	44.8'	31.2'
Turning radius (W-W)		44.0	CALL OF CALL OF CALLER
Tire size-10Rx22.5G		- 4- 020 ha	
Tire size—10Rx22.5G Engine—Cummins 6BTA5	.9 diesel, 160 h	p to 230 np	The south and see
		18643	
Transmission—spring or air Suspension—spring or air	ride	and the second	and the second
Suspension Spins		to to search o	11:37 GOOD 1901
Suspension op TAS 65 Steering—Ross TAS 65	4.33:1	4.44:1	4.44:1
Drive axle-Dana Opice	k hydraulic	Rockwell S-cam air	Rockwell S-cam air
Brakes 60 gal	100 gal.		AND PROVE THE PARTY OF THE
Brakes Fuel tank capacity—60 gal	27,000 lbs.	30,000 lbs.	27,000 lbs.
GVWB	21,000		
underfloor baggage	38.8 cu. ft.	90.5 cu. ft.	47.1 cu. ft.
capacity Air conditioning—78,000 B	TU 106 000 B	TU, 120,000 BTU	
Air conditioning-78,000 B	10, 100,000 -		
Wheelchair lift option			

For further information, circle No. 207 on the special Bus Ride Bus Equipment For further information, and Body Co., Dept. B, P.O. Box 937, Fort Valley, Ga. 31030; InfoCard or contact Blue Bird Body Co., Dept. B, P.O. Box 937, Fort Valley, Ga. 31030; (912) 825-2021, FAX (912) 825-0315. 266

Canadian Foremost



Canadian Foremost Terra Bus

Canadian Foremost, Ltd. manufactures the Terra Bus, a specialized vehicle which can be used to transport passengers in on-road and off-road situations.

Hills, mountains, swamp and other terrain which would pose problems for standard vehicles, are easily negotiated by the Terra Bus. Special equipment includes a 252-hp Detroit Diesel 6V92TA engine, Clark 34000 Series Powershift transmission and large, low-pressure Terra tires.

Tours of Alberta's Columbia Icefields are given regularly by Brewster Transportation & Tours in the 56-passenger Terra Bus.

Carpenter

Five vehicle models designed for safe, efficient pupil transportation are built by Carpenter Manufacturing.



Carpenter Coach

Classmate, with a maximum capacity of 22, to the Coach, which holds up to 90 seated passengers. Other models in the line include the Counselor, the Classic, and the Cadet.

The Coach is the result of Carpenter's recent acquisition of Crown Coach, Inc., and is said to combine the best features of both manufacturers to produce Carpenter's biggest, safest and most powerful school bus to date.

ModelTerra BusSeating capacity56Length42'8"Width11'10"Height12'8"Wheelbase20'10"
Length 42'8" Width 11'10" Height 12'8" Wheelbase 20'10"
Width11'10"Height12'8"Wheelbase20'10"
Height 12'8" Wheelbase 20'10"
Wheelbase 20'10"
Step height
Overhang, front
Overhang, rear
Interior headroom 74"
Aisle width
Door width 28.5
Turning radius at body comer '55'
Tire sizes-66x43:00x25-PR Goodyear Terra
Engine—DDC 6V92TA DDECII (rear mounted)
Transmission-Clark 34000 Series Powershift
Suspension-leaf spring (f); walking beam (r)
Steering-semi-integral hydraulic power assist
with link boost
Rear axle-Rockwell Planetary
Brakes-air-over-hydraulic front, air rear drums
Fuel tank capacity-72 U.S. gal.
Weight-43,000 lbs. (55,000 lbs. GVWR)
For further information, circle No. 209 on
the special Bus Ride Bus Equipment InfoCard

Specifications

the special Bus Ride Bus Equipment InfoCard or contact Canadian Foremost Ltd., Dept. B, 1616 Meridian Road N.E., Calgary, Alberta T2A 2P1; (403) 272-3322, FAX (403) 273-8084.

Sp	ecifications	
Model	Counselor	Coach
Seating capacity	48-89	72-90
Length	29'2"-40'	29'2"-40'
Width	96*	96"
Height	123"	133"
Wheelbase	146-228"	263"
Step height	16"	16"
Overhang, front	83.38"	96"
Overhang, rear	161.62	121*
Interior headroom Aisle width	77" 12"	75"
Door width	30.5"	12"
Turning radius	25-38	40'
Tire size	11x22.5 F	12R22.5 H
Engine		Cummins
Ligino	6BT5.9	diesel, rear,
	diesel	
Transmission	Allison	Allison
	AT545	
and a start day	4-spd.	4-spd auto
Suspension, front	multi-leaf	progressive
and the second second	spring	rate spring and
Suspension, rear		
Steering Sheppan	d(M-100P) R	ossTAS65007
Drive axle	Eaton	Rockwell
a contraction of a state of the	19050-S	RC-23-160
Brakes air,	ont hydraulic	air
Fuel tank cap. 60) gal. 100 g	al. diesel
Fuel tank cap. 60	200 g	al. methanol
GVWR up	o to 34,200	up to 37,400
Underfloor bag. ca	p.—17.21 to 2	21.49 cu. ft.
Air conditioning—o		
Wheelchair lift option	on	1312
	1	The wanter of

For further information, circle No. 211 on the special Bus Ride Bus Equipment InfoCard or contact Carpenter Manufacturing, Dept. B, P.O. Box 128, Mitchell, Ind. 47446; (812) 849-3131, FAX (812) 849-5727.

Champion

The Champ, a 14-passenger small bus which does not require a Commercial Driver's License, is the latest addition to the product line of Champion Motor Coach Inc.



The Champ by Champion

The Champ is well suited for use as an airport parking, rental car or hotel shuttle, as well as government and municipal transit applications. Its spacious interior and sturdy steel-cage construction also make it ideal for churches and nursing homes. An optional paratransit version van meets the requirements of the Americans with Disabilities Act (ADA).

Chevrolet's P-30 Commercial chassis, powered by a gas or diesel engine, is used for the Champ.

Champion's product line also includes the Centurion, Challenger and CTS Mid-Size bus series, all designed for a wide variety of uses.

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	Specifications	
Model	Champ	Challenge
Seating cap.	14 max.	13-29
Length	21'	20'-28'
Width	84"	96"
Height	112"	109"
Wheelbase	133"	158", 176
Step height	11"	11
Interior headrm.	77"	76"
Aisle width	23"	16 1/2"
Door width	24", 32"	32"
Tire size	LT235/85R16E	LT225/
	the states of the second	75Rx16D
Engine	Chev. 4.3L	Ford 351
1. 1. S	V6 gas	460, 7.3
	5.7L V8 gas	Chev. 350
and the second	6.2L V8 diesel	ACA
Transmission	4 sp. w/OD	Ford EOD
	indep. coll spring	coil spring
the state of the	rear multi-leaf	leaf
Steering	power	power
Drive axle hy		full floating
Brakes, front/rea	ar-disc/drum	· Arental A
Fuel tank cap.		36 gal.
Air conditioning	A/C Ind.	A/C Ind.
Wheelchair lift o		
the set of the second second second second	The second se	and the second second

For further information, circle No. 213 on the special Bus Ride Bus Equipment InfoCard or contact Champion Motor Coach, Inc., Commercial Vehicle Div., Dept. B, P.O. Box 158, Imlay City, Mich. 48444; (313) 724-6474, (800) 776-4943, FAX (313) 724-1844.

Collins



A full line of small to medium-sized buses for the transit, "on demand" dial-up service, tour and airport/hotel shuttle segments of the bus industry is

Produced by Collins Bus Corporation. From the 10-passenger Citivan to the 31-passenger 2000 coach, the

Collins line is one of the broadest in the industry. All models can be built to meet ADA specifications.

Collins' full-body roll-cage construction and crash-tested seats make its buses among the safest on the road.

a second s	opeonicationa	
Model	THE REAL PROPERTY OF THE PROPERTY OF THE REAL PROPE	
Seating capacity	Civitran	Diplomat
grapacity	15 amb. or 8 amb.	25 amb. or 16 amb.
LAD	(with two wheelchairs)	Le anie. er re anie.
VICHL	240"	290"
IBIAL	82"	96"
Vheelbase	107"	
heelbase	138"	112"
^{leg} lbase lep height		176"
leadroom	10.5"	10*
usle width	73"	78"
oor width	. 14*	14"
urning radius	30"	30"
at hadius	25'1"	29'11"
Ito 4y corner	30'10"	Lo II all a second
inoi-	LT235/85Rx16E	LT215/85Rx16
BI	7.3L diesel,	
ransmission uspension		7.3L diesel,
ansmission	7.5L gas	Coact and a second
uspension	Ford E40D	Ford E40D
	coil (front)	coil (front)
leering	leaf (rear)	leaf (rear)
^{ee} ring ^e ar axle ^{fake}	Ford power	Ford power
akee	Dana 61-1	Dana 70-2U
hydraulic power assis	and a contraction of the second street	
^{var} axle fakes—hydraulic power assis lei tank cap. ^{eight}	36 gal.	36 gal.
and	50 yai.	8,150 lbs.
Conditioning Fand AVO	5,860 lbs.	I and the function in the
ir conditioning—Ford, A/C Inc heelchair lift option	lustries	yes
int option	yes	,

Specifications

For further information, circle No. 215 on the special Bus Ride Bus Equipment InfoCard or Pupper 2916 Hutchinson, Kan. 67504-2946: ^{contract} Collins Bus Corporation, Dept. B, P.O. Box 2946. Hutchinson, Kan. 67504-2946; ⁽³¹⁶⁾ 660 ⁽³¹⁶⁾ 662-9000, FAX (316) 662-3838.

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Chance Coach

The Chance RT-52 is a small bus sized right to be the primary vehicle in small- to medium-sized metropolitan areas, for feeder routes, rural and suburban transit, and park-and-ride service. straps and drop-down pocket windows lend authenticity, along with a centermounted headlight and a distinctive bell. Seats are made of hand-finished Philippine mahogany, with each having a custom-cast brass plaque.



Chance Coach's RT-52

Durable as a big bus but with greater efficiency, the RT-52 goes the same distance as a 40-foot bus on approximately half the fuel, says Chance Coach.

Seating accommodates 19 to 23 passengers, depending on the use of two available wheelchair tiedown positions. A heavy-duty, Chancedesigned 170-inch transit chassis offers a smooth ride and long life.

The RT-52 also serves as the power module for the Chance Articulated Modular Transit Vehicle (AMTV). With the addition of up to two 30-passenger trailing modules, varying passenger loads can be accommodated efficiently.

Chance Coach, Inc. also manufactures the Alamo City Streetcar, a bus styled after a turn-of-thecentury trolley with the same chassis as is used in the RT-52.

Heavy-duty Rockwell axles are featured, along with air ride suspension boasting four air springs on each axle. For increased brake life, largerdiameter Cam-Master[®] brakes have also been incorporated.

Aesthetically, the Alamo City Streetcar captures the same craftsmanship as its old-time predecessors. Cast brass fittings, heavy leather grab The Sunliner, an articulated openair tram, is another Chance Coach product.

Coach & Equipment

Coach & Equipment's Guardian is a 15-16 passenger bus built on a single-rear-wheel van chassis.

It features Guardrail construction for passenger security. The sidewall design uses a 16-gauge rail that extends the full length of the bus. All seats are mounted to a ¹/₈-inch-thick rail extending the full length of the bus.

Chevrolet, Ford and Dodge, with their variety of engines, can be chosen as the chassis.

A number of seating arrangements are possible, including luxury seats for tour and other special services. A wheelchair lift is mounted at the rear of the vehicle for customers wishing to use it for paratransit applications.

Coach & Equipment has been building vehicles for more than 35 years, and more than 5,000 of its buses are on the road today.

For further information, circle No. 219 on the special Bus Ride Bus Equipment InfoCard or contact Coach & Equipment Mfg. Corp., Dept. B, P.O. Box 502, Penn Yan, N.Y. 14527; (315) 536-7517, FAX (315) 536-0460.

S	pecifications	Oibi
Model	RT-52	Alamo City
Model	AMTV Power	Streetcar
Seating capacity	19-23	24
Length	25'11"	25'9"
Width	96*	102"
Height	124" (w/rear AC)122"
Wheelbase	170"	170"
Step height, (f)	14"	13"
Overhang, front	47.5"	51"
Overhang, rear		88"
Headroom	75.5"	86"
Aisle width	20"	19.5"
Turning radius	26'10"	27'
at hody corner	29'1"	30'
		d 22.5
Transmission-	Allison AT545, MT	643, MIDO
Suspension—a	ITTUE	
Steering-Ross	Integral Power	
Rear axle-Roo	kwell H-172 QX	
Brakes-air		
Fuel tank cap.	75 gal.	59 gal.
		tional
Air conditioning	-make and loca	tion options
Kneeling feature	e option	
Wheelchair lift o	option	

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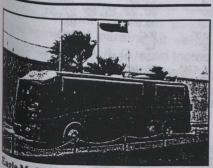
For further information, circle No. 217 on the special Bus Ride Bus Equipment InfoCard or contact Chance Coach Inc., Dept. B, P.O. Box 12328, Wichita, Kan. 67277-2328; (316) 942-7411, FAX (316) 942-7416.



Coach & Equipment Guardian

Specifications

Model	Guardian
Seating capacity	15-16
Length	247"
Width	78"
	110"
Height	138"
Wheelbase	10-12"
Step height	30"/79"
Overhang (front/rear)	
Interior headroom	75"
Door width	24" or 32"
Aisle width	18" avg.
Turning radius Engine—Ford, Chevy, Do	23.9' mines an
Turning radius Engine—Ford, Chevy, Do Transmission—all availab Brakes	dge/all engineton var
Transmission-all availab	ole in OEM
Brakes	hydraulic
Wheel size	16-
Fuel tank capacity	35 gal. avg.
GVWR	35 gal. 9,500 lbs. avg.
Air conditioning—custom	er choice
Air conditioning-custom	
Wheelchair lift option	



agle Model 15

Eagle

Eagle Coach Corporation Manufactures its Model 15 coach in 35. 40- and 45-foot lengths to suit a Variety of applications.

The Model 15 is Eagle's standard 102-inch-wide coach, featuring ^{Iorsilastic®} suspension, a powerful ^{Jual} air conditioning and heating ^{System,} and a Cor-Ten[®] steel epoxy-^{Coated} frame.

The 35-foot coach is powered by Detroit Diesel's 6V92TA DDEC-II engine, while the 40-footer boasts Detroit's 8V92TA, also equipped with DDEC-II. A choice of Allison automatic and Spicer manual transmissions are available. A Jacobs (better mown as "Jake") engine brake is also available as an option.

del	Specific	cations
ating capa ngth dtb	S	15
ngth cap	acity	47
igth cap		40'
ight		102"
9ht Pelbase		136.5"
Pheight		285.5"
		16.5"
		76.25"
or width		14" on
ning rod		26"
hing radiu	JS	45.5' .
line pp	bouddle a	45.5' . 11x24.5 tubeless A standard, 8V92TA ne brake also optional
otional	EC 6V92T/	A standard, 8V92TA
nsmission Ja	acobs engir	ne brake also optional
Instant	Fuller T	11x24.5 tubeless A standard, 8V92TA ne brake also optional -1160F 5-spd. nical standard; or HT755 ATEC
SON HT	esn mecha	nical standard;
pension	41 ATEC C	or HT755 ATEC
erino	-B.F. Good	drich "Torsilastic"
axia	nydraulic	power
res_P_	Hockwell S	162
lank	idix air	
		U.S. gal.
ondition	00 lbs.	
elchair	ng-Carrie	r O5G
.an II	Dacity—154 700 lbs. ng—Carrie ft option	
orfin		
sporthe	er informat	ion. circle No. 221 on
Contral	Bus Ric	tion, circle No. 221 on de Bus Equipment le Coach Corporation, , Brownsville, Texas
L. porc	ontact Fag	le Coach Corporation
20, P.O	Box 1110	de Bus Equipment leCoachCorporation, , Brownsville, Texas
: (512	50.1 4119	, Brownsville, Texas

^{520;} P.O. Box 4119, Brownsville, Texas ^{520;} (512) 541-3111, (800) 421-4217, ^{541-9661.}

ElDorado National

ElDorado National Co. is the new organization resulting from ElDorado Bus's acquisition of National Coach Corporation late last year.

Most models offered by both companies prior to the acquisition are still part of the new company's product line. The all-new luxury Aerotech and the economical Hawk have been redesigned to increase usable interior space by more than 10 percent while increasing the vehicle's overall exterior dimension by less than 2 percent.

The RE offers big-bus durability and luxury at a fraction of the cost. Utilizing ElDorado's own chassis, the RE is built from the ground up to serve any transit, shuttle or over-the-road application.



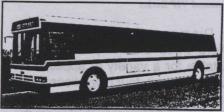
ElDorado National Co. Aerotech

	Specifications	
Model	Aerotech Hawk	Escort RE
Seating cap.	15-29	20-33
Length	20',22',24',28'	28'9", 32'
Width	96"	96"
Height	113"	116"
Wheelbase	138", 158", 176"	139", 178"
Step height	10¾"	13"
Overhang (front)	30"	30"
Overhang (rear)		116"
Interior headrm	80"	76.5"
Aisle width	variable	variable
Door width	30", 36", 40"	35"-42"
Turning radius	25.1'-31.05'	29'-32'
Tire sizes	L225/75R16D	GR-22.5 F
Engine Ford 4	60 CID gas Cui	mmins 5.9L
7.3L di		sel, rear
		les CNG, (r)
	Ford E40D Allis	
Suspension	coil (f), leaf (r)	
Steering	Ford, power	
Drive axle	Dana 70-2U,	Rockwell
		RS-15
Brakes-hydraul		100
Fuel tank cap.	36 gal. (nominal)	100 gal.
GVWR 10,300-1		
Underfloor bag.		yes
Air conditioning-		
Wheelchair lift op	nion	

For further information, circle No. 223 on the special Bus Ride Bus Equipment InfoCard or contact ElDorado National Co., Dept. B, 304 Ave. B, Salina, Kan. 67401; (913) 827-1033, FAX (913) 827-0965. **270**

Flxible

The Metro[™] Advanced Design Transit Coach is produced by the Flxible Corporation, in lengths of 30, 35 and 40 feet.



Flxible Metro 40

A wide range of engine and transmission combinations is offered. Alternative-fuel technology—including CNG, LNG and methanol—is also available.

Today's Metro represents nearly 80 years of transit manufacturing experience. Flxible backs its product with excellent training and service support, and one of the industry's most extensive service parts networks.

Specifications				
Model	Metro 30	Metro 35/		
したでは認知		Metro 40		
Seating cap.	29	37/45		
Length	30'	35'/40'		
Width	96-102"	96-102"		
Height	120-128"	120-128"		
Wheelbase	179"	239"/298"		
Step height,(f)	14.5"	14.5"		
Step height, (r)	14.2"	14.6"/14.8"		
Overhang, (f)	82.5"	82.5"		
Overhang, (r)	98.5"	98.5"		
Headroom	78.5"	78.5*		
Aisle width	96" 21.25"	21.25" max		
Aisle width	102" 27.25"	27.25" max		
Door width, (f)	35"	35"		
Door width, (r)	32"	32"		
Turning radius		and the second		
at body corner		36.5'/43.9'		
Tire size	12.5x22.5	12.5x22.5		
Engine-Cummin	s LIA-10 (D	iesel, LNG or		
CNG); Cummin	s C 8.3; Detroi	t Diesel 6V92T		
DDEC; DDC 6	L/1; DDC M	ethanol; DDC,		
LNG or CNG; D	DC 50 Series			
Transmission-All	ISON V-731 AT	EC; Allison VH-		
731 w/retarder; ZF HP 500/590		DH w/retarder;		
Suspension-air	wretarder			
Steering-Sheppa	rd nower			
Rear axle—Rocky				
Brakes—air				
Fuel tank cap12	5/135 gal			
Weight, empty		26,400 lbs./		
in origina, ornipay	20,000 103.	27,850 lbs.		
Air conditioning-1	hermo King	Sutrak Carrier		
Air conditioning—Thermo King, Sutrak, Carrier Kneeling feature option				
Wheelchair lift opti				
in opti	Contraction of the local distance			

For further information, circle No. 225 on the special Bus Ride Bus Equipment InfoCard or contact The Flxible Corporation (Bus), 970 Pittsburgh Drive, Delaware, Ohio 43015; (614) 362-2600, FAX (614) 362-2658.

Diamond Coach



Diamond VIP Series

Diamond Coach Corporation offers three distinct product lines, suitable for a variety of applications such as transit, tour operations, hotel airport shuttle, and other services.

Diamond's largest vehicles are the DC Series, consisting of the DC 2700 (length 27 feet) and the DC 3102 (length 31 feet, 2 inches).

To the front and sides of the bus. the driver has an unobstructed. panoramic view through oversize win-The DC's interior can be dows. equipped with seats in several styles, from standard low-back bench seats to high-back recliners and non-

recliners.

The MB-200 offers big-bus features and convenience in a small-bus package, according to Diamond. This unit will seat up to 13 passengers in conventional configurations, or offers a variety of floor plans including a wheelchair lift and up to four tiedown positions. Many other interior and exterior options are offered.

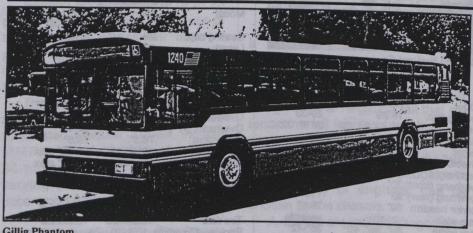
Another definite advantage of the MB-200 touted by Diamond is that a commercial drivers license (CDL) is not required to operate it.

Diamond Coach also offers the VIP Series, a line of mid-sized vehicles suitable for many applications. VIP Series units are available in lengths of approximately 21, 23, 25 and 28 feet, seating from 17 to 29 passengers.

	and the second s		
		Specifications	
Model	MB 200	VIP Series	DC 2700/
Contine	10		DC 3102
Seating	13	12-29	18-35
Length	20'	20', 22', 25', 29'	27', 31'
Width	83*	95.5"	96"
Height	110"	9'4"	9'5"
Step height	12"	12"	12"
Wheelbase	138"	138", 158", 176"	158 1/2", 208"
Headroom	75 1/4"	751/4"	751/4"
Aisle width	15"	15"	15"
Door width	36"	36"	36"
Tire size	LT245/75R	LT215/85Rx16D	8 19 5E
- The second	16DBSW		0.10.01
Engine	(Ford, die	sel or gasoline)	Cummins B5.9
Link MIN L		forward	Ourininii 5 DO.0
Transmission	Ford E40D	Ford F40D	Allison 542
Suspension	Ford	air	Oshkosh
Steering		Ford power	
Drive axle	Ford	Ford	Saginaw power
Brakes-hvd	raulic nowo	, old	Dana HD70
ruel tank can	35 gal	35 gal.	00
GVWR	10,000	12,400	90 gal.
Underfloor ba		CONTRACTOR STREET, THE AREA	16,000/18,000
Air cond.	(Ford plus	otherel	24.4 cu. ft.
A State Barris	thord plus		Sanden 709,
A/1	A STATISTICS AND T		plus others

Wheelchair lift option

For further information, circle No. 227 on the special Bus Ride Bus Equipment InfoCard or contact Diamond Coach Corporation, Dept. B, P.O. Box 489, Oswego, Kan. 67356; (316) 795-2191, FAX (316) 795-4816.



Gillig Phantom

The Gillig Corporation produces the Phantom, known as the "transit fleet work horse," in 30-, 35- and 40foot lengths, and 96- and 102-inch widths in standard transit, suburban and shuttle configurations.

Gillig has a wide range of experience with clean air technology, having built and delivered buses with the following clean air systems: methanol, ethanol, ethanol fumigated, CNG, LPG, and particulate trap (fuel fired

and electric), and was scheduled to deliver LNG-powered buses last month.

Gillig, a 100 percent Americanowned and operated company, continues its 100-plus-year tradition of quality, integrity and customer satisfaction by providing reliable and cost-effective buses that exceed the ADA requirements and the clean air regulations-an optimization of quality, value and performance.

Spec	ifications
Model	Phantom
Seating capacity	31-47
Length	30', 35', 40'
Width	96", 102"
Height	120"
Wheelbase	173"-270"
Step height, front	15"
Step height, rear	16"
Overhang, front	91.5"
Overhang, rear	116"
Headroom	78.5"
Aisle width	20-26"
Door width, front	37"
Door width, rear	
Turning radius	30,"-57"
Tire size	33'-44'
Engine	12.5x22.5
Lighte	DDC 6V92TA,
Transmission	Cummins L10
ransmission	Allison HT747 or HTB
Succession in the second	748 4-speed ZF;Voith
Suspension	air
Steering	Ross HFB 70 integral
Axles	Rockwell
Brakes	'S' cam
Fuel tank cap.	125 gal
Weight	22-26,000 lbs.
Air conditioning	Thormo King
Kneeling feature, when	elchair lift and trans
the second second second	

For further information, circle No. 229 on the special Bus Ride Bus Equipment Information Card or contact Gillig Corporation, Dept. B, P.O. Box 3008, Hayward, Calif. 94540-3008; (510) 785-1500, FAX (510) 785-6819.

MCI CLASSIC

Girardin

The Futura "S" is an all-new, re-engineered paratransit vehicle manufactured by A. Girardin Inc.

Many unique features make the Futura "S" suitable for any paratransit operation. One of these unique features is an independent body electri-



Girardin Futura "S"

cal system. The unique fiberglassreinforced plastic interior sidewalls feature a padded vinyl ceiling. The Futura "S" also features extensive use of galvanealed steel for the roll cage and exterior panels.

In addition to these many features, Girardin also employs the latest technology methods for corrosion Protection.

Girardin is presently marketing the ^{Futura} "S" throughout the U.S. and ^{Canada.}

S	pecifications	
Model Seating capacity Length Exterior width Height Wheelbase Sep height Interior headroom Door width Aisle width Engine Iransmission Sleering Bearing	Pecifications FordE350/ Futura "S" 6 ambulatory/ 4 wheelchair occuparties 20' 86" 9' 138" 11" 74" 24" 22" 7.3L diesel/ 350 ci. gas 4-speed/ automatic overdrive power hydraulic	
Algening Algening Makes Velsize Veltank capacity	4-speed/ automatic overdrive power	

For further information, circle No. 231 the special Bus Ride Bus Equipment industry or contact Ron Campbell, Girardin runn on dville, Quebec J2B 6V 19) 475-9622, FAX (819) 475-9633.

Ikarus USA-

Five low-floor, rear-engined transit buses are offered by lkarus USA. The buses have virtually the same modular body elements being utilized in the manufacture of 35-, 40and 45-foot two-axle and 55- and 60foot articulated models.



Ikarus 436 articulated

Features of the more than 600 buses sold in the U.S. market to date include low floor and extra-wide doors for easier patron accessibility, fullcradle-mount propulsion system for lower life-cycle costs, entrance-door kneeling system, a passive front-door wheelchair lift, and a variety of engines and transmissions.

Ikarus USA has developed the technology to utilize exhaust aftertreatment systems, as well as alternative-fuel engines, in its buses.

Specifications			
Model	416	436	
. Seating capacity	46	68	
Length	40'	59'2"	
Width	102"	102"	
Height	120"	120"	
Wheelbase	264"	264"/224"	
Step height (front)	14"	14"	
Overhang			
(front/rear)	103"/119"	103"/119"	
Headroom	82"	82"	
Turning radius	37'3"	37'3"	
Tire size-12.5x22			
		ins L10.	
Engine—Caterpillar 3176, Cummins L10, DDC 6V92TA			
Transmission—Allison HTB748, Voith D863,			
ZF HP500 or HP590			
Suspension-air	550		
	DOWOT		
Steering—integral, Axles—Rockwell	power		
	andix air custo	m	
Brakes-S-cam, Bendix air system			
Fuel tank capacity—125 gal. std., 160 gal.opt.			
Weight, empty 27,900 lbs. 42,100 lbs.			
Air conditioning—Thermo King or Sutrak			
Kneeling feature option			
Wheelchair lift optic	n		

For further information, circle No. 233 on the special Bus Ride Bus Equipment InfoCard or contact Ikarus USA, Inc., Dept. B, 9430 Topanga Canyon Blvd., Suite 203, Chatsworth, Calif. 91311; (818) 709-8961, FAX (818) 709-1601.

MCI CLASSIC-

The MCI CLASSIC bus is produced by Greyhound Canada, Inc. at its plant in St-Eustache, Quebec. Final assembly operations are also in place in the U.S. so that the CLASSIC complies with "Buy America" regulations.

A transit model with up to 52 passenger seats (51 with one wheelchair position), and a suburban model with 53 seats, are offered. Dual-stream front doors are standard, and the rear door can be eliminated for suburban service.

In addition to the standard 40-foot bus, MCI offers a 60-foot articulated version of the CLASSIC with 69+ seats. During 1992, the company delivered the first CLASSIC articulated buses.



Spe	cifications	
Model	Transit	Suburban
Seating capacity	52	53
Length	40'	40'
Width	102"	102"
Height	120.22"	120.22"
Wheelbase	284.76"	284.76"
Step height, front	13.15"	13.15"
Step height, rear	14.15"	n/a
Headroom, front	81.4"	81.4"
Headroom, rear	79.4"	79.4"
Aisle width	26"	15"
Door width, front	43.0"	43.0"
Door width, rear	26.5"	n/a
Turning radius	37.66'	37.66'
Tire size (both)-12	2.00x22.5	
Engine-DDC 6V9	2TA	
Transmission—Allis D863 ADR	son V731 or V	R731, Voith
Suspension-air		
Steering-Sheppar	d. power	
Rear axle—Rockwe	ell	
Brakes-Bendix W	estinahouse "	S' cam
Fuel tank capacity- U.S. gal. opt.	-95 U.S. gal.	std., 125
Weight 22	,575 lbs.	24,000 lbs.
Air conditioning-V	abor or Sutra	k
Kneeling feature on	otion	ur,
Wheelchair lift optic	n	

For further information, circle No. 235 on the special Bus Ride Bus Equipment InfoCard or contact Motor Coach Industries Ltd., Dept. B, 1329 Fuller St., London, Ontario N5Y 4R1; (519) 453-5231, FAX (519) 453-5750.

Murray/Seattle



Murray/Seattle's STL 176

Murray/Seattle produces van-type buses and paratransit buses tailored to meet a wide variety of applications.

