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GLOUCESTER

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Gloucester Resource Study

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Gloucester Resource Study

Interdepartmental Student Project in Systems Engineering at the Massachusetts Institute of Technology, Spring Term, 1973

Edited by Roy Nick McPherson

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Gloucester Harbor



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Preface

This volume continues the practice of making available in book form the results of an effort initiated as a student design subject entitled "Special Studies in Systems Engineering". This subject, which has been offered in the spring term for ten years, provides exploration into a different topic each year. The work is carried out by a multidisciplinary group and typically involves students not only from M.I.T., but also from neighboring universities.

The choice of Gloucester as the subject for the 1973 project was based on several factors. First, a project was sought which would excite the interest of students with a variety of backgrounds; second, selection of a locale within easy reach of Cambridge was considered advantageous as it would facilitate interaction between the students and the locale of the study; and third, but not least, some support for this interdisciplinary student project had been received from the Sea Grant Program of the National Oceanic and Atmospheric Administration. Since this program is charged with furthering our knowledge of ocean related activities and since NOAA was recently assigned responsibility for developing a federal coastal zone management program, an ocean or coastal zone topic was sought.

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Table P-1 Participating Students

The interdisciplinary framework used provides a tool whereby the examination and explanation of complex problems can be considered in various aspects and to various degrees. A study of Gloucester, as for any community, goes beyond the boundaries of any single discipline and can be examined effectively only from a multidisciplinary point of view. The Gloucester project provided a real problem situation in which students could learn to work in a team situation and examine complex problems in a cooperative manner.

From the outset of the project the tentative goals were to identify, in a broad manner, the problems of the area and to formulate potential solutions. It was never felt that a specific "master plan" would be developed, since master planning in the traditional sense limits the options which a city may consider. Instead it was believed that the present situation in Gloucester should be described and the desires of the community interpreted. Based upon these findings, recommendations for aligning the community's needs and desires with its future physical, political and social environment could be developed. The proposal suggested represents one option whereby Gloucester might effectively make that alignment.

Initially, four M.I.T. students were involved with me in a series of visits to Gloucester during January 1973 to gather background information. In February, presentations to the class by guest lecturers helped to identify fundamental issues pertinent to the study. Simultaneously, students selected specific areas of interest and formed subgroups for closer examination of critical problem areas. On May 21 and again on June 6, results of the findings of the group were presented to Gloucester audiences which included representatives from the business and government establishments and from concerned citizen organizations. These findings were formally written up as term papers. Presented herein are the results of the research findings initially presented along with a substantial amount of research conducted during the summer of 1973. The additional research and the preparation of this final report were efforts carried out primarily by Roy Nick McPherson. It is hoped that the information presented will assist Gloucester in future decision making. The primary aim is to generate interest in problem areas which need additional consideration and expanded study.

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Cambridge, Massachusetts October, 1973

Introduction

Gloucester is obviously a very special city. It is known worldwide as a fishing port and has been blessed with several beautiful beaches and serene coves which contrast sharply with towns and communities nearby. Open spaces, inland and along the shore, offer a pleasant retreat from the fast pace of the city.

However, it shares problems common to many communities. Numerous stores along Main Street are closed and the central business district is decaying. There are beautiful mansions in some areas yet dilapidated housing in others. The waterfront is the center of activity which has resulted in congestion and has not been sufficiently productive economically to keep up with the decay of dilapidated piers and unplanned growth around the potentially beautiful harbor.

With these broad impressions as a background we set out to characterize the City and its resources more thoroughly. The framework in which we chose to carry on the study is shown in Figure i-1. The rectangles represent considerations which influence both the decisions that a city such as Gloucester might make and the effects of those decisions. The human and natural resources available to the city are among the most important considerations. The manner in which the public and private decision makers choose to develop these resources produces primary effects on the area. These effects in turn influence and are influenced by values held by the individuals and institutions of the city, and in turn influence the economic, legal and political framework of the city. The decision makers gather information on the various components and control the manner in which resources are allocated and how they are developed; in turn the decision makers are themselves influenced or controlled by the economic and political forces which result from the interplay of the decisions made.

This study is an attempt to understand the present situation in Gloucester and to offer Gloucester two things:

(1) An information base by which Gloucester may better understand her present situation and aid in making decisions to align the ever-changing environment with the "long range goals" of the residents of Gloucester.

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(2) Suggestions and recommendations which are a reflection of the "longrange goals".



Figure 1-1

Methodology

INFORMATION BASE



History of Gloucester

The city of Gloucester is located on Cape Ann in northern Massachusetts. She has a good natural harbor, located near some of the finest fishing grounds in the world. Hers is a long, proud history, over 300 years of intimate association with the sea. She has been celebrated by Rudyard Kipling in "Captain's Courageous", in poems by Longfellow and others, and in the works of countless Cape Ann artists. She has survived hard times and prosperous times with the sea, but today her proud ships and heroic fishermen are just memories. Her survival now depends upon decisions affecting her role, her ties to the sea, her very character. These decisions should be made with a feeling for her past and a knowledge of her present, her resources and capabilities.

Long before the first settlers arrived, Europeans had been fishing profitably in the waters off Cape Ann. The Portuguese called it "Cabo De Santa Maria" (Cape of St. Mary). The French explorer, Champlain, called it "Cape Aux Trois Iles", and in 1606 he anchored in what he called "Le Beau Port", one of the first recorded visits to what was to become the Port of Gloucester. He made note of her scenic beauty, strange natives, and abundance of fish. In 1614 Capt. John Smith paid a visit to the area calling it Cape Tragabigzanda, after a certain princess whom he had once befriended.

It wasn't until 1624 that this cape received its present name, Cape Ann, after the mother of Charles I. In 1642, "Le Beau Port" was incorporated as the town of Gloucester, named after a village of the same name in England.

1.1 Early Settlers

The first settlers arrived in 1623, following disagreements with the Puritans in Plymouth. They settled on the Annisquam, and were joined in 1624 by another group from England. Many of the original settlers didn't stay, but those who did survived through a combination of farming, fishing and the trading of cordwood and timber with Boston and Salem. The early fishermen stuck close to the shore, between Cape Ann and Cape Sable at the western end of Nova Scotia (Garland, 1971).

It wasn't until the beginning of the 1700's that fishing became the dominant factor in the life and economy of Gloucester. By this time the supply of timber was all but exhausted, and farming had never flourished in the rocky terrain. So Gloucester began to look offshore to the rich, but dangerous waters of the "Grand Banks" for sustenance. This meant hard, perilous fishing trips, lasting 10-12 weeks, but it also meant the beginning of a great seafaring tradition, and prosperity. The end of the wars with the French was a boon to the fishermen, giving them more access to Canadian waters.

A little story told of this period gives an idea of the flavor of the times. A Gloucester clergyman, welcoming his congregation, began with "We are gathered here to praise God," whereupon a voice from among his listeners cried out "And to catch fish!"

1.2 Commerce and Trade

Meanwhile, the longer fishing trips led to a need for larger vessels, and a ship building industry began to grow on Cape Ann. The world's first schooner was built by a Gloucesterman in 1713. In fact, during her most prosperous fishing era, her schooners and clipper ships were known everywhere for their beauty and speed.

Foreign commerce also played a leading role from this period up to the Revolutionary War. Gloucester salt cod was shipped to Mediterranean ports where it was traded for their products, which were in turn traded in the West Indies for rum, sugar and molasses. This came to be called the "Triangular Trade."

By the start of the Revolutionary War, Gloucester was second only to Marblehead, as a fishing port in the "colonies", with over eighty vessels working out of her harbor. But the war changed all that. Foreign trade was cut off, and most fishing vessels converted to privateers.

Recovery was slow for about thirty years after the war. It wasn't until the end of the War of 1812 that prosperity began to return to Gloucester. Fishing once again assumed the major role, with halibut and mackerel being sought, in addition to cod. Thus began a long controversy over fishing rights within Canada's

three mile limit, a controversy which wasn't finally resolved until the beginning of this century. Cape Ann's granite quarries also began to be exploited around this time, a venture which remained profitable until the early 1900's.

Fishing continued to grow in importance, until "by 1866 Gloucester led all ports in the New World in the importance and extent of its fishing interests " (McFarland, 1911). There were over 400 boats and 5000 men sailing out of Gloucester, and the population had increased from a Revolutionary War figure of 5000, to an 1860 figure of 25,000 despite the fact that thousands of men had drowned in the dangerous offshore fishing waters.

There were tales by the dozen of her courageous fishermen and sea captains. One such man was Howard Blackburn, who was lost in a two man dory in a mid-Atlantic winter storm. When he realized that his hands were freezing solid, he molded them about the oars so that he would be able to row to shore, over 100 miles away. Although he eventually lost most of his fingers and toes, he survived, and returned to Gloucester, where he lived to a ripe old age. Another of Gloucester's famous sailors was Captain Harry Johnson, who made numerous solo, transatlantic voyages (Garland, 1971). Immigrants played a big role in this growth, first the Irish and Finish, and later Portuguese and Italian sailors manned Gloucester vessels. Many of them had been fishermen in the old country, and they took over the fishing when they came to Gloucester. In 1874 as prosperity continued, Gloucester was incorporated as a city.

But after 1880 fishing began to decline. This was due to the development of, and demand for, new fish products, improved refrigeration and transportation methods, and increased competition from Canadian and other American ports. Modernization marked the end of Gloucester's most glamorous era. With the advent of diesel power in 1900, ship building on Cape Ann ceased.

Industry, particularly the fish industry, replaced fishing as the town's source of economy. The Cape Ann area also began catering to summer visitors, which soon developed into a major source of income. Recreational facilities were built to attract more people, and a railroad line to Boston was completed. In addition, the now famous artist colonies began to flourish.

In the 1930's, fishermen made a partial comeback, with redfish replacing cod, halibut and mackerel. In 1938 the State Fish Pier and Public Freezer were built, and during World War II Gloucester was the nation's leading producer of food fish. But the fishing comeback was only temporary and its decline resumed. Even today, fewer and fewer boats fish out of Gloucester harbor.

1.3 Concluding Remarks

Although Gloucester is still an important fish processing center, and a major tourist attraction, the town itself has ceased growing. The population was 25,000 in 1860, and is 27,941 today. The fishing fleet is getting smaller and the waterfront is decaying. What was once a dynamic, vibrant seaport is now just a small, stagnant New England town. Perhaps she should stay that way. She still has her scenic beauty and the proud ghosts of her past - perhaps that's enough. But there are those who argue that a town can't and shouldn't stay still; it should grow and change with the times. They may be right, but if so, how should she grow? Should she continue to look to the sea as she has for centuries, or should she look elsewhere?

The following pages will examine these questions, will examine her resources and her capacity to grow or change, and will suggest alternatives. Alternatives, not definitive paths, to enable people of Gloucester to make wiser decisions for the future direction and growth pattern of their city.

Economic Base

2.1 Introduction

Gloucester today is a city struggling for survival without direction. Her population is near 28,000 with a steady out migration of young people. The labor force is primarily semi-skilled and under-educated. Geographically, she has scenic beauty but little room for expansion in area or population.

Fish processing is her most important source of employment, followed by wholesale and retail trade, catering to tourists. Fishing has become her number three source of income and employment. (Refer to Figure 2-1). Manufacturing, other than seafood preparation, has just begun to grow, with plastics and apparel manufacturing providing the greatest sources of employment. (City facts and figures pamphlet - Shaw Table). Due to the geographic location and lack of appropriate terrain, building construction plays such a minor role in the city's economy that it will not be discussed.

2.2 Fishing Industry

2.2.1 Frozen-fish Processing

Today Gloucester has the largest concentration of imported groundfish in the nation. (For breakdown of processors, volume, and value, refer to Figure 2-2 (Brown, 1973), Table 2-1, and Table 2-2). Virtually all frozen fish in the United States is imported (National Marine Fisheries Service, 1972). Imported fresh fish, although produced at appreciably lower cost due to lower vessel, gear and labor costs, loses much of this advantage through perishability in transit. Thus domestic fresh fish is more highly valued, with an understandable reluctance on the part of the processer to freeze up domestic fresh fish supplies.

The import of frozen fish blocks was 355 million pounds in 1972, having increased at roughly 40 million pounds per year in the past few years. Not only does the U.S. need the imports, but the major suppliers (Norway, Iceland, Canada,...) have to sell their enormous excesses as well. However, other markets have been in competition for these products, and with the probable exception of



Figure 2-1

Per Cent of Workforce in Fisheries: Gloucester, Mass.

Source: "Gloucester Monograph", 1972



Figure 2-2

Major Gloucester Processing Facilities

Source: "Future Prospects For New England Domestic And Imported Fish Processing And Handling Facilities", 1973

Table 2-1

Major Gloucester Processing Facilities

Processor

Products

1.	Boston Frozen Foods, Inc.	shrimp, fresh and frozen
2.	American Fillets, Inc.	fresh and frozen fillets
3.	Atlantic Seafoods, Inc.	fresh, frozen, and breaded fillets
4.	Gloucester Ice and Cold Storage	cold storage
5.	Lipman Marine Products, Inc.	fish meal
6.	Quincy Market and Cold Storage	cold storage
7.	Neptune & Seven Seas, Inc.	fresh and frozen fillets
8.	North Atlantic Fish Co.	cold storage, fresh, frozen, prepared fish
9.	Ocean Crest Seafoods	fresh fillets
10.	O'Donnell-Usen Fisheries	cold storage, prepared fish
11.	Quick Freeze Corp.	plate-freezing and cold storage
12.	Deep, Deep Ocean Products	lobsters
13.	Cape Ann Seafoods	fresh, frozen, prepared fish
14.	Star Fisheries	fresh and frozen fillets
15.	Capt. Joe and Sons, Inc.	fresh fillets, shrimp
16.	Gorton Corp.	prepared seafoods
17.	Oceanside Fisheries, Inc.	fresh fillets
18.	Empire Fish Co.	cold storage, fresh, frozen, prepared fish
19.	Fort Cold Storage	cold storage

Source: Gloucester Monograph, Massachusetts Department of Commerce & Development, April 1973.

Table 2-2

Processed Fishery Products, Massachusetts, 1970

Туре	Million Pounds	Million Dollars	
Cod (fillet and specialities)	27.4	15.1	
Haddock	11.6	8.7	
Cakes	6.5	2.6	
Dinners	10.7	7.5	
Sticks	44.1 (U.S. 115.9)	21.5 (U.S. 57.7)	
Portions	70.4 (U.S. 233.4)	30.3 (U.S. 97.6)	

Source: N.M.F.S. "Processed Fishery Products Annual Summary, 1970" Washington 1972. Frionor of New Bedford (a Norwegian firm supplied by the home organization) no New England frozen fish processor can be too certain as to steadiness of supply or prices. Future developments here will naturally concern Gloucester as a major frozen fish processor.

Cold Storage: In February of 1973, Gloucester could produce up to 360 tons of ice a day, and have cold storage capacity of nearly 100 million pounds. New England cold storage holdings are fairly steady at about 40% of the nation's. Figure 2-3 shows the relative sizes of Gloucester's cold storage against New England's and the nation's.

2.2.2 Fresh Fish Processing

The fresh fish processing facilities of Gloucester are, in contrast to their frozen fish counterparts, generally small, and reflect their old age. As this sector of the industry is less adaptable to automation, and as funds are scarce anyway, operations tend to be more manual. Fort Point and the State Pier are two major areas of fresh fish processing. An important development has been the recently established fresh herring processing industry which utilizes large quantities of domestic landings augmented with foreign imports.

2.2.3 Fisheries Employment and Earnings

Figure 2-1 shows ("Gloucester Monograph", March 1972) the trend of employment in the fisheries as a percentage of the total Gloucester workforce. Over the years shown, the trend is generally downward, but even so the 10% figure for 1970 earned \$5.4 million on 13.3% of the total payroll of the city. Furthermore the figures for more recent years appear to be higher. The survey of March 1973 showed that 33% of our Gloucester High School sample had parents working in some part of the fisheries. Recent estimates (Gloucester Times, May 17, 1973) by the Gloucester Fisheries Commission tally with this.

2.2.4 Fresh Fishing

<u>Landings and sales:</u> Fresh fish is not sold by auction in Gloucester, as in other major New England ports. A principle of paying 1¢ per pound less than Boston ex-vessel for cod, haddock and flounder exists, but the supply/demand factor and others very much affect its practice. Basically, all landings sales are



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Source: New England Area Fisheries - Annual Summaries, 1972

by personal communication.

Figures 2-4 through 2-6 compare the trends in trips and landings at the leading New England ports. Gloucester is the only port in which the trips, volume and value have been generally on the increase. In 1972, Gloucester landed about twice the volume of the following port but received about half the total ex-vessel revenue of that port due to the comparatively low value of her landings.

<u>Fishing Grounds</u>: The Gloucester fleet now catches mainly groundfish and shrimp. The main fishing grounds are Georges Bank and Browns Bank (Figure 2-7). These areas fall under the jurisdiction of the International Commission for Northwest Atlantic Fisheries (ICNAF). Several restrictive measures have been taken by ICNAF to preserve certain over-fished species. Total haddock quota (National Marine Fisheries Service, "New England Area Fisheries - Annual Summaries") now stands at 15 thousand metric tons. U.S. quotas of cod, yellowtail flounders and ocean perch now stand at 20, 24, and 24.5 tons respectively.

<u>Fleet</u>: The Gloucester fleet has been fairly stable at about 100 vessels in recent years. The average age of a New England trawler is about 23 years (Brown, 1973). The 1971 average age of Gloucester vessels was about 26 years (Action, Inc., 1971). Gross displacements go up to about 200 tons. The fleet decreased from 196 vessels and 700 crewmen in 1967 (Action, Inc., 1969) to 115 and 101 vessels in 1971 and 1972 respectively (Hall). A small contribution to this trend comes from the tendency towards smaller crews in the face of rising insurance costs, and from the introduction of a few newer boats which need smaller crews; but the overall decline seems apparent. The fishermen are contracted to vessel owners by union law as in other ports.

<u>Species:</u> Species that have recently been or currently are important in Gloucester's fresh fish industry are cod, sea herring, shrimp, ocean perch, pollock, whiting, haddock, and flounder. Lobster, although landed in much smaller volume (some landed at other ports) are also important due to their very high prices relative to other species. See Appendix I for a detailed breakdown of each species in terms of volume and value.





Figure 2-5

Gloucester Landings

Source: New England Area Fisheries - Annual Summaries, 1972



Total Landings

Source: New England Area Fisheries - Annual Summaries, 1972



Figure 2-7

Fishing Grounds

Source: New England Area Fisheries - Annual Summaries, 1972

2.3 Manufacturing and Industry (non-fishing)

In the area of manufacture, food processing is Gloucester's number one employer, followed by plastics and apparel industries. The fishing industry (distinct from fish processing) has been discussed in the foregoing section, but its relative importance in relation to other industry may be seen in Table 2-3. In 1971 the industry paid about \$4.7 million in wages, employing about 650 people.

Other industries may be grouped as Food Processing (mainly fish, shellfish, etc.) and non-fish related industry. For the purpose of analysis of the impact of industrial parks on Gloucester's economy, we will discuss non-fish related industry in terms of location, i.e. industrial park resident or non-industrial park resident.

2.3.1 Food Processing

Food Processing ranks as the third largest employer and wage earner for Gloucester. Figures 2-8 and 2-9 illustrate this sector as employing about 15% of the total work force and pays 20% of their annual wages. Food Processing also contributes significantly to the tax revenue, as revealed by the fact that this sector was assessed for 53.7% of the total tax rate in 1972. Figure 2-8 also shows the annual payroll, which has decreased slightly since 1970.

2.3.2 Other Manufacturing Industry

Industrial Park Location

Gloucester hosts two industrial parks, both established by the Gloucester Industrial Development Commission (IDC) in 1969. The Cape Ann Industrial Park is located in Magnolia and the Blackburn Industrial Park is just off Route 128 at Blackburn Circle. The parks house seven buildings (the end of 1973) and provide about 906 jobs.

Omniwave, Inc. is the newest arrival to the parks, relocating from Salem in February 1973. It employs about 90 persons, only 31 being Gloucester residents, and most of these are employed in production of microwave tubes and devices.

Only one of the firms located in the parks is a "new" company, Sinterbond,

Table 2-3

	No. of firms	1971 Annual Payroll (\$)	1971 avg. employees	Distribution by employees
Manufacturing:				
Food & kindred products	13	7,741,852	1,052	16.7
Other manufacturing	<u>35</u> 48	<u>9,455,591</u> 17,197,443	<u>1,204</u> 2,256	<u>19.0</u> 35.7%
Wholesale & Retail Trade:	248	9,650,067	1,997	31.6%
Agriculture & Mining:				
Fishing	94	4,688,459	648	10.3
Other	$\frac{14}{108}$	<u>416,697</u> 5,105,156	<u>79</u> 727	$\frac{1.2}{11.5\%}$
Service	144	2,925,777	679	10.7%
Construction	63	2,804,677	290	4.6%
Finance, Insurance & Real Estate	34	1,518,552	201	3.2%
Transport, Comm., & Utilities	28	865,796	174	2.7%
TOTAL:	673	\$40,067,468	6324	

Source: Gloucester Monograph, Massachusetts Department of Commerce & Development, April 1973.



Figure 2-8 Annual Payroll of Industries

Source: Current Employment Series of U.S. Department of Labor, Bureau of Labor Statistics/Mass. Dept. of Labor and Industries as adjusted to Employment and Wage data of Mass. Division of Employment Security.




Inc. They manufacture powdered metal products (mechanical gears, etc.) The other companies relocated in the parks from Gloucester or nearby towns.

Other firms located in the parks include Gloucester Engineering, Thermet, Inc., Rule Industries, and Bamco Manufacturing. Also housed in one of the parks is the Medical Associates Clinic. Bamco is a metal forming operation employing 45 people, all but one of whom are from Gloucester. Gloucester Engineering employs about 430 persons involved in the design and manufacture of machinery for the plastics industry. Rule Industries, Inc. is a small conglomerate of five companies ranging from bilge pumps manufacture to prefab home building. Rule currently employs about 80 people, semi-skilled mostly. Thermet, Inc. specializes in design and production of sintered porous bronze. About 45 persons are employed there.

Common to all of these firms is that they have national or international markets. It is important to Gloucester to attract companies with such flexibility, not being restricted on a special market area. It should also be noted that most employees actually from Gloucester are unskilled or semi-skilled. These firms must look elsewhere for skilled and trained personnel.

A newspaper article in the Gloucester Daily Times indicates that the IDC is currently attracting smaller growing companies to the parks (Gloucester Daily Times, April 12, 1973). This promotion is being handled by guaranteeing loans for the construction of buildings for firms that would otherwise be unable to handle delays in finding a financer. The arrangement being worked out with Fisk Organ Co. is an example. The IDC puts up credit, Fisk repays the principle and interest on the loan as well as paying the IDC a minimal service charge. The IDC pays nothing if the financed company keeps its part of the bargain. This arrangement is a profitable selling point for the parks.

In assessing the impact of the parks on Gloucester's economy, a costbenefit analysis was made. The benefit side includes taxes received by the city, and earnings generated from employment of Gloucester residents. The figure for earnings generated has been adjusted to account for the estimated number of people who would have been employed regardless of the existence of the parks.

The cost side includes the capital investment made by the city at present value and the unemployment benefits forgone by the calculated employment figures regardless of the parks' existence. (The present value calculation is made at an interest rate of 5%, assuming that half the total city money of \$1,200,000 was spent in 1968 and the other half in 1971.) Table 2-4 gives the number of employees resident in Gloucester, while the average wage was taken from estimated 105% of the 1971 value or \$6653.

<u>COSTS</u>	<u>1972</u>
Capital Investment:	\$601,470
Unemployment Benefits Foregone:	
(residents employed in new jobs) (welfare benefits) (266) (55.91) (39)	\$580,010
Total (Investment & Benefits Foregone):	\$1,181,480
<u>BENEFITS</u>	<u>1972</u>
Taxes	\$172,747
Earnings:	
(Residents employed in new jobs) (yearly salary)	
(266) (6653)	\$1,769,698
Total (Tax & Earnings):	\$1,942,445

Source: Industrial Exhibit, 1973 and Massachusetts Division of Employment Security, 1973

These figures are for one year only (1972) and do not include variable costs of city services, etc. which for the Industrial Park are fairly low. Even so, these calculations show that the capital investment (a one-time cost) was paid off in one year. The cost of foregone unemployment benefits can be cleared by yearly tax receipts.

Although the costs to the city do not include welfare benefits, the fact that the Industrial Parks are underutilized at present would benefit the city more than unemployment and welfare benefits combined. The parks are a profitable investment for the city. One of the major reasons the investment is so good stems from the fact that a substantial part of the original capital investment was a grant from the federal government, thus not included in the cost of the parks for the city.

Non-Industrial Park Firms

The contribution to the economy by manufacturing industries (besides fishing) located outside the industrial parks is comparable to that of the industrial parks. Assuming a 3% increase in annual payroll over 1971, non-food industries outside the parks contributed 39.8% as compared to 60.2% by industrial park firms Also, of the top ten taxpayers of the city, the taxable valuations of firms in the parks was 24.8% of the total as compared to 6.6% by the outside firms (Gloucester Monograph, 1973).

Firms outside the parks are as varied as those inside. A few are Murmac Manufacturing Co. (precision mechanical machining firm), Le Page (adhesive manufacturer), and Harris Ltd. (a canvas and boat building firm).

Gloucester's Labor Force

Gloucester's labor force is less educated in comparison to the region and the state. The median number of school years completed for both males and females over 25 years is below both state and county figures (Table 2-5). In terms of occupations of employed persons Gloucester has a slightly higher percentage of laborers than professionals or clericals (Table 2-6a) (1970 census). Lack of skill is evident among the unemployed. According to a 10% sample of Gloucester unemployed taken in October 1972 by the Division of Employment Security (DES), the largest portion (31%) were last employed in the "less skilled miscellaneous category, as deck hands and packers. Clerical and sales occupations accounted for 18%, while 12% were last employed in the service workers category.

Gloucester's yearly average unemployment rates have been almost double those for Massachusetts and the U.S. for the past decade (Table 2-6b). The average monthly high unemployment rate since 1965 is 15.5%, the low average is 6.2% (DES). In 1971 seasonality affected approximately 650 jobs in Gloucester (Figure 2-9).

1970 census figures on wage levels by occupation show that only in the category of fishing laborers is Gloucester's wage rate higher than for Massachusetts (Table 2-7). In all other cases, it is lower. Gloucester's higher wage for

Table 2-4

Average Annual Employment

Year	1967	1968	1969	1970	1971
Total Annual Payroll in 000's \$	30,749.3	33,818.0	37,500.6	40,274.3	40,067.4
Average Annual Wage	4,758	5,147	5,579	6,169	6,336
Number Establishments	708	6 97	685	674	6 7 0
Total Employment	6,463	6,570	6,722	6,528	6,324
Agriculture, Forestry Fisheries	980	895	991	725	727
Mining	0	0	0	0	0
Contract Construction	326	308	309	298	290
Manufacturing	2,317	2,459	2,465	2,356	2,256
Transportation, Communication Utilities	118	119	115	172	174
Wholesale and Retail Trade	1,899	1,945	1,989	2,109	1,997
Finance Insurance Real Estate	204	204	206	202	201
Services	620	639	647	663	679

Source: <u>Massachusetts Cities and Towns</u>, Employment & Wages in Establishments Subject to the Massachusetts Employment Security Law by Major Industry Divisions 1967-1971.

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TABLE 2-5

EDUCATION 1970

(of those 25 years and older)

	females	males
Gloucester:		
Median No. of school years completed:	12.1	11.8
Percent high school graduates:	54.1	48.8
Essex County:		
Median No. of school years completed:	12.3	12.3
Percent high school graduates:	60.2	58,4
Massachusetts:		
Median No. of school years completed:	12.2	12.2
United States:		
Median No. of school years completed:	12.1	12.1
New England:		
Median No. of school years completed:	12.1	12.1

Source: 1970 Census, General Social and Economic Characteristics

TABLE 2-6 a

Employment by Occupation Group

Category	Gloucester	Essex County
professional	13.40%	17.16%
sales	5.63	7.18
managerial, admin.	8.10	8.78
clerical	14.29	17.87
craftsmen, foremen	14.87	13.34
operatives inc. transport	20.19	19.82
laborers, inc. farm	7.71	3.62
service	14.55	11.44
private household	1.11	.62

Source: Calculated from Census Data, 1970 Census, General Social and Economic Characteristics

UNEMPLOYMENT RATES

ANNUAL AVERAGES

	Gloucester	Massachusetts	United States
1962	11.6%	5.4%	5.5%
1963	11.1	5.8	5.7
1964	10.6	5.7	5.2
1965	10.2	4.9	4.5
1966	8.9	4.2	3.8
1967	9.5	4.1	3.8
1968	8.5	4.1	3.6
1969	7.8	3.9	3.5
1970	9.1	5.3	4.9
1971	11.7	7.0	5.9

TABLE 2-6b

Source: Current Employment Series of U.S. Dept. of Labor, Bureau of Labor Statistics, 1962-1971.



TABLE 2-7

Comparison of Average Wage Levels 1971 Covered Employment

Category	Gloucester	<u>Massachusetts</u>
Agriculture forestry		
and fishing	\$ 7 022	\$6450
Construction	9671	10,783
Manufacturing	7623	8423
Transportation,		
Communication,	4076	9192
Utilities	4976	5102
Trade	4832	5942
Finance Insurance		
Real Estate	7555	8167
Services	4309	6496
TOTAL AVERAGE WAGES	6336	7577

Source: Calculated from Census Data, 1970 Census, General Social and Economic Characteristics laborers is probably due to the impact of unionization in the fish related occupations. Wage figures by industry (DES) show a consistently lower wage than for Massachusetts as a whole. The Gloucester annual average wage (1971) is \$1200 lower than the state average.

Despite lower wages and seasonality of many jobs, the Division of Employment Security (DES) places 60 to 100 people per month and always has job listings for the area. However, most of the jobs available are unstable, low paying, and unpleasant.

Gloucester workers are aware of the use they can make of unemployment benefits and so are employed long enough to qualify for benefits and then stop working. Available jobs are being passed around among the unemployed. This is borne out by DES statistics by the unusually short duration of unemployment and the large number of claims reopened. As a result the unemployed do not exert an effective demand for more jobs.

At present, Gloucester does not really feel the full impact of the large unemployment problem since welfare and unemployment compensation is not financed through the city. However, the payroll which would be generated by 1000 new jobs, computed at the average wage rate, would be 6.4 million dollars.

2.3.3 Employment and Earnings

Before discussing the impact of each type of industry, let us first review employment and earnings. Table 2-4 shows the trend of wages and employment since 1967. Manufacturing is responsible for just over a third of the total employment, while wholesale and retail trade accounts for just under a third of the labor force. The remainder is shared by all other sectors of the economy. Employment has been almost static since 1967 even though total employment has steadily decreased since 1969. Services employment, on the other hand, has been slightly increasing every year.

Revenue for the city comes both from payrolls and from city taxes. Total industrial payroll in 1971 (Gloucester Times, April 12, 1973) approximated \$40 million while assessed taxes amounted to %9.1 million. Industrial tax was only a small portion of this sum.

2.4.1 Introduction

The city of Gloucester is known throughout Massachusetts and the whole United States as a unique and appealing vacation spot. Its beaches, historical places, marinas, fishing fleets, restaurants and art shops all present an appealing location to spend one's leisure. This has resulted in a very large influx of visitors during the summer. As many as four hundred thousand people visit Gloucester during a typical summer.

The influx of tourists to Gloucester is a seasonal phenomenon. During the summer the population of Gloucester increases by about 18,500 for a single day (this includes summer residents as well as people who remain for one day or less). (City Manager's Office, 1973). This is almost a 70% increase in population. The problem of traffic congestion, whether automobile, pedestrian or boat, is a familiar problem to both residents and visitors.