The company's vehicles feature total welded steel construction and 100 percent galvanized steel skin welded to the frame. Exterior seams are welded and smooth.

Up to 29 passengers can fit in Murray/Seattle's paratransit buses, while the van bus capacity is up to 15 passengers. Wheelchair lift and securement equipment is available to meet customer specifications.

An all-glass plug-type door for ambulatory passengers features lower steps to aid the elderly. The lift door is contoured to the shape of the bus body.

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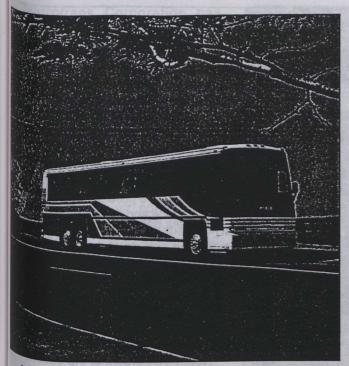
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Ford and GMC chassis and power trains are offered. Coil, leaf and air-spring suspension is available.

	Specification	IS
Model	STL 158	STL 176
Seating capaci	ty (both)-up t	to 25
Length	266"	292"
Width	96"	96"
Height	108*	108"
Wheelbase	158"	176"
Step height	8"	8"
Overhang (from	t/rear, both)-	-23"/82"
Interior headro	om 78"	78"
Door width	36*	36"
Aisle width	18"	18"
Engine-Ford		
Transmission-	-Ford	
Suspension-o		rinas
Steering-pow	er	
Drive axle-Fo	rd	
Brakes-hydra	ulic	
Tire size-215/	85R 16D or E	
Fuel tank capa	city-35 gal	
GVWR-11,70	0 lbs.	
Baggage capad	city-60 cu ft	
Air conditioning	A/C Industr	ies
Wheelchair lift	option	100 A 100 A 100
	The second second second	

For further information, circle No. 237 on the special Bus Ride Bus Equipment InfoCard or contact Murray / Seattle, Dept. B, 7659 Day Road N.E., Bainbridge Island, Wash. 98110; (206) 842-4300.



MCI 102DL3

Motor Coach Industries (MCI) has special "sparkle" in 1992 as it elebrates its Diamond Anniversary, ^{altaining} 60 successful years of coach building in Canada and The United blates. A detailed story of MCI's fistory begins on page 80 of this issue of Bus Ride.

Today, MCI is part of Phoenix, Arizona-based Transportation Manuacturing Operations, Inc. To satisfy the different requirements of intercity and commuter operations as well as conversion coach owners, MCI manuactures 40-foot coaches in two widths and varying heights as well as the recently introduced 45-foot, 102-inchwide coach, for a total of five different models.

The MC-12 is a 40-foot-long, ^{36-inch-wide coach that is particularly ^{aulted} to line-run applications. From ^{he} roof to the passenger floor level ^{he} MC-12 duplicates an MC-9, and ^{hom} the passenger floor line down it ^{Resembles} a 96B3. This combination ^b the two models results in a coach ^{hat} fits well into an existing fleet of ^{MC-9s}.}

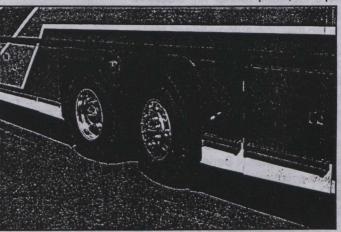
The Model 96B3 features larger ^{Windows} and is 96 inches wide and 40 ^{Bet long}. Along with its traditional roof height (133.67 inches), the 96B3 includes a smooth side belt (no exposed fasteners) and stainless steel panels beneath the passenger floor line on front, sides and rear.

For applications that can utilize a wider 40-foot coach, there are two

102-inch-wide models that provide additional passenger comfort. The 102B3 is built at the conventional height of 133.67 inches with an upper destination sign box housing. The 102C3 is 2³/₄ inches higher (136.42 inches) and permits the installation of an upper wind-

shield, providing a substantially more open feeling to the passengers. The destination sign is removable on this model to eliminate any obstruction to forward visibility. More than 70 percent of MCI's production is the 102C3. Both models feature a fiberglass front end and smooth sides (no exposed fasteners), all of which are fully paintable to maximize the impact of the graphic on the coach. For customers desiring a more traditional appearance, stainless steel panels can be specified below the passenger floor line and on the front end.

The newest model offered by MCI is the 45-foot-long, 102-inch-wide 102DL3. Introduced this spring at a series of regional showings, the 102DL3 has been enthusiastically received and many orders have been placed. As compared to typical 40foot coach with lavatory that carries 47 passengers, the similarly equipped 45-foot coach will carry 55 passengers (a 17 percent increase). A typical 40-foot coach has 319 cubic feet of baggage space, while the 45-foot coach has more than 400 cubic feet (a 26 percent increase). As contrasted with a 40-foot coach that would have a 156-gallon fuel tank, the 102DL3 has a 192-gallon fuel tank (a 23 percent increase) for extended operating range. Both coaches require one driver, so there are real economies of scale. For the 45-foot coach the estimated increase in fuel consumption is less than 5 percent. So, for a slight increase in fuel consumption, the op-



The tag axle on the 102DL3 has automatic selfsteering in both forward and reverse, allowing for a shorter turning radius than many 40-foot coaches.

erator gains 17 percent more passenger capacity and 26 percent more cargo capacity, a significant increase in productivity. Deliveries of the 102DL3 will begin in October.

Last December 18, the Intermodal Surface Transportation Efficiency Act of 1991 was signed into law. It included a provision that established 45 feet as the allowable length for coaches (preempting any shorter length limitations) on the interstate and federal aid highways, along with reasonable access thereto. Legislation to legalize 45-foot coaches in the Canadian provinces is actively being pursued; in the interim, permits are available from each province.

In addition to the productivity advantages mentioned, the 102DL3 has some significant differences from other MCI models. The 102DL3 was designed and engineered from the ground up as a 45-foot coach. The wheelbase was lengthened 33 inches. and the fuel tank, batteries, and heating/air-conditioning systems have been moved to the center of the coach for proper weight distribution. The air springs on the front, drive and tag axles are mounted higher and wider for improved lateral stability and superior ride quality. It also includes a flat and level floor from front to rear and a new underfloor tunnel for electrical cable, pipes, etc. from front to rear. A new tag axle with automatic self-steering in both forward and reverse provides a turning radius which is shorter than that of many 40-foot coaches. The parcel rack contains an air-conditioning system for individual passenger comfort and control, and built-in full-length overhead grab rails. The 4cycle Detroit Diesel Series 60 engine may be specified, as well as the DDC "92" series, Cummins L-10E, or Caterpillar 3176 engines.

Other available features on MCI's various models include the System 2000, which is a state-of-the-art audio processor that incorporates advanced digital design for enhanced reliability and complete centralized control. The unit controls the public address system, AM/FM cassette player and videocassette player. An antilock brake system (ABS) is available for the front and drive axles. Disc brakes can be specified for front and tag axles.

Both the 102C3 and 102DL3 are available as shells for the conversion



The hostess seat on an MCI bus.

market. As conversion shells, both models are available with a high-roof (139.67 inches) to provide expanded headroom in the living quarters. This extension of nearly three inches is in the side wall rather than above the windows. To satisfy all segments of the industry, both models can be equipped with a wide range of options including DDC 92 Series engines up to 500 horsepower and DDC Series 60 engines at up to 450 horsepower. intr sm.

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As a result of its 60 years of coachbuilding experience, MCI has developed one of the industry's best and most expansive product support systems. Service and parts are available at hundreds of coach garages nationwide. The system also includes five parts warehouses and a knowledgeable, responsive group including field service representatives and a control center staffed by experience personnel that are readily accessible through a toll-free number.

Nearly 70 percent of the coaches operating today on North American highways were built by MCI. And finally, all MCI coaches include one of the industry's finest warranties of 200,000 miles or 24 months.

Model	96B3	102B3	· Sparni dato	
Seating capacity	47	47	102C3	102DL3
Length (over bumpers)	40'2.25"	are writer that the second of the second	47	55
Nidth	96"	40'2.25"	40'2.25"	45'6.25
leight	133.25"	102*	102"	102"
Vheelbase	285"	133.71*	136.92*-	136.94"
Step height	15.5	285*	285	318"
Overhang, front/rear		15.5*	15.5	15.5
leadroom, front/rear	78.5"/75.5"	73.75"/124.25"	73.75"/124.25"	73.75"/151
Aisle width	14"	78.92*/75.92*	81.65"/78.65"	78.75
Door width	30"	-14°	14"	14"
Furning radius body comer	12 01	30",	30"	30*
Tire size 12 75x20 5 (40.0	43'11"	43'11"	45' (R.H.)
12.75x22.5 (F	1) tubeless, 315/8	30Bx22 5 (1) 12	00D-00'T (II)	A Company of the second
Caterpillar 3176; DDC Fransmission—Fuller ma Suspension—air	Series 60 (102D) anual basic, Alliso	Dasic, DDC 8V9	2TA DDEC. Cumm	nins L-10,
Caterpillar 3176; DDC ; Fransmission—Fuller ma Suspension—air Steering—Ross Gear int	Series 60 (102D) anual basic, Alliso	L3 only) Dn or ZF automat	2TA DDEC, Cumm ic optional	nins L-10,
Caterpillar 3176; DDC ; Fransmission—Fuller ma Suspension—air Steering—Ross Gear int	Series 60 (102D) anual basic, Alliso	L3 only) Dn or ZF automat	2TA DDEC, Cumm ic optional	nins L-10,
Suspension—air Steering—Ross Gear int	Series 60 (102D) anual basic, Alliso	L3 only) Dn or ZF automat	2TA DDEC, Cumm ic optional	nins L-10,
Caterpillar 3176; DDC : Fransmission—Fuller ma Suspension—air Steering—Ross Gear into XIe—Rockwell World fu Brakes—air Fuel tank cap. (95% full)	Series 60 (102D) anual basic, Alliso egral power Il floating 3.73:1 136 gal.	L3 only) on or ZF automat	2TA DDEC, Cumm ic optional 1, 3:42:1 & 4:10:1.c	nins L-10, optional
Caterpillar 3176; DDC Transmission—Fuller ma Suspension—air Steering—Ross Gear into XIe—Rockwell World fu Brakes—air Tuel tank cap. (95% full) Veight	Series 60 (102D) anual basic, Allisc egral power Il floating 3.73:1 136 gal. 27 000 lbs	L3 only) on or ZF automat ratio basic; 3.26: 148 gal.	2TA DDEC, Cumm ic optional 1, 3:42:1 & 4:10:1.0 148 gal.	nins L-10, optional 182 gal.
Caterpillar 3176; DDC Fransmission—Fuller ma Suspension—air	Series 60 (102D) anual basic, Allisc egral power Il floating 3.73:1 136 gal. 27,000 lbs.	ratio basic; 3.26: 148 gal. 27,250 lbs.	2TA DDEC, Cumm ic optional 1, 3:42:1 & 4:10:1.c	nins L-10, optional

For further information, circle No. 239 on the special Bus Ride Bus Equipment InfoCard of contact MCI New Coach Sales, Dept. B, 10 E. Golf Road, Des Plaines, Ill. 60016-2291; (708) 299-9900, (800) 428-7626, FAX (708) 299-0375. In Canada, contact Motor Coach Industries Ltd., Dept. B, 1149 St. Matthews Ave., Winnipeg, Manitoba R3G 0J8; (204) 786-3301, FAX (204) 888-6369. 275

Metrotrans

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Metrotrans Corporation has Introduced the Classic II coach, a Small, streamlined version of its Popular Classic models.

With a width of just 85 inches, ^{comp}ared to the 96-inch width of the ^{Classic} models, the 20-foot-long ^{Classic} II offers increased maneuverability. Fuel economy is also enhanced with a smaller 351-C.I.D. V-8 engine and a GVWR of 9,600 lbs.

Power steering, power brakes, 40,000-BTU rear air conditioning, humbered and color-coded electrical system, two-leaf electrically operated entry door, 36-gallon fuel tank, and a high-capacity cooling system are additional features of the Classic II.

The original Classic series is available in 20-, 22-, 24- and 28-foot engths.

Standard features of the Classic and the new Classic II include aremountable body, welded steel roll age on 24-inch centers and .063 aluminum exterior. Also featured are kinch marine-grade plywood floor, wo-inch-thick fiberglass insulation, and transportation-grade nylon carpet.

Metrotrans also manufactures the Eurotrans, a mid-size coach whose lame is derived from its European Viling. This vehicle is made in lengths Vil 29 and 35 feet, seating up to 37 Passengers. Model

Length

Width

Height

Wheelbase

Step height

Overhang, front

Overhang, rear

Turning radius

Transmission

Suspension

Steering

Front axle

Rear axle

Fuel tank capacity

GVWR (lbs.)

Air conditioning

Kneeling feature option Wheelchair lift option

Brakes

Tire size

Engine

Interior headroom

Seating capacity

The Eurotrans is powered by the Cummins 6BT turbocharged diesel Ingine, mounted in the rear, which is Soupled with Allison's AT545 automatic transmission.

The Eurotrans features four-wheel Power disc brakes, a 100-gallon fuel ank, 94,000-BTU air conditioning and 0,000-BTU heat. A two-leaf electrically operated door, 30 percent light ransmission side windows, and adlistable track seating are other and ard features.

^{For} further information, circle No. 241 on ^{Tontact} Bus Ride Bus Equipment InfoCard ^{Tontact} Metrotrans Corporation, Dept. B, ⁽⁴⁰⁴⁾ 229-5995, FAX (404) 229-4943.

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			-	

Specifications

Classic

20', 22', 24', 28

138", 158", 176

23'9", 26'9", 29'9'

LT215/85R16

diesel (rear)

coil/leaf & air

Ford power

wide trac

assist (29')

11,000-14,500

40,000 BTU rear

24,000 (35')

power

38 gal.

Eaton 15-040

power w/hydraulic

460 CID V8 gas

Ford E40D auto.

14-31

96"

12"

82*

76*

110"



Eurotrans

139", 208"

12", 13"

81*

75

leaf

power

100 gal.

18,500 (29')

94,000 BTU w/

dual compressors

118

29"-45

235/80R 22.5

Cummins 6BT

Allison AT545 auto

Spicer I-75 I-beam

FMVSS 121 air (35')

Spicer D135/

31-37

96*

116

29'. 35'

Eurotrans by Metrotrans Corporation

> Classic II 20' 85" 110" 138" 176"+42" tag axle 9" 76" 351 CID V8 gas or 7. 3L diesel Ford E40D auto. Ford power full floating power 36 gal 9,600

276

NEOPLAN USA

NEOPLAN USA is building the latest in clean air technology for both the public and private sectors. LNG, CNG or particulate trap configurations are offered on all buses in its large transit product line.

Scenic Hyway Tours of San Francisco recently accepted delivery of its first 45-foot Neoplan Cityliner. It features a Detroit Diesel Series 60 for both greater fuel economy and a cleaner environment.

NEOPLAN is also producing LNG/diesel-engine articulated buses in an order for Houston METRO, as well as 45-foot buses.

For further information, circle No. 243 on the special Bus Ride Bus Equipment InfoCard or contact Neoplan USA Corporation, Dept. B, 700 Auwaerter Drive, Lamar, Colo. 81052; (719) 336-3256; FAX (719) 336-4201.

Neoplan AN460 articulated for Houston Metro

Specifications Articulated Metroline AN440 AN460 AN116/3 AN122/3 Seating cap. 67 71-79 Length 40 60' 96 102 96"/102" 96*/102 102 102 Height (w/AC) 131* 131' 145.2 142 162 Whe 272 212.4/299.5* 231.5 231.5 229/52 5 14" 15% 15.5 15.0" 16 Na 15.0 86.5 78 62.5° (up) Aiclo width 10 102 20 23/23 38 18.5/23.38 Turning rad. 43.8/44.8 39.7 12.5x22.5 12.5x22.5 12Rx22.5 12R22 5 Engine DDC DDC DDC DDC 6V92TA 6V92TA 8V92TA 8V92TA 8V92TA Transmiss HT747 HTR748 HT747 **HTB748** HT748 ZF 8043 ZF Hydro DB dual air 140 0 160 m 38,700 lbs. 27,720 bs 33 900 37,400 bs 275 250 Sutrak T.K. Sutrak no



New Goshen Coach

The New Goshen Coach Corporation produces small and midsize tour and transit buses in various configurations to accommodate 16 to 37 passengers.

Its newest addition to the product line is the Americoach, a rear-dieselengined coach designed for the tour bus industry. Features such as full-cushion air-glide ride, large panoramic windows and high-back reclining seats with armrests make the Americoach suitable for short or long tours. Enclosed overhead luggage racks and large, underfloor luggage bays provide capacity for longer tours.

New Goshen's Americoach

The Americoach is available in a variety of floor plans, from 30 passengers with restroom to 37 passengers without a restroom.

The New Goshen Coach also produces the GCII, Pacer and Sentry ML series small buses, all offering various options to suit them to a variety of uses. 277

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and the second second	Specifica		
Model	Americoach	GCII	Sentry, ML
Seating cap.		18-30	18-31
Length		251-349	288 367
Width		96"	96
Height	132"	114	118
Wheelbase		158-186	158.5-208
Step height	13"	12"	13
Overhang, fron	t 80"	25,001 0	.45
Overhang rear		varies 2	101-114
Interior headrm	78.5	72,5-76.5	TI
Aisle width	14"	16"	17 3. 24
DOOL MIQUU	26 Martin Star	32 1	32
Turning radius	n/a	aries	varies varies
Thre size	70R 22.5/ LT22	5/75R16E	BH19.51
	70R 22.5	104 A 173	Cunimins
	mins 460		6BTA 5.9
-681/	A 5.9 7.3L	V8diesel	Allison 542
Transmission	Allison MD	auto w/	Allison
	3060 W.T		
Cuppopolion	6-speed w/oven	drive	spring
Suspension Stooring	air spring or	optair	Saginaw
Drive avia 5 ag	inaw 710 Ross	power	Dana
	Rockwell For		and search the second
Brakes	ir budroulio	oid drive	in nur assis
Fuel tank cap.	ir hydraulic	36 gal.	60 gal.
GVWR 29,00	Too yai.	varies	60 gal. 18,000 lbs.
Underfloor bag.	can 150 cu #	varies	n/a
Air conditioning	Carrier, rear	varies	varies
Wheelchair lift of	option	Ves	yes
in the original fill (phone -	905	- Andrew

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For further information, circle No. 245^{on} the special Bus Ride Bus Equipment InfoCard or contact The New Goshen Coach Corporation, Dept. B, 1809 W. Hively, Elkhart, Ind. 46517; (219) 293-3500, FAX (219) 293-3097.

New Flyer

The Transit User Friendly ("TUF") ^{bus} is New Flyer Industries' newest in ^{its} lineup of transit buses. Also known as the Model D40LF, the bus features a floor height at both doors of 14 inches, allowing easier access.

The low-floor design of the bus

unitized-construction, integratedchassis design. Detroit Diesel's 6V92TA or Cummins' L10 engines, and a choice of Voith or ZF transmissions, are available.

New Flyer Industries also has many years experience in building electric



Flyer D40 LI

also eliminates the need for a wheelchair lift. Instead, a simple ramp exlends out from the front that allows wheelchairs to roll on and off easily and quickly. The ramp has minimal Maintenance and no operating costs.

The basic body structure is a

4.	Creatil		the second
Model	Specific D40	D35	D60
Seating capacity	48	43	68
	40'	35'	60'
	102"	102"	102"
	120"	120"	120"
Wheelbase Step height	262.75*	202"	202-308"
Wowlieight	14.8"	14.8"	14.8"
TRad (I/r)	97.6"/128"	97.6"/128"	97.6"/118"
	82*/79*	82"/79"	82*/79*
	23.5"	23.5"	23.5"
Turning radius	44"	44"	44"
body corpor	27'9"	22'	20'
	40'10"	33'6*	39'
Engine 12.5x2	DDD 6V71N		6V92TA
	or 6V92TA.		OVSZIA
Transmission	Cummins L1	0	
smission	Allison V731	The second second second second	HTB748
pleering air			the second of
Sleering—Sheppa Bear axle—Rockw Fuel & air	ard power		- Burneller
Brakes_air	vell		-erne Trester
Wai lank opposite	150		Diversity of the
Fuel tank capacity Weight (Ibs.)	150 gal.	150 gal.	20.000
			38,000
		or Sutrak	suggestions.
Peight (lbs.) 24,600 23,800 38,000 Astination sign—electronic or curtain Ar conditioning—Thermo King or Sutrak Wheeling feature option—all models Wheelchair lift option—Lift-U			
Chair lift opti	on-Lift-U	ACTOR COMPANY	the desired and
R-			

trolley buses, with more than 900 units currently in service. Trolleys are available in 40- and 60-foot lengths, with body features the same as for diesel models. Propulsion is either AC or DC, with suppliers being General Electric or Kiepe.

D40-1 F

various

40'

102"

120"

293*

14.38

109.8

84"

84"

77'

38'

23.5"

diesel

air

air

or D863

11x22.5

DDC 6V92 TAC

Sheppard power

M.A.N. low profile

100 U.S. gal.

Thermo King

26,000 lbs.

Sutrak.

ZF 4HP500

Model

Length

Width

Height

Wheelbase

Step height (front & rear)

Overhang, front

Overhang, rear

Headroom, front

Headroom, rear

Turning radius

Transmission

Suspension

Fuel tank capacity

Kneeling feature option Wheelchair ramp option

Air conditioning

Steering

Brakes

Weight

Rear axle

Aisle width

Tire size

Engine

Seating capacity

^{or} further information, circle No. 247 on the special Bus Ride Bus Equipment InfoCard or that ther information, circle 100. 247 on the spectal Dranscona P.O., Winnipeg, Manitoba ^{ho}C ³T4; (204) 224-1251, FAX (204) 224-0551.

South Florida Trolley

All chassis built by South Florida Trolley Co. are custom built to customer specifications, allowing flexibility in meeting specific requirements. Bodies are available in capacities from 16 to 36 passengers.

Standard features include a complete stereo sound system, weather-resistant aluminum window sashes and a cable-car-style gong.

Cummins engines are standard in all models with an Allison AT545 transmission. A Chevrolet engine is avail-



South Florida Trolley's Lolly Trolley

able as an option, as is a wheelchair lift.

South Florida Trolley Co. not only builds trackless trolley buses, but also operates a tourist-oriented trolley line in the Fort Lauderdale, Florida area under the name Trolley Tours, Inc. D

Specifications - Lolly Trolley Seating capacity 16+ 36 Length 25' 33.5 Width 96" 96" Height 138' 138" Wheelbase 158" 208 Step height 10' 10' Interior headroom 88" 88* Aisle width 24" 24 Tire size 8X19.5 8X19.5 Engine Cummins Cummins or Chevrolet Transmission—Allison AT545 Steering—Saginaw Suspension-leaf spring Fuel tank capacity-90 gal.

Weight 15,400 lbs. 18,000-25,000 lbs Restroom option Wheelchair lift option

For further information, circle No. 249 on the special Bus Ride Bus Equipment InfoCard or contact South Florida Trolley Co., Dept. B 200 N.W. 2nd St., Fort Lauderdale, Fla. 33311; (305) 522-7701, FAX (305) 522-7114.

Prevost Car

A complete line of motorcoaches designed and engineered especially for intercity, charter and tour operators is offered by Prevost Car, Inc. These coaches include the Le Mirage XL, the H3-40 high-deck model and the H5-60 high-deck articulated coach.

The H3-40 is a 3-axle, 40-foot coach with modern styling and a high deck for the comfort and sightseeing advantages for passengers. The H3-40 boasts 420 cubic feet of baggage capacity underfloor.

The H3-40's braking system has disc brakes on the front and tag axles, with drum brakes on the drive axle. Prevost engineers report that this provides several advantages over disc-only and drum-only systems, including reduction of fading effect, shorter stopping distance at both high and low speeds, and decreased upswing weight for better comfort.

A 235-U.S. gallon fuel tank gives the coach considerable range.

Continuing to grow in popularity is Prevost's H5-60 articulated coach. It can seat up to 76 passengers, although actual capacity may vary according to interior layout. Detroit Diesel's 8V92 DDEC-equipped diesel engine powers the coach. It is matched with the Allison HT755 ATECequipped 5-speed automatic transmission with input retarder.

Model

Length

Width

Height

Wheelbase

Step height

Headroom

Aisle width Door width

Tire size

Engine

Brakes

Weight

Turning radius

Transmission (both)-

Steering-Ross powe

Rear axle-Rockwell

Underfloor bag. cap. 4

Wheelchair lift opt. no

235 1

ves

ves

yes

279

Suspension-air

Fuel tank cap.

Air conditioning

Kneeling option

manual; various Alli

Overhang, front

Overhang, rear

Seating capacity

Despite the coach's 60-foot length, a tight 42-foot turning radius is achieved, thanks to the H5-60's twinsteer front axles. All 10 wheels have disc brakes and the latest in antilock braking systems, assuring safe stops under any conditions.

Both the H5-60 and the H3-40 feature integral construction. The body structure consists of an all-stainless steel welded assembly using square tubing. The front section is made of composite material reinforced with carbon fibers for maximum strength. Impact-resistant fiber composite is also used for side paneling.

Prevost's Le Mirage XL remains a popular touring coach with its large front windshield and side windows

that extend into the roof section. Passengers can enjoy almost unobstructed viewing. Several seating arrangements, a galley and other options are available. The Astral XL, a variation of the Le Mirage XL, features a glass-paneled roof to enhance panoramic viewing for tours.

The Le Mirage XL also offers Prevost-manufactured Silhouette and

Tourismo recliner seats, singlecontrol synchronized electric wipers, central door-locking for all baggagebay doors, and twin column-mounted tail lights for added brightness and safer night driving.

The Prevost Parts and Service Network has locations throughout North America to assist in obtaining parts and technical support.

Prevost Car's H5-60

articulated coach



Specifications

H3-40 Le Mirage XL 48 47 40' 40' 102" 102" 12' 130.75" 280" 280" 15" 15" 69.5" 69.5" 82.5" 82.5" 77" 76.5" 14" 14" 26" 26" 43' 43' 315/80 315/80R R22.5 22.5MAX DDC DDC 6V92TA, 8V92 or 8V92TA 6V92TA (DDEC) or (DDEC) Series 60 0)—Spicer 1362-B 6-spd. Allison automatics wer ell 61143 disc front, air	Center of tanden Step height Overhang (front/rear) Headroom Aisle width Turning radius Tire size—315/80/ Engine—DDC 8VS Transmission—All w/integral retardo Suspension—air, (lobes with volum Steering—Ross int Rear axle—Rockw Brakes—disc, all w Fuel tank capacity- Weight, empty—46 Underfloor baggag	14 1/4" 72"/69" 77" 14" 42' R 22.5 MAX 22 ison HT755, 5-spd. auto- er, ATEC Goodyear 1100 rolling e can tegral hydraulic power ell SQ 10D tandem drive theels -200 U.S. gal. 5,400 lbs. e canacity—550 cu ft.
	Air conditioning—C Kneeling feature of	Carrier O5G
5 U.S. gal. 160 U.S. gal 27,395 lbs. 0. 420 cu. ft. 315 cu. ft. Carrier 05GCarrier 9-ton	the special Bus Ride	ormation, circle No. 251 o Bus Equipment InfoCar ar, Inc., Dept. B. 35 Gagno

251 on Card or contact Prevost Car, Inc., Dept. B, 35 Gagnon Blvd., Ste-Claire, Quebec GOR 2V0; (418) 883-3391, FAX (418) 883-4157.

Orion

Sacramento (California) Regional Transit District recently awarded Bus Industries of America Inc. (BIA) a contract for 75 ORION V 40-foot by 102inch compressed natural gas (CNG) buses. This was BIA's first award for CNG buses in the state of California.

BIA has also received orders for ORION CNG buses from 16 other

North American cities.

The Port Authority of Allegheny County in Pittsburgh, Pennsylvania, also awarded a contract to BIA recently for the manufacture of 125 ORION V buses. Port Authority had previously purchased 125 ORIONS, five of which were CNGpowered.



Specifications

Model			
veatin	Orion II	Orion 96"	Orion 102*
length Width	18-24	31-48	44-50
WICHL	22'4", 25'4"	30'11", 39'9"	34'9", 39'10"
	96"	96"	102"
	110"	112"	119"
Wheelbase Step boist	189-236"	180"-280"	219-280"
Overtieight	12"	14", 14 1/2"	
Overhang, front Overhang, front Headroom front	41"	88 1/2"	14" (front), 15" (rear 90"
Head rear	39"	114 1/2", 118 1/2"	90 117*
Headroom, front	85"	77.5"	
Headroom, front Aisle width	76 1/2"	75"	82*
Width	20"	20"	78"
oor width, front	32"	34 1/2"	26"
oor width, front	34"	27"-37"	30 3/4"-48 1/2"
uning radius	26'2"-31'4"	28'6"-35'6"	30 1/4"-40 1/4"
at body comer	30'-34'	200-330	28'10"-35.4'
	235/80R.	32'6", 40'6"	34', 40'6"
ŝngine	255/80R, 22.5	11,22.5	12.5x22.5
ngine	DDC 8.2	12.5x22.5	
h.		DDC 6V92TA,	DDC 6V92TA,
^{rans} mission	Navistar GMC 350	Cummins, L10	Cummins, L10
	Allison	Allison, ZF	Allison
Uspension leening		Voith, Renk	Voith, ZF
eension	air	air	air
.9	ZF power	Sheppard	Sheppard
ear axle		axle mtd. power	axle mtd. power
rakes	Independent	Rockwell	Rockwell
uel tank	air	air	air
^{Vel tank} cap.	50 gal.	125 gal.	125 gal.
Bight (Ihan)	50 gal./optional		
leight (lbs.)	14,800	20,600, 24,860	24,000, 26,000
	N/A	AAE 100 4	
r conditioning	Sutrak vheelchair provisions—fro	Thermo King T2	Thermo King T2
"g reature and w	vheelchair provisions-from	nt. rear	

's reature and wheelchair provisions—front, rear

^{For} further information, circle No. 253 on the special Bus Ride Bus Equipment InfoCard or ^(a)I₅ 768-8101, FAX (315) 768-7790. In Canada, contact Ontario Bus Industries, Ltd., Dept. B, ^(a)J₉₅ Maingate Drive, Mississauga, Ontario L4W 1G6; (416) 625-9510, FAX (416) 625-5218.

Specialty

Specialty Vehicle Manufacturing Corporation continues as a leader in the field of specialized theme vehicles with its wide range of trolley models. Specialty concentrates on manufacturing vehicles to meet each customer's specific needs.

Three sizes of trolleys offer varying seating capacities. The Standard Trolley seats up to 23 adults, the Deluxe Trolley up to 31, and the Transit Trolley has 35 seats plus room for 20 standees. All models are available with totally open, semi-open or totally enclosed sidewalls.

With an eye toward alternativefueled "clean air" vehicles, Specialty offers LPG and CNG power as well as several models of electricpowered trolleys and buses.

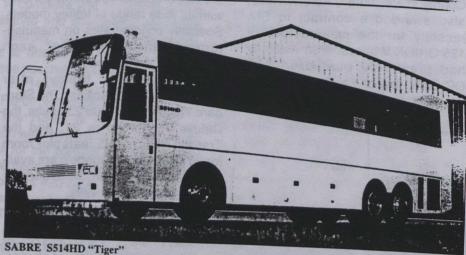


Specialty's Model 3000T

	Specifications	
Model	3000T	3000 Deluxe
Seating cap.	35	31
Length	30.5'	27.6'
Width	98"	94"
Height	136"	131"
Wheelbase	208"	178"
Step height	14"/15"	15"
Overhang, front		43"
Overhang, rear	115"	109"
Interior headrm	85*-	80*
Aisle width	24.5*	20"
Door width	39"	32"
Turning radius	32' inside	31'
Tire size	255//80Rx22.5	8-19.5 12ply
Engine Hercules	GTA 5.6: CNG	Cummins B5.9
	s B 5.9 diesel	
Transmission	Allison MT643, MTB643	AT-545
Suspension	air	leaf spring
Steering	Ross power	power
Drive axle	Eaton 19050S	Dana 80
Brakes	air	hydraulic
Fuel tank cap.	80 gal.	60 gal.
GVWR	29,430	18 000
Air conditioning- Trans/Air TA-70	-Thermo King S 66	-1 (R-22) or
Kneeling opt.	yes	no
Wheelchair opt.	yes	yes

For further information, circle No. 255 on the special Bus Ride Bus Equipment InfoCard or contact Specialty Vehicles, Inc., 12229 Woodruff Ave., Downey, Calif. 90241; (310) 803-3456, FAX (310) 803-5501.

SABRE Bus & Coach



SABRE Bus & Coach, which prides itself on being "an American company building coaches in the United States," produces several models, including the S514HD "Tiger" (a 40-foot, 47passenger model), the S513HD "Leopard" (a 35-foot, 39-passenger version), and 45-foot-long coaches. All models feature elegant, simple European styling, with a durable steel frame designed to give many years of service.

Front and drive axles each carry four air springs, producing a high degree of stability. An additional safety feature is the electric TELMA retarder.

The side windows have been improved with the introduction of a new type of sash that includes an outer sandwich of two glass panels, tinted green with a polyvinylbutulate sheet in between, a quarter-inch air gap, and a repeat of the aforementioned sandwich. This combination is said to reduce solar radiation into the interior by about 80 percent without inhibiting visibility.

Carrier air conditioning is standard, and is delivered from overhead. There are also separate in-dash air conditioning units for driver and tour guide. Reclining seats with ample leg room, fold-up armrests, tray table and adjustable footrests are standard on the 40-foot model.

Entertainment systems include a Blaupunkt sound system with AM/FM self-seeking radio, cassette, 12-player CD, and two-microphone PA system Nearly all mechanical compone

used by SABRE can be sourced at thousands of outlets throughout the country. Where SABRE supplies its own parts, they are guaranteed to be delivered within 24 hours wherever possible, but parts are free if shipment takes longer than 48 hours. Each new coach is also delivered with a spa set of windshields at no extra cos

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C		
Model	pecifications	
	S513HD	S514HD
Seating capacity	"Leopard"	"Tiger"
Length	39+	47+
Width	35'	40'
	102"	102"
Height	11'3"	11'3"
Wheelbase	190"	228"
Step height	14"	14"
Overhang, front	93.5"	93.5"
Overhang, rear	123.3"	150.5
interior headroom	76.5"	76.5"
Aisle width	14"	14"
Door width	36"	36"
Tire size	Michelin 1100x2	0.50
Engine — Cummir		- AL.
Detroit Series 60 4	25 HP (optional	on "Time"
Transmission	Ceemat	Bood
	9-sod auto	Denner
Suspension — full	air ontional Tor	Ranger
Steering	ZF 8096	Silastic
Drive axle-Eaton	230705	ZF 8097
Brakes-air	200703	
Fuel tank capacity-	-137110	
GVWR (lbs.)	37 500 gal.	
Underfloor capacity	57,500	43,000
Air conditioning—C		364 cu. ft.
Kneeling lift option	amer 10-ton, roo	of ducted
Wheelchair lift option	10	
optic		

For further information, circle No. 257 on the special Bus Ride Bus Equipment InfoCard or contact SABRE Bus & Coach Corporatio Dept. B. P.O. Box 243, Lancaster, Wis. 535 (800) 322-1018 or (608) 723-4070, F. 16081 723-4492 281

Stratus

Stratus Specialty Vehicles has been manufacturing vehicles engineered specifically for use in trans-Porting elderly and disabled riders since 1970.



^{tratus} Paratransit wheelchair coach

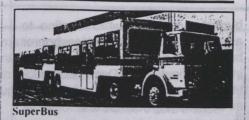
The Stratus Paratransit wheelchair ^{coach}, built on a Ford E-350 van chas-^{sis}, accommodates 15 passengers ^{including} wheelchair passengers. It has a raised door with a lowered ^{entry}way step. Sanitary one-piece ^{iberglass} walls and matching head ^{iner} are found in the interior.

Other features include tinted front glass and privacy glass on side and back doors, heavy-duty cooling syslem, power steering, power brakes, and a gauge package.

In addition to buses, Stratus also manufactures handicap van conversions, ambulances, and other mansportation products.

h_e^{cop} further information, circle No. 259 on h_especial Bus Ride Bus Equipment InfoCard b_{cont}act Stratus Specialty Vehicles, Inc., ξ4₁₁₈; (816) 734-5000; (800) 821-5451 outside h_{issouri}, FAX (816) 734-5090.

SuperBus



SuperBus™ is based on an innovative, modular concept consisting of a standard, heavy-duty cabover semi-tractor and passenger modules which are available in two sizes.

The 46-foot module (55-foot total unit length) has a capacity of 67 seated and 34 standing passengers. The 27foot module (36-foot total unit length) seats 29 with room for 15 standees.

An electronic security system consisting of intercoms and video monitors enables drivers to have complete control over the vehicle, according to SuperBus, Inc.

Potentially dangerous steps are eliminated due to SuperBus's low floor. By using a ramp, wheelchair-bound passengers can enter on their own.

Specifications Model 27' 46' Seating capacity 29 67 Length (incl. tractor) 36' 55' Width 102" 102" Height 10'9" 10'9"-11'4" Wheelbase 105" 105" Step height 11"-15" 11"-15"			
Length (incl. tractor) 36' 55' Width 102" 102" Height 10'9" 10'9"-11'4" Wheelbase 105" 105" Step height 11"-15" 11"-15"			
Width 102" 102" Height 10'9" 10'9"-11'4" Wheelbase 105" 105" Step height 11"-15" 11"-15"			
Height 10'9" 10'9"-11'4" Wheelbase 105" 105" Step height 11"-15" 11"-15"			
Wheelbase 105" 105" Step height 11"-15" 11"-15"			
Step height 11"-15" 11"-15"			
Step height 11"-15" 11"-15"			
Overhand front FCI FOI			
Overhang, front 56" 56"			
Overhang, rear 30" 92"			
Headroom, upper 76" 76"			
Headroom, lower 107" 107"			
Aisle width 25" 25"			
Door width, front 40" 40"			
Door width, rear 40" 40"			
Turning radius 29' 42'6"			
Tire sizes—low profile			
Engine and transmission optional, as drive			
unit is a truck tractor			
Suspension-air			
Steering—power			
Rear axle—Rockwell TQ4670-611			
Brakes-air 'S' cam, ABS, brake retarder opt.			
Fuel tank capacity—varies with tank chosen			
Underfloor baggage capacity-varies with			
design chosen			
Air conditioning—Thermo King, Sutrak or Carrier			
Weight 15,000 lbs. 24,000 lbs.			
Combined			
w/power module 27,000 lbs. 36,000 lbs.			
Kneeling feature option			

Wheelchair option (ramp)

For further information, circle No. 2610n the special Bus Ride Bus Equipment InfoCard or contact SuperBus, Inc., Dept. B, 2010 N. First St., San Jose, Calif. 95131; (408) 436-2960, FAX (408) 741-1280.

Supreme

Supreme StarTrans Bus Division is a leading manufacturer of small buses, including the Sentinel raisedroof van model, with seating capacity up to 13 passengers, and the Senator model, which comes in four lengths ranging from 20 to 28 feet.



Supreme Sentinel Van

The Senator offers the customer 80 inches of interior headroom, seating capacity up to 29 passengers, and a wide range of options for rider comfort. All Supreme models can be built for disabled accessibility.

Both vehicles are built on Ford chassis, with a choice of diesel power or either of two gasoline engines.

Specifications

Model	Senator	Sentinel
Seating cap.	16-29	7-14
Length	20', 22', 25',	28' 19'
Width	96*	78"
Height	114"	111*
	8", 146", 158",	176" 138"
Step height	10 1/2"	10"
Interior headrm	80 1/2"	75"
Aisle width	15"	12"
Door width	36"	24", 27"
Tire size LT	225-16D L	T245/75R16E
Engine—Ford 3	51, 460, 7.3L d	diesel
Transmission-	Ford 4-spd. ov	erdrive
Suspension-Fo	brd	
Steering-Ford	power assist	
Drive axle-Ford	4:10	
Brakes-hydrau		
Fuel tank capaci	ty-35 gal.	
GVWR 10,500		
Air conditoning-		1
Wheelchair lift of	otion	

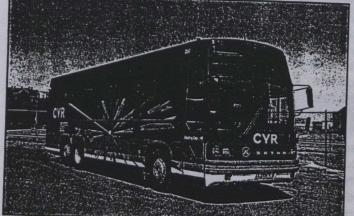
For further information, circle No. 263 on the special Bus Ride Bus Equipment InfoCard or contact Supreme Corporation, Dept. B, P.O. Box 463, Goshen, Ind. 46526; (219) 642-4888, FAX (219) 642-4169.

Setra (Kassbohrer)

Since its introduction to the North American market in 1984, the Setra Intercontinental has gained widespread acceptance, particularly among U.S. charter and tour operators. The versatile coach, marketed by Kassbohrer of North America, is ideal for the tour and charter operator,

bucket-style seats which recline to any of several positions. Kassbohrer builds these seats to its own demanding specifications. Overhead modules with individual reading lights and air conditioning outlets are also part of the package.

The smooth exterior design of the



S215 HDH

Setra Intercontinental

yet can be adapted to meet the needs of intercity route service, commuter operations. airport ground transportation and more.

Interior amenities of the Intercontinental include tastefully upholstered

Spec	cifications
Model	Intercontinental
	S215 HDH
Seating capacity	44-57
Length	39.4
Width	98.5
Height	11.9'
Wheelbase	215"
Step height	14.2"
Overhang (front)	96,5*,
Overhang (rear)	109.5
Interior headroom	76.8
Aisle width	15.7"
Door width	33.4"
Turning radius	33'4"
Tire sizes-12R-22.5	, 295/80R 22.5
11.00x20, 11R 22.5	
Engine-Detroit Dies	el Series 60
I ransmission—Alliso	n HTB 748 auto (ATEC)
Suspension—air	
Steering—ZF 8043	
Drive axle-Rockwell	Type 61142-N-X2
brakes-air-operated	drum type
Fuel tank capacity-2	22 U.S. gal.
Weight (empty)	32,000 lbs.
Underfloor baggage c	apacity-360 cu. ft.
Kneeling feature	

For further information, circle No. 265 on the Bus Ride Information Card or contact Kassbohrer of North America, Inc., Dept. B, 32 Lewiston Road, Gray, Maine 04039; (207) 657-3326, FAX (207) 657-4362.

Intercontinental is also important to its appeal. A rigid self supporting structure, welded in specially designed jigs from high-grade square steel tubes, is a major part of this design. This process ensures that all body parts fit as they should. The body's structural integrity is maintained through the use of a series of carefully applied anticorrosion treatments.

Powering the Intercontinental is Detroit Diesel's Series 60 engine. The transmission is Allison's HTB748 ATEC-equipped automatic. The incorporation of these American-made components enhances serviceability of the coach, as well as spare parts availability.

Kassbohrer also incorporates its own independent front-wheel air suspension, assuring responsive handling and excellent ride characteristics. A self-steering third axle improves steering. As a result, the Intercontinental's turning radius is just over 33 feet-impressively tight for a 40-foot coach.

Kassbohrer has built more than 50,000 buses in its nearly 80 years of existence, using many of the same integral design concepts still employed today. 283

Stewart & Stevenson

The Apollo T-40 is a 40-foot transit bus built by the Transit Products Division of Stewart & Stevenson Services, Inc., in cooperation with Mercedes-Benz of Brazil.

The 102-inch-wide vehicle seats up to 47 passengers. The unit is powered by Detroit Diesel's 6V92 DDEC-equipped engine, with a choice of diesel or alternative-fuel power. Allison's HT748 electronic control transmission is standard, with a retarder offered as an option.

Two shuttle-type vehicles are also produced by Stewart & Stevenson. These are known as the S-25 and S-30, with the numbers in each representing the unit's approximate length in feet.



Stewart & Stevenson Apollo T-40

Sn	eclfications
Model	
Seating capacity	Apollo T40
Length	41 to 47
Lengin	40'
Width	102"
Height	118"
Wheelbase	278"
Step height	14"
Overhang, front	88"
Overhang, rear	. 114"
Interior headroom	
Aisle width	82*
Door width	34*
Turning	36"
Turning radius	43'8"
Tire size-12.5x22.	5
Engine-DDC 6V92	TA (DDEC II) diesel,
CING, LING	the same and the same
Transmission-Allis	on HT 748 ATEC w/
retarder	ATLC I
Suspension-MRR/	Firestone bags-air
Steering-ZF 8065	r restorie bags-ail
Drive avia Morroad	es-Benz H07/01 DL-10
Brakes-air	es-Benz H07/01 DL-10
Fueltaskassa	34
Fuel tank capacity-	-125 gal. diesel
GVVVII-26.000 lbs	the second s
Air conditioning—Th	ermo King T-6
inteeling leature ont	ion
Wheelchair lift option	1
and the second	

For further information, circle No. 267 on the special Bus Ride Bus Equipment InfoCard or contact Stewart & Stevenson Services, Inc., Transit Products Division, Dept. B, P.O. Box 1637, Houston, Texas 77251-1637; (713) 868-7700, FAX (713) 868-7692.

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homas Built Buses

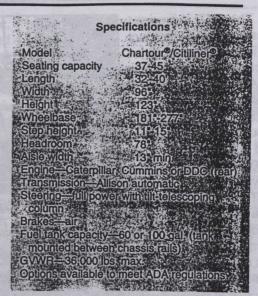
The Thomas Chartour[®] and liner[®] are built for long-term wice. These sleek vehicles are signed to be the embodiment comfort while still providing durabiland dependability, says the

matic transmission. The coaches range in wheelbase from 181 inches to 277 inches, with seating capacities up to 45 adults.

Thomas Built Buses offers a wide selection of options for tour bus



Thomas Built Buses Citiliner



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The Chartour and Citiliner feature ^{Bar} engine, with a choice of Caterar, Cummins or Detroit Diesel gines matched to an Allison autoservice as well as colleges and universities, small-city and rural transportation, shuttle service and more. Thomas Built vehicles are designed to meet all ADA requirements.

For further information, circle No. 269 on the special Bus Ride Bus Equipment InfoCard or contact Susan Kearns at Thomas Built Buses, Inc., Dept. B, P.O. Box 2450, High Point, N.C. 27261; (919) 841-5719, FAX (919) 889-2589.



he Chaperone II

Wayne's Chaperone II, built on dor Chevrolet chassis, is a versasmall bus designed for adult sportation.

Body construction consists of fullth exterior and interior side panexterior roof panels and interior support panels, all made from Anized steel.

A two-leaf, outward-opening, anually operated entrance door inates costly downtime resulting power door failures. Step height 10 inches from the road surface, therefore even less from the curb. Options include air conditioning, underseat heaters, electro-hydraulic wheelchair lift, wheelchair retention, radio and public address systems, and destination signs. Several seating and luggage storage configurations are possible.

Paramakakati karta Arakamir a-	N. TARMAN COLORISON ON LODG THE STREET AND
Speci	fications de la company
Souther States	
Model	Chaperone II
Seating capacity	up to 21 passengers
Length	260
Width	96",
Height	106" std., 109" opt
Wheelbase	125" & 158" 127
	10" to first step;
	7. riser height
	72"std., 76" opt.
	LT 215:85RX16D
Engine-7.5L V-8.gas	
Transmission-3-spe	
Steering power	
	vacuum-boost-assisted
dual system; front disc	
Fuel tank capacity-3	
Air conditioning-option	onal
Wheelchair lift option	
	4.5 70 ALT 8-24

For further information, circle No. 271 on the special Bus Ride Bus Equipment InfoCard or contact Wayne Corporation, Dept. B, P.O. Box 1447, Richmond, Ind. 47375-8447; (317) 962-7511; FAX (317) 962-4016. D production in 1990, provides a befront door that permits the use of the front door that permits the use of the same door wheelchair lift. TMC is currently engaged in joint wer-plant development programs in industry leaders including Detroit sei Corporation and the Donaldson mpany, Inc., is order to meet clean-

all requirements. Duses powered by methanol and by compressed natural gas, as well as particulate trapequipped buses, are disp being delivered.

Andr-delivery support for RTS buses includes a strong technical training program, regional service engoasoing staff and the nationwide poverage of the Universal Coson Parts no. distribution network

Recognizing the extraordinary durability of the RTS structure, 740 has now introduced its REMAN program, which includes factorycontrolled diseasembly, cleaning, hagection, topak, replacement and efinishing to return buses to unotonally reveondation.

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TMC/RTS

The RTS Advanced Design Bus is a product of Transportation Manufacturing Corporation (TMC), a subsidiary of the Dial Corp. The RTS has established a strong reputation for durability and reliability, with some 15,000 units in revenue service.

The main body shell is a welded, unitized modular design using corrosion-resistant stainless steel and galvaneal sections. This body construction is coupled with non-structural, easily replaced exterior panels resulting in minimum

deterioration from corrosion and road salts. Higher stainless steel body shell content and glass-fiber reinforced exterior panels are available as options.

The RTS 08 series, which went into production in 1990, provides a wide front door that permits the use of a front wheelchair lift. The 06 series offers a rear-door wheelchair lift.

TMC is currently engaged in joint power-plant development programs with industry leaders including Detroit Diesel Corporation and the Donaldson Company, Inc., in order to meet cleanair requirements. Buses powered by methanol and by compressed natural gas, as well as particulate trapequipped buses, are also being delivered.

After-delivery support for RTS buses includes a strong technical training program, regional service engineering staff and the nationwide coverage of the Universal Coach Parts, Inc. distribution network.

Recognizing the extraordinary durability of the RTS structure, TMC has now introduced its REMAN program, which includes factorycontrolled disassembly, cleaning, inspection, repair, replacement and refinishing to return buses to functionally new condition.



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TMC/RTS 06

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	S	pecifications		
Model 06 Series 08 Series Seating capacity Length Width Height - Max. Wheelbase Step height, frt/rear Overhang, front Overhang, rear Headroom, front Headroom, rear Aisle width Door width (clear opening)	T70606 T70608 39 35' 96" 118.5" 238.7" 14"/16" 94.68" 93.92" 80.2" 80.25"	T70206 T70208 39 35: 102" 118.5" 238.7" 14"/16" 94.68" 93.92" 80.2" 80.2" 80.25" 22"	T80606 T80608 47 40' 96" 118.5" 298.7" 14"/16" 94.68" 93.92" 80.2" 80.25" 16"	T80206 T80208 47 40' 102" 118.5" 298.7" 14"/16" 94.68" 93.92" 80.2" 80.25" 22"
Minimum front (06) (08) Minimum rear (std.) (narrow) Turning radius, wheel	30" 35.4" 44" 22"	30", 35.4" 44" 22"	30" 35.4" 44" 22"	30" 35.4" 44" 22"
Tuming radius, body come	30.9' r	31:35	38'	38.4'
	and interest of the second second of the second	37.3'	43.75'	44'

The following data apply to all current product RTS series transit buses: Engine—DDC, 6V92TA, DDEC II, rear, transverse type, 2-cycle diesel or Cummins L-10, C-Series Transmission—Allison V-731, 3-spd., auto., angle drive. ZF and Allison retarder transmission

Suspension Air suspension front and rear, self leveling type with solid front axle Steering—Sheppard. Hydraulic, integral Rear axle—Rockwell full floating w/spiral bevel drive

Brakes—Dual wedge, air operation, automatic adjusting, dual circuit

Air conditioning-Carrier automatic climate control Kneeling feature-optional

Wheelchair lift (ADA compliant)-available as an option at rear door location on 06 Series and at

For further information, circle No. 273 on the special Bus Ride Bus Equipment InfoCard or contact Transportation Manufacturing Corporation, Dept. B, P.O. Box 5670 (RIAC), Roswell, N.M. 88202-5670; (505) 347-2011, FAX (505) 347-7545. 285

Turtle Top

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AM-USA

The TAM 260 incorporates the concept and design of a luxury Eurolean tour coach with modern, top-ofhe-line U.S.-manufactured components, utilizing a one-piece tubular seel frame "monocoque" structure with galvanized steel wall and roof lanels.

The TAM motorcoach is supported y a Wide Ride pneumatic suspenion system which provides excepional comfort, directional stability, and, conjunction with an anti-lock brakg system, the safest possible transortation in all driving conditions. With aurning radius of 34.5 feet, the TAM 80 has exceptional maneuverability ind handling.

The TAM 260's thoroughly ergoomic and aerodynamic European esign features luxury reclining seats in individual overhead comfort conolunits; a fully carpeted interior; overred, double-pane windows with curins; panoramic windshield; TV/VCR monitor; restroom; fully automatic, climate controlled air conditioning and heating systems; and 260 cubic feet of "pass-through" underfloor luggage space.

A fuel-efficient Cummins 6CTAA 8.3L-275 engine allows the operator to maximize the TAM 260's usability while minimizing amortization costs.

TAM coaches, buses, articulated buses and minibuses—as well as a variety of other vehicles—have been sold in more than 40 countries during TAM's 45-year history.



TAM's 260

Sp	pecifications
Model	260 A 119
Seating capacity	46-48
Length	39.37
Width	98.5
Height	- 128.5
Wheelbase	248"
Step height	14.5" (12.5" kneeled)
Overhang: front	100.2
Overhang, rear	124.2"
Interior headroom	76.7
Aisle width	16"
Door width	35"
Turning radius	34.5
Tire size	12R22.5
Engine Cumming	6CTAA 8.3-275 diesel (r)
Transmission-ZF	5-spd. automatic
electronic w/inter	grated retarder
Suspension-TAM	Wide Ride Air w/

outboard-mounted air bags Steering—ZF Servocom 8097, hydraulic pwr Drive axle—Rockwell/BS-23,160, Brakes—air, Rockwell/Bendix Fuel tank capacity 100 gal, GVWR 37,400 lbs. Underfloor bag, cap 260 cu, ft Air conditioning Sutrak AC35-Tropic, roof-mounted Kneeling feature option—yes

For further information, circle No. 275 on the special Bus Ride Bus Equipment InfoCard or contact TAM-USA, Dept. B, 6850 Van Nuys Blvd., Suite. 320, Van Nuys, Calif. 91405; (818) 988-3826, FAX (818) 374-3485.

Vide One

Wide One Corporation produces thicles suited for transit, paratransit, mand-response service, shuttles d many other uses. The van-type uses are larger as a result of several tented processes used to widen the andard van unit.

Built with heavy-duty Dodge Ram Wivans, the Wide One is powered Dodge's 360-cubic-inch fuel-

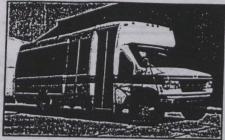


the V8 gasoline engine. The transsolon is Chrysler's heavy-duty 4ad automatic with overdrive. The Wide One's width is 94.5 thes, which is 14 inches wider than standard Dodge Ram Maxivan. Maximum seating for non-wheelchair applications is 19 passengers, with many floor-plan options offered.

Sp	ecifications
Seating capacity	up to 19
Length	223.5"
Width	94.5°
Height	前来 105"
Wheelbase, 194	.127.6*
Step height, front	12"
Overhang, front	13"
Overhang, rear. Headroom	51" 74"
Aisle width	14"/17"
Door width	32"
Turning radius	26
Tire size-LT245/7	5R16E
Engine Dodge 36	0'CID gas, fuel injected
Transmission—Chi	vsler 4-speed automatic
Suspension—coil (front), leaf (rear)
Steering recircula	ting ball, power assisted
Rear axle Spicer	disc front/drum rear w/pwr
Fuel tank capacity-	-35 gal
Weight-9,000 lbs.	
Air conditioning-C	hrysler OEM, A/C
Industries or Danl	hard (rear)
Wheelchair lift optic	patented "Lectralift"
and strike a second	

For further information, circle No. 277 on the special Bus Ride Bus Equipment InfoCard or contact Wide One Corporation, Dept. B, 3051E. LaPalma Ave., Anaheim, Calif. 92806; (714) 630-7933, FAX (714) 630-6137. 286

Turtle Top



Terra Transit Bus

Turtle Top currently produces its Model TTP Terra Transit Bus in various lengths, with seating capacities from 16 to 29 passengers. Wheelbases of 138, 158 and 176 inches, and a tag-axle version, are available.

The many options offered with the Terra Transit Bus give it the versatility necessary to fit many applications, including disabled-rider service, shuttle service, transit, airport service, hotel/rental car courtesy service, intercity and tour bus service, churches, colleges and more. Turtle Top has a separate production line for the Terra Transit II raised-roof van, which was introduced in 1986. This vehicle has a gross weight rating of 9,000 lbs. and is built on the Dodge Maxivan or Ford Supervan chassis. Two versions are available: a shuttle-bus model with either a single- or double-leaf busstyle front door, or a handicap model with a single bus-style front door adjacent to a wheelchair door and lift.

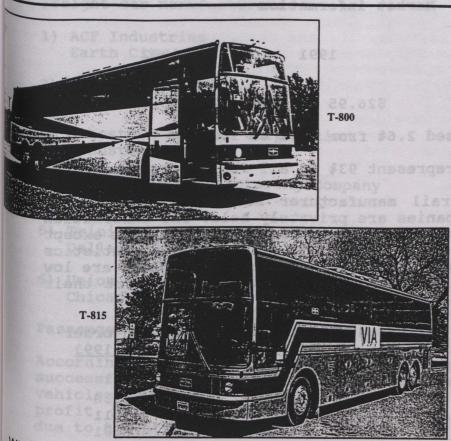
A wide, enclosed stepwell is standard. Entrance doors in 251/2- or 34-inch widths each have a height of 82 inches.

Other features offered with all Turtle Top vehicles include air conditioning, baggage racks, and a choice of various windows, floor coverings, seats and seating arrangements.

For further information, circle No. 279 on the special Bus Ride Bus Equipment InfoCard or contact Turtle Top, Terra Transit Division, Dept. B, 67819 S.R. 15, New Paris, Ind. 46553; (219) 831-4340, FAX (219) 534-3719.

Specifica	tions —	Terra Tra	ansit
Model	Van	Bus	inter-
Seating cap.		16-29	Seller!
Length	226.8"	254-3	
Width	79.8"	94"	F.
Height	113"		15
Wheelbase	138*	138", 1	158,17
Step height	12"	11.5	
Overhang, front	25"	25"	
Overhang, rear	63.8"		
Headroom	78"	76.5	
Aisle width	14"-16"	15-19	
Door width, front	25.5	29	
Door width,			
for wheelchair	-43.5	₩ 40 ~~~;	
Tuming radius (cu	ind to curt		
23.9', 26.9', 29.8	5		1.6
Tire size (Bus only	/)-LI2]	-85R 16	D
Engine (Van only)	-rora 5.	8L,75.L	Garion
7.3L diesel Engine (Bus only)	E Ta	And the state	
7.3L diesel	-rora /	SL gas o	
Transmission-au	tomotion	Sector	
Suspension con			
Suspension—sprin Steering—Ford po	Ig coll on	Callyna	Sector
Rear axle—Ford	WOI		
Brakes-hydraulic		Sep. 1	
Fuel tank cap.	38 gal	26 001	n in the
Weight (lbs.)	6 700	7 100 1	760
Underfloor baggage	can (Bus	ontv)	tritonal.
Air conditioning_T	rans/Air.r	A/C In	lustries
Wheelchair lift optic	on		R.C.
an an an adverse a ser a series	1	一些人的	ATC. S. FATL

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With a substantial number of Perators who exclusively run Van tol equipment, including many retat buyers, this respected Belgian anufacturer has experienced rearkable success in the U.S. market. an Hool's product line offers some of a most popular European imports in oth America.

an Hool

1

In a massive factory complex near Werp, Belgium, some 3,400 workhave built more than 50,000 aches since the firm began 45 years Van Hool buses and coaches seeing duty today in more than 85

Recognized for quality and ention to detail, Van Hool is also led for including an abundance of entites as standard equipment on coaches. For these reasons, sevalU.S. operators utilize Van Hool as inpreferred VIP or executive coach. Van Hool coaches are built with a ged "monocoque" construction hnique, using an integral method, major assemblies and componts installed at the appropriate point during construction. A framework of steel tubing surrounds the coach chassis. After this is installed, laser-cut exterior panels are then applied. Insulation and interior detailing are then added. Throughout the process, many types of corrosion-protection material are used. The result is a durable, reliable and extremely quiet vehicle.

Two 40-foot, 3-axle coaches are offered for the U.S. market. The T-815 Series is available in one- or two-door configurations, with a wide variety of seating options and other interior amenities, including a rear lounge area. The T-815 is powered by a Cummins LTAA 10B 300STC engine, coupled with Allison's HT754CR transmission.