2.4.2 State Tourism

Whether it be the West Coast, the Gulf Coast or the New England coastline, tourism is a real industry but often poses problems beyond a community's ability to cope adequately.

In Massachusetts retail businesses and shops are seasonally influenced by tourist-vacation travel. It appears that historically there are ten non-manufacturing industries which have provided the bulk of employment for tourist oriented activities. The invariable order in which these climb from February's seasonal low point to August's peak is:

- 1) eating and drinking establishments
- 2) hotels and motels
- 3) trailer parks and camps
- 4) sports promoters and miscellaneous amusements
- 5) laundries and dry cleaners
- 6) rooming and boarding houses
- 7) gasoline service stations
- 8) motion pictures
- 9) theatrical production
- 10) retail trade in souvenirs and novelties

Usually the first four of these industries will account for more than 65% of total February-August seasonal gain (O'Donnell, 1972).

Between the fourteen counties of Massachusetts, Barnstable, Suffolk, Middlesex and Essex will enroll the greatest number of mid-summer workers.

> Estimated Employment 13,090

Table 2-8	(O'Donnell,	1972)

	= =
Barnstable	13 090
Berkshire	4 755
Prietol	4,755
Dulas	2,203
Dukes	1,105
Essex	5,750
Franklin	555
Hampden	3,150
Hampshire	485
Middlesex	5,920
Norfolk	4,230
Nantucket	1,175
Plymouth	2,925
Suffolk	9,945
Worcester	3,490

According to the 1971 employment figures in Massachusetts employment for the vacation tourist travel industry was third from the top with 58,400. As shown in Massachusetts, tourism is big business and must be examined seriously.

2.4.3 Gloucester Tourism

County

Tourism is an important source of income and a source of concern for Gloucester. The season is short, lasting only sixteen weeks. Tables 2-9 and 2-10 reveal that in some areas of retail trade and services which would specifically deal with visitors to Gloucester, the rate of employment does rise substantially for the months of June, July, August and part of September.

In some businesses such as furniture stores, food stores and miscellaneous retail stores, the rise of employment is due to an increase in sales over the entire year or because of additional stores in the area and not due to tourism. Services such as legal, educational, architectural or engineering services fluctuate for reasons such as climate or school sessions rather than due to tourist influence.

			WHOLE	SALE & R	ETAIL TH	NDE - 1	1972							
N	lo.of estab- lishments	Jan	Feb	March	April	Мау	June	July	Aug	Sept	Oct	Nov	Dec	Ave.
Wholesale Trade	42	279	300	268	280	332	332	373	370	383	386	386	383	339
Bld. Materials	đ	130	116	124	125	122	129	124	122	118	126	126	127	124
Retail Trade, General Merch	. 10	206	207	236	200	196	215	220	231	240	221	215	247	220
Food Stores	48	252	248	247	251	256	282	282	285	286	289	288	285	271
Automotive Dealers, Gas Service Station	IS 40	259	261	266	269	285	284	286	286	292	284	279	279	278
Apparel Stores	13	39	41	41	45	43	45	41	41	41	41	42	44	42
Furniture	თ	68	64	67	43	41	46	66	68	72	57	58	54	60
Eating & Drinking Place	s 93	580	628	666	841	1012	1245	1332	1396	1274	934	814	745	956
Miscellaneous Retail Stores	74	278	270	271	301	305	319	372	375	373	371	375	380	333

Current Employment Series of U.S. Department of Labor, Bureau of Labor Statistics/Massachusetts Department of Labor and Industries as adjusted to Employment and Wage data of Massachusetts Division of Employment Security. Source:

TABLE 2-9

Nc II	o. of estab- shments	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Ave.
Hotels, Rooming House Camps & other Lodging places	2 3 2 3	87	75	64	96	115	216	262	275	256	138	73	58	146
Personal Servi	ces 28	102	86	66	94	5 6	102	97	95	96	85	84	84	94
Misc. Busines Advertising	s 85	76	76	76	79	81	87	06	83	87	83	82	84	83
Auto. Repair	10	42	42	42	35	35	37	34	31	37	37	36	39	37
Misc. Repair	13	40	41	41	41	40	41	39	40	38	35	36	36	39
Amusement & Recreation	14	28	2 8	29	47	62	86	94	93	83	52	41	35	57
Medical & Hea	ilth 38	805	807	805	852	854	883	851	875	869	828	880	968	850
Legal Services	14	22	22	22	19	19	21	22	22	22	22	21	21	21
Educational Se	rv. 6	9	9	9	7	7	9	15	10	11	12	11	11	თ
Non-Profit Organizations	19	74	74	74	74	75	80				58	50	64	

37

SERVICES - 1972

TABLE 2-10

The businesses directly influenced by tourists are: eating and drinking places, hotels, motels and trailer parks, automotive dealers and gas stations, also recreational services such as museums, art galleries and motion picture establishments. In all cases the employment rate drops at the end of the tourist season, motels and hotels experience the sharpest fall.

2.4.3.1 Eating and Drinking Establishments

Gloucester offers the visitor a wide cross section in eating and drinking establishments. There are 93 eating and drinking places in the city, including 23 dining restaurants catering to the more leisurely diner. Prices vary somewhat from one establishment to another but, in general, prices are somewhat less than their Boston counterparts.

Being a fishing community, seafoods are the major dishes in most establishments. As revealed in the tourist questionnaire most people who come to Gloucester already know the reputation of seafood restaurants and many come specifically to eat seafood.

Looking at Table 2-9, the employment rate increases by 20% from March to April and continues to increase until the last of August and then drops abruptly in September. From January until December there is an increase of approximately 20% due to new establishments or enlargement of existing facilities. Even with this yearly increase the number of people employed by eating and drinking places doubles for the summer season.

The season for eating and drinking places seems to have a longer season, beginning as early as April. The increase in business is due to weather conditions, which are not as limiting on restaurant activities as upon swimming and other outdoor activities.

2.4.3.2 Hotels, Motels and Camps

Gloucester has 33 hotels, motels and lodging houses and 1 campsite. During the peak season approximately 1500 people can be accomodated in hotels while the campsite provides 200 tent and trailer sites (City Board of Health, 1973). The cost of accomodations will vary with the tourist season. However, many hotels and guest houses which remain open year round usually have a fixed rate. Rates usually run \$14-\$16 for a double room per day and most include private baths. Most of the guest houses which are located along Rocky Neck and Bass Rocks are more expensive.

The number of employees for the various lodging places will increase by 430% from March to August and then drop to the previous December level. Tanuary, February, March, November and December appear to be the slowest months of the year.

2.4.3.3 Art Colony and Museums

Cape Ann has been popular for many years with artists of all medias. Rockport has developed into a nucleus of artists especially interested in recording and expressing in their own vision the beauty of New England's coastline. Gloucester also, but to a lesser degree, attracts artists as a location where they may work and sell their creations.

East Gloucester and Rocky Neck have become sites of most of the studios. Rocky Neck has 30 studios primarily operating during the summer months (Tune to September). The shops are usually owned and operated by one individual or by husband and wife. Few hire extra help.

A questionnaire given to retail businesses in early September, 1973 indicated that 80% of the artists make 90% or more of their income from non-local people. Many are strongly dependent upon restaurants, marinas and hotels to initially bring in prospective buyers.

There are several art galleries and museums open to the public. The White-Ellery House, Hammond Museum, Sargent-Hough House, Capt. Elias Davis House, Beauport Museum, Annisquam Firehouse, and the James Babson Cooperage Shop all contain period furniture and a variety of art collections. The last two charge no admission.

North Shore Arts Association, located on East Main Street, exhibits works of local artists. The Old Schoolhouse, in Annisquam, maintains a local artists'

gallery as well as selling handicrafts and antiques. Both are free to the public (Summer Guide to Cape Ann, June 1973).

2.4.3.4 Boating and Other Recreation

Each summer Gloucester becomes the destination of many sportsmen. Beaches, marinas and open spaces come alive when visitors come to Gloucester for a summertime vacation.

Swimming

All beaches in Gloucester become quite crowded on any good summer day. Good Harbor and Wingaersheek beaches function as regional resources since they are beaches of unusual quality, fully developed with parking, sanitary facilities, changing rooms and concession stands. Fort Stage Park's Half-Moon and Cressy beaches are developed similarly to serve the visitor to Gloucester. Dunfudgin, Niles, Pavillion and Plum Cove beaches serve a more local population. Only parking is available (Philip B. Herr & Associates, 1969). Coffins Beach, Brace Cove, and Lighthouse Cove have remained undeveloped or only lightly developed.

Use of beaches is restricted to bathing during the day but scuba diving and skin diving are permitted in early morning hours and after 5 p.m. Lifeguards are on duty from 9 a.m. to 5 p.m. There is a non-resident parking fee charged with the neighborhood beaches having parking only for residents. Beach capacity, largely constrained by parking, is close to 10,000 persons simultaneously (Philip B. Herr & Associates, 1969).

There are nine major freshwater ponds or impoundments which might be utilized to relieve some of the heavy use of saltwater beaches. Seven of the nine are either already part of Gloucester's water supply or are under consideration for use in it. It is improbable that the eighth, Niles Pond, will be prepared for public use and the ninth, Plum Cove Quarry has not been developed for public use.

The opportunities for new beaches or inland sources for public use is quite limited, with concern for resident use taking priority.

Recreational boating

Boating and fishing are also popular with Gloucester tourists. The number of bait and tackle stores, boat rentals, charter fishing boats and marinas indicates that

Gloucester's relationship to the ocean is shared by many people.

Gloucester has become one of the larger recreational boating centers in Massachusetts, maintaining slips and mooring places for about 1,000 boats. Most of this capacity is privately supplied with some public control existing. In addition, 27 public landings exist, of which three are substantially developed and nine are inactive (Tables 2-11, 2-12).

The income Gloucester makes on recreational boating is substantial, either directly through mooring fees, equipment and supplies purchased, and servicing or indirectly by creating an environment which maintains a strong tie to the ocean, thus appealing to anyone who owns a boat. The <u>Gloucester Open Space Plan</u>, prepared by Philip B. Herr & Associates, suggests that demand far exceeds supply. Their findings were based upon interviews with marina and boatyard operators.

The Inner Harbor and Annisquam River offer the best protected areas. However, the Inner Harbor is becoming more congested with larger commercial fishing craft. The facilities existing on the Annisquam are surrounded by salt marshes and any proposals for creation of new facilities or expansion of existing facilities will conflict with marsh conservation.

Inland Recreation

Open spaces are plentiful within the interior of Cape Ann. Gloucester has over 50 public and semi-public outdoor parks and recreation areas other than beaches. Sizes vary from a tenth of an acre at some school playgrounds to the 400 acre Ravenswood Park. All of the areas total about 800 acres with 100 acres developed for active recreation, and the remainder in essentially natural state or serving as landscape decoration (Tables 2-13, 2-14, 2-15).

PUBLIC LANDINGS

Title

Landing at the "Green" Present "Town Landing" Lanes Cove Landing

Access By

Washington & Marsh Sts. & Rte. # 128 Foot of Washington St., jct. Commercial St. Duley & Andrews Sts., off Washington St.

SECONDARY OR NEIGHBORHOOD LANDINGS

Cripple Cove Landing Clay Cove Landing Gardner's Landing Head of Harbor Landing Kents Cove Landing Trynal Cove (Blsque Ferry) Landing Wingaersheek Beach Landing Plum Cove Landing Folly Cove Landing

Mill River from Clam Alley off Washington St. Landing, Eastern Point Road, opp. Ledge Ln. Lane Road off Washington & Leonard Sts. End of Old County Road, Rust Island Essex Ave. opp. Magnolia Ave. Rocky Neck, off Wonson Street East Main Street at Plum Cove St. Washington St. At Stone Br. W. side cove, off Leonard Shore Road at parking lot Holly & Dennison Sts. River Rd., Annisquam Off Wayside Lane Washington St. Atlantic St.

INACTIVE LANDINGS

E. Main St. opp. Haskell St.
93-97 E. Main St.
rear of 167 E. Main St.
rear of 447 Main St. opp. Eastern Ave.
Little River off Concord St.
Little River off Concord St.
End of Ferry St. South
Atlantic Street, city beach parking lot
Washington St., near Rockport line

TABLE 2-11

MAJOR RECREATIONAL BOAT DOCKING SITES

Name - Location	Slips reported	Mooring spaces reported
Annisquam Market & Marina 33 River Road	20	
Lobster Cove		2-300
Annisguam Yacht Club		70
Lobster Cove		
Beacon Marine Basin	30	
E. Main St. across from Plum St.		
Bickford Marina	100	100
Smith's Cove		
Burnham & Thomas Yards	18	10
Norwood Court		
Cape Ann Marina	51	70
Annisquam R. off Essex Ave.		
Eastern Point Yacht Club		70
Eastern Pt. Blvd.		
Gateway Marina	38	74
Little River off #128		
Hesperus Marine Service	40	
Parker St.		
Huck's Boat Livery	20	50
Rt. 128, Annisquam R.		
Rockaway Hotel	14	
Rackcliffe St.		
	221	5 4 4

TOTAL docking facilities 331 644 reported -744

TABLE 2-12

Source: Gloucester Open Space Plan, 1969

LAND-BASED NEIGHBC	RECREATIONAL FACILITIES* ORHOOD FACILITIES	Acreage	Juvenile fac.	Ball field	Basketball court	Natural	Decorative
Ward 1	Ward 1 Sch. land - Division St.	2.0	x				
	Parsons Plyd Division St.	1,5	3	ĸ			
Ward 2	Eastern Ave. Sch. land Dace Pond Skating area Eastern Ave.	1.0	:	ĸ			
Ward 2-2	+Middleton Memorial Plyd 49-	.25	x		x		
	Ward II Sch. land - 9-21	5.0	x				
	Webster St. Mattos Plyd Eastern Avenue	1.0	3	¢			
Ward 3	+Burnham's Field - 75-9 Pleasant St.	6.0	хз	\$	x		
	Green St. Plyd. Fishermen's Memorial Park -	.5 10.0	x		x	x	
Inner Harbor	+Fort Sq. Plyd Fort Sq. Benjamin Smith Plyd 73-81 E. Main St.	.25 .2	ж Х	1		x	
	Rocky Neck Park - 12-14 Rocky	.5					x
	The Fort Park - Rogers St. Rocky Neck Park Skating Rink	4.0					х
City Hall	Gloucester YMCA land - 71 Middle St. Library Park - 2-9 Dale Ave.	.2 .5				x	x
Ward 4	Collins Sch. Land - 31-33 Prospect St	. 1.0	3	¢			
Ward 6-1	Poplar St. Plyd.	.2	5 2	¢			
*Existing or	programmed.						

+Site of supervised summer program

.