The T-815 Series is 102 inches wide and 147 inches high, providing an exceptionally high seating area and ample luggage capacity. Sizable expanses of glass offer passengers an outstanding view and create a striking exterior design.

Van Hool's T-800 Series is a onedoor coach, loaded with many features popular with U.S. operators. This 49-passenger coach features a rear restroom, exceptional luggage capacity, and a PA system with two microphones. Wiring for an optional video system is also installed.

The T-800 Series drivetrain features the Cummins LTAA 10B 300STC engine, supported by more than 4,000 Cummins dealers nationwide. Like the T-815, the T-800 is equipped with the Allison HT754CR transmission.

ABC Coach, Inc. is the U.S. distributor for Van Hool coaches. ABC Bus Companies, Inc., the parent firm, purchased 100 Van Hool T-800 Series coaches in 1990 for sale and lease, making ABC the major purchaser of Van Hool products and demonstrating ABC's commitment to Van Hool.

Van Hool coaches are sold and supported by ABC and its nationwide network of sales and service locations. Additionally, Van Hool frequently offers training programs at the factory and at various U.S. locations.

St	pecifications	Link Link to the ort
Model	T-800	T-815
Seating cap.	49	49
Length	40'	40;
Width	102"-	102
Height	11.8'	+ 12.6
Wheelbase	20.9'	20.9'
Step height	14.82	14.82"
Overhang (front)	6'8	6'8"
Overhang (rear) Interior headrm	8'1* 75*	8'1" 75"
Aisle width	14.5"	14:5
Door width	29"	29"
Turning radius	38.3'	38.3'
Tire size	12R-22.5	12B-22.5
Engine	Cummins	Cummins
	LTAA10B	LT11.10B
	300STC,	300STC,
Carponent and and	diesel, rear	
Transmission-Al		RAN
Suspension-Inte		the get the
Steering-ZF pow		
Drive axle-Eaton	23123	
Brakes—air Fuel tank cap.—1	12 001	A MARKEN ST
GVWR-43,000 lt		the first the the
Underfloor bag. ca		424 cu ft
Air conditioning	Sutrak 35 roof	mount
Kneeling feature o	ption	and the second sec
Wheelchair lift opt		
The second s		All and the state of the state

For further information, circle No. 281on the special Bus Ride Bus Equipment InfoCard or contact ABC Coach, Inc., Dept. B, 17469 W. Highway 50, Bldg. a, Winter Garden, Fla. 34787; (407) 656-7977 or (800) ABC BUS 1, FAX (407) 877-0855. B. RAIL INDUSTRY

Market information

1991

Market size:

Freight revenues:

Class I railroads

\$26.95 billion 27.5 billion

1992

Freight revenues increased 2.6% from 1991 to 1992.

Class I U.S. railroads represent 93% of all freight revenues.

Passenger and freight rail manufacturer sales figures are not available since the companies are privately held. The information below on deliveries and manufacturing (for all rail vehicles except for freight cars) was obtained from APTA. APTA compiles statistics from U.S. and Canadian public transit systems. The figures are low figures to APTA.

Delivered <u>in 1991</u>	Delivered <u>in 1992</u>	Built <u>in 1992</u>	On order in 1993
24,674	25,761		
16		227	336
156		A REAL PROPERTY OF THE REAL PR	211
C MICH STOR			301
6		18	2
0		nany re-	tent, including t
20		22	201 65
	<u>in 1991</u> 24,674 8 16 156 5 15 6 0	<u>in 1991</u> <u>in 1992</u> 24,674 25,761 8 16 156 5 15 6 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

1993 freight car delivery is expected to increase slightly over 1992.

Number of vehicle manufacturers:

In both the freight and passenger car market, there are a few companies which dominate the industries. Components manufacturing represents a much more fragmented industry with thousands of companies operating.

289

core were delivered in 199 Competition Orders Mast eddes and distant

- Freight car manufacturers: 1) ACF Industries Earth City, MO
- 2) Gunderson, Inc. Portland, OR
- 3) Johnstown America Corporation Johnstown, PA Johnstown, PA
- uring Company 4) Thrall Car Manufacturing Company Chicago Heights, IL
- 5) Trinity Industries Dallas, TX
- 6) Union Tank Car Company Chicago, IL

Passenger vehicles:

According to industry experts, the companies that are most successful are ones that are skilled at managing construction of vehicles, have the capabilities to price low and still make a profit. Price is most often the dominant consideration in contracts due to the strained economic times.

The most important manufacturers of rail vehicles include:

A.B.B. Traction, Inc., of Sweden. A.B.B. Traction is a 1) manufacturer of high-speed trains, one of which has been tested by Amtrak for use for the Northeast Corridor High-Speed train service. With \$40 billion in sales, A.B.B. is the world's largest mechanical and engineering-based firm. According to industry experts, this company is expansionist in its business strategy. The A.B.B. manufacturing plant is located in New York. A.B.B. is one of the 3 biggest companies of the dominant European suppliers, the other 2 being GEC and Siemens.

2) Bombardier Corporation of Canada. It is estimated that Bombardier has a 20%-30% market share, according to industry experts. Bombardier operates a manufacturing plant in Barre, VT.

3) Breda of Italy.

4) GEC-Alsthom of Spain. GEC-Alsthom is a French/British-owned firm which is not considered expansionist or outward-looking by industry experts.

5) Kawasaki of Japan. Kawasaki is the strongest Japanese firm in the rail vehicle industry. However, they are not particularly visible in the U.S.

6) Morrison Knudsen of Boise, ID. It is estimated that Morrison Knudsen has a 20%-30% market share. Manufacturing plants are located in Hormel, NY, Chicago, IL, and California. Although the company claims to be the only American-made manufacturer of rail vehicles, their body shells are built in Brazil. This claim is one that is touted by lobbyists in Washington, D.C.

Morrison Knudsen Corporation Rail Systems Group P.O. Box 73, MK Plaza Boise, ID 83729 Tel: (208) 386-5950 Fax: (208) 386-5967 Contact: Tom J. Smith, President and C.E.O.

Products/Services:

Products/Services: Provides remanufacturing of locomotives and passenger/commuter/transit cars; manufacture of transit and commuter cars also rebuilding of components and wreck repairs; manufactures and rebuilds traction motors and other electrical rotating equipment; manufactures control flow ballast doors; outlet gates; module card manufacture and repair.

7) Siemens of Germany. Siemens is positioning itself in the U.S. by establishing a manufacturing plant in Sacramento, CA.

8) Sumitomo of Japan. Sumitomo is less prominent than the other

Manufacturers in vehicle categories: the nost important manufacturers

The of FW Light Rail vehicles: Locomotives: Kinki Sharyo F40PH F40PH-2C Presidential Conference Cars F40PH-2M ABB Traction, Inc. Siemens-Duewag

Heavy Rail/Rapid Transit vehicles: Pullman Standard U.T.D.C. Hawker Siddeley Morrison Knudsen

Coaches: MBB Tuillman High-speed trains: A.B.B. Traction, Inc. Pullman Siemens

Please see the following page for information on the passenger car market. rauser alorday list and

Passenger car market at-a-glance

These cars were delivered in 1992

^{Purchaser} # of	cars	Туре	Builder
Amtrak	140	BI-Level Intercity	Bombardier
Baltimore (MARC)	dine	Commuter	Sumitomo
Galtimore (MTA)	23	Light Rail	ABB
Chicago (CTA)	76	Rapid Transit	Morrison Knudsen
UNICADO (NICTO)	10	Commuter	Sumitomo/Nippon Sharyo
miami (Metro-Dade)	15	People Mover	AEG Westinghouse
"Wark (N.I Transit)	30	Rebuilt Commuter	ABB
New York City (NYCTA)	9	Rapid Transit	Bombardier
	10	Rapid Transit	Kawasaki
Portland (Tri-Met)	2	Vintage Trolley	Gomaco
"ASDIDATOR DC MARAATA) 52	Rapid Transit	Breda
- Velillornia (SCDDA)	61	Bi-Level commuter	Bombardier
St. Louis (Bi-State)	10	Light Rall	Siemens-Duewag

AEG Westinghouse

Orders likely to develop in 1993

Purchaser # of cars Type

Amtrak	1.4.5	ner Juni 131100
and the second s	35	Bi-Level Intercity
Baltimore (MARC)	125*	Commuter
Dallas (DART)	13	Light Rall
Fort Lauderdale (Tri-County)	8	BI-Level Commuter
Portland (Tri-Met)	37	- Light Rall
San Francisco (MUNI)	6	Vintage Trolley
So. California (SCRRA)	30	BI-Level Commuter
*Based on 10,000-seat estimate	Ð	The Tarra That

The five-year (1994-98) outlook

Intercity

Light Rall **BI-Level Commuter** Light Rall **Bi-Level Commuter Rebuilt Commuter** Commuter Commuter **Rapid Transit Rapid Transit** Light Rall Light Rall Light Rall **Bi-Level Commuter** or Intercity **Bi-Level Commuter** Light Rall Light Rail or Rapid Transit

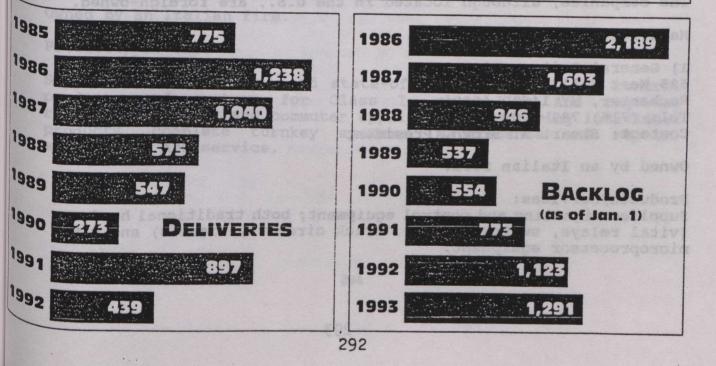
ntercity (High Speed)

Purchaser # of cars Type

Work progresses on this undelivered backlog

"urchaser # of c	MPC	Type	Builden	· · · · · · · · · · · · · · · · · · ·	JE
Amtrak		Datation	Builder	Amtrak . 0-220	
Bate	50	Intercity	Morrison Knudsen	130*	
Baltimore (MARC)	10	Commuter	Sumitomo	Baltimore (MTA) 20	
TILIDORO /AFTAN	7	Light Rail	ABB	Chicago (NICTD) 3	
ILATO OTAL	180	Rapid Transit	Morrison Knudsen	Dallas (DART) 100-125	
Cano /Armon	173	Commuter	Morrison Knudsen	Fort Lauderdale (Tri-County) 4	
THE ADD (MICTO)	7	Commuter	Sumitomo	Newark (NJ Transit) 0-70	
TTCAC) 20"	40	Light Rail	Kinki Sharyo USA	New York City (LIRR) 0-144	
"qmi /adata D	2	People Mover	AEG Westinghouse		
	58	Commuter	Bombardier	N	
"GFK /ALL T IAL	200	Rebuilt Commuter	ABB		
)* 6	Commuter	Morrison Knudsen		
	52	Light Rail	Siemens-Duewag	Pittsburgh (PA Transit) 15	
	80	Rapid Transit	Morrison Knudsen	Sacramento (SRTD) 30	
San Francisco (MUNI)	10	Light Rali		San Francisco (MUNI) 68-128	
	13	Rebuilt Vintage Trolley	Breda	So. California (Caltrans) 0-260**	1
^{So.} California (Caltrans)	48	Bi-Level Commuter	Morrison Knudsen	this tentotet poles	
(ourdand)	40		Morrison Knudsen	So. California (SCRRA) 30-50	I
So. California (SCRRA)	33	Bi-Level Intercity Bi-Level Commuter	Morrison Knudsen	St. Louis (BI-State) 15-40	
St. Louis (BI-State)	21		Bombardier	Toronto (TTC) 350	
Toronto (TTC)	1.	Light Rail	Siemens-Duewag		
	216	Rapid Transit	Bombardier	*Based on a projected 26 high speed	train
Purchased with Connecticut D	45 DOT	Rapid Transit	Breda	** Based on information obtained from ger Railroad Planner's Guide" (RA, No	"19 ov. 1

nsets * Based on information obtained from *1993 Regional Passen ger Railroad Planner's Guide" (RA, Nov. 1992, p. 55)



Contract services:

Contract service for construction, bridge and tunnel work is also an essential part of the industry. Two dominant companies in this industry are listed below.

1) Bechtel Corporation. Civil engineering firm. Bechtel is doing contract work for the Central Artery project in Boston, MA. Further information is not available.

2) Morrison Knudsen Corporation/Construction Group P.O. Box 73 Boise, ID 83729 Tel: (208) 386-5000 Tax: (208) 386-6516 Contact: James L. Lindsay, V.P.R.R. Construction

Products/Services:

Contractor specializing in track construction and maintenance; bridge construction and maintenance; tunnel construction and maintenance; tunnel enlargement; intermodal facility construction and emergency service.

Morrison Knudsen has won the electrification contract for the Northeast Corridor Project.

Components industry:

This industry is very fragmented with thousands of suppliers. No statistical sales information was available.

Signal equipment:

The rail signal equipment industry is comprised of 3 to 4 primary suppliers in the U.S. None of the companies dominates the industry. The companies, although located in the U.S., are foreign-owned.

Manufacturers:

1) General Railway Signal 625 West Fall Road Rochester, NY 14620-4609 Tel: (716) 783-2000 Contact: Stuart A. Brown, President

Owned by an Italian firm.

Products/Services: Supplies signaling and control equipment; both traditional hardware (vital relays, switch machine, track circuits, signals) and vital microprocessor equipment.

2) Safetran Corporation 4650 Main Street, NE Minneapolis, MN 55421 Tel: (612) 572-0466 Fax: (612) 572-2641 Contact: E. Moe, Manager, Technical Markets

Owned by a British firm.

Products/Services: Power signalling apparatus; centralized traffic control systems; level crossing barriers; tone and digital remote control systems.

3) SEL Division Alcatel Canada Inc. 101 Valleybrook Drive Don Mills, Ontario M3B 3M5 Canada Tel: (416) 445-8600 Fax: (416) 441-3438 Contact: Walter Friesen, Marketing Director

Products/Services:

Turnkey signalling systems for streetcars, subways, light rail transit, subways, people movers, AGT systems and heavy rail and mainline railways.

4) Union Switch and Signal, Inc. 1902 Main Street Suite 1150 Columbia, SC 29201-2435 Tel: (803) 929-1200 Fax: (803) 929-1219 Contact: Walter Alessandrini, President and C.E.O.

Owned by an Italian firm.

Products/Services:

Supplier of traditional and state-of-the-art signal and control products and systems for Class I, short-line and regional railroads, transit and commuter applications; offering individual products, complete turnkey systems, maintenance and repair, engineering and service.

Lount Industries, Inc. 51 Water Struct, P.C. Box 368 Arren, RI 02885 Al: (401) 245-8300 Ax: (401) 265-8300 Ax: (401) 265-8301 Ontact: Luther Slougt, Presiden

C. TRUCKING INDUSTRY

Market information

1990

Gross freight revenues: \$272 billion \$278 billion

The increase in freight revenues in 1991 represents an increase of approximately 1% over 1990. For-hire trucking companies account for 38% of these revenues.

Number of companies: Approximately 265,000 companies operate trucks, of which 54% operate 6 or fewer trucks. 47,890 Interstate Commerce Commission-authorized for-hire carriers haul goods interstate.

Competition

The 12 largest U.S. for-hire trucking companies and their 1991 gross revenues are listed below.

Company

1991 Gross Revenue (in thousands)

 6) Overnite Transportation Company, Richmond, VA 7) ABF Freight System, Inc., Fort Smith, AR 8) North American Van Lines, Inc., Fort Wayne, IN 9) J.B. Hunt Transport, Inc., Lowell, AR 10) Schneider National Carriers, Inc., Green Bay, WI \$701,379 11) Carolina Freight Carriers Corp., Cherryville, NC \$583,592 12) Con-Way Transportation Services, Portland, OR \$2,041,314 \$799,769 \$783,024 \$799,769 \$783,024 \$783,024 \$783,024 \$783,024 \$783,024 \$783,024 \$783,024 \$783,024 \$799,769 \$783,024 \$783,024 \$783,024 \$799,769 \$783,024 \$783,024 \$783,024 \$783,024 \$783,024 \$799,769 \$783,024 \$799,769 \$783,024 \$799,769 \$799,769 \$799,769 \$799,769 \$791,379 \$791,379 \$791,379 \$791,379<th> 8) North American Van Lines, Inc., Fort Smith, AR 8) North American Van Lines, Inc., Fort Wayne, IN 9) J.B. Hunt Transport, Inc., Lowell, AR 10) Schneider National Carriers, Inc., Green Bay, 11) Carolina Freight Carriers Corp. Charmonical </th><th>\$799,769 \$783,024 \$752,608 \$731,584 WI \$701,379 NC \$583,592</th>	 8) North American Van Lines, Inc., Fort Smith, AR 8) North American Van Lines, Inc., Fort Wayne, IN 9) J.B. Hunt Transport, Inc., Lowell, AR 10) Schneider National Carriers, Inc., Green Bay, 11) Carolina Freight Carriers Corp. Charmonical 	\$799,769 \$783,024 \$752,608 \$731,584 WI \$701,379 NC \$583,592
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St. Johnsbury Trucking company of Vermont is ranked eighteenth with revenues of \$304,721,000.

No other New England companies are among the top 100 trucking companies in the U.S.

D. WATER TRANSIT INDUSTRY

Market information

Market size (sales): This information is not available since the companies are privately held small companies.

Number of shipbuilders: The U.S. shipbuilding industry has suffered in recent years with many companies going out of business or converting their business to ship repair. The industry is fragmented. The below-listed shipbuilders are associate members of the National Association of Passenger Vessel Owners. tact: Flows charrier, Shipyard Matketing Man

Navatek Shine Ltd. Abyol Competition

Shipbuilders: American Eagle Manufacturing 1178 Sherman Street La Conner, WA 98257 La Conner, WA 98257 Tel: (206) 466-5925 Fax: (206) 466-5921 Contact: Michael Caldwell, General Manager

Atlantic Marine, Inc. 8500 Hecksher Drive Jacksonville, FL 32226 Tel: (904) 251-3111 Fax: (904) 251-3337 Contact: Edward Doherty, President

Avondale Industries, Inc. P.O. Box 50280 New Orleans, LA 70150 Tel: (504) 436-5393 Fax: (504) 436-5375 Contact: Ronald McAlear, V.P. Advertising Program and Marketing

Fax: (505) 672-1873

Bender Shipbuilding and Repair P.O. Box 42 Mobile, AL 36601 Tel: (205) 431-7940 Fax: (205) 432-2260 Contact: Larry Hairston, Marketing Director

Blount Industries, Inc. 461 Water Street, P.O. Box 368 Warren, RI 02885 Tel: (401) 245-8300 Fax: (401) 245-8303 Contact: Luther Blount, President

Bollinger Machine and Shipyard P.O. Box 250, Highway 300 South Lockport, LA 70374 Tel: (504) 532-2554 Fax: (504) 532-7225 Contact: Charles Hardy, V.P.- Business Development Breaux's Bay Craft, Inc. P.O. Box 306 Loreauville, LA 70557 Tel: (318) 229-4246 Contact: Hub Allums Eastern Shipyards, Inc. P.O. Box 960 Panama City, FL 32402-0960 Tel: (904) 763-1900 Fax: (904) 763-7904 Contact: Kenneth Munroe, President Foss Maritime Company 660 West Ewing Stret Seattle, WA 98119 Tel: (206) 281-3872 Fax: (206) 281-4732 Contact: James Cole, Shipyard Sales Manager Freeport Shipbuilding P.O. Box 49 Freeport, FL 32439 Tel: (904) 835-4125 Fax: (904) 835-4873 Contact: James Murray Gladding-Hearn Shipbuilding 1 Riverside Avenue, Box 300 Somerset, MA 02726 Tel: (508) 676-8596 Fax: (508) 672-1873 Contact: George Duclos, President Gulf Craft, Inc. 3904 Highway 182 Patterson, LA 70392 Tel: (504) 395-5254 Fax: (504) 395-3657 Contact: R. Scott Tibbs Leevac Shipyards P.O. Box 1190 Jennings, LA 70546 Tel: (318) 824-2210 Fax: (318) 824-2970 Contact: Charles Burrell

Marco Shipyard 2300 West Commodore Way Seattle, WA 98199 Tel: (206) 285-3200 Fax: (206) 285-8486 Contact: Charles Garman, Sales/Marketing Manager McDermott Shipyards 1010 Common Street New Orleans, LA Tel: (504) 587-6538 Fax: (205) 824-4884 Fax: (504) 587-6153 Contact: Floyd Charrier, Shipyard Marketing Manager Navatek Ship Ltd./Royal Hawaiian 841 Bishop Street, Suite 1880 Honolulu, HI 96813 Tel: (808) 531-7001 Fax: (808) 523-7668 Contact: Michael Schmicker Nichols Brothers Boat Builders P.O. Box 580 Freeland, WA 98249 Tel: (206) 331-5500 Fax: (206) 221-7484 Contact: Matthew Nichols Patti Shipyard, Inc. P.O. Box 271 Pensacola, FL 32592 Tel: (904) 453-1282 Fax: (904) 453-8835 Contact: Frank Patti Peterson Builders, Inc. 101 Pennsylvania Street Sturgeon Bay, WI 542365-0650 Tel: (414) 743-5574 Fax: (414) 743-6089 Contact: Allen Powell, Director of Business Development Service Marine Industries, Inc. P.O. Box 3606 Morgan City, LA 70381 Tel: (504) 631-0511 Fax: (504) 631-0046 Contact: T.R. Hensley

Skipperliner Shipyard 621 Park Plaza Drive LaCrosse, WI 54601 Tel: (608) 784-5110 Fax: (608) 784-7778 Contact: Robert McMahon Steiner Shipyards, Inc. P.O. Box 742 Bayou La Batre, AL 36509 Tel: (205) 824-4143 Fax: (205) 824-4884 Contact: Russell Steiner, President Superior Boat Works, Inc. P.O. Drawer 8 Greenville, MS 38702 Tel: (601) 378-4700 Fax: (601) 378-4708 Contact: Collins Brent, President Swath Ocean Systems, Inc. 979 G Street Chula Vista, CA 91911 Tel: (619) 426-2179 Fax: (619) 426-2196 Contact: Robin Brackenbury, Director of Marketing Trinity Marine Group P.O. Box 3029 Gulfport, MS 39505 Tel: (601) 896-0029 Fax: (601) 867-1603 Contact: Sid Mizell, Vice President Walker Boat Yard, Inc. P.O. Box 1400 Paducah, KY 42002 Tel: (502) 444-4058 Fax: (502) 444-4012 Contact: Ken Wheeler Washburn and Doughty P.O. Box 296 East Boothbay, ME 04544 Tel: (207) 633-6517 Contact: Bruce Doughty, President Westport Shipyard P.O. Box 308 Westport, WA 98595 Tel: (206) 268-0117 Fax: (206) 268-0119 Contact: Randy Rust, Manager

XV. TRANSPORTATION INDUSTRY INFORMATION

A. TRADE ASSOCIATIONS (by industry)

Trade associations often publish directories or magazines in which bids are advertised by public entities.

General associations

American Public Transit Association (APTA) 1201 New York Avenue, N.W. Washington, DC 20005 Tel: (202) 898-4000 Fax: (202) 898-4070 Executive Vice President: Jack Gilstrap APTA members include over 1,000 motor bus, rapid transit systems and organizations responsible for planning, design, constructing, financing and operating transit systems.

Caravan for Commuters, Inc. Transportation Building 10 Park Plaza Boston, MA 02116 Tel: (617) 227-7665 Contact: Carolyn DiMambro Caravan for Commuters is a "clearinghouse" for commuters. Information is available on carpools, vanpools, the MBTA, commuter rail, private bus carriers, and commuter boats.

Maine Transit Association 54 Pine Street Mexico, ME 04257 No telephone number is available.

Maine World Trade Association 77 Sewall St. Augusta, ME 04330 Tel: (207) 622-0234 Fax: (207) 622-3760 Contact: Daniel W. Marra, President

National Conference of State Transportation Specialists 22197 Clark Lane Gulfport, MS 39503 Tel: (804) 786-2488 President: William Fulcher Members are employees of state public service commissions involved in the motor carrier industry. National Freight Transportation Association P.O. Box 21856 Roanoke, VA 24018 Tel: (607) 562-3378 Executive Secretary-Treasurer: Walter C. Mayo 500 members

National Industrial Transportation League 1700 North Moore St., Suite 1900 Arlington, VA 22209-1904 Tel: (703) 524-5011 Represents industrial and commercial shippers, boards of trade and chambers of commerce.

National Small Shipments Traffic Conference 1750 Pennsylvania Ave. NW, Suite 1111 Washington, DC 20006 Tel: (202) 393-5505 Fax: (202) 347-8978 Executive Director: Joseph Cutrona Members are 250 truck, air, rail and sea shippers of freight weighing less than 10,000 lbs.

New Hampshire Transit Association P.O. Box 731 Lebanon, ME 03766 No telephone number is available.

Transportation Lawyers Association P.O. Box 15122 Lenexa, KS 66285-5122 Tel: (913) 541-9077 Fax: (913) 541-0156 Director: Deirdre Gish Panjad Members total 600 lawyers in this international bar association representing motor carriers before the Interstate Commerce Commission and Canadian regulatory agencies.

Publications: "Transportation Law Journal" "Your Letter of the Law"

Women's Transportation Seminar 1 Walnut Street Boston, MA 02108 Tel: (617) 227-5551 Fax: (617) 227-6783 President: Kathleen Scannell, Massachusetts President

Bridge, tunnel and turnpike industry 6410 Kenilworth Ave., Suite 108 International Bridge, Tunnel and Turnpike Association 2120 L St., NW, Suite 305 Washington, DC 20037 Tel: (202) 659-4620 Fax: (202) 659-0500 Executive Director: Neil Schuster Bus industry American Bus Association 1015 15th St., NW, Suite 250 Washington, DC 20005 Tel: (202) 842-1645 Fax: (202) 842-0850 Executive Vice President and CEO: George T. Snyder, Jr. research, economics, finance, accounts Publications: "Destinations" "Travel Scan" "Bus Operator" "The Motorcoach Marketer" "Transit Times" "Operator Scan" National Association and and an Paper Social and "Railroads and States" "Railroads and States" United Bus Owners of America 1300 L St. NW, Suite 1050 Washington, DC 20005 Tel: (202) 484-5623 Contact: Annette Ott Intermodal industry

Institute of Intermodal Repairers 251 Lafayette Circle, Suite 150 Lafayette, CA 94549 Tel: (510) 283-4837 Fax: (510) 283-5202 Executive Secretary: Mark C. North Members total 70 companies. The membership fee is \$700 per year. The association began in 1983 by about 40 U.S. and Canadian repair companies to develop the industry in new repair technologies and to unify industry response to other traditional associations and groups. Intermodal Transportation Association 6410 Kenilworth Ave., Suite 108 Riverdale, MD 20737 Tel: (301) 864-2661 Executive Director: John McQuade

Railroad industry

American Association of Railroads 50 F Street N.W. Washington, DC 20001-1564 Tel: (202) 639-2100 Fax: (202) 639-5546 President: Edwin L. Harper 100 railroads are members. This association serves its members to assure an efficient nationwide rail system. Activity areas include standards, operations, maintenance, safety, theoretical and applied research, economics, finance, accounting, communications, data systems, hazardous materials, legislative matters and public affairs.

Publications: "Rail News Update" "Railroad Facts" "Analysis of Class I Railroads" "Railroad Ten-Year Trends" "Railroads and States"

American Short Line Railroad Association P.O. Box 19026 2000 Massachusetts Avenue, NW Washington, DC 20036 Tel: (202) 628-4500 Fax: (202) 628-6430 Executive Director: William Loftis

New England Railroad Club P.O. Box 82 Lowell, MA 01853 Tel: (413) 568-6426 President: Marjorie P. Silver, Pinsly Railroad

Shipping industry

composed of 3 branches: 51 state trucking American Association of Port Authorities 1010 Duke Street Alexandria, VA 22314 Tel: (703) 684-5700 Fax: (703) 684-6321 Contact: Rex Sherman manufacturers, suppliers, shipyards, government Occast 125, adaquat

Association of Ship Brokers and Agents 90 West St., Suite 2021 New York, NY 10006-1039 Tel: (212) 385-4060 Fax: (212) 385-4063 Secretary: Virginia Redstone Members total 105 ship brokers and agents. Precutive Director: Eric :

Boston Shipping Association 33 3rd Ave. Charlestown, MA 02129 Tel: (617) 242-3303 General Manager: Alfred Frizelle

National Association of Rail Shippers 50 F St., NW, Room 6400 Washington, DC 20001 Tel: (202) 639-2560 Tel: (202) 639-2560 Executive Director: Anne Bennoff 2,000 members are industrial traffic executives using rail transportation.

Fax: (401) 438-9818

New England Association of Rail Shippers 29 Cushing Ave. Hingham, MA 02043 Tel: (508) 428-1224 President: Ruth Gale VP: Rob Chafitz Hingham, MA 02043

Trucking industry

American Trucking Associations (ATA) 2200 Mill Road Alexandria, VA 22314-4677 Tel: (703) 838-1880 Fax: (703) 684-5720 Fax: (703) 684-5720 Information Center: (703) 838-1880 President & CEO: Thomas Donohue

ATA is the national association of the trucking industry. It is composed of 3 branches: 51 state trucking associations; legislative, policy and technical headquarters in Washington; and 9 independent national conferences.

Maine Motor Transport Association 524 Western Ave. Augusta, ME 04330 Tel: (207) 623-4128 Contact: Richard Jones

Massachusetts Motor Transportation Association 80 Blanchard Road Burlington, MA 01803 Tel: (617) 270-6880 Contact: Kevin Kiley

New Hampshire Motor Transport Association 4 Park Street Concord, NH 03301 Tel: (603) 224-7337 Fax: (603) 225-9361 President: Robert Sculley

Rhode Island Trucking Association 1240 Pawtucket Avenue Rumford, RI 02916-1427 Tel: (401) 438-0410 Fax: (401) 438-9818 President: John Atwood

Truck Trailer Manufacturers Association 1020 Princess Street Alexandria, VA 22314 Tel: (703) 549-3010 Fax: (703) 549-3014 President: Richard Bowling This association represents manufacturers of truck trailers and intermodal containers. The 200 members are responsible for the manufacture of more than 90% of commercial trailers produced in the U.S.