Table 2-13

Source: Open Space Plan, 1969

	Acreage	Tuvenile fac.	Ball field	Basketball court Natural Decorative
+The Oval Plyd 92 Centennial Ave.	2.0	х	x	
Looxout Playground - / Lookout St.	1.0			
Riverdale Green-Washington St. Mill Pond Skating Area - Washington St.	1.5			x
Beeman Sch. Land - off Washington St. Earl Rice Plyd off Washington St.	7.0 1.0		x	
Washington St. Plyd 901 Washington St.	.5			
Plum Cove Plyd Washington St.	1.0		х	
Plum Cove Park - Washington St. Lanesville Comm. Center Land - Vulcan St.	49.0 .2	x		x
W. Gloucester Plyd Concord St. Tysver Pond Skating Area - off Essex Ave.	6.0		x	
Hesperus Ave. Plyd. Kent Circle Park - Western Ave.	1.0 1.0			x
Magnolia Center Park - Shore Dr. Burkes Plyd Western Ave.	.1 1.5	x	x	x
	 +The Oval Plyd 92 Centennial Ave. Lookout Playground - 7 Lookout St. Riverdale Green-Washington St. Mill Pond Skating Area - Washington St. Beeman Sch. Land - off Washington St. Beeman Sch. Land - off Washington St. Earl Rice Plyd off Washington St. Washington St. Plyd 901 Washington St. Plum Cove Plyd Washington St. Plum Cove Park - Washington St. Lanesville Comm. Center Land - Vulcan St. W. Gloucester Plyd Concord St. Tysver Pond Skating Area - off Essex Ave. Hesperus Ave. Plyd. Kent Circle Park - Western Ave. Magnolia Center Park - Shore Dr. Burkes Plyd Western Ave. 	 +The Oval Plyd 92 Centennial Ave. Lookout Playground - 7 Lookout St. Riverdale Green-Washington St. Riverdale Green-Washington St. Mill Pond Skating Area - Washington St. Beeman Sch. Land - off Washington St. Beeman Sch. Land - off Washington St. Beeman Sch. Land - off Washington St. Plum Cove Plyd off Washington St. Plum Cove Plyd Washington St. Plum Cove Park - Concord St. W. Gloucester Plyd Concord St. W. Gloucester Plyd Concord St. Fysver Pond Skating Area - off Essex Ave. Hesperus Ave. Plyd. Magnolia Center Park - Shore Dr. Burkes Plyd Western Ave. 	 +The Oval Plyd 92 Centennial Ave. Lookout Playground - 7 Lookout St. Riverdale Green-Washington St. Mill Pond Skating Area - Washington St. Beeman Sch. Land - off Washington St. Plum Cove Plyd off Washington St. Plum Cove Park - Vashington St. Plum Cove Park - Va	 +The Oval Plyd 92 Centennial Ave. Lookout Playground - 7 Lookout St. Riverdale Green-Washington St. Mill Pond Skating Area - Washington St. Beeman Sch. Land - off Washington St. Plum Cove Plyd off Washington St. Plum Cove Park - Western Ave. Magnolia Center Park - Shore Dr. Magnolia Center Park - Shore Dr. St. St.

TOTAL

107.0

TABLE 2-14

Source: Open Space Plan, 1969

LAND-BASED RECREATIONAL FACILITIES -SPECIAL FACILITIES

Name-Location	Acreage	
Ten Pound Island - Gloucester Harbor	3	nat. landing for boats
Bass Rocks Golf Course	106	18-hole golf courses
Newell Stadium - 20-40 Centennial Ave.	8	ballfield, football field, track
Y.M.C.A. (Louise Spring Memorial) Park-Atlantic St.	35	ballfield, swimming pool
Cape Ann Sportsmen Club A -	20	game and fish
B -	16	reserves
Genoda Picnic Area - Holly Street	3	picnic benches in grove
Ravenswood Park - Western Ave.	390	wilderness trails
Mt Ann Reservation - Rte, #128	45	wilderness trails
Stage Fort Plvd, and Park - Western Ave.	45	juvenile facilities
Stage fort flya. dia faik (Colorin floor		two ballfields, picnic facilities and park furniture
Malout St. Poservation - Annisquam	14	wilderness trails
Applantation - Amiloquan	5	grounds around
Annisquan Harbor Light Station -	U	lighthouse
Eastern Point Light Station - Eastern Point Blvd.	2	Gloucester breakwater lighthouse
Annisquam Memorial Park - Washington St.	3	privately-owned open space
Camp Annisquam for Boys - Stanwood Pt.	2	private boarding camp; sailing facilities, swimming pool, tennis court
Camp Pinehurst - 640 Essex Ave.	5	private day camp for boys and girls; juvenile facilities, ballfield
Camp Stella Maris - Massachusetts Ave.	24	N.A.

TOTAL

726

TABLE 2-15

Source: Open Space Plan, 1969

Transportation

Essential to the study of any urban situation is a knowledge of the available transportation facilities. This includes the transportation of both goods and people, within the city and through the city.

A good transportation system is necessary to attract new industry. No matter how favorable the job market, if there is no way to distribute the product, the industries will not come. In the same way, the transportation system will affect the type and number of people living within the system and where they live within the system. In a city without good public transportation, a person without a car is severely constrained as to where he can live in relation to where he works. The number of people who live in one town and work in another will depend on how much transportation is available between cities.

Turning to Gloucester, we find that the city is served, in varying degrees, by road, rail, sea and air. The principle traffic flows occur on Route 128, Eastern Ave. (Rte. 127), Thatcher Rd. (Rte. 127A), Washington St. (Rte. 127) and Essex Ave. (Rte. 133). Within the city, the Main St.-Rogers St. one-way couple is the principal thoroughfare. Until recently there was a local and regional bus service, run by Action, Inc.

Rail service is provided by the Boston & Maine Railroad. Gloucester is on the "Gloucester Branch" of the B & M which runs from Boston's North Station to Rockport, and carries both passengers and freight.

A municipal airport at nearby Beverly provides facilities for private aircraft but offers no scheduled commercial service. For the long distance traveler, there is Boston's Logan International Airport, slightly more than an hour's drive away.

Gloucester has a fine natural harobr, with a controlling depth of 20'.

3.1 <u>Rail Service</u>

3.1.1 Passengers

During the early 1960's, the Boston & Maine Railroad was experiencing a continuing decrease in patronage. This was part of a nationwide trend away from

the rails that had been in existence for a number of years and had caused the bankruptcy of a number of lines. As a result, a number of experiments were performed to see if the B & M could increase revenue from passenger service. The experiments showed that increased service was indeed accompanied by increased patronage and increased revenue. But the increase was not enough. So to prevent the cancellation of the B & M service, a financial arrangement was made with the MBTA. Under this agreement, the MBTA pays the difference between costs incurred that could have been eliminated by abandonment, and revenues that would not have been received. In addition, the MBTA has an option for the purchase of or use of the railroad "rights of way".

Gloucester is situated on the "Gloucester Branch" of the Eastern Route of the B & M. The trip from Boston's North Station to Gloucester is 31.6 miles and takes approximately 60 minutes. The first half of the trip is through some fairly grim scenery, chiefly old houses and factories, but beginning around Beverly and continuing through Gloucester, the views improve, including a beautiful stretch across the Annisquam.

Upon arrival in Gloucester, however, one is greeted by the not very scenic back side of a gas station. The train station itself is a long wooden overhang with a small parking lot, located near the intersection of Washington St. and Railroad Ave.

Table 3-1 shows the stations on the Gloucester Branch, as well as the number of trains per day, number of cars per train, the number of riders, and the projected number of riders in 1980.



<u>Table 3-1</u>

Station		# of trains		_	# of cars/	weekly	1980
	Wkday	Rush Hr.	Şat.	Sun.	<u>Rush Hr.</u>	patronage	patronage
Beverly Inc.							
Montserrat	13	3	9	7		110	
Prides	12	3	9	7		41	
Beverly Farms	13	3	9	7	11	81	
Manchester	13	3	9	7		207	
W. Glouceste	r 4	3	0	0		9	
Gloucester	13	3	9	7		211	
Rockport	13	3	9	7		127	
					Total	786	1420

The Gloucester Branch

Source: Massachusetts Boston Transportation Planning Review 1972.

The regular one-way fare to Gloucester is \$2.00. In addition there are special commuter fares of \$21.20 for 12 rides and \$28.60 for 20 rides.

The tracks themselves are in a partial state of disrepair. In fact, two years ago, (1971), the running speed for all trains had to be reduced because of the poor condition of the tracks. The cars themselves are Budd cars, purchased in the 1950's, and are in fairly good condition. However, the familiar complaint of not enough air conditioning during the summer is heard here too.

Table 3-2 shows typical weekly patronage figures over the last three years. In examining these figures, one should keep in mind that there was a fare increase on January 1, 1972.

Table 3-2

Glouce	ster	Branch	Pa	tronage	

one we	eek	Inbound								
in	Wkdy.	<u>Sat</u> .	<u>Sun</u> .	<u>Total</u>	<u>Total \$</u>	<u>Wkdy</u>	Sat.	<u>Sun.</u>	<u>Total</u>	<u>Total \$</u>
1971:	Jan. 1234	75	9 0	1399	\$1981	1207	79	65	1351	\$1939.
	Aug.1375	115	100	1590	2316	1393	134	83	1610	2393.
1972:	Jan. 988	57	68	1123	1751	1030	81	59	1170	1847.
	Aug.1124	107	123	1351	2230	1081	127	70	1278	2216.
1973:	Jan. 980	80	63	1123	1773	1009	94	65	1168	1875.

Source: MBTA figures, interviews with Dick Welch, B & M R.R., March & April 1973

Of the totals listed above, 70% represent peak hour travelers. In addition, about 10% are local riders, that is, they get on or off without going to either end of the line. It is obvious from the table that the fare increase caused a significant decrease in the number of commuters riding the train, and indeed in the revenue collected. The figures for January 1971 and January 1972 show a 19% drop in patronage, while the figures for January 1972 and January 1973 were the same.

The table also shows that the fare increase had no effect on the number of tourists, or vacationers, riding the train. The figure for weekday riders for August 1972 shows a decrease of 251 from the figure for August 1971, approximately the same as the decrease between January 1972 and January 1971. At the same time, the number of week-end riders remained essentially constant.

We have seen that the line is in a generally run down condition, and that the revenues from passenger service are decreasing, or at best remaining constant. But the MBTA has shown an interest in making improvements, naturally with the hope of attracting more riders. In fact there is a "Commuter Railroad Improvement Program", charged with investigating the purchase of new equipment, and the possibility of electrification of the railroad.

On numerous occasions, the MBTA has actually considered abandoning the Gloucester Branch altogether and replacing it with a Park & Ride facility in Beverly. However, the expense of land acquisition proved to be prohibitive, and in addition, the riders of the Gloucester Branch didn't want to see it happen.

3.1.2 Freight Service

In addition to the passenger service, the Boston & Maine also provides a regular freight service to Gloucester. Runs are usually made twice a week - on Tuesdays and Thursdays. If the need arises, an extra run is made on Sundays.

Freight spurs are located at the Lepages Glue plant, Cape Anne Forge, Washington St., Quincy Market, and Gorton's. There is also a spur next to Gorton's for picking up fish oil, and there is a freight yard for public delivery.

In 1972, 250 car loads of freight (35 tons per car load) were handled out of Gloucester, covering 19 different accounts. The largest, accounting for 95 carloads was Quincy Cold Storage. However, this was only a very small portion of Quincy's total dealings.

The major product handled on the Gloucester Branch is frozen fish.

The average revenue per ton mile on the B & M is 2.16, (The Boston Regional Survey, Vol. 6, 1963) slightly higher than for the country at large.

3.2 Roads and Highways

The focal point for a study of Gloucester's roads and highways is Route 128 (see page 49). It is a modern divided highway providing access to Boston and the rest of New England. But within the city we have a pattern of old, narrow streets. They are characterized by excessive grades, narrow widths and poor alignment. A good deal of the problem is due to unfavorable topography, that is, the granite hills, but the problem is there none the less.

Route 128 forms a semi-circle about the built-up, older portion of the city. From there, the major access to the city is along Washington St. (Rte. 127), a two lane road primarily traversing residential areas. Between Route 128 and the waterfront, the street pattern is more or less a grid, with roads running north-south and east-west. Other principle traffic flows occur along Thatcher Rd. (Rte. 127A), which begins east of the center city and runs towards Rockport; Eastern Ave. (Rte. 127) which runs north-east from the end of Route 128; and Essex Ave. which runs into Western Ave. at Kent Circle on Western harbor.

Within the center city, the major flow occurs along the Main St. - Rogers St., a one-way couple. A good deal of the traffic here consists of tractor-trailors calling along the waterfront. In fact, this is one of the worst congestion spots in the city. Prospect St. and Pleasant St. are the other major streets within the center city.

The map (see page 49) shows relative daily traffic counts on these major streets (indicated by width). These counts were taken in 1972 (Topics Plan, April, 1972). Unfortunately there are no figures to which these can be compared. The only other traffic study, done in 1962, (Gloucester General Plan Report, Vol. I & II, 1963) used peak hour figures. However, a look at the trend in the number of automobiles registered in the city is revealing. In 1950 there were 7600, (Gloucester General Plan Report, 1963) in 1960 there were 11,500 and in 1970 the number increased to 16,900. Add to this the growing amount of traffic due to tourists in the summer months, and we have a picture of growing congestion on Gloucester's streets and highways.

Even so, there has been very little road construction in Gloucester in the past ten years, and there is not a great deal planned for the near future. The Massachusetts Transportation Planning Commission, in its plan for 1990, has recommended the upgrading of Route 128 from Beverly to Gloucester, as well as express bus service along Route 128, from extended rapid transit lines. But a proposal to extend Route 128 to Rockport was abandoned because of fears that it would affect the nearby reservoir.

On the local scale, the Massachusetts Department of Public Works has made a study of Gloucester as part of TOPICS (Traffic Optimization Program to Increase Capacity and Safety). The purpose of this program is "to increase the operational efficiency and improve the safety of existing urban street systems" making "optimum use of existing facilities at maximum cost effectiveness" (Proposed Areawide Topics Plan, 1972). Their major recommendations call for the improvement of traffic signals, the redesign of channelization (i.e. designation of left turn lanes etc.) and improved signs and lighting. The major intersections noted were: Main St. at Washington St. and Western Ave; Main St. at Prospect St. and Rogers St; and the Harbor Loop and Rogers St.

Perhaps the most important recommendation in the TOPICS report was that Gloucester initiate long range traffic engineering studies. These should include gathering data on amount of traffic, and type and destination of traffic. This type of information is necessary for any coherent transportation planning.

3.3 Shipping

In order to examine the characteristics of shipping as transportation in Gloucester, the characteristics of shipping in the New England region must also be looked at. Comparisons will be made according to facilities available for use, and the type and amount of traffic passing through each port.

Gloucester: (Ports of the World, 1972)

Gloucester, Mass. is situated on Cape Ann, on the Annisquam River and Ipswich and Massachusetts Bays.

Accomodations:

-controlling depth of 20 feet.

-width of entrance is 1200 yards.

-several refrigerated warehouses with total capacity of 100 million pounds.

-new pier can accomodate vessels with drafts up to 22 feet.

-mobile cranes lift up to 10 tons.

-can accomodate vessel lengths up to 300 feet.

-stevedores work on tonnage basis, days or night.

-served by the Boston and Maine railroad.

Ship Repairs:

-six marine railways for vessels up to 400 tons.

Charges:

-no harbor dues.

Traffic:

-100,000 short tons in and out per annum.

Airport:

-Logan International Airport, 35 miles away.

3.3.1 Existing Facilities

Searsport: (Ports of the World, 1972)

Searsport Harbor is on the westerly side of Penobscot Bay, in Maine. The bay is about 20 miles wide from Isle au Haut on the east to Whitehead Island on the west, and 28 miles long from its entrance to the mouth of Penobscot River. The port is 90 nautical miles northeast of Portland, Me. and 140 nautical miles from Gloucester.

Five waterfront facilities serve Searsport. One, in the town of Searsport, is used for moving small craft. Three facilities are on Mack Point about one mile east of Searsport; one is used for handling general cargo, petroleum products, newsprint and potatoes; one is used for the receipt of dry bulk commodities, petroleum products, and bunkering vessels, and one for the shipment of petroleum products by small tank vessels. The facility at the mouth of the Penobscot River is used for receiving fertilizer materials and shipping bagged fertilizer.

Accomodations:

-three facilities to handle petroleum products.

-35,000 square feet of covered storage.

-No facilities are available for making major port repairs.

-The Bangor and Aroostook Railroad serves the port.

Portland: (Ports of the World, 1972)

Portland Harbor is on the southerly coast of Maine at the west end of Casco Bay. The harbor is about 3.5 nautical miles from the Atlantic Ocean and 75 nautical miles northeast of Gloucester. The city of Portland occupies a peninsula between Back Cove and the Fore River.

The deepwater entrance of the main ship channel to the harbor is between Cushing Island on the east and Portland Head on the mainland to the west. The Outer harbor portion of the port comprises the area west of Cushing, Peaks, House, and Great and Little Diamond Islands in Casco Bay. The Inner Harbor extends up the Fore River to the Portland Bridge and continues to the head of deepwater navigation.

Accomodation:

-large, deep and well sheltered.

-channel 3 1/2 miles long and 1,100 feet wide with depth of 45 feet Mean Low Water (M.L.W.)

-five berths for deep draft cargo ships, eight berths for deep draft tankers.

-depth in harbor, 30 feet L.W.

-modern State Pier, 1000 feet long, 366 feet wide, 32 feet deep.

-served by three line-haul railroads.

Ship repair:

-seven marine repair plants are available for major repairs.

Charges:

-vessels are given free dockage at State Pier.

-cargo is charged a nominal wharfage rate.

Traffic:

-Dry cargo: 37,127 short tons.

-Oil: 26,526,034 short tons.

Portsmouth: (Ports of the World, 1972)

Portsmouth, New Hampshire, on the south bank of the Piscataqua River opposite Kittery, Maine, is 36 nautical miles northeast of Gloucester, and 56 nautical miles southwest of Portland, Maine.

The majority of the waterfront facilities at the port are on the south bank of the Piscataqua River and between Portsmouth and Newington.

Accomodations:

-depth at entrance is 45 feet, the width of the port is one mile.

-capacity of lifting cranes is 65 tons, the navy maintains a 100 ton capacity crane.

-new federal harbor and river project now completed. It provides channel widths from 400-600 feet with minimum depth of 35 feet at M.L.W.

Development:

-new marine terminal under construction, will provide three berths of 550, 450 and 375 feet with staging and storage areas.

Tanker terminals:

-Six oil berths.

Charges:

-None.

<u>New Bedford:</u> (Ports of the World, 1972)

New Bedford, Mass., is situated on Buzzards Bay and the Acushnet River. It has nine miles of protected waterfront, with numerous terminals and a State Pier.

Accomodations:

-large, well-sheltered harbor, practically landlocked on the east, north and west sides.

-length of harbor: 7 1/2 miles.

-entrance channel is 2.9 miles long and 350 feet wide, follows a straight course, is adequately buoyed and has a depth of 30 feet M.L.W. There are 23 piers, mostly privately owned and used for small craft.

-State pier berthage north side: 600 feet. south side: 775 feet. east or frontal: 449 feet. total area occupied: 350,000 square feet. covered area: north berth, 97,000 square feet. south berth, 10,600 square feet. east or frontal, 3,360 square feet. open storage: north berth, 240,000 square feet.

-new lift: 20,000 pound capacity.

-Maritime Terminal Inc.: 32 feet at M.L.W. dockside can handle up to 500 feet, deep freeze storage: 38,000,000 pounds, equipped with railroad spurs.

Development:

-New Fish Pier: 20-30 foot depth, 1200 feet long.

-New North Terminal: 30 feet M.L.W., 1200 feet long.

Charges:

-Dockage fees \$50/day for vessels exceeding 200 feet.

-Five days free time before and after discharging and loading.

-Cargo charges for wharfage service 30¢ per short ton.

Airport:

-Municipal airport: 4 miles away.

Fall River: (Ports of the World, 1972)

Fall River Harbor is at the mouth of the Taunton River, on the eastern side of Mount Hope Bay, the north-eastern arm of Narragansett Bay. The harbor is about 27 nautical miles from the Atlantic Ocean.

From the ocean, deep-draft vessels approach Fall River Harbor through the East Passage of Narragansett Bay to Mount Hope Bay. An alternate route to the harbor for shallow-draft vessels is through the Sakonnet River.

The waterfront facilities at the port of Fall River are located along the Taunton and Sakonnet Rivers and the east sides of Fall River Harbor and Mount Hope Bay.

Accomodations:

-depth at entrance is 75 feet.

- -main channel at M.L.W. is 35 feet, at M.H.W. is 39 feet.
- -anchorage basin at M.L.W. varies from 23 to 35 feet, at principal wharves, 35 feet.
- -State Pier, 3 berths at 35 feet, M.L.W. with 96,000 square feet, marine terminal, five spur tracks, unlimited open storage.

-city wharf: 16 feet L.W.

-Shell Oil Company and Firestone docks: 35 feet L.W.

-served by the New York, New Haven and Hartford railroad.

Charges:

-no harbor dues.

Ship repair:

-no facilities available for making major repairs or for dry-docking large, deep-draft vessels.

Airport:

-municipal airport, 1 1/2 miles away.

Traffic:

-5,900,000 short tons cargo in and out per annum.
Providence: (Ports of the World, 1972)

Providence, Rhode Island, is at the head of navigation on the Providence River, a tributary of Narragansett Bay. The city is about 27 nautical miles from the Atlantic Ocean. The port area includes both banks of the upper 2.5 mile navigable channel of the river.

The Seekonk River empties into the east side of the harbor at Fox Point. An authorized channel for shallow draft vessels up this river to Pawtucket, Rhode Island.

From the Atlantic Ocean, vessels approach Providence Harbor through the broad and deep East Passage of Narragansett Bay and the dredged channel in the upper part of the Bay and the Providence River.

Accomodations:

-depth at entrance: 60 feet.

-State dock, 20,000 square feet covered. Depth is 35 feet at low tide.

-Municipal Dock: 4,300 feet long, 35 feet at low tide; 260,000 square feet covered area, 15 acres open storage.

-channel 600 feet wide, depth of 35 feet L.W.

Development:

-Additional 1000 feet being added to Municipal Dock.

Charges:

-30¢ per ton of 2000 pounds or 40 cubic feet, which ever is greater.

-\$50/day for vessels exceeding 100 feet; \$25/day if less than 100 feet.

-Wharfage: 45¢/ton; lumber: 30¢/1000 feet; dry and bulk: 20¢/ton.

Newport: (Ports of the World, 1972)

Newport, Rhode Island is situated near the mouth of Narragansett Bay, about 25 nautical miles southeast of Providence.

Accomodations:

-Depth of outer harbor: 120 feet; inner harbor: 24 feet; berth: 12 feet.

-Vessels of 18 foot draft can be close to the pier at L.W.

-New municipal dock.

Ship repair:

-two marine railways, 400 and 750 ton capacity.

Airport:

-Newport Air Park

Compared to other New England ports, Gloucester falls somewhere between the worst and the best of them, in terms of available facilities. Since we are specifically interested in Gloucester a closer investigation is necessary. The following is a summary of findings concerning the particular port of Gloucester:

- -There are unrelated and incompatible uses such as tourist oriented facilities adjoining industrial land uses.
- -The piers are generally constructed of wooden decks on wooden piles. Of these over 30% are dilapidated or have some gross deficiency.
- -The Gloucester Fish Pier is not extensively used for fresh fish activities.
- -Use of pier facilities is generally controlled by those providing fuel services to ships (Inner Harbor District Plan Gloucester, Mass., 1969).
- -There are inadequate facilities for fresh fish boats and small boats.
- -The harbor water is polluted and obviously has a blighting influence on the harbor.
- -The frozen fish processing plant dominates the waterfront and, due to lack of scheduling or concern or both, the up traffic on Main Street for long periods of time.
- -In general, the port is not operating at peak efficiency or capacity. Many parts of the waterfront are totally ignored and have fallen into disrepair.

Most of these findings can be found in all the ports discussed earlier. The purpose of these findings is to indicate areas of concern which cause deterioration of existing facilities and discourage new development.

3.3.2 Import-Export Trade

One method of revealing the mutual influences of transportation on land and sea is to study the import-export traffic which passes through a port. Table 3-3 shows the relative growth of traffic through the various New England ports, Boston excluded. The values are for all traffic passing through the port, whether it be imported or exported goods, and whether it be foreign or domestic (Waterborne Commerce of the U.S., 1958-1971). Figure 3-1 is the table in a

TABLE 3-3 FREIGHT TRAFFIC (SHORT TONS) Port

Year

	Searsport Me .	Portland Me .	Portsmouth N.H.	Gloucester Mass.	New Bed- ford, Mass	Fall River Mass.	Providence R.I.	Newport R.I.
1958	865,959	15,590,854	1,219,120	183,977	219,643	2,101,916	7,889,434	112,877
1959	896,350	17,363,095	1,315,369	185,093	262,670	2,174,230	8,275,928	124,012
1960	890,219	16,167,661	1,397,389	171,536	224,263	2,142,912	7,949,820	117,162
1961	1,013,478	15,509,251	1,273,805	152,415	225,610	2,179,633	8,012,341	86,966
1962	1,105,804	15,467,817	1,454,768	176,019	300,549	2,599,329	8,534,151	92,492
1963	1,209,832	18,734,653	1,572,315	201,924	372,344	2,737,650	9,001,251	96,169
1964	1,248,574	18,830,314	1,460,325	170,632	343,924	3,161,590	8,191,681	84,092
1965	1,417,521	18,462,915	1,654,508	181,799	414,786	3,661,963	9,102,548	94,238
1966	1,333,579	22,315,086	1,740,119	198,340	427,511	4,040,441	9,206,698	123,423
1967	991,500	22,818,045	1,824,537	175,385	511,997	3,850,063	9,062,469	133,003
1968	1,154,030	27,237,553	1,833,373	204,326	658,657	3,541,631	9,471,235	145 , 586
1969	1,256,382	27,831,851	1,795,915	228,187	566,670	4,261,327	10,153,951	115,565
1970	1,009,394	30,016,945	2,187,303	234,745	615,068	4,333,530	9,872,267	102,500
1971	1,013,537	31,679,119	2,174,425	260,206	486,349	3,970,302	8,762,293	910,16



Source: U.S. Waterborne General Imports And Inbound In-Transit Shipments, 1972.

graphical form which places the ports in relationship to one another and indicates the rate of increases of tonnage.

A closer look at the commerce which passed through each port revealed the following interesting facts:

-with the exception of Gloucester the chief import was oil or oil products.

- -all ports export very little in relation to imported goods.
- -with the exception of Gloucester, Newport and New Bedford, no other port deals in significant quantities of fish or fish product commodities.
- -Gloucester is the only port where fish and fish products are the main commodity of the port.

The import-export commodities which pass through Gloucester may be listed in three separate categories:

- (1) Fish, which includes fresh fish, prepared fish (frozen, canned, dried or smoked), shellfish and prepared shellfish.
- (2) Oil products, which includes gasoline, jet fuel, residual fuel oil, distillate fuel oil, solvents, greases and various petroleum products.
- (3) Miscellaneous, which includes manufactured goods, food products, and wood products.

Figure 3-2 relates these three categories showing the relative increase or decrease in specific commodities. The graph shows that Gloucester, based upon the past eight years, is tending to be less diverse, concentrating solely on fish and fish products for its commerce. This produces several points of consideration concerning transportation in Gloucester:

-The heavy in-flux of fish commodities into the Gloucester port greatly increases the number of trucks needed to transport the fish. Little fish leaves by rail and even less by ship. In other ports where oil is the main commodity, pipelines are the main source of transportation. This dependence on trucks aggravates the problem of highway saturation every time a ship docks.

-Although Gloucester handles more fish than New-Bedford and Portland, it receives less money per pound as indicated by Table 3-4.





Gloucester Waterborne Commerce

Source: U.S. Waterborne General Imports and Inbound In-Transit Shipments, 1972

	<u>Table 3-4</u>		
	Value (\$)	Weight (lbs).	\$/lbs.
Portland, Me.	2,624,580	13,515,860	.20
New Bedford, Mass.	5,327,522	17,948,639	.297
Gloucester, Mass.	2,674,864	20,339,146	.131

-Of the total traffic which passes through Gloucester, 10-20% is export trade. This is higher than all of the other ports previously discussed.

-Since 1965 the number of passengers through the port of Gloucester has dropped from 28,119/year to 408/year in 1971.

Trends

A. Shipping

From the New England regional view trends which seem to be prevalent are:

-Increasing dependency on oil as the main import commodity. Little export trade exists.

-The use of pipelines and highways for major transportation source. Less dependency on use of railroads and ships.

On the local level trends that exist in Gloucester are:

-Growing interference between traffic, afloat and ashore.

-Heading toward a less diversified import-export business. Growing dependency on fish as the basic commodity.

-Complete integration of several distinct activities of the fishing fleet such as: landing of fish, routine repair and berthage.

Governmental Structure

4.1 City System

4

4.1.1 Introduction

One might think of a city-wide government as deriving its power base from two sources. One is the legal basis for government – the laws of both local and state origin which stipulate the framework within which the government must act. The other source might be considered the "popular" source of power – the extent of rapport the government has with the citizens which it represents.

In the case of Gloucester, the legal framework is embodied principally in the Plan E Charter, as set forth in the Massachusetts General Laws Annotated (M.G.L.A.), Code 43, Sections 93-116 (adopted by the people of Gloucester on December 4, 1951). Local constraints on the city government are embodied in the current Code of Ordinances, City of Gloucester, Massachusetts, adopted April 2, 1970.

The "popular" source of power extends from the necessity for the city government to respond to the desires of its constituents, its ability to do so and further its ability to convince the people of this fact. An inability to do this will result in an emotional populace – one unsure of the representation of its interests and one intent upon making its feeling known to its representatives. The populace will manifest its feelings in two manners: (1) general wariness of and opposition to the government which represents it (perhaps indicated by electoral preference); and (2) creation of a "crisis" atmosphere at public meetings, as the people of the city attempt to make their feeling known to the lawmakers. Both manifestations interrupt a smoothly flowing governmental process as attention is focused on matters of current interest. Planning for future contingencies ceases and the power to deal with them is thus eroded.

An atmosphere seems to exist in Gloucester today, which indicates the populace is apparently unsure of the city's ability to respond to them. Currently, a number of

neighborhood groups, as they are called, have arisen to combat proposed development in Gloucester. They represent a manifestation of the desires of the people of Gloucester and as such form one aspect of what is considered the popular framework for government. The other aspect is, of course, the voting process which is well known and will not be discussed further.

The remainder of this section will seek to elaborate further upon the broad legal and popular framework for government just presented. Where certain aspects of this structure bear directly upon sector case studies chosen by the Systems Engineering class, mention will be made of this fact.

4.1.2 Institutional Framework

The existing Plan E framework provides for a strong city manager form of government. The mayor, who in other forms of government is vested with strong financial and administrative power, is relegated to a primarily ceremonial role as head of the city, though maintaining limited appointive powers. In the Plan E form of government, it is the City Manager in whom most financial and directive powers reside. Additionally, the City Manager in Gloucester retains extensive appointive powers, ranging from members of the Planning Board and Housing Authority to the school physicians and town Animal Inspector. He is, in short, that individual responsible for smooth daily operation of the government and for ensuring that directives of the city council are carried out.

In Gloucester, though, it is the city council which has the final say as to operations of the government. It must be stressed that though the city manager has been given broad administrative powers, he is still directly answerable to the city council, and serves in his post at their pleasure. Thus, he is only one step removed from the voters themselves, who go to the polls once every two years to vote for council members in an at-large election.

Under the terms of the M.G.L.A., code 43, section 96-97, the city council consists of seven members, and is formally charged with exercising all legislative powers of the city except those reserved for the school committee and qualified voters of the city. For example, the council is charged with electing a mayor and vice-chairman from amongst its members. Additionally, it has the power to

appoint not only the City Manager, but the City Clerk and City Auditor as well.

4.1.3 Committees and Boards

4.1.3.1 Elected Committees

An arm of the government somewhat separated from its daily operations but nonetheless of vital concern to Gloucester's citizens, is the school committee. The committee consists of the mayor and six other committee members, who are elected every two years in at large elections throughout the city. Other than the city council, this is the only group of individuals <u>directly</u> responsible to the citizens. The school committee is charged with control of all school buildings and grounds and shall make reasonable rules and regulations for proper management of the schools. They are responsible for the election of a superintendent of schools who serves at their pleasure. Separation of the school committee from other areas of city government is ensured by Ch. 43 Section 31, M.G.L.A., which states that "No member of the school committee, except the mayor, shall, while a member thereof, hold any other office or position the salary or compensation for which is payable out of the city treasury."

On first observation, one might refute the premise that the school committee is vital to the operation of the city government, arguing that nowhere do they have power over any operations of it and further arguing that separation of powers is ensured by Massachusetts law. However, if one considers control over money a form of power, then the school committee is powerful indeed. In 1973, the 18month budget approved by the city council showed approximately \$10,700,000 approved for school operation out of a total city budget of about \$22,900,000 or about 47% of the city budget (<u>Gloucester Daily Times</u>, March 23, 1973). A review of the city debt as of December 31, 1971 underscores this further. School or school related expenditures accounted for \$17,000,000 of the total outstanding debt of \$22,600,000 or 75% of the debt (<u>Gloucester Daily Times</u>, Nov. 3, 1972).