Vermont Truck and Bus Association P.O. Box 271 Barre, VT 05641-0271 Tel: (802) 479-1778 Fax: (802) 479-1395 Executive Secretary: Alice Ennis

Water Transit industry International Marine Transit Association 34 Otis Hill Rd. Hingham, MA 02043 Tel: (617) 749-0078 President: Martha Reardon Members include 300 ferry operators, naval architects, manufacturers, suppliers, shipyards, government agencies, support services, marine engineering and planning consultants, and specialists in marine training. National Association of Passenger Vessel Operators 808 17th St., N.W., Suite 200 Washington, DC 20006 Tel: (202) 785-0510 Executive Director: Eric Scharf B. TRADE PUBLICATIONS (by industry) General transportation "American Public Transit Association Directory" American Public Transit Association (APTA) 1201 New York Avenue, N.W. Washington, DC 20005 Tel: (202) 898-4000 Fax: (202) 898-4070 Executive VP: Jack Gilstrap APTA Directory: \$50.00 "Passenger Transport" American Public Transit Association. See information above. Weekly newspaper with annual subscription of \$103. Numerous public bids are advertised here. Federal News Services, Inc. P.O. Box 19481 Alexandria, VA 22320 Tel: (703) 548-5177 Fax: (703) 683-2466 Editor: Thomas Robinson Transportation law newsletter "Mass Transit" 445 Broad Hollow Road Melville, NY 11747 Tel: (516) 845-2700 Fax: (516) 845-7019 306

"Northeast Journal of Transportation" 31 Fargo St. South Boston, MA 02127 Tel: (617) 695-1660

"Traffic World" 741 National Press Building Washington, DC 20045-0001 Tel: (202) 383-6144

Bus industry

"Destinations" "Travel Scan" "Bus Operator" "The Motorcoach Marketer" "Transit Times" "Operator Scan"

The above-listed bus publications are produced by the American Bus Association. Please see address below.

American Bus Association 1015 15th St., NW, Suite 250 Washington, DC 20005 Tel: (202) 842-1645 Fax: (202) 842-0850 Executive Vice President and CEO: George T. Snyder, Jr.

"Bus Book" Bus Book Publishing Company P.O. Box 7 Willamina, OR 97396-0007 Tel: (503) 843-4344 Fax: (503) 843-3362

"Bus Operator" 1210 Eighth Ave. So. Nashville, TN 37203 Tel: (61) 242-7747 Contact: Keela Stapp

"Bus Ride" Friendship Publications, Inc. P.O. Box 1472 Spokane, WA 99210 Tel: (509) 328-9181 Fax: (509) 325-5396

Massa Transit 445 Broad Hollow Road Malville, NY 11747 Tel: (516) 845-2700 Pag: (516) 345-2701

VP: Jack Gilatrap

"Metro" Bobit Publishing Company 2512 Artesia Boulevard Redondo Beach, CA 90278 Tel: (213) 376-8788 Fax: (213) 376-9043

Intermodal industry

"Intermodal Reporter" K-III Information Company, Inc. 424 W. 33rd St. New York, NY 10001 Tel: (800) 888-0631 Information packets available on the industry 1985 198

Railroad industry

"The Official Railway Guide" K-III Directory Corporation 424 West 33rd Street

"The Pocket List of Railroad Officials" K-III Directory Corporation 424 West 33rd Street New York, NY 10001 Tel: (212) 714-3100

"Progressive Railroading" Murphy-Richter Publishing Company Two North Riverside Plaza, 1825

New York, NY 10001 Tel: (212) 714-3100

Chicago, IL 60606-2701 Tel: (312) 629-1200

"Railway Age" Simmons-Boardman Publishing Corporation 1809 Capitol Avenue or 345 Hudson St.
 Omaha, NE 68102
 New York, NY 10014

 Tel: (402) 346-4300
 Tel: (212) 620-7200
 Tilbraries Suppler Transf at the Version Department of Lipraries.

Trucking industry

"American Motor Carriers Directory" K-III Directory Corporation 424 West 33rd Street New York, NY 10001 Tel: (212) 714-3100

"The Trucking Information Buyers Guide" "Transport Topics" "Trucksource" American Trucking Association 2200 Mill Road Alexandria, VA 22314-4677 Tel: (703) 838-1700 The ATA also operates an Information Center with data bases and information packets available on the industry.

Water Transit industry

"Marine Log" Simmons-Boardman Publishing Corporation 345 Hudson St. New York, NY 10014 Tel: (212) 620-7209 Fax: (212) 633-1165

"Maritime Reporter and Engineering News" 118 East 25th St. New York, NY 10010 Tel: (212) 477-6700 Contact: Gregory Trauthwein

"Maritime Services Directory" Aegis Publications 5394 Linda Vista Road, Suite A San Diego, CA 92110 Tel: (619) 294-8630

Publications/Computer Systems for Advertising Public Bids

Most of the New England states publish bids for construction work in a Central Register or in a computer data base. Information is noted below:

Maine spland Transportation Consortium is affiliated with this

An advertising schedule for contracting consultants is available on a quarterly basis. Construction bids are also available. No subscription fee.

Department of Transportation State House- Station 16 Augusta, ME 04333 Tel: (207) 287-2484 Contact: Robin Phillips

Massachusetts

Construction bids are advertised weekly in the Central Register which is available through the State Bookstore. \$200 annual subsciption fee. State Bookstore, Room 116

State Bookstore, Room 116 State House Boston, MA 02133 Tel: (617) 727-2834 Contact: Heidi Anderson

New Hampshire

No Central Register is available in New Hampshire.

Rhode Island

No Central Register is available in Rhode Island.

Vermont

A weekly bid newsletter for construction and transportation work over \$10,000 is available for an annual subscription fee of \$75. Bid information is also on computer through Vermont Automated Libraries System (VALS) at the Vermont Department of Libraries.

contracts the Bostonial one isoanostation and heaters is and set of the

Newsletter contact: Betsy Donahue The General Services Center US Rt. 2 Middlesex, VT 05633-7601 Tel: (802) 828-3274

Computer contact: Cybil McShane	
Vermont Department of Libraries	
109 State St.	
Montpelier, VT 05609-0601	
Tel: (802) 828-3261	
Tel: (212) 714-3165	
Public and private construction bids for	cities and states are also
advertised in F.W. Dodge Bulletins why	ich are published daily.
Subscription and address information is	below.
T. W. Dedre Bulletin	
F.W. Dodge Bulletin	
800 Boylston St. Boston, MA 02116	
m_{2} : (617) 375-2200	
Tel: (617) 375-2200 Contact: Laurie Guerra	
	Tel: (207) 287-2484
Annua	l subscription fee
Eastern Massachusetts	\$1,234
Western Massachusetts	\$1,463
Rhode Island	\$1 112
Maine, New Hampshire, Vermont	\$1,718
A weekly magazine is also published at t	the following rates:
Eastern Massachusetts	¢670
Western Massachusetts and Rhode Island	\$504
Maine	\$504
New Hampsnire	\$504
Vermont	\$504
Advertigers include the Massachusette D	
Advertisers include the Massachusetts Bay and federal, state and county organizati	Transportation Authority,
For bidding advertisements, it is essent	ons.
contacts to read the Boston Globe, Bosto	on Horold and the seeking
newspapers on an ongoing basis.	on heraid and other local
"mericiae Services Directory"	
	Tel: (802) 828-3374
311	

C. TRANSPORTATION STUDY CENTERS

Center for Transportation Studies MIT, Room 1-178 Cambridge, MA 02131 Tel: (617) 253-5320 Contact: Carl Martland New England Transportation Consortium is affiliated with this center Contact: Thomas Humphrey Tel: (617) 253-4978

Northeastern University 370 Common Street Dedham, MA 02026-4097 Tel: (617) 320-8000 ext. 21 or 22 Fax: (617) 326-8127 Dean: Malcolm J. Campbell

Transportation Research Board (federal program) National Research Council Green Building, Suite 300 2001 Wisconsin Ave., NW Washington, DC 20007 Tel: (202) 334-2933

Transportation Research Forum 1730 North Lynn St., Suite 502 Arlington, VA 22209 Tel: (703) 525-1191 Fax: (703) 276-8196 Administrator: Richard Guggolz Members total 750 transportation industry professionals. TRF's purpose is to provide an impartial meeting ground for carriers, shippers, government officials, consultants, university researchers, suppliers and others seeking information regarding passenger and freight transportation.

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D. TRADE EVENTS (by industry)

Date

April 19-21, 1993

Bridge, Tunnel and Turnpike industry

International Bridge, Tunnel and Turnpike Assn June 26-30, 1993 Trade show New York City Show organizers: International Bridge, Tunnel and Turnpike Association Tel: (202) 659-4620 Fax: (202) 659-0500 Contact: Maureen Gallagher

Bus industry

United Bus Owners of America Jan. 16-19, 1994 Trade show Show organizers: United Bus Owners of America Tel: (202) 484-5623 Fax: (202) 898-0484 Contact: Annette Ott

Intermodal industry

International Intermodal Expo '93 Trade show 57 Forsyth St., Suite 600 Atlanta, GA 30303 Show organizers: Georgia Freight Bureau Tel: (404) 524-7778 Fax: (404) 524-7776 Contact: David Leedy

Purpose is to provide an impartial manufind for groups Public Transit industry

researchers, suppliers and others seeking i International Public Transit Expo '93 Oct. 4-6, 1993 Trade show New Orleans, LA Show organizers: PEMCO Tel: (708) 260-9700 Fax: (708) 260-0396 Contact: Ingrid Tomasek

Railroad industry

Railway Supply Association/ Sept. 12-15, 1993 Coordinated Mechanical Associations Annual meeting Chicago, IL Show organizers: Railway Supply Association Tel: not available Fax: (708) 469-5732

Please see the following 3 pages for additional meetings and trade shows in the railroad industry. (1993 Meetings)

March 22-24-American Railway Engineering Association 1993 Spring Technical Conference. Chicago, IL. For info: Ms. W.S. Tayman, Director Admin., AREA (202) 639-2190.

March 24-26--Arizona Dept. of Transp. 1993 Spring NCSRO Conference. Hotel Park Tuscon, Arizona. For info: Mary Szafranski (602) 255-6540.

March 22-26--Carnegie Mellon Research Inst. short course "Electric Traction Systems for Rail Transit". Contact Pamela Sellitti, Admin. Asst., Carnegie Mellon Research Inst. Rail Systems Center, 4400 Fifth Ave., Pittsburgh, PA 15213 (412) 268-2960.

March 24-26--4th International Congress of EDI Users presented by the EDI Council of Australia. For info: EDI Council of Australia, P.O. Box 521, Hawthorn, Victoria 3122 Australia. Intl. Ph. #61 3 819 6860.

April 2-3--Railroad Personnel Association Annual Section Meetings. Orlando Marriott & International Drive, Orlando, Fla. Contact Penny Prue at (202) 639-2150.

April 6-8--ASME/IEEE Joint Railway Conference. Vista Hotel, Pittsburgh, PA. For Info: James F. Wright (412) 771-7300.

April 6--Canadian Short Line Railroad Conference. King Edward Hotel, Toronto, Ontario Canada. For info: (514) 843-9850.

April 7-8--Midwest Freight Claim & Damage Prevention Conference. Westin Canal Place Hotel, New Orleans, La. Contact B.J. Wade at (703) 981-3924.

April 12-14--California Transit Association 28th Annual Legislative Conference. Sacramento, CA. For info: Lola Woronow (916) 446-4656.

April 13-14-- Regional Railroads of America Annual Meeting. Washington Court Hotel, Washington, DC. Contact Thomas Heckard at (202) 638-7790.

April 18-21--American Public Transit Association 1993 Commuter Rail Conference. Queen Elizabeth Hotel, Montreal, Quebec. For info: (202) 898-4000.

April 20-22--International Intermodal Expo. Georgia World Congress

Center, Atlanta. For further info: Georgia Freight Bureau, 57 Forsyth St., Atlanta, Ga. 30303 (404) 524-7778 or (800) THE-EXPO.

May 3-5--National Association of Rail Shippers Annual Transportation Seminar. Westin Crown Center, Kansas City, MO. For info: Anne Bennof at (202) 639-2560.

May 4--National Association of Purchasing Management Rail Industry Group Meeting. Marriott Rivercenter Hotel, San Antonio, Texas. To be held in conjunction with the NAPM International Purchasing Conference. For info: Bill Hoenig (415) 541-1680 or Phil Wilson (215) 209-4119.

May 23-26-American Railway Development Association Annual Meeting. Westin Crown Center, Kansas City, MO. For info: E.G. Tyckoson, ^{Jr}., Exec. Dir. (612) 828-9750.

May 23-27--Tenth International Convention on High Speed Rail and Magnetic Levitation sponsored by the High Speed Rail/Maglev Association. Westin Harbour Castle Hotel. Toronto, Ontario. For info: 412-364-9306.

May 24-26--1993 High Speed Rail/Maglev Exposition sponsored by the High Speed Rail/Maglev Association. Westin Harbour Castle Hotel, Toronto. For info: Peter McLean, Group Show Mgr., Industrial Trade & Consumer Shows, Inc. (416) 252-7791.

May 25-27--Association of American Railroads/Bureau of Explosives 6th Annual Hazardous Materials Seminar. Hyatt Regency Hotel, Dallas, Texas. For info: Cyndi Stone (202) 639-2230.

May 25-27--Railtex '93 International Exhibition of Products and Services for Passenger and Freight Railways held in conjunction with an International Conference on Railways organized by: The Institution of Civil Engineers. Wembley, London, England. For further information on the conference: Sue Frye, Conference Executive, Institution of Civil Engineers, 1 Great George Street, Westminster, London, SW1P 3AA England. Tel: 071 839 9801.

May 25-27--The Institution of Civil Engineers International Conference on Railways. Wembley Conference & Exhibition Centre, London, UK. For further information contact Susan Frye, Institution of Civil Engineers, 1 Great George Street, Westminster, London SW1P 3AA, UK, 071-839 9801.

^{June} 6-10--APTA Rail Transit Conference. Miami. For info: Ingrid ^{Tomasek} at (202) 898-4000.

^{June} 6-11--5th International Heavy Haul Conference "Efficiency and ^{Safety}". For information write The Conference Manager, The Fifth ^{Int}ernational Heavy Haul Railway Conference, China Railway Society, ¹⁰ Fuxing Rd., P.O. Box 2499, Beijing - China 100844, Tel. 81-1326-7184.

June 21-22--American Association of Railroad Superintendents 97th Annual Meeting. Minneapolis Hilton & Towers, Minneapolis, MN. For information (708) 799-4650).

July 6-8--Association of American Railroads Damage Prevention & Freight Claim Section's 102nd Annual Session. Westin Hotel, Seattle, Wash. For info: Vic Rye (202) 639-2346.

Sept. 6-10--The International Railway Congress Association (IRCA) World Railway Congress. Lisbon. For information contact Chantel Sandron Press Officer IRCA at telephone +32 2 525 40 78 or by fax +32 2 525 40 84.

Sept. 12-15--Railway Supply Association/Coordinated Mechanical Associations annual meeting. Chicago. For info: (708) 469-5732.

Sept. 19-22-- REMSA/Technology 2000 -- Railway Engineering-Maintenance Suppliers Association in conjunction with Roadmasters & B&B annual meetings. REMSA/Technology 2000 Indoor and Outdoor Exhibit./Colorado Convention Center, Denver, Co. For info: Judi Meyerhoeffer, Exec. Dir. at 703-241-8514.

Sept. 29-Oct. 2--American Council of Railroad Women 50th Annual Meeting. Wyndham-Hamilton Hotel, Itasca, Ill. For info: Martha J. Smith (21&) 788-8644.

Oct. 3-6--Railroad Personnel Association 41st Annual Conference. Plaza San Antonio, San Antonio, Texas (202) 639-2150.

Oct. 3-6--International Public Transit Expo '93. New Orleans Convention Center. New Orleans, La. For complete details 1-800-323-5155.

Oct. 10-13--Railway Systems Suppliers Inc./AAR C&S Div. Meeting & Exhibit. St. Louis. For info: (908) 494-2910.

Nov. 3-5--California Transit Association 28th Annual Fall Conference. Pleasanton, Calif. For info: Barbara May (510) 455-7555.

1994 Meetings

January, 1994--XIX Pan American Railway Congress "Let us look after the planet, it is the only one we have" "An axiom that is fully complied with by the Railway". Caracas, Venezuela. For further information contact: Pan American Railway Congress Association, Av. 9 de Julio No. 1925, Piso 13, Buenos Aires (1332) Argentina. Tel: 54-1-381-4625 Telex: 23045 RETIRO AR, FAX: 54-1-8141823

Shipping industry

National Small Shipments Traffic Conference April 13-15, 1993 Trade conference Washington, DC Show organizers: National Small Shipments Traffic Conference Tel: (202) 393-5505 Fax: (202) 397-8978 Contact: Ann Mehrten

Massachusetts Port Authority Maritime Department Oct. 1993 Annual meeting Specific date is Fish Pier East II, Northern Avenue not yet available. Boston, MA 02210 Tel: (617) 973-5354 Fax: (617) 973-5359 Contact: Toni Whitmore

Nov. 14-16, 1993 Transcomp Trade show San Diego, CA Show organizers: National Industrial Transportation League Tel: (703) 524-5011 Fax: (703) 524-5017 Contact: Elizabeth Archer 200 exhibitors include freight and computer software companies

Trucking industry

American Trucking Associations Feb. 28-March 4, 1993 Maintenance Council Meeting Orlando, FL Show organizers: American Trucking Associations Tel: (703) 838-1880 Fax: (703) 684-5720 Pax: (212) 633-1165 Contact: Paul Domer, Director of Conventions Fort Lauderdale, but the show management

March 17-19, 1994

Mid-American Trucking Show Trade show (also open to the public) Louisville, KY Ship Repair and Maritime Maintenance Show organizers: Exhibit Management Tel: (502) 458-4487 Fax: (502) 473-0547 Contact: Jim Young

New England Truck Show Trade show Boston, MA Show organizers: North American Expositions Tel: (617) 242-6092 Fax: (617) 242-1817 Contact: Michael J. Petta

Water Transit industry

Ferries '93

International Marine Transit Association Oct. 18-21, 1993 Trade conference San Francisco, CA Show organizers: International Marine Transit Association Tel: (617) 749-0078 Contact: Martha Reardon Please note that the name and number provided are the Massachusetts contact.

Propulsion '93 Trade show New Orleans, LA Show organizers: "Marine Log" Trasce. Tel: (212) 620-7209 Fax: (212) 633-1165 Contact: Jane Poterala 200 exhibitors include fre Please note that the trade show is held in New Orleans, but the show management is located in New York City.

March 28-30, 1993

April 25-27, 1993

Nov. 7-9, 1993

May 5-7, 1993

Trade show Fort Lauderdale, FL Show organizers: "Marine Log" Tel: (212) 620-7209 Fax: (212) 633-1165 Contact: Jane Poterala Please note that the trade show is held in Fort Lauderdale, but the show management is located in New York City.

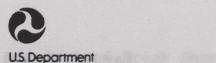
Prade shew (also open to the public Ship Repair and Maritime Maintenance Trade show New Orleans, LA Show organizers: "Marine Log" Tel: (212) 620-7209 Fax: (212) 633-1165 Contact: Jane Poterala Please note that the trade show is held in New Orleans, but the show management is located in New York City.

May 18-19, 1993

Tanker Legislation '93 Trade show Washington, DC Show organizers: "Marine Log" Tel: (212) 620-7209 Fax: (212) 633-1165 Contact: Jane Poterala Please note that the trade show is held in Washington, DC, but the show management is located in New York City.

The Federal Transit Administration provides a list of meetings and events. Please refer to this list on the following 5 pages.

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of Transportation Federal Transit Administration 400 Seventh St., S.W. Washington, D.C. 20590

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EVENTS OF INTEREST TO FTA

1993

Date	Meeting	Sponsor/Location	City
MARCH			
	Turnkey Roundtable Seminar	anance .	
	SMART Regional Mobility Seminar	TTS	Washington
1	Automated People Movers		Overland Park, KS
1-2	Environmental Health and Safety Issues in Motor Vehicle	ASCE	Dallas
1	Maintenance	Environmental Resource Inst.	Atlanta
1-5	Society of Automotive Engineers International Congress	64.D	
	and Exposition	SAE	Detroit
1-12	Traffic and Transportation Engineering Seminar	N	
2	Fare Management Workshop	Northwestern University	Evanston
3	Marketing Mass Transit in the 90's	TTS	Cambridge, MA
5-6	Transportation Planning for Livable Communities	CUNY	New York
7-9	APTA Legislative Conference	FHWA	Austin
8-9	ISTEA in Rural and Small Urban America	АРТА	Washington
8-12	Mass Transit Instructor Orientation and Training	DOA/DOT/NACo/NACE	Boise
10	Special Workshop on Key Environmental Issues Affecting	TTS/TSI	Oklahoma City
	Transit Operations and Facilities	АРТА	Washington
10-11	Evergreen Bus Maintenance Forum		
10-12	Private Financing of the Passenger Rail Renaissance	Friendship Publications	Seattle
11	Manitoba Section Meeting	DuPont Plaza Hotel	Washington
12	Joint California Border Section and Southern California	ITE	Winnipeg, MANITOBA
	Section Meeting	ITE	San Diego
12-13	Transportation Planning for Livable Communities		
14-17	ISTEA and the Transportation Profession	FHWA	Boston
14-17	Transportation Claims and Prevention Council 19th Annual	ITE	Orlando
i	Conference: Liability Issues and Transportation Policy in	TCPC	Orlando
i	the New Administration		
15-16	4th Transit Planning and Research Priorities Workshop	-	
	(Invitation Only)	TTS	Alexandria, VA
15-17	Implementing the Americans with Disabilities Act	DUITO	
15-17	Specialty Conference: Automated People Movers	DHHS	Billings
15-17	Human Resources Transportation Regional Training Conference	ASCE	Las Colinas, TX
15-19	Bus Accident Investigation	DHHS/CTAP	Billings
15-19	Contract Administration	TTS/TSI	Oklahoma City
		FTA	Denver

MARCH 1995

NOTE: For information on these events, contact the sponsor. For additions, changes, or deletions, contact Edith Rodano, Office of Technical Assistance and Safety, at the above address or phone 202, 366-0191. 321

Date	Meeting	Sponsor/Location	City
MARCH	(continued)		
16-19	"Understanding Railway Track" Seminar	Days Inn Lakeshore	Chicago
17-19	Joint ITE Arizona Section/International Municipal Signal	ITE	Phoenix
	Association Arisons Chapter Spring Conference	TTE/THY second form	ALL SALSHOWS CHE AN
18	San Francisco Bay Area Section Monthly Luncheon Meeting	ITE	Oakland
18-20	International Specialty Conference on Automated People Movers	TRB antimered and and	Las Colinas, TX
19	Oregon Section Luncheon Meeting	ITE	Tualatin
19-20	4th Conference on Intergenerational Issues and Programs	Child Welfare League	Washington
22-24	Spring Technical Conference	AREA	Chicago
22-26	Electric Traction Systems for Rail Transit	Carnegie Mellon	Pittsburgh
22-26	Rural/Specialized Transit Management Workshop	Univ. of Wisconsin/Milwaukee	Milwaukee
22-26	Railroad Track Inspection and Safety Standards	University of Tennessee	Chattanooga
24-25	Railway Bridges Inspection, Evaluation and Rehabilitation	Tech. Univ. of Nova Scotia	Montreal, QUEBEC
24-25	Colonial Bus Maintenance Forum	Friendship Publications	Atlanta
14-27	Society of Fire Protection Engineers Annual Meeting and	SFPE	Orlando
QUEER	Engineering Seminars		
4-28	American Road and Transport Builders Association	ARTBA	San Diego
5	Annual Conference		Bulleyda
5-26	Alaska Section Luncheon Meeting	ITE	Anchorage
	Railway Bridges Inspection, Evaluation and Rehabilitation	Tech. Univ. of Nova Scotia	Montreal, QUEBEC
5-30	39th Annual Meeting of the American Society on Aging	ASA	Chicago
8-4/1	APTA Transit Management Conference	APTA	Portland, OR
9-4/2	Mass Transit Instructor Orientation and Training	TTS/TSI	Oklahoma City
9-4/2	Petroleum/Energy Economics and Management	Northwestern University	Evanston, IL
0-4/2	2nd International Symposium on Differential Satellite Navigation	Netherlands Inst. of Nav.	Amsterdam, NETH
1	Israel Section Meeting	ITE	Tel Aviv
0-31	TransAction 93 New Jersey Transportation Conference	Morris County DOT	Atlantic City
pring	National Conference on Travel Demand Management Research	TRB	Washington
	and Innovation		the second second
pring	Workshop on Transit and Fare Management	TRBA ward These desides T land	
PRIL			
1	California Border Section Meeting	sion (Washington, Oregon, Willish	33 (COMP)
	Riverside/San Bernardino Section Meeting	ITE mileseM (busial m	San Diego
-3	Transportation Planning for Livable Communities	ITE	Riverside
7	District 5 Annual Meeting	FHWA has been T appind land	San Francisco
.7	National Conference on Tort Liability and Risk Management	ITE podecto W pottatonnal	Richmond, VA
	for Universities	TRB/AASHTO	University Park, PA
.8	Introduction to Global Positioning Systems	The Wissend's Cont	AND TO AND ALL
7	ISTEA in Rural and Small Urban America	The Wisconsin Center	Madison
8	ASME/IEEE Joint Railway Conference	DOA/DOT/NACo/NACE	Burlington, VT
	Metropolitan Section of New York and New Jersey Meeting	ASME/IEEE	Pittsburgh
	Manitoba Section Meeting	ITE	Blinging MANUMON
-14	California Transit Association 28th Annual Legislative	California TA	Winnipeg, MANITOB Sacramento
-15	Conference	Crement Association Account Manufi	
-15	Pennsylvania Association of Transportation Authorities	Pennsylvania ATA	Hershey
	Annual Meeting	Contesence of TON, Samaural as	Surdie H Bahage
	Communications Subcommittee		Washington
	International Liaison Subcommittee		Washington
	Personal Portable ATIS Subcommittee		Washington
	APTS Committee	IVHS America	Washington
	ATIS Committee		and the second

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Date

APRIL (continued)

Meeting

Sponsor/Location

APA

ITE

of Wisconsin/Milwaukee

City Washington

Washington Washington Washington Washington Washington Washington Madison Washington Oakland Atlanta Washington Anaheim Austin Cleveland Montreal, QUEBEC Washington

Kansas City Washington Oklahoma City Cambridge Cohasset, MA Honolulu Atlanta Anaheim Honolulu Mobile Anchorage Three Rivers, QUEB Baltimore

Seaside, OR

Atlanta Washington Milwaukee Philadelphia Madison Portland, OR Chicago Tel Aviv San Diego Anchorage Anchorage Phoenix Winter Park Washington

Los Angeles Chicago San Antonio

APRIL ((continued)	
13	Commercial Vehicle Operations Committee	IVHS America
13	Standards and Protocols Committee	IVHS America
13	Legal Issues Committee	IVHS America
13	Institutional Issues .	IVHS America
13	Advanced Rural Transportation Committee	IVHS America
13	Strategic Plans Subcommittee	IVHS America
14	IVHS American Coordinating Council Meeting	IVHS America
14	Wisconsin Section Meeting	ITE
14-17	IVHS America 3rd Annual Meeting and Exposition	IVHS America
15	San Francisco Bay Area Section Monthly Luncheon Meeting	ITE
15-16	Linking Land Use and Transportation	APA
16	IVHS America Board of Directors	IVHS America
17-21	National Council on the Aging 43rd Annual Conference	NCA
17-21	Community Transportation Expo '93	CTAA
18-21	North American Snow Conference	APWA
18-21	APTA Commuter Rail Annual Conference	APTA
18-21	National Council for Urban Economic Development 1993	NCUED
	Annual Conference	NOOED
19-21	Transportation Information Integration	AASHTO
19-21	ISO/TC204 Committee Meeting	ISO
19-23	Bus Accident Investigation	
19-23	Cost Price Analysis and Contract Negotiation	TTS/TSI
19-29	Transportation Management Seminar, Part 2	FTA
20	Aloha Fleet Safety Forum	
20-22	International Intermodal Expo	Friendship Publications
21	Joint Southern California Section/OCTEC Meeting	World Congress Center
21-22	Aloha Bus Maintenance Forum	ITE
21-22	Alabama Transit Association Annual Meeting	Friendship Publications
22	Alaska Section Luncheon Meeting	Alabama TA
22-23	Semi-Annual Meeting	ITE
22-25	International Taxicab and Livery Association Spring	APAQ
	Conference	ITLA
23		
	Quad Section (Washington, Oregon, British Columbia and Vancouver Island) Meeting	ITE
23-24		
24-27	Transportation Planning for Livable Communities	FHWA
	International Bridge, Tunnel and Turnpike Association Workshop	IBTTA
26-28	ADA Implementation Workshop	Univ. of Wisconsin/Milwa
26-29	Computer Graphics Solutions: Applications for Implementation	NCGA
26-29	Effective Management of Public Works, Part II	The Wisconsin Center
26-30	Mass Transit Rail System Safety	TTS/TSI
26-30	Railroad Tracks: Design, Analysis, and Maintenance	IRE
28	Israel Section Meeting	ITE
28-30	Emerging Concepts in Urban Transit Facility Design	ASCE
18-30	Implementing the Americans with Disabilities Act	DHHS
28-30	Human Resources Transportation Regional Training Conference	DHHS/CTAP
8-30	Arisona Transit Association Annual Meeting	Arisona TA
30-5/1	Transportation Planning for Livable Communities	FHWA
Spring	National Conference on TDM, Research and Innovation	TRB
AY		
L	American Consulting Engineers Council Annual Convention	ACEC
L-5	American Planning Association Annual Conference	ADA

American Planning Association Annual Conference 1-5 2 Board of Directors Meeting

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Date	Meeting	Sponsor/Location	City
MAY (co	ontinued)		
2-7	50th UITP International Congress	UITP	Sydney, AUSTRA
2-7	Orientation to Third-Party Contracting	FTA primarily all inst	Memphis
8-7	Bus Accident Investigation	TTS/TSI	Oklahoma City
3-7	4th National Conference on Transportation Planning	TRB would sedered term	Daytona Beach
	Methods Application	Bordan Rection Americal Brainans	Daytona Deach
435-28	National Association of Purchasing Management-Rail Industry	NAPM	San Antonio
NAR ANT	Group Meeting	NAL M	San Antonio
5-8	Interface '93: Humanising Technology	and Descrimentations & month 2 day	Delalah
TIELA .	Colorado/Wyoming Section Meeting	ITE pattered legranA	Raleigh
9-12	APTA Bus Operations and Technology Conference	APTA	Anna and the second
10-14	Mass Transit Rail Accident Investigation	TTS/TSI	Indianapolis
10-21	Advanced Transportation Management	Northwestern University	San Francisco
12-14	Emerging Concepts in Urban Transportation Facility Design	ASCE	Evanston
12-14	District 1 Annual Meeting	ITE	San Diego
12-14	Elements of Railway Signaling and Control Systems	GWU	Port Jefferson, NY
18-25	Evaluation of APTS Operations Tests	TTS/GMU/VNTSC	Washington
13	Riverside/San Bernardino Section Meeting		Wash./Balt. Area
13	San Francisco Bay Area Monthly Luncheon Meeting	ITE	Riverside
15-17	International Specialty Conference on Automated People Movers	ITE	Oakland
15-23	18th International Motor Show	TRB	Las Colinas, TX
16-19	Bus Operations and Technology Conference	galasse termer	Barcelona, SPAIN
16-19		АРТА	Indianapolis
6-21	Ontario Motor Coach Association Spring Meeting	OMCA	Toronto, ONTARI
7-19	12th International Road Federation World Meeting	IRF	Madrid, SPAIN
7-21	Canadian Bus Expo '93	CBA	Mississauga, ONTA
7-21	Bus Accident Investigation	TTS/TSI	Oklahoma City
18	Community Transportation EXPO '93	CTAA	Austin
18-19	Metropolitan Section of New York and New Jersey Meeting	ITE SHOOMA LANDER BOLISS	anorawy So-1
9	ISTEA in Rural and Small Urban America	DOA/DOT/NACo/NACE	Hershey
10-10/1	The Marriage of Autos and Transit: How to Make Transit	University of Minnesota	Minneapolis
9	Popular Again		
	Wisconsin Section Meeting	ITE	Waukesha
19 T	Joint Southern California Section/Riverside/San Bernardino Meeting	ITE Contraction A state of a	Pomona
9-20	4th Annual Transportation Research Conference	University of Minnesota	Minneapolis
9-21	Women's Transportation Seminar National Conference	WTS	american de la companya de la compa
1	Oregon Section Luncheon Meeting with State Traffic Control	ITE in an indestants la moiten	Chicago Tualatin
	Device Committee and Technical Session		
3-26	American Railway Development Association Annual Meeting	ARDA Salata dashe dashe dasha	Kansas City
3-27	10th International Convention on High Speed Rail and Magnetic Levitation	High Speed Rail/Maglev Assn.	Toronto, ONTARIO
4-26	Paratransit Scheduling/Dispatching Workshop	Univ. of Wisconsin/Milwaukee	Milwaukee
4-28	13th Annual Environmental Systems Research Institute	ESRI	Palm Springs
	User Conference	interest in Public Involvement	I am opring.
5-27	Institution of Civil Engineering International Conference	ICE	London, ENGLAND
	on Railways	Nebicke "24	Dondon, ENGLAND
8	Israel Section Meeting	ITE	Tel Aviv
6-28	North Carolina Public Transit Association Annual Meeting	North Carolina PTA	Boone
7	Alaska Section Annual Meeting	ITE	Doome
7	Hamilton Section Meeting	ITE	
7-29	Conference on Impacts of ADA on Paratransit Operations	TRB	
-6/4			Phoenix
	International Conference on Motor Carrier Transportation	TRB	Williamsburg
1-6/4	26th International Symposium on Automotive Technology and Automation 324	ISATA	Florence, ITALY

Date	Meeting	Sponsor/Location	City
JUNE			
1-6	Srd International Conference on Case Histories in	TRB	· (benaiteres) YAR
	Geotechnical Engineering	IND Isonitemetal	St. Louis
2-4	Iowa Public Transit Association Annual Meeting	to Third-Past Control of	
3-12	International Motor Show	Iowa PTA	Lake Okoboji
4	California Border Section Annual Business Meeting	al Conference on Trades	Porto, PORTUGAL
6-9	APTA Rapid Transit Conference	ITE	San Diego
6-9	Canadian ITE Annual Conference	APTA	Miami
6-9	New England Bus Association Annual Meeting	ITE	Edmonton, ALBERTA
6-9	District 7 Annual Meeting	NEBA	Quebec City, QUEBEC
6-10	National Conference of State Transportation Specialists	ITE	Edmonton, ALBERTA
7-9	5th International Conference on Computing in Civil and	NARUC	Virginia Beach
	Building Engineering	ASCE	Anaheim
10	Riverside/San Bernardino Section Meeting		
10	Alabama Section Annual Meeting	ITE	Riverside
13-16	Canadian Urban Transit Association Annual Conference and	ITE	Gulf Shores
	Bus Roadeo	CUTA	St. John, NEW BRUNS
14-15			
14-18	Linking Land Use and Transportation	АРА	Philadelphia
	Contract Administration	FTA	
16-18	APTS Technologies	TTS/VNTSC	San Antonio
10-10	District 4 Annual Meeting	ITE	instantine an art
17	Metropolitan Section of New York and New Jersey Meeting	ITE	Milwaukee
A CARLES AND A CARLES	San Francisco Bay Area Monthly Luncheon Meeting	ITE	Correction States
17-18	Linking Land Use and Transportation	АРА	Oakland
17-19	Texas Section 1993 Summer Meeting	ITE	Denver
21-22	American Association of Railroad Superintendents 97th	AARS	San Antonio
25.55	Annual Meeting	AARS	Minneapolis
21-22	Virginia Section Annual Meeting	ty Transportation BACO	
21-23	Infrastructure Management: New ChallengesNew Methods	ITE	Virginia Beach
21-23	Guessing the Future: Coping with Uncertainty in	ASCE	Denver
	Infrastructure Planning	ASCE	Denver
21-24	Passenger Assistance, Safety and Wheelchair Securement		
22-24	Conference on Native American Concerns Encompassing ISTEA	Univ. of Wisconsin/Milwaukee	Milwaukee
	and Other Transportation Programs	TRB	Polson, MT
23	Turnkey Workshop		- 010011, MI 1
23-25	Southern California Section Meeting	APTA/TTS	Miami
26-30	2nd International Symposium on Electronic Toll and	ITE	
	Traffic Management	IBTTA/TRB	Los Angeles
27-30	Symposium on Rock Mechanics	and the second second second second second	New York
28-7/2		Univ. of Wisconsin/Madison	Provincipile unit
Salar and the second	13th Annual Transportation Convention		Madison
30	Israel Section Meeting	ITE	Pretoria, S. AFRICA
			Tel Aviv
JULY			
6-7	Reviving Interest in Public Involvement	TRB	
7-10	Transportation and Economic Development The State of the Art	TRB	Burlington, VT
14-16	Intelligent Vehicles '93		Burlington, VT
14-16	New England Training Conference	IEEE/SAE	Tokyo, JAPAN
18-21	National Association of Area Agencies on Aging Annual Meeting	Regional Transp. Program	Portland, ME
18-22	S2nd Annual Workshop on Transportation Law	NAAAA	Washington
25-28	Pacific Rim TransTech Conference	TRB paintente terrare & more	
25-28	Application of Advanced Technology in Transportation	Washington DOT/FHWA	Seattle
	Engineering	ASCE	Seattle
28-8/1	International Taxicab and Livery Association Mid-Year		the Appress state
	Conference	ITLA	Armen
	325		Aspen

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Date	Meeting	Sponsor/Location	City
AUGUST	Marting		
2-3	Paratransit Demand Forecasting, Budgeting and Creative	TRA	Washington
	Financing: How to Meet the Challenge of ADA	Univ. of Wisconsin/Milwauke	e Milwaukee
2-4	Conference on Access Management Systems and Techniques	south Englandinioosa A Hansel of	molificata 3-6
2-5	19th International Forum on Traffic Records Systems	TRB	Vail
10-12	Kansas Public Transit Association Annual Meeting	TRB	Arlington, VA
16-18	IVHS America 4th Annual Meeting	Kansas PTA	Pittsburg
23-9/3	Transit Management Workshop	IVHS America	Atlanta
30-9/2	Washington State DOT Annual Meeting	Univ. of Wisconsin/Milwaukee Washington DOT/STA	Spokane
SEPTEM			Sporate
13-15			
113-17	North Dakota Transit Association Annual Meeting	North Dakota TA	Minot
1	21st Summer Annual Meeting, PTRC European Transport,	TRB	Manchester, ENGLAN
13-24	Highways, and Planning		Atheneneting
15-16	Advanced Problems in Bus Accident Investigation	TTS/TSI	Oklahoma City
18-23	Pioneer Bus Maintenance Forum	Friendship Publications	Minneapolis
19-21	International Public Works Congress and Equipment Show	APWA	Phoenix
19-24	Virginia Bus Association Annual Meeting	Virginia Bus Association	Natural Bridge
20-22	ITE 63rd Annual Meeting	ITE	The Hague, NETHER
22-23	Fixed Route Scheduling/Run Cutting	Univ. of Wisconsin/Milwaukee	
	Symposium on Innovations in Railroad and Maintenance-of-Way Work Equipment	TRB	Denver
22-23	North Star Bus Maintenance Forum	Friendship Publications	
22-24	SHRP and Traffic Safety on Two Continents	TRB	Anchorage
23-26	Association des Proprietaires d'Autobus du Quebec Annual Meeting	APAQ	The Hague, NETHER Tadoussac, QUEBEC
26-29			and and and the second
	11th National Conference on Rural and Intercity Public Transportation	Utah DOT	Park City
28-30	International Symposium on Technological Innovations in Transportation		Lille, FRANCE
28-10/3	International Commercial Motor Show		
Fall	Evaluation of the 1990 Census Transportation Planning Package	TRB	Birmingham, ENGLANI
Fall	11th National Conference on Rural Public Transportation	7 222	
0000000		TRB	Park City, UT
OCTOBER			
1	American Society of Civil Engineers Annual Convention and Exposition	ASCE	Dallas
3-7	International Taxicab and Livery Association 75th Annual Convention and Trade Show	ITLA	New Orleans
3-8	American Public Transit Association Annual Meeting and		
	Expo '93 and International Bus Operators Roadeo	АРТА	New Orleans
4-6	International Public Transit Expo '93		
5-15	Russian International Motor Show		New Orleans
12-14	VNIS '93		Moscow, RUSSIA
18-20	Workshop on Safety Research Related to High-Speed Rail and		Ottawa, ONTARIO
	Maglev Passenger Systems	TRB	Nordic Hills, IL
22-26	American Association of State Highway and Transportation Officials Annual Meeting	AASHTO	Detroit

Date	Meeting	Sponsor/Location	City
NOVEME			
1-4	International Truck and Bus Meeting and Exposition	SAE	Detroit
15-19	California Transit Association 28th Annual Fall Conference 7th International Pacific Conference on Automotive	California TA	Pleasanton
N. VA ^{P-1} AV	Engineering	SAE	Phoenix
DECEMB			
6-11	American Bus Association Marketplace		
4.4	American Dus Association Marketplace	ABA	Montreal, QUEBEC

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SHOTTASTRADEO ON 1994 TO SHTRONDA

Date	Meeting	Sponsor/Location	City
1/9-13	73rd Annual TRB Meeting	TRB Deci as to de	Washington
3/21-23	AREA Spring Technical Conference	AREA STATE TO TO	Chicago
4/16-18	IVHS America 4th Annual Meeting	IVHS America	Atlanta
4/24-26	California Transit Association 29th Annual Legislative Conference	California TA	Sacramento
5/16-18	Society of Fire Protection Engineers Annual Meeting and Engineering Seminars	SFPE	San Francisco
5/16-18	Innovations in Highway Safety	TRB	ions imanidam a
9/24-29	International Public Works Congress and Equipment Show	APWA	Hershey Chicago
10/20	Transit and Intermodal Transportation Law	TRB TOTTSTOORSA atta	
0/25-28	High Occupancy Vehicle Systems	TRB Indak Indago inved	San Diego
1/406	Management and Productivity Workshop	TRB loosak printenipal	Ottawa, ONTARIO
1/5-7	Managing Diversity in the Work Force	TRB mbl ing monanent	New Orleans
1/11-15	American Association of State Highway and Transportation		Phoenix
	Officials Annual Meeting	AASHTO	Albuquerque
	1995		
/20-22	AREA Spring Technical Conference	AREA	Chicago
/22-25	Society of Fire Protection Engineers Annual Meeting and and Engineering Seminars	SFPE	Atlanta
/13-15	AREA Fall Technical Conference	AREA	and to seecherst of the
/23-28	International Public Works Congress and Equipment Show	APWA	Anchorage Dallas

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AARS	American Association of Raiload Superintendents	ICE	Institution of Civil Engineering
AASHTO	American Association of State Highway and	IEEE	Institute of Electrical and Electronic Engineers
	Transportation Officials	IRE	Institute for Railroad Engineering
ABA	American Bus Association	IRF	International Road Federation
ACEC	American Consulting Engineers Council	ISATA	
AGTA	Airport Ground Transportation Association	ISAIA	International Symposium on Automotive Technology and Automation
APA	American Planning Association	ITE	Section Process of a risk reserved build many section of the
APAQ	Association des Proprietaires d'Autobus du Quebec	ITLA	Institute of Transportation Engineers
APTA	American Public Transit Association	IVHS	International Taxicab and Livery Association
APWA	American Public Works Association	NAAAA	Intelligent Vehicle Highway Systems
ARDA	American Railway Development Association	NACE	National Association of Area Agencies on Aging
AREA	American Railway Engineering Association		National Association of County Engineers
ARTBA	American Road and Transport Builders Association	NACO	National Association of Counties
ASA	American Society on Aging		National Association of Purchasing Management
ASCE	American Society of Civil Engineers	NARUC	National Association of Regulatory Utility
ASME	American Society of Mechanical Engineers		Commissioners
CBA	Canadian Bus Association	NCA	National Council on Aging
CTAA	Community Transportation Association of America	NCGA	National Computer Graphics Association
CUNY	City University of New York	NCUED	National Council for Urban Economic Development
CUTA	Canadian Urban Transit Association	NEBA	New England Bus Association
DHHS	Department of Health and Human Services	OMCA	Ontario Motor Coach Association
DOA	Department of Agriculture	PTA/TA	Public Transit Association/Transit Association
DOT	Department of Transportation	SAE	Society of Automotive Engineers
ESRI	Environmental Systems Research Institute	SFPE	Society of Fire Protection Engineers
FHWA	Federal Highway Administration	TCPC	Transportation Claims and Prevention Council
FTA	Federal Transit Administration	TRB	Transportation Research Board
GMU	George Mason University	TSI	Transportation Safety Institute
SMU	George Washington University	TTS	FTA Office of Technical Assistance and Safety
BTTA		UITP	International Union of Public Transport
	International Bridge, Tunnel and Turnpike Association	VNTSC	Volpe National Transportation Systems Center
	Noveration.	WTS	Women's Transportation Seminar

E. DEPARTMENTS OF TRANSPORTATION IN NEW ENGLAND

Dana F. Connors, Commissioner Maine Department of Transportation State House- Station 16 Augusta, ME 04333 Tel: (207) 289-2551 Fax: (207) 287-2896

James J. Kerasiotes, Secretary of Transportation and Construction Executive Office of Transportation and Construction 10 Park Plaza, Room 3170 Boston, MA 02116 Tel: (617) 973-7800

Charles P. O'Leary, Commissioner New Hampshire Department of Transportation John O. Morton Building P.O. Box 483 Hazen Drive Concord, NH 03302-0483 Tel: (603) 271-3734

Dante E. Boffi, Jr., Director Rhode Island Department of Transportation 210 State Office Building Providence, RI 02903 Tel: (401) 277-2481

Patrick Garahan, Secretary of Transportation Vermont Agency of Transportation State Administration Building 133 State Street Montpelier, VT 05602 Tel: (802) 828-2657

Charles River Associates 200 Clareadon Street Boaton, MA 02116 Tel: (617) 265-0500 Contacts: Thomas Parody, Gary Fauth Specialty: Rail, urban transit, airport access, 0492456n (defand le specialty: Rail, urban transit, airport access, 0492456n (defand le Stata bionrA :toaton Specialty: Rail, urban transit, airport access, 0492456n (defand le stata bionrA :toaton Specialty: Bail, urban transit, airport access, 0492456n (defand le stata bionrA :toaton Specialty: Bail, urban transit, airport base Stata bionrA :toaton Stata bionrA :toaton Statas Association Statas (17) 655-8130 Contact: John Connery

pecialty: Planning and development consulting

XVI. CONSULTING FIRMS AND LAW FIRMS

The following information is a list of consulting and law firms whose work includes the transportation industry. Although the firm might consult or conduct law in diverse fields, the specialties of each firm mentioned are those only involved in the transportation industry.

A. Consulting Firms

Louis Berger and Associates 303 Bear Hill Road Waltham, MA 02154 Tel: (617) 890-8999 Contact: Peter Polk, Office Manager Specialty: Transit (bus, subway and rail), traffic engineering, forecasting, highway design, airport planning

Cambridge Systematics 222 Third Avenue Cambridge, MA 02142 Tel: (617) 354-0167 Contact: Laura Hussey Specialty: Broad-based transportation planning

Bruce Campbell and Associates 38 Chauncy Street Boston, MA 02116 Tel: (617) 542-1199 Contact: Michael Gruenbaum Specialty: Traffic engineering, transportation planning, civil planning, highway and street design

Charles River Associates 200 Clarendon Street Boston, MA 02116 Tel: (617) 266-0500 Contacts: Thomas Parody, Gary Fauth Specialty: Rail, urban transit, airport access, aviation demand

Connery Associates 19 Parker Street Melrose, MA 02176 Tel: (617) 665-8130 Contact: John Connery Specialty: Planning and development consulting Fay, Spoffard and Thorndike, Inc. 20 Park Plaza, Suite 920 Boston, MA 02116 Tel: (617) 426-8666 Contact: Michael Hall Specialty: Traffic and highway planning, transit (bus, subway and rail)

Gordon, Bua and Read, Inc. 83 Pine Street, Suite 115 Peabody, MA 01960 Tel: (508) 535-9051 Fax: (508) 535-5545 Contact: Dennis Coffey, Manager, Project Planning and Development Specialty: Civil, railroad, structural and transportation

H.M.M. Associates, Inc. 196 Baker Avenue Concord, MA 01742 Tel: (508) 371-4198 Contact: Barry Porter Specialty: Broad-based transportation consultants; planning and engineering services in Environmental Impact Studies (EIS); air quality, traffic operations; transportation demand management; highway design

Howard/Stein-Hudson Associates, Inc. 38 Chauncy Street, 9th floor Boston, MA 02111 Tel: (617) 482-7080 Contact: Kathy Stein Specialty: Broad-based transportation planning

HNTB Corporation John Hancock Building 200 Clarendon Street 34th Floor Boston, MA 02116 Tel: (617) 267-6710 Fax: (617) 236-1233 Contact: Arnold Antak Specialty: Highways, bridges, transit facilities, airports, broadbased transportation planning

Specialty: Broad-based transportation planmingon . 2 same

Indus-Rail Company P.O. Box 263 Shelburne Falls, MA 01370 Tel: (413) 625-6708 Contact: Anthony H. Jewell Specialty: Railroad consultation services

Arthur D. Little 20 Acorn Park Cambridge, MA 02140 Tel: (617) 498-5000 Contact: Dr. Alan Bing Specialty: Broad-based transportation planning, airport planning, aerospace, rail (safety and transportation planning)

Multisystems, Inc. 1050 Massachusetts Avenue Cambridge, MA 02138 Tel: (617) 864-5810 Contact: Curt Dossin, Director of Marketing Specialty: Transit and paratransit

TAMS Engineers and Architects 38 Chauncy Street Boston, MA 02111 Tel: (617) 482-4835 Contact: Charles Norris Specialty: Land-based planning, highways, water transit, commercial shipping, airport planning

Vollmer Associates 6 St. James Avenue Boston, MA 02116 Tel: (617) 451-0044 Contact: Mindy MacNeill Specialty: Traffic and highway design

Vanasse, Hangen and Brustlin, Inc. 101 Walnut Street Watertown, MA 02272 Tel: (617) 924-1770 Contact: Ronald E. Thompson Specialty: Broad-based transportation planning Wallace Floyd Associates, Inc. Russia Wharf 286 Congress Street Boston, MA 02210 Tel: (617) 423-4440 Contact: Skip Smallridge Specialty: Architecture for transit, rail and multimodal terminals; highway-related architecture (tunnels, bridges); environmental impact studies, urban design, landscape architecture for transit and highway industries.

B. Law Firms

Foley, Hoag and Eliot One Post Office Square Boston, MA 02109 Tel: (617) 482-1390 Contact: Peter W. Coogan Specialty: Environment, litigation, real estate

Hale and Dorr 60 State Street Boston, MA Tel: (617) 526-6000 Contact: Mara Aspinall Specialty: Urban rail transportation financing, environmental issues related to transportation, transportation litigation, state and federal transportation facilities siting and permitting, consulting on Central Artery Tunnel Project, sale of commuter rail cars to the MBTA, redevelopment of Pease Air Force Base, aircraft leasing, trucking regulations, highway projects

Keohane and Keegan 21 Custom House Street Boston, MA 02110 Tel: (617) 951-1400 Contact: Hank Keohane Specialty: Buses, commercial motor vehicles (all trucks), rail

Kirkpatrick and Lockhart One International Place Boston, MA 02110-2600 Tel: (617) 261-3100 Contact: James E. Howard Specialty: Rail Mintz, Levin, Cohn, Ferris, Glovsky and Popeo One Financial Center Boston, MA 02111 Tel: (617) 542-6000 Contact: James Durham, Marketing Director Specialty: information not available

Palmer and Dodge One Beacon Street Boston, MA 02108 Tel: (617) 573-0376 Contact: Roger P. Vacco Specialty: This law firm has now

Specialty: This law firm has represented the Massachusetts Bay Transportation Authority and Massachusetts Port Authority. It has also worked with an organization called "Move Mass. 2000," a watchdog organization for the Central Artery/Third Harbor Tunnel project.

> 21 Custom House Street Boston, MA 02110 Tel: (617) 951-1400 Contact: Hank Keohane Specialty: Buses, comman

Mirkpatrick and Lockhalt One International Place Boston, MA 02120-2000 Tel: (517) 251-3100 Contact: James E. Howerd Specialty: Rail

XVII. RECOMMENDATIONS FOR CANADIAN COMPANIES

The transportation industry offers significant business opportunities for Canadian firms able to compete in this sophisticated and demanding market.

The industry sectors offering the most opportunities are:

- Bus (especially public transit)
- Highway and bridge
- Rail (including freight, passenger, commuter, rapid transit and light rail)

Less consequential opportunities may be found in the water transit industry and port expansion.

Highway and bridge rehabiliation and restoration comprise the majority of federally funded projects. With the renewed interest in public transit and new federal legislation which will require new vehicle procurement, there is substantial opportunity for companies in the transportation industry.

The most important transportation projects in New England over the next 10 years will be the Boston Central Artery/Third Harbor Tunnel project, the Old Colony Rail Restoration project, the Logan Airport Modernization Program and the Massport Conley terminal improvement program. There will be a significant amount of engineering, design and consulting work. The consulting work will include environmental impact studies and demand management planning. Each of these projects is located in Massachusetts.

The major pieces of legislation, the Clean Air Act Amendments, the Buy America Act, the Americans with Disabilities Act and the Jones Act, create technical and logistical challenges to Canadian firms. Although there are significant barriers to market entry and stringent requirements created by these Acts, there is also legislation creating opportunities for Canadian companies. This legislation includes the Intermodal Surface Transportation Efficiency Act, the U.S. Customs Free Trade Agreement and the North American Free Trade Agreement. Canadian companies may obtain copies of completed legislation by contacting the Government Printing Office in Washington, D.C.

The Buy America Act presents significant barriers to market entry in the bus and rail industry when federal funding is involved. Some Canadian companies have circumvented this obstacle by establishing assembly plants in the U.S. Establishing a U.S.-based plant is highly recommended if it is feasible for a particular company.

The water transit industry is one which presents significant barriers to market entry through the Jones Act, which prevents foreign-made water vessels from carrying passengers in the U.S. To circumvent barriers to market entry implicit in the Buy America Act and the Jones Act, Canadian companies may choose to supply other Canadian firms which are already suppliers to the New England market. Components manufacturers of water transit vehicles may sell to U.S. boat builders without any federal restrictions.

To gain access to the New England transportation market, it is recommended that Canadian companies form relations with transportation procurers and maintain familiarity with public bids. Companies should keep updated on bid announcements advertised in local newspapers, especially the Boston Globe and the Boston Herald, and trade publications, such as "Passenger Transport" and the F.W. Dodge Bulletin. It is also recommended that companies seek prequalification and be added to vendor lists where applicable in order to receive bid information automatically.

Canadian companies may contact individual state transportation offices to request a copy of each State Transportation Improvement Program (TIP) detailing short and long-range plans for highway, bridge and transit projects. Other planning documents, such as the Maine study, "Transportation to the Year 2000," and the New Hampshire study, "Transportation in the 21st Century," are also helpful since they serve as bases for the TIPs.

The ability of a company to bid low is virtually the most important factor in the bidding process. In the highway and bridge industry, the lowest bidder with the best qualifications will often be awarded the contract. In the public transit industries, price of equipment and services is often the deciding factor in awarding bids. Technical merit and ability to meet specifications are part of the decision-making process among equipment procurers. However, the low bidder will be awarded a contract if it is able to meet specifications.

Canadian companies must bear in mind that the early eighties produced a boom time for the New England region, especially Massachusetts. Many companies were formed during this period. With the current lean economic times local and national companies are competing fiercely for business.

In conclusion, the niche opportunities and growth areas in the transportation field are found in the bus, rail, highway and bridge industries. The water transit industry represents smaller sales potential and growth.

Canadian companies would be well served to take advantage of the current planning and ordering mode and not lose this window of opportunity. Although significant barriers to market exist, these barriers may be overcome to some extent. It is suggested that Canadian companies become fully aware of legislation, keep updated on bidding announcements, and form working relationships with New England transportation planners and procurers.

XVIII. ACRONYMS

ADA See 1	Americans with Disabilities Act	
CA/T	Central Artery/Third Harbor Tunnel	
CAAA	Clean Air Act Amendments	
DOT	Department of Transportation	
EOTC	Executive Office of Transportation and Construction	
EPA		
LFA	Environmental Protection Agency	
FTA	Federal Transit Authority	
FTA	Free Trade Agreement	
FTZ	Free Trade Zone	
FY	Fiscal Year	
ISTEA	Intermodal Surface Transportation Efficiency Act	
MASSPORT	Massachusetts Port Authority	
MBTA	Massachusetts Bay Transportation Authority	
MHD	Massachusetts Highway Department	
MITA	Massachusetts Intermodal Transportation Authority	
MPO	Metropolitan Planning Organization	
MTA	Massachusetts Turnpike Authority	
NAFTA	North American Free Trade Agreement	
NETI	New England Transportation Initiative	
TIP	Transportation Improvement Program	

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XIX. STATE TRANSPORTATION BUDGET INFORMATION

This section is dedicated to program funding summaries for each of the states. The following information is set forth for each state:

Page(s)

Maine	Fiscal Years 1992 and 1993 Program Funding Summary	340-348
Massachusetts	Fiscal Years 1993-1995 Federal Highway Funding Totals Summary of Transit Funding Programs	349-353
New Hampshire	Estimated Total Apportionments Federal Programs 1994-2003	354
Rhode Island	Transportation Improvement Program, 1991-1997	355-364
Vermont	Fiscal Year 1994 Budget Estimated Expenditures State Funding Source Summary	365

Please refer to this information on the pages noted above.

MAINE

FISCAL YEARS 1992 AND 1993 PROGRAM FUNDING SUMMARY

Program <u>Category</u> <u>Total</u>	Federal Funds	State Funds	Local/Other Funds	-
FEDERAL/STATE PROGRAMS				
FINJ Frewongineering			60.000	
Interstate 4R \$	22,500,000	\$ 3,610,000	\$ -0-	\$ 26,110,000
Primary	54,600,000	23,690,000	1,000,000	79,290,000
Secondary	18,000,000	8,670,000	-0-	26,670,000
Urban	9,000,000	870,000	2,400,000	12,270,000
Bridge Repl. & Rehab.	29,700,000*	12,710,000	-0-	42,410,000
Local Bridges	1,400,000	1,400,000	1,300,000	4,100,000
Hazard Elimination	1,800,000	200,000	-0-	2,000,000
Rail/Highway Crossings	1,800,000	100,000	100,000	2,000,000
Pavement Markings	4,000,000	-0-	-0-	4,000,000
				Program Inte
SUBTOTAL \$14	12,800,000	\$51,250,000	\$4,800,000	\$198,850,000
SUBTOTAL \$14	12,800,000	\$51,250,000	\$4,800,000	\$198,850,000
125, 90014 tota 250000	250,000	\$51,250,000	\$4,800,000	\$198,850,000
SUBTOTAL \$14	42,800,000	\$51,250,000	\$4,800,000	\$198,850,000
STATE PROGRAMS	250,000 (550,000	000,008,30	\$4,800,000	\$198,850,000
STATE PROGRAMS Non-Federal State Highways	-0-	\$ 300,000	\$4,800,000	\$198,850,000 \$ 300,000
STATE PROGRAMS Non-Federal State Highways Collector Roads	-0- -0-	\$ 300,000 8,600,000	0 1,850	0285(33
STATE PROGRAMS Non-Federal State Highways Collector Roads Maintenance Resurfacing	-0- -0- -0-	\$ 300,000 8,600,000 8,600,000	-0-	\$ 300,000
STATE PROGRAMS Non-Federal State Highways Collector Roads Maintenance Resurfacing State Highway Resurfacing	s -0- -0- -0- -0- -0-	\$ 300,000 8,600,000	-0- -0-	\$ 300,000 8,600,000
STATE PROGRAMS Non-Federal State Highways Collector Roads Maintenance Resurfacing	-0- -0- -0-	\$ 300,000 8,600,000 8,600,000	-0- -0- -0-	\$ 300,000 8,600,000 8,600,000
STATE PROGRAMS Non-Federal State Highways Collector Roads Maintenance Resurfacing State Highway Resurfacing Traffic Signals	-0- -0- -0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000 100,000	-0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000
STATE PROGRAMS Non-Federal State Highways Collector Roads Maintenance Resurfacing State Highway Resurfacing	-0- -0- -0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000	-0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000
STATE PROGRAMS Non-Federal State Highways Collector Roads Maintenance Resurfacing State Highway Resurfacing Traffic Signals SUBTOTAL	s -0- -0- -0- -0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000 100,000 \$21,100,000	-0- -0- -0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000 100,000
STATE PROGRAMS Non-Federal State Highways Collector Roads Maintenance Resurfacing State Highway Resurfacing Traffic Signals SUBTOTAL	s -0- -0- -0- -0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000 100,000 \$21,100,000	-0- -0- -0- -0- -0- -0-	\$ 300,000 8,600,000 8,600,000 3,500,000 100,000

 Bridge Replacement & Rehabilitation figures include Federal Interstate 4R, Primary, Secondary and Urban funds.