Thus, school expenditures are responsible for a very significant portion of the city budget. Such a condition indicates of necessity that the school committee has a great deal of influence within the government. Money spent for schools is not available for use elsewhere and vice versa.

4.1.3.2 Appointed Committees

There are several provisions within the legal framework of government just presented that bear directly upon the economic and industrial aspects of the city. The city council is empowered to direct the formation of committees as they deem necessary. Theoretically, then, the city should be able to respond to needs and problem areas as they arise, at the same time, dissolving attention to areas no longer vitally affecting the well-being of the city. Among these are provisions for a planning board, fisheries and harbor study commissions, a tourist commission and a conservation commission, as examples. A listing of these organizations follows, along with their appointed tasks (as listed in the Gloucester Annual Reports, January 1, 1970 through December 31, 1971):

Appointed by the Mayor:

<u>Fisheries Commission</u> - "...attempts to develop financial resources and programs for the development of Gloucester's fishing industry. They help to coordinate local programs pertaining to fishing matters with federal and state programs."

<u>Tourist Commission</u> - "...is responsible for advising the city in the following areas:

- (1) the organization, creation, and maintenance of tourist attractions.
- (2) advertising programs of these attractions, and
- (3) all other matters relating to the tourist industry as may be referred to them."

Appointed by the City Manager:

<u>Planning Board</u> – "...They shall compile whatever statistical data and other information (that) is required to determine the future growth needs of the city. They shall submit their reports to the manager and council..."

<u>Traffic and Parking Commission</u> - "...advises the councilmen on ways of improving traffic flow and control."

<u>Industrial Development Commission</u> - "...was created by a legislative act of the Commonwealth. It is a sponsoring real estate agency of the city whose purposes are to create suitable location for industrial development and to attract new industry to Gloucester."

<u>Conservation Commission</u> - "...appointed by the manager for determining which properties shall be taken and conserved by the city. They are a guardian agency to help the city preserve an ecological balance and develop sufficient recreation and open spaces."

<u>Historical Commission</u> - "...has under its care the preservation of buildings and real estate significant to Gloucester's history."

<u>Overall Economic Development Planning Committee</u> - "This committee establishes plans with such supporting data as they can gather to aid in Gloucester's economic development." (<u>Gloucester Daily Times</u>, Nov. 3, 1972).

The previously listed organizations are designed to deal with a wide range of problems and opportunities facing the city. In addition, a number of others exist, but their tasks are not germane to this study. All of this indicates that, at least on paper, Gloucester has provided for adequate consideration of matters of both current and future concern.

However, a review of the 1973-1974 eighteen month city budget reveals that a number of these organizations have either minimal funding or none at all. For example, the Fisheries Commission was given less than \$11,000 to pursue its objectives for the period, the Planning Board somewhat more than \$13,000 ("1973 Budget", City of Gloucester). The members of each of these organizations serve without pay.

What this means, of course, is that unless financial power is given to these organizations, the contributions they can make to a large scale planning and governing program are severely limited. For example, it has been estimated that a planning effort of any consequence would cost the city several times its current planning budget (Oral Communication, P.B. Herr & Associates). At the current level of funding, the city's planning consultant is largely confined to working on matters of current interest with little time left over to devote to long range efforts. It should also be noted that there are no standing committees for the council. This indicates a tendency to deal only with immediate areas of concern without a view to long range city development.

One other aspect of city government in Gloucester deserves special consideration. Within the framework of the currently effective (May, 1973) Zoning Ordinance of the City of Gloucester, the city council is empowered to, among

other things, allow the development of hotels, motels, and multi-family dwellings within currently existing residential zones in the city. This is what is commonly referred to as "special permit."

An account of the history of the special permit, appearing in the "Gloucester Daily Times" (Mauro, T., March 24, 1973) indicated that its establishment was undertaken in the late 1960's in order to return to the City Council a measure of the authority which they felt had been removed from them when the Plan E form of government was instituted. Mr. Joseph F. Grace, mayor of Gloucester when the new zoning ordinances were passed is quoted by the "Times" as saying "...it was the opinion of certain of the previous councilors that under Plan E, much authority had been taken away from them, and that on this they wouldn't give up." (Mauro, T., March 24, 1973).

Opinions vary on the value of the special council permit. Some like the "sensitive control" it offers. Others dislike it because "you're taking a great chance when you buy a house in Gloucester-" (Mauro, T., March 24, 1973). Developers dislike the expense involved in obtaining one.

Regardless of personal opinion about the worth of the council's permit power, two things worthy of consideration should be mentioned in regard to this study: 1) Use of the special permit power can have a significant effect on growth patterns within Gloucester and 2) Other than the guidelines appearing in section 1.4.2.2 e of the city's zoning ordinance, the city council has not adopted any instructions for their use of the permit power. The guidelines presently existent read as follows:

"No permit shall be granted by the City Council without considering the effects upon the neighborhood and the city at large, and due consideration should be given to the public welfare, safety and health and to the public needs, convenience and necessity. No permit, however, shall be arbitrarily or unreasonably refused." ("Zoning Ordinance of the City of Gloucester).

One other observation should be made at this point: the guidelines for the special permit inherent in the zoning ordinances are sufficiently broad that they are liable to a wide range of interpretations. Should the election of a council of "growth oriented" individuals occur, it is totally possible that the special permit

power could be used to encourage rapid and continuous growth within the city even though just the opposite is currently the case.

4.2 Popular Structure

4.2.1 Neighborhood Organization

Popular control over Gloucester's government is formally exerted in the elections for City Council and the School Committee held every two years. Less formally, investigation reveals the existence of a number of "neighborhood groups" within the city, each aiming to protect the interests of the people living in its geographical area of concern. Many of these organizations are of fairly recent origin, having been formed over the past year or so in reaction to proposed development plans within the city. A number of other groups have become more active during this time, and a new city-wide coalition has recently been formed in order to "protect our land and protect our city, " (Bartlett, K., "Neighborhoods Pick Target") according to an article in the "Gloucester Daily Times".

One such new organization is the West Gloucester Neighborhood Association, which was recently formulated as a direct result of two new development proposals in that section of town. The first of these proposals was for a mobile home park near the Gloucester-Essex line. A few months later, another development proposal was made - this time for a campsite off New Way Lane in the western portion of the city. These two events appear to have convinced residents of a need for a stable organization to speak to such proposals and the West Gloucester organization was the result (Bartlett, K., "City's third action group forms in West Gloucester). Other neighborhood organizations of recent history include the East Gloucester and Eastern Avenue Groups.

The formulation of these active city groups has taken place too recently to fully assess the true extent of their power. At this point in time, they have served primarily to focus attention on the reaction of Gloucester residents to proposed developments within the city. Additionally, as hearings on proposed developments have come before the Planning Board, these groups have organized formal public opposition to proposed developments within their geographical area of interest.

Perhaps indicative of the future trends of the neighborhoods is the reaction of the East Gloucester Neighborhood Association to the proposed development of condominiums on the present site of the Hawthorne Inn in East Gloucester. Realizing that the proposed development essentially meets all regulations for multi-family housing within the city, the association is countered by supporting two positions, one of which would remove the Gloucester city council "special permit" priviledge with respect to multi-family dwellings in previously single family residential zones within the city, and the other of which would remove Eastern Point Road from arterial status thus making it inaccessible to developers of multi-family dwellings. Following Planning Board refusal to set hearing dates for these proposals, the East Gloucester group sought legal recourse in its efforts to force the Planning Board to hold hearings on the proposals. (note: The city council, at its meeting of May 3, 1973, voted 6-1 to deny permission for construction of the proposed Hawthorne Inn condominiums, ostensibly eliminating the need for further action on this issue by the East Gloucester residents.)

In summary, it can be stated that the emergence of the neighborhood groups as a power base has occurred only recently and as a result of proposed development within the city. Likewise, city-wide organization of these groups is a recent phenomenon. Two conclusions can be made concerning these groups: 1) Presently, they exist as a focal point for community opposition to growth within the city, and 2) action by the East Gloucester group in the case of the Hawthorne Inn development plans indicates that these groups are indeed quite serious in their attempts to stem development and shall continue to be so in the future. It is expected that the full impact of these groups is yet to be felt.

4.2.2 Local Organizations

Also within the popular structure affecting Gloucester government, industry, and economy are the following organizations:

<u>New England Fisheries Association (Gloucester Branch)</u>: This body represents boat owners and processors. It gets grants from sources like the Economic Development Association and the NMFS to carry out research and development. Recently completed is a research (backed with \$99,000 EDA funds and \$35,000

NMFS services in kind) program which sought to produce new products from lowvalue fish. A kind of "fish-flesh" product has been made (Mauro, T., March 24, 1973) and might soon be commercially produced, and a NOAA fund of \$400,000 has just been made available to promote the product. Current research involves midwater trawling for groundfish.

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<u>The Labor Unions</u>: Gloucester fishermen, fish-workers and others have their unions. The Amalgamated Meat Cutters (AFL-CIO) handles all lumber and processing work.

<u>United Fishermen's Wives Organization</u>: This group was organized in 1969 with the avowed aims to limit imports and foreign fishing off the U.S. coast, to hold education programs for the increased consumption of fish, and to support as necessary legislative matters of interest to domestic fisheries. Parallel groups of this organization exist in other New England ports.

<u>Gloucester Fishermen's Institute</u>: This institute is aimed at improving the condition of seamen in Gloucester and surroundings. It caters to elderly fishermen, and offers educational, religious and social programs.

Non-Governmental Organizations and Legislature

Obviously, Federal laws and international agreements affect all parts of our nation. Federal regulations and law affects every city in much the same way. For planning purposes, we will concentrate on those institutions and pieces of legislation having a direct bearing on Gloucester's land management and fishing-related industry.

5.1 Effects on the Fishing Industry

Many institutions exist at various levels that define, regulate and affect to varying extents the workings and fate of the fishing industry. Some of those more recently relevant to Gloucester's interests are discussed below.

5.1.1 International

(i) United Nations Organization: This body, through its "Law of the Seas" has the perogative to determine national fishing bounds. A current topic yet to be resolved at a future international Conference (s) is whether or not to adopt a 200mile fishing limit whereby a nation has exclusive rights to the resources within 200 miles round its coast.

(ii) International Commission for Northwest Atlantic Fisheries (ICNAF): This body watches over the welfare of fishes in the Northwest Atlantic Ocean. It has powers to restrict or forbid fishing as it deems necessary. In effect from 1970, it imposed quotas of 12,000 metric tons (m.t.) (Georges Bank) and 18,000 metric tons (Brown's Bank) per nationality on the fishing of haddock (National Marine Fisheries Service). The quotas have since been halved. Also in effect from 1971 it imposed quotas of between 16,000 m.t. to 10,000 m.t. on the fishing of yellowtail flounders in certain areas. Ocean perch has also recently been placed under quota.

(iii) Various international bodies exist for regulating species in the high sease.g. the Inter-American Tuna Commission.

5.1.2 U.S. Government

Notable among the numerous and detailed existing legislations affecting the industry is the Nicholson Act (originally 1792) whereby only U.S.-constructed

fishing vessels may be used. This has become a sore point since the vessels now cost about twice as much as in foreign countries.

Trade and Diplomatic Agreements with Foreign Governments

The U.S. Government has sought to help its Fishing Industry by getting other nations to cooperate on research, and fishing limitation for species vital to the U.S. Fisheries. Instances are the December 1968 agreement with the USSR government to control the fishing of fluke, scup, red hake and whiting in the U.S. Mid-Atlantic Coast (National Marine Fisheries Service). A similar agreement was concluded with Poland in June 1969.

Since the start of 1972, the provisions of the Kennedy round of the General Agreement on Tariff and Trade Treaty (GATT) nullified tariff for imported blocks. However the figures (in million pounds) of 273,311, and 355 for the years 1970, 1971, 1972, respectively, reveal that the imports have not increased more than at the former rate. The relevant part of this agreement is shown in Table 2.3

Government Economic Policies

Obviously, these can affect any part of the nation's life. An instance was the August 1971 New Policy which introduced import surcharges and wage-price freezes (later relaxed) which drew complaints from frozen fish importers.

U.S. Department of Commerce

In October 1970, Commercial Fisheries functions were transferred from the Department of the Interior to the Department of Commerce. The relevant body is now the National Marine Fisheries Service (NMFS) which took on the major elements of the former Bureau for Commercial Fisheries (BCF) under the National Oceanic and Atmospheric Administration within the Department of Commerce. Many institutions existed under BCF management and the fishing industry. Some of these now managed by the NMFS are:

- (a) Funds and Loans
 - (i) Fishing Vessel Construction Differential Subsidy: Program (created under U.S. Fishing Vessel Improvement Act P.L. 88-498). This was designed to correct imbalances between fishing vessel construction

costs in the U.S. and those in other countries. Up to 50% of construction costs of new vessels would be paid under the specified conditions. However, the program has expired and is now discontinued.

- (ii) Capital Construction Fund: (set up by the Merchant Marine Act of 1936, ammended 1970). This offers commercial fishing vessel owners and leasees operating the fisheries of the U.S. the privilege to deposit their profits in this untaxed coffer and thereby get ready money to finance repairs and replacements.
- (iii) Fisherles Loan Fund: This was started in 1956 to finance vessel repairs and purchase of new boats. The fund presently has an annual capital of about \$2 million and charges an interest of 6 1/2%, with a loan maturation period of 14 years. Loans have been restricted to \$40,000 per request.
- (iv) Mortgage and Loan Insurance Program: This is a scheme whereby the NMFS insures mortgages on fishing vessel construction, conversion and repair.
- (b) Safeguard for Fair Trade Practices

Fish and Wildlife Act (1956): This empowers the Secretary of the Interior to report to the President and Congress on effects of imported fishery products in direct competition with the domestic industry. An instance of its use was in 1968 when the BCF investigated this competition as a result of some U.S. fish dealers' complaints. The findings were that the cost-price squeeze due to low-cost imports was hurting U.S. groundfishermen (U.S. Bureau of Commercial Fisheries, 1969).

- (c) Resource Management NMFS Management Agency: This body, by air reconnaisance flights, monitors the sea traffic on the fishing grounds of the U.S. Commercial Fishing Industry.
- (d) Research and Development
 The NMFS has various departments located through the U.S. coastal areas,

fully occupied in research and development related to the fishing industry. Some of those more relevant to Gloucester's interests are:

- (i) North East Fisheries Center, Woods Hole: The biologists at this oceanographic laboratory monitor fish landings and fish populations in the U.S. fishing grounds, and issue annual forecasts on availability of the species of interest.
- (ii) Exploratory Fishing and Gear Research Base, Gloucester: Among the tasks of this institution are the development and sea trials of new fishing gear and exploration and location of new fishing grounds. Some of their achievements are the development of the high opening trawl net (1968) and the very successful promotion of the pollock and shrimp fisheries (1969).
- (iii) Technological Laboratory, Gloucester: This institution specializes in technical innovations and modifications to accessory equipment of the fishing industry. Some of their achievements are the development of the shipboard vacuum enviscerator (60 fish/minute, 1969), and a shrimp cooker that handles 100-150 shrimp every 6 minutes (1969).
- (e) The Economic Development Administration
 Through its Economic Development Administration the department gives grants and technical assistance for projects related to development. The Overall Economic Development Committee for Cape Ann serves as a bridge to these facilities for Cape Ann citizens. Many substantial aids have been given. A grant for the current study of the feasibility of utilizing midwater trawling methods for harvesting underutilized species seems to be the latest.

U.S. Department of the Treasury (Customs)

Complaints may be made to the U.S. Customs in case of suspected violation of the Antidumping Act of 1921 regarding any competitive foreign product that enters the U.S. at less than fair value. For example, in 1968 such complaints were made against frozen cod from Canada, although the Treasury Department eventually overruled it as unfounded.