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AIR TRANSPORTATION INVESTMENT PROGRAM

ENTITLEMENT AIRPORTS:	Total	Federal Share	State Share	Local Share
Bangor International				PRDERAL/STATE PRO
000,000,000,000,000,000				
FY92 *FY93	\$4,783,920 5,537,384	\$2,368,040 2,491,823	\$394,673 415,304	\$2,021,206 2,630,257
Portland Jetport				WEDEN
000,000 1 4 4 9 4 9 6 0 9 6 0 9				
FY92 FY93	2,830,000 3,600,000	2,547,000 3,240,000	141,500 180,000	141,500 180,000
Presque Isle				iburuzen juleisaleh
FY92	500,000	250,000	125,000	
FY93	500,000	450,000	25,000	125,000 25,000
-0- 300,000				
COMMERCIAL SERVICE AIRPOR	RTS:			
Augusta State Airport				
FY92 - Design & Construct SRE Bldg.; Land Acquisition	1,341,111	1,207,000	134,111	
000,000 \$219,950,000				
FY93 - Entitlement	333,333	300,000	33,333	
Hancock County			sment à Rena Secondary an	
FY92 - Master Plan	50,000	45 000		
FY93 - Runway Rehab.	1,200,000	45,000 1,080,000	2,500 60,000	2,500 60,000
Knox County				
*FY92/93	672,600	604,928	33,630	33,630

* Reflects increase in previous allocations for runway extension, landing ** Additional funds for International Terminal Project ***Additional funds for Domestic Terminal Project

	Total	Federal Share	State Share	Local Share
RELIEVER AIRPORTS:				Oxford County
Auburn/Lewiston .			75%) grant	
FY93 Pre-engineering/	nded		60,000-	60,000
Taxiway				Rangeley Local
Sanford				
FY92 Land Acq. FY93 Taxiway Const.	950,000 1,800,000	855,000 1,620,000	47,500 90,000	47,500 90,000
GENERAL AVIATION AIRPORTS:				
Belfast				
FY93 Master Plan	37,000	33,300	1,850	1,850
Bethel				
FY92 Land Acq.	120,000	108,000	6,000	6,000
Biddeford				
FY93 Apron Expansion	650,000	585,000	32,500	32,500
Dexter				
FY93 Expand GA Apron	210,700	189,630	10,535	10,535
Fryeburg				
FY93 Pre-engineering/ Runway extension	120,000		60,000	60,000
Jackman				
FY92 Runway drainage	360,750	324,675	18,037	18,038
Machias				
FY92 Master Plan FY93 Land Acq.	30,000 100,000	27,000 90,000	1,500 5,000	1,500
Norridgewock				180 000
FY92 Master Plan	37,000	33,300	1,850	1,850

Old Town				
FY92 Snowblower		La sum		
F192 Bhowblower	140,000	126,000	7,000	7,000
Oxford County				
FY93 Expand apron, taxiway, beacon, obstruction lights	650,000	585,000	32,500	32,500
Rangeley				FY93 Pre-eng: Taxiway
FY92 Master Plan	80,000	72,000	4,000	4,000
Discretionary	126,677		126,677	
Preservation Candidates:	500,000		450,000	50,000
Princeton Frenchville				
Houlton Carrabassett Biddeford				
				81ddeford
	\$27,760,475 \$1	9,232,696 \$2	,500,000	5,647,426
				Dexter .
				FY93 Fre-engi ARRes artens cod, 68
These distances				

TRANSPORTATION INVESTMENT PROGRAM ELEMENTS

A. UMTA SECTION 3 GRANT ME-03-0025

Section 3 is a discretionary Federal capital assistance (75%) grant for transit. Funds may be used to purchase rolling stock and support equipment and, to buy, build or refurbish facilities.

Aroostook Regional Transportation Systems,			Local
Two Buses 14+1 with lift	\$ 72,000		\$ 18,000
Radio Equipment base station & equipment	20,540	15,405	5,135
Eastern Transportation Services, Inc.			
Three Modified minivans (7+2) with lifts	84,000	63,000	21,000
New Office Garage Facilities	800,000	600,000	200,000
City of Bath		2 passenger 13	
Two 20-passenger buses	80,000		
City of Bangor			Das dopy and
Three small transit buses	435,000	326,250	108,750
Biddeford-Saco Old Orchard Beach Transit Committee			
Two 30-foot Orion Transit Buses, Four radios and antennas and 2 fareboxes	306,000	229,500	76,500
Coastal Transportation			
Six 15-passenger vans One lift bus 18+2 Three raised roof 15-passenger vans with l		180,000	60,000
Kennebec Valley Community Action Program			
Two 8+1 passenger modified van with lift	54,000	40.500	13.500
Lewiston-Auburn Transit Committee			
Four 30-32 passenger transit buses			

Downeast Transportation, Inc.			
Two 18-passenger lift equipped buses	91,000	68,250	22,750
One Laser printer from MacIntosh			
Regional Transportation Program			
Five buses 18+2 with lift Two station wagons, 1 service truck	-	2	
One tire changer, 1 phone system	station Systems, In 000.8		
Eighteen radios	320,000	240,000	80,000
Washington-Hancock Community Agency			
One 15-passenger van	18,000	13,500	4,500
Two minivans modified	54,000	40,500	13,500
Western Maine Transportation Services, Inc.			
Twelve 17-24 passenger lift buses Three 5-10 passenger lift buses	762,950	572,213	190,737
Three personal computers w/hard-drive pri One copy machine	nter		
One insulated door with opener One gas-powered air compressor			
One air/manual service jack One air grease pump			
One transmission jack One dual wheel dolly			
One gas emissions analyzer w/printer			
York County Community Action Program			
Two buses with lifts 16+2 passengers	80,000	60,000	20,000
240,000 190,000 60,000	** ***		

Totals

\$4,056,491 \$3,042,368 \$1,014,123

B. UMTA Section 16(b)(2) GRANT ME-16-0014

Section 16(b)(2) is a Federally funded discretionary grant designed to supplement other capital assistance programs by funding (80%) transportation projects for the elderly and handicapped in all areas -- urbanized, small urban and rural. Capital acquisitions authorized under this program include rolling stock, communication equipment; wheelchair lifts, ramps and restraints; computer hardware and software.

	Total	Federal	Local
Aroostook Regional Transportation Systems, Inc.			
One school bus with Lift			\$ 7,714
Washington-Hancock Community Agency			
Two vans with Ramps			7,301
Eastern Transportation Services, Inc.			
One bus less than 30' with lift & mobile radio	39,947	31,958	7,989
Kennebec Valley Community Action Program			
One bus less than 30' with lift	39,947	31,958	7,989
Coastal Trans, Inc.			
One station wagon	17,943	14,354	3,589
One van with ramps	19,550	15,640	3,910
Two mobile radios	2,800	2,240	560
Regional Transportation Program, Inc.			
One bus less than 30' with lift Mobile radio and farebox	38,227	30,581	7,646
Western Maine Transportation Services, Inc.			
One bus less than 30' with lift Mobile radio and farebox	44 000	35,264	8,816
and the second community motion corp.			
One bus less than 30' with lift and mobile radio	32,371	25,897	61,988
POWER/BOUIFMENT DISCIPLINE)			

E. NAVIGATION PROJECTS

In 1986, Congress passed the Omnibus Water Resources Bill which, among other things, set levels for local cost sharing of new Federally sponsored navigation projects managed by the Army Corps of Engineers such as dredging, breakwaters, etc. These new cost share levels are 50% state/local for planning studies and 20% state/local for actual construction projects. This Ports & Marine Transportation Investment Program includes funding for these important projects in the State's overall transportation system in the Harbor Development Program contained in Section B.

			SUMMARY	
		Estimat Cost FY92	FY93	Federal Participation
Α.	Cargo Ports	\$ 750,000	\$ 750,000	yes
в.	Harbor Dev. Program	10,000,000		yes yes
c.	Ferry Vessels	500,000		yes
D.	Ferry Facilities	1,400,000	1,390,000	yes
Ε.	Navigation Projects			yes

\$12,650,000 \$2,140,000

Total \$14,790,000

The following is a listing of rail studies, and track rehabilitation projects to be undertaken in this RTP:

80% O	Fiscal Year <u>1992</u> <u>1993</u>
Rail Property Evaluations and/or Assessments Mt. Sub-division, Foxcroft Branch, and Belfast & Moosehead Lake Railroad	\$ 25,000 \$ 25,000
Studies 1) Rail Plan Update 2) Railroad Passenger Service	\$ 6,300 \$ 6,300 \$ 35,000 \$ 35,000
Rehabilitation 1) Rockland Branch-Lower Road (Brunswick- Augusta) track rehabilitation	\$275,000* \$275,000*
* Contingent upon FRA approval Discretionary Grant applicat	of Department's LRFA ion
2) Calais Branch track rehabilitation (brush control)	\$ 50,000 \$ 50,000
B. DEVELOPMENT AND IMPLEMENT	ATTON OF DATE CARPENT
	E State Stat
INSPECTION PROGRAM (TRACK	9 9 9 9 9 9 9 9
POWER/EQUIPMENT DISCIPLI	
Pursuant to 23 M.R.S.A. c.	. 615, the Department of
Transportation has develop	ped railroad track and
equipment inspection capab	oilities, comprised of three
inspectors (2 track and 1	

ATOT EMICHIUT YAWHEIH JARED

FEDERAL HIGHWAY FUNDING TOTALS ESTIMATED APPORTIONMENTS VS. STIP

03/08/93

FY 1995	STIP PERCENT	13.5 26%	142.6 224%	136.3 113%	27.3 463%	42.7 104%	362.4 128%		0.0 0%	9.4		0.2	0.0	
	FUNDING	51.9	63.8	121.0	5.9	41.0	283.6	490.0	4.0				0.0	
	PERCENT	17%	198%	107%	664%	129%	126%	95%	28%				%0	
FY 1994	STIP	8.6	126.5	128.7	39.2	52.9	355.9	731.9	1.1	13.2		0.6	1.0 0.0 0.9	
	FUNDING	51.9	63.8	120.3	5.9	41.0	282.9	770.0	4.0				2.4	
	PERCENT	77%	243%	%06	136%	98%	123%	98%	46%			40%	25% 124% 53% 94%	
FY 1993	STIP	40.7	164.5	138.1	50.8	45.6	439.65	756.2	3.2	7.1		1.2	0.2 9.8 3.0	
	FUNDING	52.9	67.8	. 152.7	37.2	46.6	357.2	770.0	7.0	E.		3.0	0.8 7.9 3.2	
	FUNDING CATEGORY	INTERSTATE MAINT.	NAT. HWY. SYS.	BRIDGE	SUR. TRANS. PROG. *	CON. MIT. AIR QUAL.	SUBTOTAL:	INTERSTATE	INTERSTATE TRANSFER	DEMONSTRATION & OTHER	UNOBLIG. BALANCES:	HAZARD ELIMINATION	URBAN-BOSTON AREA URBAN-BOSTON URBAN-LAW/HAV URBAN-WORC.	

* REFLECTS TRANSFERS OF \$22.3 m. FROM BRIDGE TO STP IN F.Y. 93

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the following is a listing of rail studies of and

SUMMARY OF FTA SECTION 3 (DISCRETIONARY) FUNDING PROGRAM BY REGION	FISCAL YEARS 1993-1995

Amount	\$-74,599,300	\$24,317,600	\$54,050,000	\$3,768,300	R BRITOROAAUSAGINAS NEJRANTSTRY VIIJAMAN	
Apportionment	\$182,300,000	\$146,500,000	\$52,900,000	\$381,700,000		
Federal Funds Requested		\$154,789,600 \$28,000 \$16,000,000 \$170,817,600	\$104,800,000 \$2,150,000 \$106,950,000	\$385,468,300		
Total Cost	\$9,105,000 \$88,200,000 \$9,487,200 \$2,925,000 \$2,925,000 \$7,600,000 \$7,600,000 Total \$137,317,200	E O O O	\$131,000,000 \$2,150,000 Total \$133,150,000	Grand Total \$483,982,200		
Regions	Cape Cod MPO Boston MPO Montachusett MPO N. Middlesex MPO Pioneer Valley MPO SE Mass. MPO	0 \$73,1	Boston MPO Martha's Vineyard			
Year	1993	1994	350			

FISCAL YEAR 1993

STATEWIDE TIP FOR THE COMMONWEALTH OF MASSACHUSETTS SUMMARY OF TRANSIT FUNDING PROGRAMS BY REGION*

Funding Program	Regions	Federal Funds Requested	110 % of Estimated Apportionment	Amount over 110% of Estimated Apportionment
Section 16	Berkshire MPO	\$29,500		
	Boston MPO	\$796,500		
	Montachusett MPO	\$275,000		
	Merrimack Val. MPO	\$87,924		
	N. Middlesex MPO	\$68,000		1
	Pioneer Val. MPO	\$77,000		
	Other	\$646,076		
	Total	\$1,980,000	\$1,980,000	\$0
Section 18	Berkshire MPO	\$245,000		
	Cape Cod MPO	\$220,000		
	Central Mass. MPO	\$153,000	888 888	
	Montachusett MPO	\$80,000		
	Martha's Vineyard	\$16,000		
	Pioneer Val. MPO	\$393,000		
	SE Mass. MPO	\$60,000		
	Other	\$923,000		
	Total	\$2,090,000	\$2,090,000	\$0
Section 23 Interstate	Boston MPO	\$3,315,000		
Section 25 interstate	Other	\$260,000		
	Total	\$3,575,000	\$3,575,000	\$0
Section 9	Berkshire MPO	\$259,276		
Section 5	Cape Cod MPO	\$91,000		
	Central Mass. MPO	\$3,134,000		
	Boston MPO**	\$43,499,484		
	Montachusett MPO	\$481,000		
	Martha's Vineyard	\$91,000		
	Merrimack Val. MPO	\$6,595,875		
	N. Middlesex MPO	\$1,477,000		
	Old Colony MPO	\$1,115,400		
	Pioneer Val. MPO	\$11,398,965		
	SE Mass. MPO	\$5,007,000		
	Total	\$73,150,000	\$73,150,000	\$0
	Grand Total	\$80,795,000	\$80,795,000	\$0
	Grand Total	<i><i>vvvvvvvvvvvvv</i></i>	Mico Other	March

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*Excludes Section 3 (discretionary) funding. See separate summary sheet for Fiscal Years 93-95 Section 3 funding. **Federal funds requested includes operating assistance for the MBTA which is currently not listed in the Boston MPO TIP.

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FISCAL YEAR 1994

STATEWIDE TIP FOR THE COMMONWEALTH OF MASSACHUSETTS SUMMARY OF TRANSIT FUNDING PROGRAMS BY REGION*

nding ogram	Entim	Amo K of I Appor	OFE	Regi	ons	% of t		abnu bette		ral Fun equest		110 % Ap		imateo		110%	of Est	imated
tion 23 l	Inters	state	60.170 60.170	Bosto	n MP	0	Total	000		825,00 25,00			\$3,82	5,000	8 98e	2 1 42	-	\$0
tion 18				Cape Centr Mont	hire M Cod M al Mas achuse er Val.	MPO ss. MP	0		\$2 \$2 \$1 \$1	245,00 231,00 153,00 \$80,00 404,79								0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				Othe		. MFC	Total		\$2,0	90,00)9	3 6	\$3,190	0.000				\$0
tion 9 Pi	rogra	m		Cape Centr	hire M Cod M al Mas	APO		600 605. 000	\$2,5 \$2,5	259,27 352,90 726,00	76 00 00	NPO NPO NPO NPO	Asse.					•••
				Mont Merri N. M	in MP achuse mack v iddlese Colony	ett MP Val. M ex MP	PO		\$4 \$6 \$1,4	907,21 400,00 580,00 490,20 025,00	00							
				Pione	er Val. ass. M	MPC			\$11,4	471,41 838,00	4							
						Gran	Total d Total			50,00 165,00			73,150),000 5,000				\$0 \$0

*cludes Section 3 (discretionary) funding. See separate summary sheet for Fiscal Years 93-95 Section 3 funding. Federal funds requested includes operating assistance for the MBTA which is currently not listed in the Boston MPO TIP.

FISCAL YEAR 1995

STATEWIDE TIP FOR THE COMMONWEALTH OF MASSACHUSETTS SUMMARY OF TRANSIT FUNDING PROGRAMS BY REGION*

Funding Program	Regions	Federal Funds Requested	110 % of Estimated Apportionment	Amount over 110% of Estimated Apportionment
Section 18	Berkshire MPO	\$245,000		
0.8	Cape Cod MPO	\$243,000		
	Central Mass. MPO	\$153,000		
	Montachusett MPO	\$80,000		
	Pioneer Val. MPO	\$416,934		
	Other	\$2,052,066		
	Total	\$3,190,000	\$3,190,000	\$0
Section 9	Berkshire MPO	\$259,276		
	Cape Cod MPO	\$100,000		
	Central Mass. MPO	\$2,715,000		
	Boston MPO**	\$49,981,208		
	Montachusett MPO	\$400,000		
	Merrimack Val. MPO	\$2,200,000		
	N. Mass. MPO	\$1,487,000		
	Old Colony MPO	\$1,025,000		
	Pioneer Val. MPO	\$11,632,516		
	SE Mass. MPO	\$3,350,000		
	Total	\$73,150,000	\$73,150,000	\$0
	Grand Tota	\$76,340,000		

FEDERAL FROGRAMS

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*Excludes Section 3 (discretionary) funding. See separate summary sheet for Fiscal Years 93-95 Section 3 funding. **Federal funds requested includes operating assistance for the MBTA which is currently not listed in the Boston MPO TIP.

TOTO A LEGAN		1994	1995	1996	1997	1998	6661	2000	2001	2002	2003	TOTAL	
NTEDETATE INVITED INC.												-	
IN TERSTATE MAINTEN ANCE	Tolal		15 230	15 230	15 230	15 230	15 230	15 230	15 230	15 230	15 230	153 200	
	Federal	13 707	13 707	13 707	13 707	13 707	13 707	13 707				0	0
NATIONAL HIGHWAY SYSTEM	00	00 00		08								203	XOA
	Total	0.1	36 093				550 52	55 093	55 093	25 093	25 093	325 530	
		19 87	28 874	36 714	36 714	28 874	20 074	20 074	20 074	20 074	20 074	260	
CONDESTION MITIGATION & AIR QUALITY	Total	6 047	6 047	6 047	K DA7	6 0.47				10 10		0	
	Federal	4 838	4 838	4 838			4 838	4 838	4 838	4 R 3 R	6 0 4 7 4 8 3 8	60 470	
	68 68	24										-	
ON SYSTEM	Tolal	11 476	11 476	11 476		11 476	11 476	11476	11 476	11 476	11 476	114 760	
	F ederal	9 181	9 181	9181	9 181	9 181	9 181	9 181	9 181	9 181	9 181	122	
OFF SYSTEM	Total	4 552	4 552	4 552	4 6.6.9	4 66.2	1 663				0		
	Federal	1.6	3642	3642		3642	3642	3642	3 642	3642	3642	45 520	
	朝日の										760 0	-	
SAFETY	[otal	1 464	1 464	1 464	1 464	1 464	1 464	1 464	1 464	1 464	1 46.4	14 640	
	regeral	511	111	1111	1 1 1 1	1111	1111	1111	1111	1111	1111	11 712	•
TRANSPORTATION ENHANCEMENT	Total	3 203	3 203	3 203	3 203	3 203	3 203	3 203	8 203	3 2013	3 2013	000 00	
	Federal	2 562	2 562	2 5.62	2562	2 562	2 562	2 562	2 562	2 562	2562	3%	
URBANIZED OVER 200 000 BVD	502.	5% 2010	200						SM			1000	
AMI	Federal	0 366	0.366	0 366	0 366	0 366	396 0	0 366	0 366	0 366	0 366	11	
		¥62 0	620	620	6620	6620	6 2 9 3	6 2 6 3	662 0	£62 0	1620	¢:	
ANY AREA	Total	1 068	7 068	7 068	7 068	7 068	14 068	14 068	14 068	14 068	14 06.8	105 680	
	Federal	5 654	5.654	5 654	5 654	5 654	11 254	11 25.4	11 254	11 254	11 254	30	
NON URBAN AREAS	Total	0 000	0000	0000	0000	0000	2 06 7			133		иво	
	Federal	0 000	0 000	0 0 0 0	0000 0	0000	3 086	3 086	3 086	128 5	1. H F	13 285	
	12 12 12	NO I NBI					-				44.4	H26 C1	
0 POP	Total	11 780	11 780	11 780	11 780	11 780	11 780	11 780	11 780	11 780	11 780	117 800	
	Federal	9 424	9 424	9 424	9 424	9 424	9 424	9 42.1	9 12.1	9.424	1.51. 9	94 240	
RAIL-HWY PROTECT DEVICES	Tolal	0 222	0 222	0 222	0 222	0 222	0 232				55	1	
	Federal	0.178	0.178	0.178	0 178		0 178	0 178	0 178	0 178	0 178	2 2:20	
	et :	ec						19.				0111	
MALL TIME ELIMI OF HAZARUS	Total	0 222	0 222	0 222	0 222	0 222	0 222	0 222	0 222	0 222	0 222	2 220	
	Federal	0 178	0 178	0.178	0 178	0 178	0 178	0 178	0 178	0 178	0 178	1 776	
HAZARD ELIMINATION	Total	0 599	0 5.9.3	0 500	0 600	0 600	0 600			(1)	119	2	
	Federal	0.470	0 470	0110		6300	620 0	6690	0 599	0 599	0 593	066 5	
		611.0			0419	6/10	0 479	0 479	0 479	0 479	624.0	262 4	
	Total	0 564	0 564	0 564	0 564	0 564	0 564	0.564	0 564	0 564	0 SAJ	6 640	
	Federal	0 564	0 564	0 564	0 564	0 564	0.564	0.564	0 564	0 564	0 564	5 640	
RURAL ACCESS PROJECTS	Total	5 198	5 198	5 1 QR	6 10D	0000	0000	0000		1	214	195	
	Federal	4 158	4 158	4 150	1 160		00000	000 0	000.0	0000	0000	63	
	11	0	2	DC		0000	0.000	0 000	0000.0	0000 0	0000	16 6336	
INNOVATIVE PROJEC 15	Total	1.909	1 909	1 909	1 909	0000	0000	0 000	0 000	0 000	0 0 0 0	7 636	
TOTAL	Federal	1.527	1 527	1 527	1 527	0000	0000	0.000	0.000	0 000	0.000	6 109	
!	Total	105 993	105 993	115 793	115 793	98 886	98 743	98.743	98 743	98 743	98 743	103	
	Lederal	05 F 98	BP 430	94 270	94.270	80 745	80 630	80 630	80 630	80 630	80 630	845 296	

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FEDERAL PROGRAMS

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RHODE ISLAND

Transportation Improvement Program OCTOBER 1, 1991 TO SEPTEMBER 30, 1997 (Cost in \$ Thousands)

							GIC		
RANK	:		1992	2 & 1993		1994 &	95	1996 & 9	
	1 1-95 VIADUCT & BRIDGE REPAIR	C DROVIDENCE	с	4000	• •		1	•••••	4000
	5 JAMESTOWN BR Interim repair	JAMESTOWN	c		"C"	7380			7880
-	& demolition (const prev.aut			500		1 300			
	BERKELEY BROG #769	CUMBERLAND	RC	2600					2600
and the second second	MARTIN ST BRDG #774 (REPL)	LINCOLN							
3 * 11	1-195 BRDG.REH. & SAFETYIMPR	PROVIDENCE			RC	16000	RC	50000	166000
	1-95 to Gano St.								
13	EAST PROVIDENCE IND. HOWY	EAST PROVIDENCE	rc	2000	RC	13500	RC	21000	36500
		PAWTUCKET							
15	LEWIS FARM RD BRIDGE #847 REPLACEMENT (OFF SYS)	COVENTRY	RC	500					500
17	RTE 138 - NEW LOCATION	SOUTH KINGSTOWN	r	2500	RC	21000	RC	44000	67500
	RTE 2 TO RTE 1 (INCL.URI CON	NECTOR) EXETER							
21	ATWOOD AVE	JOHNSTON	rc	6500					6500
12 8	CENTRAL AVE TO RTE 6	19 81 3							
24	MEMORIAL BLVD. EXTENSION	PROVIDENCE	C	7000					7000
	(PART CITY FUNDED)								
24	WHITE ROCK BRIDGE #65	WESTERLY	rc	1750					1750
25	WESTERLY/STONINGTON (REPL.) CHURCH ST RR BRIDGE #943								88 23
000	(OFF SYS)	CUMBERLAND	RC	450					450
28	PHENIX AVE BR#413 & approach	CRANSTON		1700					1700
	REPLACEMENT		rc	1300					1300
33	SEAPOWET BRIDGE #291	TIVERTON	RC	500					500
70	REPLACEMENT (OFF SYS)								
38	HEMLOCK BR # 433	FOSTER	RC	400					400
70	REPLACEMENT WASHINGTON BRDG #200 SOUTH	EAST DOOULOSUOS							
	QUONSET PT/DAVISVILLE CONNEC.	EAST PROVIDENCE	с	1500					1500
	RT 4 TO US 1	EAST GREENWICH		8.3	RC	24700 r	c	27200	51900
44	ARNOLD ST RR BRDG #944	WOONSOCKET	RC	550					8 2
	REPLACEMENT		~~	330					550
45	ALBION BRDG #164 & ALBION	LINCOLN	rc	2000					2000
	TRENCH BRDG #163 & APPROACHES		- 60						2000
48	RT 6 UPGRADING	JOHNSTON			C	6000 R	c	45000	51000
	1-295 TO CT S/L	FOSTER				19	100 AT 100 AT	0.0	
49	STATE OFFICE TRAFFIC	PROVIDENCE	rc	4000					4000
	CIRCULATION								8 . E
	WOLF ROCKS RR CROSS. ELIM.	SOUTH KINGSTOWN	RC	500					500
	HARRISVILLE MILL BRDG #306	BURRILLVILLE	RC	500					500
	SIDEWALKS								
	BARRINGTON BRDG #123	BARRINGTON	RC	1100					1100
	L WARREN BRDG #124 (REH) COURT ST BRDG #959	WARREN		2500					
	REPLACEMENT	WOONSOCKET	rc	2500					2500
	FIRST BARBERVILLE BRDG #41	HOPKINTON		500					<u> </u>
	REPLACEMENT (OFF SYS)	RICHMOND	rc	300					500
	ESTMINSTER ST RR BRG #926	PROVIDENCE	rc	1000					1000
	BROADWAY RR BRDG #927 (REPL)		34						1000
	BRIDGE ST RR BRDG #942	WARREN	RC	300					300
	OVER STATE RR - ELIMINATION	2 1	6 28	3					300
	BRADFORD RR BRIDGE #365	WESTERLY	RC	550					550
F	REHABILITATION								

RANK:			1992	\$ 199	3	1994 & 95	1996 &	
	RRR - ROBER WILL. WAY	NORTH KINGSTOWN	RC	510	0			5100
1.000.000	POST RO TO THE END							700
64	WEST ELMNOOD BRIDGE	PROVIDENCE	rc	70	0			700
3.27.00	REHABILITATION							500
69	MIANTONOMI BRDG #270	RICHMOND	RC	500	0			500
	REHABILITATION							13
70	HUNTINGHOUSE BRDG #391	SCITUATE	RC	500	0			500
	REPLACEMENT (OFF SYS)							
71	ROCKVILLE ALTON RD	HOPKINTON	RC	7500)			7500
	RTE 3 TO RTE 91							68
73	SHANNOCK RD	RICHMOND	rc	5500)			5500
101.00	RTE 112 TO RTE 2	CHARLESTOWN						
74	APPONAUG CIRCULATOR BY-PASSES	WARWICK	RC	3300)			3300
	POST RD & RTE 117 EXTENSIONS							
77	POST RD/US-1	NORTH KINGSTOWN	rc	5050)			5050
	WEST MAIN St. TO Maxwell Dr.							
78	STILLWATER RD BRDG #949 &	SMITHFIELD	rc	1100)			1100
	APPROACHES							
79	NEW SHOREHAM BRDG #140	NEW SHOREHAM	rc	550)			550
	(OFF SYS)							
83	RTE 94	FOSTER	rc	3750	, 0			3750
	RTE 102 TO RTE 6							
84	MENDON RD	CUMBERLAND	rc	6000	1			6000
	BROAD ST TO CUMB.HILL RD	WOONSOCKET						
84	RTE 4 & US 1	NORTH KINGSTOWN	RC	11000	RC	16000 rt	29000	56000
	LAFAY. RD TO WAKEFIELD CUTOFF	SOUTH KINGSTOWN						
86	RTE 138 IMPROVEMENTS	JAMESTOWN	rc	10000	1			10000
3.00.0	JAMESTOWN BRDG TO NEWPORT BRD	OLAN RC 37						
86	RRR PROGRAM - RTE 216	CHARLESTOWN	rc	3750	NOA %			3750
	US 1 TO RTE 91	WESTERLY	101	129.00				
90	BURDICKVILLE RD RR BRG #914	CHARLESTOWN	rc	750				750
1200	REPLACEMENT (OFF SYS)		7,2,2001	I MORE				ANN SEL
91	UNION AVE RR BRDG #925	PROVIDENCE	RC	1050				1050
	REPLACEMENT	0(2) 21	0.019	11111				NAM CCT
92	RTE 44/1-295 DRAINAGE IMPROV.	JOHNSTON	RC	450				450
0945		SMITHFIELD	1301 1019	TRAT				ANA DOL
92	RTE 138 UPGRADING - E.MAIN RD				RC	12500 rc	0000	21500
	RTE 24 TO RTE 114	MIDDLETOWN			~	12300 10		21300
94	WOODRUFF AVE/COLUMBIA ST	SOUTH KINGSTOWN	rc	3200				3200
5000	RTE 108 TO NARR T/L	SOUTH KINGSTOWN	100	5200				3200
98	NEWPORT CIRCULATION IMPROV	NEWPORT			RC	4600 C	9200	13800
	IMPROVEMENTS	MIDDLETOWN			~~		7200	1194.201-
100	BURR. WW MEN. BROG #310	BURRILLVILLE	RC	1550				1550
1.92	REPLACEMENT		SOLVORA .					
101	US 1	WESTERLY	RC	4500				4500
	ROBIN HOLLOW TO PROSSER TRAIL							4300
102	US 44	GLOCESTER	XO LYRAN	10000		10000 80	10000	30000
	1-295 TO RTE 102	SMITHFIELD	RC		NG.	10000 RC		30000
103	NATICK BRIDGE #026	WEST WARWICK	RC	400				400
0.0	REHABILITATION	WARWICK	n c					
105	ROCKLAND RD	SCITUATE	с	3500				3500
1002	RTE 6 TO PLAINFIELD PIKE	JUTIONIC	1048	3300				3300
109	METACON AVE (RTE 136)	BRISTOL			RC	13000 RC	2000	20000
	MA S/L TO MT HOPE BRDG				~~	13000 80	7000	20000
	THE TO HE HOPE BRUG	WARREN						

		19	92 & 1993	1994 & 95	1996 \$ 97	
117 WOONSOCKET INDUSTRIAL HOWY		rc	4000			4000
RTE 146: TO RTE 122	CUMBERLAND					
	BURRILLVILLE	RC	1200			1200
RTE 107 TO N. SMITHFIELD T						
123 RRR PROGRAM - POST RD	EAST GREENWICH	RC	6000			0000
FIRST AVE TO N. KINGSTOWN						
126 RRR-RTE 5/N.Main/Central S	t. NORTH SMITHFIELD	RC	1500			1500
Charon Dr. TO MA S/L						
127 ELDER BALLOU MEETING HS. L	N WOONSOCKET	rc	4000			4000
BOUND RD TO MENDON RD						
131 LIME ROCK RD	SMITHFIELD	RC	3000			3000
RTE 123 TO RTE 7						
134 RTE 102	SCITUATE	RC	6250 rc	12000		18250
OLD PLAIN. PIKE TO BURR. T,						
134 RRR PROGRAM-DIVISION RD	EAST GREENWICH	RC	2000			2000
RTE 2 TO RTE 3	WEST GREENWICH					
135 NORTH RD	JAMESTOWN	rc	2500			2500
ELDRED AVE TO EAST SHORE RE	1					
136 RRR PROGRAM - RTE 7	SMITHFIELD	rc	5000			5000
I-295 to Prov. Pike						
139 STILLWATER RD & CAPRON RD	SMITHFIELD	RC	2750			2750
RTE 104 TO LIME ROCK RD						6.75
141 RRR PROGRAM - BROAD ST	WESTERLY	rc	1600			1600
MAIN ST TO BEACH ST						-
142 RTE 3 & MISHNOCK RD	WEST GREENWICH	rc	500			500
INTERSECTION			a sala			400
144 POINT ST BRIDGE #980	PROVIDENCE	RC	2600			2600
149 RRR PROGRAM - SUCCOTASH RD	SOUTH KINGSTOWN	RC	3700			
US 1 TO MATUNUCK STATE BEAC	H NARRAGANSETT	Manager -	5.00			3700
152 WARWICK AVE	WARWICK	RC	5000			5000
HOXSIE "4" CORNERS TO SANDY	LN	1.44				5000
153 RRR PROGRAM - HARRIS AVE	WOONSOCKET	rc	1200			00
MAIN ST TO MA LINE						1200
155 RRR PROGRAM - RTE 116	SMITHFIELD	RC	4500			19
RTE 44 TO RTE 104			4500			4500
160 RRR PROGRAM - ROGER WMS. AVE	EAST PROVIDENCE	¥07	Switch . VORMA	3400		59
BOURNE AVE TO PAWTUCKET AVE			C.	2600		2600
161 RRR PROGRAM - BIRCH SWAMP RD	WARREN		11 PO PODY 54			
RTE 136 TO SCHOOL HOUSE RD	HONDER		rc	1000		1000
161 RRR PROGRAM - RI RTE 195	JOHNSTON			VE/COLIMBIA S		
RTE 6 TO 1-295	PROVIDENCE		RC	5000		5000
163 VETERANS SQUARE - RTE 117			35.00			
166 RTE 146	WEST WARWICK	RC				2500
1-95 TO MA S/L	PROVIDENCE	RC	5000			5000
166 RRR PROGRAM - MAIN STREET	NORTH PROVIDENCE					
DALE CARLIA CRNR TO OLD POST	SOUTH KINGSTOWN	rc	1400			1400
166 WAKEFIELD ST		10-10 M	TRASS START			
	WEST WARWICK	RC	3250		23 215	
PROVIDENCE ST TO MAIN ST	A REAL PROPERTY OF		17.545			
167 SIX CRNRS INTER - RTE 44	EAST PROVIDENCE	RC	2100		IRE XOLTEN	
168 OCEAN VIEW HOWY	WESTERLY	RC	1550		STIJIBANBE	
SHORE RD TO NINIGRET RD						
169 RRR - S. WEST AV/BEAVERTAIL	JAMESTOWN	rC	2300			
NARRAGANSETT AVE TO BATTERY L	N					

RANK:		199	2 & 199	73	1994 & 95	1996 & 97	TOTAL
170 SCHOOL HOUSE RD	WARREN	RC	250	00			2500
RTE 136. TO MA S/L							
175 1-95 PAWT RIVER BR #550	PAWTUCKET	rc	50	00	·		500
175 1-95 SERVICE ROADS	PROVIDENCE	rc	300	0			3000
177 RRR PROGRAM - WEEKAPAUG RD	WESTERLY	rc	90	0			900
SHORE RD TO ATLANTIC AVE							
179 RRR PROGRAM - CHARLES ST	PROVIDENCE	rc	350	0			3500
BRANCH AVE TO 1-95; & Br.#9	73						
179 RTE 14	COVENTRY	RC	210	0			2100
CT S/L TO MOOSUP VALLEY							
186 RTE 116/RTE 146 INTERCHANGE	LINCOLN	RC	175	0 rc	3500 RC	14000	19250
RTE 116 TO RTE 122	CUMBERLAND						
191 POST RD	NORTH KINGSTOWN	RC	300	0			3000
SCHOOL ST TO E. GREEN T/L							
203 RRR - MESHANTICUT INTERCHG.	CRANSTON	rc	800	0			8000
Rtes 2,5,33	WARWICK						
217 RRR - RT 96 (RND. TOP RD.)	BURRILLVILLE	rc	2000	0			2000
SCHOOL ST TO BROOK RD							
219 RTE 117	WARWICK	RC	3500)			3500
1-95 TO GAUVIN Dr.							
223 RRR PROGRAM - PAWTUCKET AVE	EAST PROVIDENCE	RC	2000)			2000
NEWMAN AVE TO PAWT C/L							
230 RTE 110 (MINISTERIAL RD)	SOUTH KINGSTOWN	rc	2500) rc	7000		9500
RTE 138 TO US 1							
236 RRR PROGRAM - WILLETT AVE	EAST PROVIDENCE			RC	2050		2050
CRES.VIEW AV TO WASHINGTON R					1998 21		1500
245 SAND HILL COVE RD	NARRAGANSETT	RC	2150	1			2150
RTE 108 TO ROGER WHEELER BEA			1819 197	2			2130
247 RRR PROGRAM - RTE 14	SCITUATE	RC	3000				3000
RTE 102 TO RTE 116	D'Standards and	10	NBOIYCX				5000
249 RTE 138 RECONSTRUCTION	RICHMOND			RC	14000	13 03 478 Yo	4000
1-95 TO RTE 2	SOUTH KINGSTOWN				A STORA	CERSECTION CINC	
254 US 1	WARWICK	RC	3500				3500
APPONAUG "4" COR. TO EG T/L		NG NG					3300
260 RRR PROGRAM - STAFFORD RD	TIVERTON			RC	1500		1500
R I AVE TO BULGARMARSH RD							1300
263 RRR PROGRAM - FRANKLIN ST	BRISTOL			RC	750		750
METACOM AVE TO WOOD ST	RASP ROMANTED			and a	2000		150
267 RRR PROGRAM - UNION ST	PORTSMOUTH			RC	800		800
EAST MAIN RD TO WEST MAIN RD	AND				A Design of		a state of the
272 WESTERLY BY-PASS &	WESTERLY			rc	8000		8000
INTERCHANGE @ US 1					34.00		5000
275 1-195/DYER ST RAMPS	PROVIDENCE	RC	4000				4000
276 RRR PROGRAM - VERNON ST	WARREN		600	rc	750		750
MAIN ST TO METACON AVE							150
282 RTE 2 (BALD HILL RD)	WARWICK	RC	8000				3000
TOLLGATE RD TO COMESETT RD	EXETER					·	
284 RRR PROGRAM - Prospect St.	PAWTUCKET	RC	900				900
BEVERAGE HILL AVE TO School S							
288 1-295 SAFETY IMPROVEMENTS	WARWICK	с	3500				500
(Bridges #719 & #722)							
290 COUNTY RD	BARRINGTON	RC	2500			3	500
SULLIVAN TERRACE TO RUMSTICK	R						

RR PROGRAM - RTE 104 -295 TO RTE 15 RR PROGRAM - US 44 TE 102 TO CT S/L RI CIRC. & RI-108 PASS STUDY WONSET PT. Circulation MProvements 95 PAVEMENT SETTLEMENT & dian Barrier Rehabilitation terstate Resurfacing E 10 RK AVE TO RTE 6, (Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION ST RD PORT RD TO STRAWBERRY FIELD	Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK	RC RC C rc	300 525 200 250 1000	60 RC 0	2700	10000	525
RR PROGRAM - US 44 TE 102 TO CT S/L RI CIRC. & RI-108 PASS STUDY HORSET PT. Circulation HORORET PT. Circulation HORORETS 95 PAVEMENT SETTLEMENT & dian Barrier Rehabilitation terstate Resurfacing E 10 RK AVE TO RTE 6, (Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L HPEL FOUR CORNERS TERSECTION FT RD	GLOCESTER SOUTH KINGSTOWN NORTH KINGSTOWN CRANSTON Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK	RC C	525 200 250 1000	60 RC 0 0 0 0 0 7 c rc	2700 10000 rc 12900 11000	10000	5250 2700 2000 2500 30000 12900 11000 6500
RR PROGRAM - US 44 TE 102 TO CT S/L RI CIRC. & RI-108 PASS STUDY HORSET PT. Circulation HORORET PT. Circulation HORORETS 95 PAVEMENT SETTLEMENT & dian Barrier Rehabilitation terstate Resurfacing E 10 RK AVE TO RTE 6, (Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L HPEL FOUR CORNERS TERSECTION FT RD	GLOCESTER SOUTH KINGSTOWN NORTH KINGSTOWN CRANSTON Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK	RC C	200 250 1000	RC 0 0 0 0 0 rc rc	2700 10000 rc 12900 11000	10000	5250 2700 2500 30000 12900 11000 6500
TE 102 TO CT S/L RI CIRC. & RI-108 PASS STUDY HONSET PT. Circulation HOPOVEMENTS 95 PAVEMENT SETTLEMENT & dian Barrier Rehabilitation terstate Resurfacing E 10 RK AVE TO RTE 6, (Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L HPEL FOUR CORNERS TERSECTION HT RD	SOUTH KINGSTOWN NORTH KINGSTOWN CRANSTON Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK	RC C	200 250 1000	RC 0 0 0 0 0 rc rc	2700 10000 rc 12900 11000	10000	2700 2000 2500 30000 12900 11000 6500
RI CIRC. & RI-108 PASS STUDY HONSET PT. Circulation HOPOVEMENTS 95 PAVEMENT SETTLEMENT & dian Barrier Rehabilitation terstate Resurfacing E 10 RK AVE TO RTE 6, (Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L HPEL FOUR CORNERS TERSECTION FT RD	NORTH KINGSTOWN CRANSTON Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK	с	250	0 0 0 rc rc rc	2700 10000 rc 12900 11000	10000	2700 2000 2500 30000 12900 11000 6500
PProvements 95 PAVEMENT SETTLEMENT & dian Barrier Rehabilitation terstate Resurfacing E 10 RK AVE TO RTE 6, (Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION ST RD	CRANSTON Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK	с	250	0 D rc rc rc	10000 rc 12900 11000	10000	2000 2500 30000 12900 11000 6500
dian Barrier Rehabilitation terstate Resurfacing E 10 RK AVE TO RTE 6,(Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION T RD	Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK		1000	D rc rc rc	10000 rc 12900 11000	10000	2500 30000 12900 11000 6500
terstate Resurfacing E 10 RK AVE TO RTE 6,(Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION DT RD	Statewide CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK		1000	D rc rc rc	10000 rc 12900 11000	10000	30000 12900 11000 6500
E 10 RK AVE TO RTE 6,(Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION DT RD	CRANSTON PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK	rc		rc rc	10000 rc 12900 11000	10000	30000 12900 11000 6500
RK AVE TO RTE 6, (Union Ave) E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION DT RD	PROVIDENCE CRANSTON COVENTRY CUMBERLAND WARWICK			rc	11000		12900 11000 6500
E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION DT RD	CRANSTON COVENTRY CUMBERLAND WARWICK			rc	11000		11000
E 10/RI RTE 195 INTERCHANGE E 3 DSENECK HILL RD TO W.W. T/L NPEL FOUR CORNERS TERSECTION DT RD	CRANSTON COVENTRY CUMBERLAND WARWICK				11000		11000 6500
DSENECK HILL RD TO W.W. T/L APEL FOUR CORNERS TERSECTION ST RD	CUMBERLAND				Charles and the second s		6500
DSENECK HILL RD TO W.W. T/L APEL FOUR CORNERS TERSECTION ST RD	CUMBERLAND			RC	Charles and the second s		6500
APEL FOUR CORNERS TERSECTION	CUMBERLAND				CA PARAMA OI		
ERSECTION ST RD	WARWICK						
THE TREE LOSS MANNED AND				rc	550		550
PORT RD TO STRAUREPRY FIFIT		RC	11000				11000
)						
6 95 TO PROVIDENCE C/L	JOHNSTON			rc	4300		4300
T OF GALILEE ROAD ROVEMENTS	NARRAGANSETT	rc	3500				3500
DONE RD BRIDGE #845	COVENTRY	rc	700				700
ens Ave. (incl.1-95 Intchg. y St. to Ernest Ave.	PROVIDENCE			rc	11000	5 102 TO	11000
	BARRINGTON	rc	570				570
	BARRINGTON			RC	2300		2300
123 (Breakneck Hill Rd.)	LINCOLN		I VERTS	rc	1700		1700
NWOOD AV BRIDGE # 947 E	EAST PROVIDENCE	гс	400				400
o (city pu. engineering)							
ious TIP Projects		\$ 3	311820	\$ 2	266580 \$ 27540	0 \$ 95	3800
	OWBROOK DR TO MA. S/L 123 (Breakneck Hill Rd.) 1 246 To Great Rd.	OWBROOK DR TO MA. S/L 123 (Breakneck Hill Rd.) LINCOLN 246 To Great Rd. WWOOD AV BRIDGE # 947 EAST PROVIDENCE	OWBROOK DR TO MA. S/L 123 (Breakneck Hill Rd.) LINCOLN 246 To Great Rd. WWOOD AV BRIDGE # 947 EAST PROVIDENCE rc	OWBROOK DR TO MA. S/L 123 (Breakneck Hill Rd.) LINCOLN 246 To Great Rd. WWOOD AV BRIDGE # 947 EAST PROVIDENCE rc 400	DWBROOK DR TO MA. S/L 123 (Breakneck Hill Rd.) LINCOLN rc 246 To Great Rd. WWOOD AV BRIDGE # 947 EAST PROVIDENCE rc 400	DWBROOK DR TO MA. S/L 123 (Breakneck Hill Rd.) LINCOLN rc 1700 246 To Great Rd. WWOOD AV BRIDGE # 947 EAST PROVIDENCE rc 400	DWBROOK DR TO MA. S/L 123 (Breakneck Hill Rd.) LINCOLN rc 1700 246 To Great Rd. WWOOD AV BRIDGE # 947 EAST PROVIDENCE rc 400

ADDRESS AND ADDRES

RHODE ISLAND

Transportation Improvement Program OCTOBER 1, 1991 TO SEPTEMBER 30, 1997 (Cost in \$ Thousands) (Cost in \$ Thousands)

ANK :			1995	8 1993	19	994 & 95	1996 & 97 TOTA
2001	1-95/Route 2 Ramps	WEST WARWICK	p	500	rc	3000	350
	66560 \$ 275400 \$ 853600	SMITHFIELD TO PRO	v.				ecose (*cos
2002	US 44 1-295 TO GEORGE WATERMAN RD	SHITHFILLD TO THE	P	200	rc	4200	440
	HIGH SERVICE TO G. WATERMAN &	0053	P	350	rc	2950	330
	ACADEMY AVE TO HIGH SERVICE A		P	150	rc	1750	190
	ACADEMY AVE TO HIGH SERVICE A	•					estevide Projecte
2003	RTE 108	SOUTH KINGSTOWN	Ρ	400	rc	10300	1070
	RTE 138 TO NARRAGANSETT T/L						
2004	RTE 1A (BOSTON NECK RD)	NORTH KINGSTOWN	P	400	rc	8500	890
	RTE 102 TO RTE 138						
2005	RTE 146A (GREAT RD)	NORTH SMITHFIELD	P	300	rc	3950	4250
005		Contraction of the second second		300		SUNTERONS'	
	RTE 146 TO RTE 146 PARK SQUAR	1600					
-004	RTE 5	CRANSTON, WARWICK					
	MAYFIELD AVE TO RTE 113		P	300	rc	5400	5700
	JOHNSTON T/L TO CRANSTON ST		P	300	rc	2950	3250
	Cranston St. TO MAYFIELD AVE	STATERA	P	400	rc	5050	5450
		DES				103 1 AJUQ3	SUITADO CLARING
007	AQUIDNECK AVE	MIDDLETOWN	P	200	rc	1800	2000
008	EAST MAIN RD TO GREEN END AVE RTE 246	N.PROV., LINCOLN	P	300	rc	4900	5200
008	PROVIDENCE C/L TO RTE 146	N.PROV., LINCOLN		500		191111120	NA DRIVENA SHELLA
009	HUNTINGTON AVE/CARTER ST	PROVIDENCE	P	150	rc	1350	1500
	CRANSTON ST TO ELMWOOD AVE						
010	AIRPORT RD	WARWICK	P	300	rc	2500	2800
	POST RD TO WARWICK AVE						
2011	Proposed Urban Collector	CUMBERLAND			RC	2000	2000
	Mendon Rd. To Highland Corpor.	ate Park					
	(Locally Funded Engineering)						
012	RTE 113 (MAIN AVE)	WARWICK	Ρ	400	RC	2800	3200
	Rte 5 to Jefferson Blvd						
013	RTE 3 (COWESETT AVE)	WEST WARWICK	Ρ	800	RC	5400	6200
1075	RTE 2 TO COVENTRY T/L						
014	BULLOCKS POINT AVE	EAST PROVIDENCE	P	400	RC	2400	2800
	Crescent View to Turner Ave			I ONE			
015	BLACKSTONE ST	WOONSOCKET	Ρ	250	RC	1200	1450
	NO MAIN ST TO HARRIS AVE						
016	COBBLE HILL RD	LINCOLN	Ρ	400	RC	3400	3800
017	RTE 246 TO WEEDEN ST	PAWTUCKET					
017	OAK HILL RD RTE 4 TO RTE 1	NORTH KINGSTOWN	P	400	RC	3000	3400
019	EXETER RD	NORTH KINGSTON		600		25.00	
010		NORTH KINGSTOWN	P	500	RC	2500	3000
010	RTE 2 TO INDIAN CORNER RD	EXETER		100		001	
019	EAST RD/STONE CHURCH RD INTERSECTION IMPROVEMENTS	TIVERTON	Ρ	150	RC	1200	1350
020	NANAQUAKET RD	TIVERTON	P	350	RC	2875	3225
	AND BRIDGE # 126			330	~~		3223
021	PARK AVE	PORTSMOUTH			RC	4000	4800
	E MAIN RD TO RTE 24	for the foreigner it	it about				4000

TRANSPORTATION IMPROVEMENT PROGRAM FFY 1992-1997 HIGHWAY PROGRAM SUMMARY (cost in \$ thousands)

anne a 97 101AL				 1992	£ 1993	1994 & 19	95 199641	997 TOTAL
evious TIP Projects ("c	:ommitted")			\$	311820	\$ 266580		0 \$ 853800
xxx Projects New to t	he TIP				8700	89375		98075
General Citter &					0,00	0,3,7		BOINAS HOLM
,999 Statewide Projec	ts							
Bridge Managem (including 100			ode)	prc	25000 pr	rc 25000	prc 25000	75000
Pavement Manage (including 100	ement (resu	rfacin		prc	10000 pr	-c 10000	prc 10000	30000
BICYCLE FACILIT				prc	4000 pr	c 4000	prc 4000	12000
RAILROAD HIGHWA	Y CROSSINGS	5			1200	1200	1200	3600
BRIDGE INSPECTI	ON & RATING				1600	1600	1600	The same a set of the second
HIGHWAY SAFETY	PROGRAM - S	TATE			1000	1000	1000	
STRATEGIC HIGHW					100	100	100	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TRUCK WEIGH-IN-					100	100	100	300 300
PLANE COORDINAT	E SURVEYS				350	350	350	1050
STAFF TRAINING	& EDUCATION				250	250	250	750
LANDSCAPING					600	600	600	1800
SIGNALIZATION					2000	- 2000	2000	6000
CARPOOLING AND	VANPOOLING				100	100	100	300
FRINGE PARKING	FACILITIES				600	600	600	
DAMAGED SAFETY P		ARE			1300	1300		1800
SIGNING UPRGRADI		24			600	600	1300	3900
STRIPING UPGRADI	ING				2000	2000	600	1800
Community Partic	ipation/End	ineer	ing		200		2000	6000
DRAINAGE STRUCTU					1000	200	200	600
SALT STORAGE FAC		0.0			500	500	1000	3000
						500	500	1500
••••••••••••••••••••••	•••••		• • • • • • • • • • •	 				"Clacelly Pund
								129878 113 CHAIN
	1200 2075							

TRANSPORTATION IMPROVEMENT PROGRAM

OCTOBER 1, 1991 TO SEPTEMBER 30, 1997 (COST IN THOUSANDS)

FUNDING CATEGORY: MASS TRANSPORTATION (UNTA)

PROJECT DESCRIPTION:	•			- 1994 199	5 · · · · 1996 · · · · 1997 ·	. TOTAL
RIPTA Operating Expenses		12200	12871		26 15114 15945	84035
Sec.9: RIPTA Operating Expense	FED. SHARE	4500	4500	4500 450	0 4500 4500	27000
CAPITAL PROJECTS						
CAPITAL PROJECTS		- 1992	\$ 1993-	-1994 & 1995	1996 & 1997-	TOTAL
Sec.9/23 BUS REPLACEMENT	STATEWIDE		12000	250	0 13200	27700
Sec.9/23 MECH.MKTG.OFFICE EQUI MISC. CAPITAL PROJECT	P. STATEWIDE		2000	4000	4500	10500
Sec.9 GARAGE FACILITIES	STATEWIDE				20000	20000
Sec.9/23 COMMUTER RAIL / MBTA				15000	ASTERLY.	15000
* Sec.9/23 PASSENGER RAIL	STATEWIDE			1408-061 Han Jrd		
* Sec.9/23 MARINE TRANSPORTATION Terminal(s) & Services	STATEWIDE			· 64,210		•
te brudge						
Sec.16(b)(2) PARATRANSIT	STATEWIDE		700	700	700	2100
Sec. 18 NON-URBAN TRANS.	RURAL AREAS		400	400	400	1200
TOTAL - CAPITAL PROJECTS	1993 1998		15100			
* NOTE: Major ending			13100	22600	38800	76500
 NOTE: Major studies are underw Those studies will likel 	ay in each of the y produce project	se areas; recommenda	tions			
" RAIL RIGHT-OF-WAY	438 160					
ACQUISITION	STATEWIDE		100	100	100	300

"Note:

The state recognizes that federal funding is not allowed for long-range advance acquisition of abandoned rail rights-of-way. However, it is state policy to preserve such transportation corridors; and the State Planning Council supports the use of state funds if necessary and federal funds if allowed in the future

TRANSPORTATION IMPROVEMENT PROGRAM

OCTOBER 1,1991 to SEPTEMBER 30, 1997 (COST IN THOUSANDS OF DOLLARS)

Re.

FUNDING CATEGORY: AIRPORT IMPROVEMENT PROGRAM

SUMMARY OF TOTAL COSTS

	AIRPORT	1992	1993	1994	1995	1996	1992 - 1996
	BLOCK ISLAND	1,500	400	200	1,200	450	3,750
	T F GREEN Terminal costs	25,370	7,520 20,000	7,825	7,400	5,400	53,515 70,000
	NEWPORT	1,425	2,460	1,150	2,050	1,750	8,835
¢	NORTH CENTRAL	2,195	2,750	1,800	875	500	8,120
	QUONSET	3,660	3,375	175	4,375	1,600	13, 185
	WESTERLY	560	3,450	1,500	1,675	500	7,685
	terminal costs other costs	50,000 34,710	20,000	0 12,650	0	0 10,200	70,000 95,090
	TOTAL COSTS	84,710	39,955	12,650	17,575	10,200	165,090
						200	200 005 200 005
	PLET STORAGE FACILIA						
	SUMMARY OF STATE C	0515					
	AIRPORT	1992	1993	1994	1995	1996	1992 - 1996
	BLOCK ISLAND	776	40	200	120	45	nebhu ens asia1,181
	T F GREEN terminal costs	2,536 39,602	7 52 20,000	1,503 0	740 0	540 0	6,071 59,602
	NEWPORT	143	246	115	205	175	884
	NORTH CENTRAL	220	1,355	270	88	50	1,982
	QUONSET	366	837	175	438	160	1,976
	WESTERLY	96	905	150	303	50	1,504
	terminal costs	39,602 4,136	20,000 4,135	0 2,413	0 1,893	0 1,020	59,602 13,596
	TOTAL COSTS	43,738	24,135	2,413	1,893	1,020	73, 198

LOCAL RAIL FREIGHT ASSISTANCE (LRFA) PROGRAM

PROJECT	RAIL LINE	LOCATION	DESCRIPTION	EST. COST
		Fiscal 92		
Re-tie Woon. Vladuct	P&W Main	Woonsocket	Re tie three spans (phase II)	\$100.000
Shore Line lead track (SEAVIEW)	QP/D Ind. Track	N. Kingstown	Rehab. Shore Line Interchange with the QP/D Industrial Track	\$50.000
lackstone R. Bridge (mp 5.83)	P&W Main	Valley Falls	Renew steel	\$250.000
Casset River Bridge	Pontiac Sec.	Cranston	Bridge reconstruction	\$300.000
Junction track rehab.	E. Junction Sec.	East Providence	Track rehabilitation and bridge work	\$230.000
indge reconstruction (mp 12.33)	P&W Main	Manville	Bridge reconstruction	\$50.000
ndge rehab. (mp 10.88)	P&W Main	School St. Cumb.	Replace bridge deck	\$50.000
		Piscal 93	and the state	
Wisville "Y"	QP/D Ind. Track	N. Kingstown	Reconstruction of switch, replace	\$850,000
lverts & drainage	Slatersville Br.	N. Smith. & Woon.	Rehab. culverts	\$50.000
		Fiscal 94		
rd track bridge	P&W Main	Valley Falls	Replace bridge deck	\$85.000
Wisville spur track	QP/D Ind. Track	N. Kingstown	Construct spur track to service new industrial customer.	\$100.000
thot Metals spur track	Harbor Junc. •	Port/Prov.	Construct spur track to improve access to existing rail user	\$17.000
Warehouse spur track	Harbor June. •	Port/Prov.	Construct spur track to improve	\$10.000

TOTAL \$2.142.000

\$10.000

Construct spur track to improve

access to existing rail user

TS

The Harbor Junction time is currently undergoing Phase II improvements

FY 94 Budget Est FY94 BUDGET ESTIN STATE FUNDING TOTAL FY94 ESTIM	FY 94 Budget Estimated Expenditures FY94 BUDGET ESTIMATED EXPENDITURES STATE FUNDING SOURCE SUMMARY TOTAL FY94 ESTIMATED EXPENDITURES	5	AUNDING CLIFC AUNDING CLIFC SUMMAR II SUMMAR II SUMON SUMON AUNDING SUMON S	OORAM LETLON N. CO
STATE FUNDING SOURCE	TOTAL	STATE	FEDERAL	
TRANSPORTATION - ENGINEERING AND CONSTRUCTION	\$ 52,727,548	\$ 6.457.087	\$ 46 N92 MDR	¢ 170 150
TRANSPORTATION - SPECIAL PROJECT UNIT	9,870,413	872,635	8,991,814	40,4035.964
	9,881,435	3,412,853	5,614,026	854,556
LAID	673,642	43,225	619,128	11,289
TRANSPORTATION - RAPT (RAIL, AIR, PUBLIC TRANSIT)	11,587,364	2,004,666	8,917,586	665,112
TRANSPORTATION - C.C.C. HIGHWAY	3,686,832	1	3,686,832	
TRANSPORTATION - PLANNING	8,251,733	1,522,622	6,729,111	
TRANSPORTATION - PAVING	23,250,000	3,250,000	20,000,000	
365	999	Porta 8. 10 9.04 9.04	010 010	10
TOTAL	\$119,928,967	\$17,563,088	\$100,650,505	\$1,715,374
			. Vladuct isad track (SE 6. Bridge (mp.)	TOELOSI

XX. SOURCES OF INFORMATION

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