U.S. Department of Health, Education and Welfare (HEW)

The Food and Drug Administration under the HEW rules on what is safe for consumption. In 1970, this body declared swordfish to contain more than .⁵ parts per million of mercury, which it considers the safe maximum. Consequently, U.S. swordfish fishery and imports have gone down drastically. In 1971 it set a 3% parasite tolerance for ocean perch (J.Ackert).

U.S. Department of Labor

Through the Manpower Development and Training Act, this department can always cooperate with any sector of the U.S. Industry to train manpower. To date, New Bedford seems to have the majority of programs for training fishermen and has made much use of USDL's help. On-the-job training programs for fishermen have in the past been in Gloucester with USDL help, however, none exists at present.

State Institutions

State Government: The Massachusetts State government has worked to promote commercial fishing in the state. Some instances are the State decision (1968) to use only U.S. caught and processed fish in its institutions, as a response to a tieup protest of Gloucester groundfishermen, and its cooperation with some organizations to promote pollock fishing.

5.2 Coastal Zone Management

In October of last year the Congress of the United States passed legislation known as the "Coastal Zone Management Act of 1972" (Conference Report to accompany S. 3507, 1972). This legislation promises to have vast implications for the City of Gloucester and its citizens. Gloucester is of course a coastal city. It is very likely that most, perhaps all, of Gloucester will be located within the coastal zone which the new law seeks to regulate. It is important, therefore, for the people of Gloucester to be familiar with the new law and its implications. Let us examine, then, before going any further, the provisions of the Coastal Zone Management Act.

In the Coastal Zone Management Act of 1972 Congress declares that there is a national interest in the management, use, protection and development of the coastal zone. This is because the coastal zone has ecological, cultural, historic,

esthetic, commercial, recreational, industrial, and mineral resources. Since many if not all of these interests are competing, Congress found it essential that adequate planning be done lest some resources, especially those which are ecologically fragile, be lost. Since present state and local programs are inadequate, Congress saw as the solution a fuller exercise of <u>state</u> authority over the coastal zone. In setting up this new authority, the states are directed to work closely with federal, regional and local governmental institutions.

Congress has declared it a national policy to "preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone." (Coastal Zone Management Act of 1972, Section 303). The words "preserve", "protect" and "restore" are all words signifying conservation. Only the word "develop" leans in the other direction. The basic thrust of the Act, therefore, is towards conservation; it is towards remedying an already harmfully developed situation. From now on development in the coastal zone will be proper only within a balanced ecological perspective.

The most important definition in the Coastal Zone Management Act is the definition of the coastal zone itself. It is as follows:

(a) "Coastal zone" means the coastal waters (including the lands therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes transitional and intertidal areas, salt marshes, wetlands, and beaches. The zone extends...seaward to the outer limits of the United States territorial sea. The zone extends inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters. Excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of, or which is held in trust by the Federal Government, its officers or agents (Coastal Zone Management Act of 1972, Section 304).

As you can see, the definition is strongly water oriented. Part of the reason for this is that the Act is designed to compliment the proposed Federal Land Use Act which would set up a similar regulatory system for the land areas of the United States. The definition is also purposefully vague so that each state may design the zone with an eye to local geography and other conditions (cf. testimony of Hon Russell Train, 1971). Sections 305 and 306 of the Act deserve special mention. Section 305 provides for annual grants from the federal government to assist the coastal states in developing comprehensive plans for the management of the land and water resources of the coastal zone. Section 306 provides for federal grants for the ongoing programs of the states once these have been fully developed and approved by the Secretary of Commerce.

The Act also requires interagency coordination and cooperation, public hearings, and the continuing review of state performance by the Secretary of Commerce. Records must be kept and annual reports given. A national advisory committee is set up. Special provisions are made for the setting up and funding of Estuarine Sanctuaries.

Finally, the Secretary of Commerce is authorized to promulgate rules and regulations for the implementation of the Act and Congress appropriates special moneys for the first few years of the program.

What does all this mean for Massachusetts and for Gloucester? Let us start with Massachusetts.

In 1969 the Massachusetts legislature asked each Secretary within the Executive Office to study the needs of each particular agency and to recommend to the legislature appropriate steps towards the improvement of state services (Citizen Task Forces on Environmental Reorganization, 1972). In response to this request the Executive Office of Environmental Affairs in the early months of 1972 authorized eight citizen task forces to study the environmental needs of Massachusetts and to make appropriate recommendations based upon their studies. The reports of the task forces were published in November of 1972. One of the task forces was the "Ocean Resources Task Force". This task force had a subcommittee on "Coastal Zone Management". I will outline for you the recommendations submitted by this subcommittee:

 Present institutional arrangements have been inefficient in allocating the resources of the coastal zone consistently with the values of society.

Therefore, we recommend that the Commonwealth move without delay

to enact legislation for the management of its coastal resources to meet important environmental, economic and other social objectives (Report of the Coastal Zone Management Subcommittee, 1972).

2. No existing agency has a mandate to represent the full range of interests that must be considered to develop a balanced program of resource management in the coastal region.

Therefore, we recommend that a Coastal Resources Council be created to serve as the policy-formulation and ultimate decision-making 'Board of Directors' for such a program.

 Various agencies within the Office of Environmental Affairs have responsibilities for the management of land and water resources in the coastal zone.

Therefore, we recommend that the Office of Environmental Affairs become the lead operating agency to develop a state-wide program and carry out the policies and decisions of the Council.

4. To achieve more effective management in the coastal zone, a delicate balance must be maintained between forces dedicated to management of resources for the benefit of all the citizens of the Commonwealth and those concerned with maintaining the greatest possible degree of local autonomy in the control of resource utilization.

(Therefore), we recommend that the state government be the focal point for <u>policy-making</u> and ultimate <u>decision-making</u>, with strong representation of local interests from the public and private sectors. For <u>planning</u>, we recommend cooperation among state, local, and intrastate regional bodies with major responsibilities at substate levels. As for <u>implementation</u>, we recommend reliance upon the existing distribution of controls and regulatory powers, with the important modification outlined below.

 Proposals for large scale developments of more than local significance from environmental (ecological, recreational, etc.) and economic standpoints are on the horizon.

Therefore, we recommend that the Secretary require an environmental-impact statement for any development within the coastal zone having more than local economic and/or environmental significance. He should review these statements and make recommendations to the Council, which shall have interim authority for the ultimate approval or disapproval of such development. This impact statement should include considerations of the effects of proposed developments on land use patterns and recreational/scenic/ cultural amenities as well as economic interests. 6. Any sound program for the management of resources in the coastal zone must be based upon an adequate informational and analytical ability in the area of environmental science.

Therefore, we recommend that the Secretary of Environmental Affairs, in cooperation with other secretariats on the Council, establish a mechanism to insure that the Office of Environmental Affairs and the Council are furnished reliable data on existing and potential uses of coastal resources and their environmental implications.

7. The five regional planning commissions in the Massachusetts coastal region are potentially valuable as linkages between state and local governments in a coastal resources management program...

Therefore, we recommend that intrastate regional planning agencies be considered as integral components in the organizational structure for coastal resource management.

8. At the interstate level, there is a need for a regional structure for joint planning, coordination and review purposes. The New England River Basins Commission and the New England Regional Commission are potentially capable of performing this function.

Therefore, we recommend that the New England River Basins Commission and the New England Regional Commission be considered as the primary mechanisms for federal-state and interstate cooperation.

The report of the "Shoreline Development and Pollution Subcommittee" of the "Ocean Resources Task Force" makes some recommendations which parallel to a large degree the recommendations of the "Coastal Zone Management Subcommittee" which have just been delineated. Having seen the recommendations of the task force, let us consider a proposal now before the legislature to carry out these recommendations.

There has been introduced into the 1973 session of the Massachusetts legislature a bill "Relative To The Management, Use, Protection, and Development of the Coastal Zone Resources". The bill was introduced by Gloucester's own state senator, Senator William Saltonstall at the request of Professor William Seifert of M.I.T. At the present time the bill has had its first hearing and has been referred to a special study committee. The main provisions of the bill are as follows: The coastal zone of Massachusetts is defined as: "all waters subject to tidal influence extending seaward to the territorial limits of the commonwealth and the land beneath said waters, and adjoining land areas to a maximum elevation of fifteen feet above mean high water mark or a maximum distance of one mile inland from the mean high water mark, whichever is the greater distance inland, except lands the use of which is by law subject solely to the discretion of or which is held in trust by the United States or by the commonwealth (Proposed bill "Relative to the Management, Use, Protection, and Development of Coastal Zone Resources").

The bill proposes a Coastal Resources Council. The Council is to be headed by an executive secretary appointed by the governor. Section 3 of the bill proposes that the secretary develop a management plan in the following way:

<u>Section 3.</u> The secretary shall prepare, with the assistance of the coastal cities and towns of the commonwealth and regional, state and federal agencies, a comprehensive, enforceable, and balanced plan for the conservation, prudent development, and efficient utilization of all resources within the coastal zone of the commonwealth. The secretary shall compile an inventory of the resources of said coastal zone and shall maintain a listing of the current uses of the coastal zone of each coastal city and town of the commonwealth.

Said inventory of coastal zone resources shall include:

- a) land uses with an inventory of current uses of said land, identification of areas which are misused or underutilized and identification of areas which have esthetic, recreational, physical or other qualities which should be preserved.
- b) renewable resources, with estimates of the quantities of marine animal and plant life available for sustained yield utilization. Present and potential conflicts over renewable resources shall be analyzed and resolutions to these conflicts suggested...
- c) non-renewable resources, with estimates of the petroleum, gas, sand, gravel and other mineral resources of the seabed of the coastal zone. Future demands on these resources shall be estimated, and the plan shall indicate areas of both the seabed and the shoreline where development of these resources would and would not compromise environmental quality goals and other goals of the plan;
- d) transportation, with estimates of demands presented in alternative mixes of facilities for the movement of people and goods through the coastal zone by sea, air, and land. The plan shall indicate the location and

size of facilities which would meet future demands and coordinate with other goals of the plan;

- e) culture or history, with inventories of those sites or areas within the coastal zone which represent the history, natural beauty, architecture, and other aspects of the culture and scenery of the commonwealth. The plan shall recommend measures for the effective preservation of the special quality of such sites or areas, and, where not destructive of their special value, for increased public access to them;
- f) natural areas and habitats, identifying those areas of the coastal zone which are important to the continued productivity of the biological resources of the coastal zone, and those areas which should be preserved for water resource management considerations such as flood hazard. An objective shall be to provide for the continued enjoyment of fish and wildlife for sport fishing and game pursuits and commercial uses, as well as preserving the aesthetic qualities of the said coastal zone.
- g) housing and economic development, indicating those areas in the coastal zone which combine maximum feasibility for residential, commercial and industrial uses and minimum inconsistency with other objectives of the plan...
- h) recreation, estimating future demands for outdoor recreation opportunities in the coastal zone. ... The plan shall recommend measures by which the recreational experiences of the coastal zone may be most fully enjoyed, consistent with other goals of the plan, and to create a balance between the desire of local residents to restrict the use of recreational areas and that of nonresidents to be allowed relatively free access to said areas.
- i) public utilities, which shall incorporate the best available estimates of the demand for waste disposal and power generation facilities in the coastal zone, and the environmental consequences of varying levels and manners of accomodation of such demands. The plan shall recommend a pattern of such accomodation indicating those areas most suitable for location of facilities.

As we can see from the above itemization of resources which must be inventoried by the state, just about every activity one can think of will have to be regulated and planned from now on if it falls within the coastal zone. Since virtually the whole of Gloucester will be within the coastal zone, almost every activity and enterprise in Gloucester will have to be regulated by the state Coastal Resources Council in accordance with the state master plan under the guidelines of both the federal and state coastal zone acts. It is very easy to see that all of this has enormous significance for the future of Gloucester. What part will the City of Gloucester get to play in this new system? The City of Gloucester will have a very important role to play. Section 4 of the proposed bill authorizes money to be allocated from the state so that each city and town will be able to develop its own coastal zone management program. The City of Gloucester will have to draw up a management program which must include:

- a) an identification of the boundaries of the area within the coastal zone subject to said management program including identification of areas of interest within the program over which the city or town has jurisdiction ...along with definition of the authority of the city or town in the area under consideration;
- b) a definition of what shall constitute permissable land and water uses within the coastal zone so as to prevent such uses which have a direct, significant, and adverse effect on resources in said coastal zone;
- an inventory and designation of areas of particular concern to said city, town or region within the coastal zone;
- d) guidelines on priority of uses in particular areas, including specifically those of lowest priority;
- e) specific consideration of the several uses of said coastal zone, including renewable resources, non-remewable resources, transportation, culture or history, natural areas and habitats, housing and economic development, recreation, and public utilities;
- f) an identification of means by which the said city, town or region proposes to exert control over land and water uses within said coastal zone including a listing of relevant constitutional provisions, legislative enactments, regulations and judicial decisions;
- g) a description of the organizational structure proposed to implement such management program including, but not limited to, the responsibilities and inter-relationships of local governments and regional planning agencies.

The state may grant up to two-thirds of the money needed to develop this plan, but for not more than three years. This three year provision is in keeping with the time schedule of developing the overall management plan delineated in the federal Coastal Zone Act. The city or town must hold hearings as it develops the plan. These hearings must insure the participation of as many local interests and people as possible in order to meet the requirements of the federal mandate for peopleparticipation. The executive secretary of the Coastal Resources Council must find that the local plan is developing in a satisfactory way before each subsequent grant after the first grant may be awarded. Once the management program of a city or town has been finally approved by the Coastal Resources Council, an elaborate permit system will be in effect whereby any developer must secure a certification from the city or town that his project meets the requirements of the management program and that any activities carried out within the coastal zone pursuant to his project also comport with the stipulations of the management program.

As you can see, the City of Gloucester has a good amount of work in store for it. There is no way of escaping the fact that a whole new era is upon us. From now on virtually every major decision about Gloucester's future development must be made within the context of the new federal and state schemes. Some may view this situation with great alarm. I suggest that we look upon it as a great and unprecedented opportunity. Gloucester has the chance to be in the forefront of this new era. Before a decade has passed probably the whole of the United States will be subject to the Federal Land Use Plan and its concommitant regulations. The Coastal Zone Management Plan is the first step on this path. Gloucester, therefore, has the chance to lead the way for cities and towns across the whole length and breadth of the country. Gloucester has the chance to become a model for the future while at the same time taking steps to preserve its heritage from the past. Let us look at some steps which can be taken.

Massachusetts and Gloucester have already taken a number of steps towards the direction pointed out in the new coastal acts. Let us briefly review some of these.

In 1957 the Massachusetts legislature passed the Conservation Commission Act of 1957. This act enabled and encouraged Massachusetts cities and towns to set up local Conservation Commissions. These local commissions were enabled to acquire lands for conservation purposes and to set up suitable outdoor facilities to care for these designated lands (Conservation Commission Act of 1957, Mass. Gen. Laws).

By the terms of the Massachusetts Self-Help Act of 1960 the Commissioner of Natural Resources was authorized to reimburse the local conservation commissions

for up to fifty percent of the funds which they spent in acquiring and equiping lands which were designated for conservation according to the terms of the 1957 Act (Massachusetts Self-Help Act of 1960, Mass. Gen. Laws).

The Jones Act of 1963 regulated the removal, filling, and dredging of any bank, flat, marsh, meadow or swamp bordering on the coastal waters (Jones Act of 1963, Mass. Gen. Laws). Anyone desiring to so remove, fill or dredge must first notify the town or city authorities, the state department of public works and the department of marine fisheries. A hearing on the matter must be held and appropriate conditions may be imposed on the project in order to safeguard fish and game.

The Coastal Wetlands Protection Act of 1965 gives the Commissioner of Natural Resources the power to regulate any and all "alterations" of the coastal lands consistent with the "public safety, health, and welfare". (Coastal Wetlands Protection Act of 1965, Mass. Gen. Laws). The coastal lands are all areas subject to tidal action or coastal zone flowage and contiguous land areas which the Commissioner feels must be reasonably included. Before an order goes into effect a public hearing must be held in the affected municipality and all affected landowners must be notified. If, by the superior court proceeding outlined in the act, the order be deemed an unconstitutional taking, the Commissioner may take the land by eminent domain or may take a lesser fee therein.

1965 also saw the passage of the Hatch Act (The Hatch Act, Mass. Gen. Laws). This Act is similar in scope to the Jones Act of 1963 except that it provides for the regulation of all wetlands bordering upon inland waters (with some exceptions). It also gives a prominent role in such regulation to the local conservation commissions.

The Inlands Wetlands Protection Act of 1968 goes further (Inland Wetlands Protection Act of 1965, Mass. Gen. Laws). It is very similar in scope to the Coastal Wetlands Protection Act of 1965. The Commissioner of Natural Resources in conjunction with his board and with the town and city governments may regulate all alterations of most inland wetlands. Provision is made for local hearings, for an appeal procedure, and for takings by eminent domain.

Finally, in July of 1972 the Massachusetts legislature enacted a new Section

40 of Chapter 131 thus striking out the Hatch Act. At the same time the Jones Act was repealed. The new act is a merger of the two previous permit acts so that both inland and coastal wetlands are now regulated according to the one new permit procedure.

A person desiring to alter any wetland must now file written notice of such intention with the local conservation commission or if none exists with the town or city officials at least sixty days in advance. Next he must obtain all local variances, permits and approvals. Then notice must be sent to the state departments of Natural Resources and Public Works. The Department of Natural Resources designates a file number and sends back notice thereof. The conservation commission (or town or city officials) then must hold a hearing within twenty-one days and, within twenty-one days after the hearing, must issue conditions with respect to the alteration if it feels that these are necessary for conservation, anti-pollution, water supply, fisheries, flood control or like purposes. Within twenty-eight days thereafter any person aggrieved, or any abutter, or any ten residents of the city or town may request the Department of Natural Resources to review the decision. The Commissioner of Natural Resources may do the same of his own initiative. Any person aggrieved by a subsequent order of the department may appeal to the courts. Any court of equity may enjoin a violation of the act upon petition of the Attorney General, the Commissioner of Natural Resources, a city or town, an owner or occupant of affected property, or ten residents of the commonwealth.

Now that we have explored the state legislation in this area we turn next to the City of Gloucester. What has been done in Gloucester up until now, and where is Gloucester at the present time?

The State Commissioner of Natural Resources has already completed an inventory of the marine resources in Gloucester.

The City of Gloucester has had a Conservation Commission in operation for about ten years now. The Conservation Commission is currently chaired by Dr. Paul Kenyon. Dr. Kenyon reports that the major project of the commission at the present time is the acquisition of some 374 acres in the Dogtown Watershed area.

Dr. Kenyon also reports that much more could be done were it not for the dearth of funds coming from the Department of Housing and Urban Development and from the Bureau of Recreation at the present time (conversation with Dr. Kenyon, April, 1973).

The state Department of Natural Resources has also been active in Gloucester in efforts to implement the Coastal Wetlands Protection Act of 1965. On Tanuary 12, 1970 the Department held a public hearing in Gloucester City Hall for the purpose of placing 1,000 acres of saltmarsh in Gloucester under the special protection of the wetlands permit system. Those testifying at the hearing in favor of the proposal included: Mr. George Sprague, Director of the Division of Conservation, Department of Natural Resources; the Mayor of Gloucester; the Conservation Commission of Gloucester; Senator William Saltonstall; State Representative David Harrison; Mr. Arthur Blandin, Division of Fisheries and Game, Department of Natural Resources; Mr. Charles Kennedy, Division of Water Resources, Department of Natural Resources; Mr. Tohn Pierce of the Essex County Greenbelt Association; Mrs. Chandler Robbins of the Gloucester Garden Council; and, Mr. Gaspar Frontiera of the Cape Ann Sportsmens' Club. There was no opposition to the proposal.

Unfortunately, as of the present time, over three years later, these 1,000 acres remain outside of the protection of the wetlands permit system. Attached as appendix III-b is a copy of the wetlands protection order which was made up specifically for Gloucester in 1969. That order has never been signed or implemented, apparently due to unexplained "red tape" in the Department of Natural Resources (Records of the Jan. 1970 hearing on file in the Department of Natural Resources).

The City of Gloucester has also been active in the area of history and culture. The Gloucester Historical Commission, whose present chairman is Mr. Julian Hatch, has prepared and submitted approximately one hundred proposals to the Massachusetts Historical Commission (Records of the Massachusetts Historical Commission). The state commission, in turn, has submitted several of these proposals to the Department of the Interior in Washington for listing on the

National Register. So far only one building has been approved for listing, the Fitzhugh Lane House in the Harbor Loop, home of America's first landscape painter of renown. Gloucester City Hall seems most likely to be the second building approved. The proposal is in Washington now and hopefully will be acted upon soon. The recent opinion survey initiated and tabulated by our research group shows that the overwhelming sentiment in Gloucester among both young and old is for the restoration of the City Hall as just such an historical landmark. Other proposals which have been submitted to the Massachusetts Historical Commission by the Gloucester Historical Commission include the following:

- 1) Sargent-Langsford House, 1750
- 2) Thomas Wise House, 1705
- 3) Allen Farm, 1838

- 4) Babson Homestead, c.1738
- 5) White-Ellery House, 1704
- 6) Meeting House Green, Grant Circle
- 7) Ancient Burying Ground, 1633
- 8) Younger House, 1780
- 9) Blackburn Building, 1900
- 10) Captain Somes House, 1770
- 11) Gilbert Home, 1760
- 12) Calvary Chapel, 1795
- 13) Gorton Corporation Building
- 14) The Moose Home, c.1800
- 15) Open Church Foundation, 1840
- 16) Lee Apartments, 1760
- 17) Puritan House Hotel, 1810
- 18) Professional Offices at 19 Pleasant St., 1842
- 19) Our Lady of Good Voyage Church, 1915
- 20) The YMCA, 1904
- 21) Universalist Church, 1806
- 22) The Legion Memorial (First Town Hall), 1850
- 23) Elias Lavis Museum, 1804
- 24) Stores at 29 Main St. and nearby
- 25) Sawyer Free Library, 1884, 1764
- 26) The Thrift Shop, 1756
- 27) Civic Center- Historical Area Heritage Area, 1738
- 28) Stage Fort Park, 1623
- 29) Bray Street Park
- 30) Annisquam Village Church, 1830
- 31) Shakespeare House, 1600s
- 32) Laneville Congregational Church, 1828, 1853
- Some 62 other private homes dating from 1700 to 1900.

Probably many more of these historic and cultural treasures would be on the National Register were more funds available for this purpose (Conversation with personnel at Massachusetts Historical Commission, April, 1973).

Another area of concern in Gloucester has been that of water pollution. On April 14, 1967 the Massachusetts Water Resources Commission evaluated the water around Gloucester. The outer harbor was given the ratings of SA and SB, thus permitting bathing, certain shell fisheries and water sports. The inner harbor was not so fortunate. It received a SC rating. Only boating and fishing were allowed because of the dumping of raw sewage into the harbor. On July 12, 1967 the Commission ordered the City to cease dumping such sewage into the harbor by April 1972. In the Fall of 1968 the Gloucester Housing Department was told to supervise some 22 harborside businesses in efforts to alleviate pollution by these businesses. The Massachusetts Water Resources Commission at the same time undertook to supervise some 12 other businesses including the 10 largest polluters. Unfortunately, in 1973, even though a new sewage treatment plant has been built in Gloucester, the citizens have voiced strong concern in a research questionnaire completed in March 1973 about the continued pollution and odor in the harbor area.
PROBLEM AREAS AND RECOMMENDATIONS



Community Values

Before examining the problem areas of Gloucester's economy, it is important to take note of the community attitudes toward planning and development. This study is designed to provide a data base and recommendations drawn from that base, but ultimately the decisions and choices for the future of Gloucester will be made by her residents.

In order to get a feel for the values and opinions residents hold concerning Gloucester's future, two questionnaires were developed in March 1973. Through the cooperation of the Gloucester Times an adult questionnaire was presented to a representative cross-section of the populace.

Another was developed for high school students and was presented in the junior and senior social science classes. The rationale for a student survey was to determine the views of the populace who will be decision makers in about five years. Questions directed to this age group will, in part, help determine the manpower potential for carrying out a master development plan.

A total of 521 students and 287 adults responded to the questionnaires. The Community Values Survey and Statistical Analysis are found in Appendix IIa. The responses to each questionnaire will be dealt with separately, examining first the adult populace.

6.1 Adult Populace

6.1.1 <u>Heritage</u>

Based on the questions of our survey, a majority of the adult populace (53%) regard Gloucester's seafaring tradition as highly important to the city and 61% felt it to be equally important to the future of the city.

6.1.2 Fishing Industry

If municipal funds were to be spent to attract new industry to Gloucester, 76% of the respondants feel it should be used to attract fish related business. However, 29% of the people feel fresh fish industry should be expanded and 16%

favor expansion of the frozen fish industry. A further indication of the community's support of the fresh fish industry was their response to a question on the nature of the waterfront. There is still some unused space along the waterfront available for development and 29% favored more facilities for fishing boats as opposed to 13% favoring more facilities for frozen fish processing.

When specifically asked to choose between another fish processing plant and a fresh fish market on the waterfront, 79% favored the latter.

6.1.3 Non-Fishing Related Industry

It has been determined that the majority of respondants favor attracting new industry to Gloucester. A total of 61% want to see tax money spent to this end and, as has been discussed, the majority favors fresh fishing industry. Manufacturing is the second most desirable industrial activity favored. It should be noted that non-fishing related industry is more desirable to the community than expansion of frozen fish processing.

INDUSTRIAL EXPANSION - RANKED BY DESIRABILITY

Fresh Fish	Manufacturing	Frozen Fish	Tourism
29%	23%	16%	16%

When asked to choose between another industrial park and a low housing project, 55% of the people preferred the industrial park. Obviously the nature of some of the questions limits the validity of the questionnaire as an accurate reflection of the desires of the community, but it does represent a healthy indication of the direction of public desire.

6.1.4 Tourism

At this point, tourism appears to be a thorny issue with the community. In terms of resident population, 64% of the respondants feel Gloucester is the right size. In terms of tourism 45% feel it is at an optimum level, and 44% feel it should be encouraged. This split in response will be analyzed in section 7.3. Tourism ranked fourth of six choices for favored industrial expansion. When given specific choices, building more hotels was disfavored. Only 26% of the respondants favor more hotels as opposed to 74% favoring more public beaches. When given

the choice of an artist colony or a new hotel at Rocky Neck, 78% of the people chose the artist colony. Expansion of tourist facilities ranked third choice for waterfront development.

These responses indicate a need for closer examination of the meaning of tourism to the community and this will be treated more thoroughly in section 7.3.

6.1.5 Land Use

The results of the Community Values Survey shows Gloucestermen to be firm conservationists. Aesthetically, the majority of people feel that the scenic rocky coast, marshlands, protected harbor, undeveloped lands, and beaches are most important to the character of Gloucester. Although 68% of the respondants feel that housing is inadequate, when asked whether the marshlands should be filled for housing or made into a wildlife preserve, 92% favored the preserve. Accordingly, when asked if Fort Point should be used for home building or for a park, 76% favored park use.

If taxes were to increase, residents favored spending it on parks and recreation (25%). In the area of waterfront development, creation of "green space", i.e. walkways, etc, was most favored (38%).

Generally it can be said that the people of Gloucester are aware of their valuable land resources and do not want to see them used haphazardly for development. This is not to say that development is viewed entirely negatively; rather, it is an indication that such development should be properly planned and located on the land most suitable for such purposes. The unique land areas of the town are areas which the people feel should be preserved for the benefit of all.

The majority of respondants (64%) consider Gloucester to be the right size but with inadequate housing. The development sought by the citizenry is not for expansion but for adequate maintenance of the existing population. Private housing is desired by 42% of the respondants, 46% want more subsidized low cost housing, and only 12% want more multistory apartments.

In addition to her seafaring tradition, residents prefer to retain a historical air about Gloucester rather than build a new image. It is preferred that City

Hall be restored as a historical landmark (89% favoring) rather than have a new building erected. They would also prefer to see the stores on Main Street rebuilt and resotred (83% favoring) rather than have a new shopping center built.

6.2 Student Populace

The student questionnaire was not as detailed as the adult version. Questions were geared to tap overall student opinion of the environment in which they live. Questions were also asked concerning factors affecting whether or not this group will remain in Gloucester during adult years.

6.2.1 Land Resources

A number of questions in the student survey were similar to those used in the adult questionnaire. The results indicate that people of high school age have values comparable to those found in the adult population. They have a very high regard for the town's land resources and are concerned about the environment. Written comments on many of the completed surveys indicate that they are worried about problems of pollution in the area's waters, promoting harbor clean up. The majority attach great importance to the beaches, the coastline, the harbor and the open land areas of Gloucester. They recognize the value of the marshes, with 71% preferring a wildlife preserve there rather than more housing on land fill. In a question asking what should be done with unused areas of the harbor, 45% favored more "green space". Also they indicated that activities which benefit the community on a year round basis are more desirable than those aimed at summer tourist trade alone. In the question proposing an artist's colony or a hotel at Rocky Neck, 64% favored the colony. Responding similarly to the adults, 89% of the students wanted to see more public beaches instead of more hotels and tourist accomodations.

Written responses also indicate that the young people of Gloucester are aware of the history and seafaring traditions of the town. One question asked them to write a description of the town for someone their age who had never seen Gloucester. Many of the answers mentioned its relation to the sea and spoke favorably of the natural setting. The only recurring negative comment was that there are not enough youth-oriented activities, especially during the school year.

One of the questions asked for an appraisal of a series of conditions in Gloucester, conditions such as the level of pollution, the adequacy of housing, the availability of transportation, medical facilities, shopping areas, and others. The majority of responses indicate that the high school students feel Gloucester is "medium" with respect to most of these variables. This was a response pattern to be expected of the students'age group; they don't perceive their town as especially good or bad, rather it's about average. However, there was an area of exception. In regard to post-high school educational opportunities, 53% responded that Gloucester ranks poorly; 88% felt this factor was of at least some importance to them in choosing a place where they might like to live. Further, 61% felt that the range of job opportunities available locally is limited. A full 98% said that employment prospects were of some importance in deciding where to live. This provides a partial reason why young adults might leave the area after graduation from high school.

6.2.2 Educational Intentions

We asked the students about their post-high school educational intentions and found that 40% intend to go on to a four year college. An additional 33% want to go to a two year college or trade school. Only 27% said they intend to stop school after graduation. From these responses it can be inferred that one of the reasons why student-age people leave the area is to continue their schooling. However, specific questions were asked about the reasons for staying in Gloucester or leaving, and the results indicate that Gloucester doesn't have much to offer in the way of a future for its graduating students. 79% said that they would like to settle within the Boston metropolitan area, especially in Gloucester and the Cape Anne region. The reasons why they might stay show that 84% have some sense of attachment to Gloucester, through family or friends or because they simply enjoy the area. However, when asked why they might leave, 51% indicated that there are better job opportunities elsewhere and 30% said they see no future in Gloucester.

Thus, it appears that the lack of future opportunities is the main reason why young people tend to leave Gloucester after high school even though they generally like the area and would prefer to settle locally. This is significant to development

in Gloucester because the city must not only cope with the problems of the present, but must also plan for its future. Apparently one area which needs improvement is facilities for higher education, especially trade schools. Also the improvement of the local economy and the creation of better job opportunities is important.

Data Evaluation and Recommendations

At this point Gloucester, as it exists today, has been presented. Industry, tourism, transportation, government structure, federal laws affecting the city, and public opinion have been collected into a data base. Before we can begin to make recommendations for the future development of the city, we must evaluate the problem areas in each sector of the city's economy and mesh these parts into the interconnected whole which gives the city life.

7.1 Fishing Industry

7.1.1 Regional Competition and Interplay

Regional competition has been traditionally almost non-existent since most New England fishing ports seemed to "specialize" in one or two species in which they surpassed everyone else. In recent years Gloucester, in particular, has divided its efforts over a variety of species, and the picture has started to change. It might be concluded from the decline and/or instability of landings at other ports by volume and value, that for survival, everyone will be forced to diversify more. New Bedford is at present experimenting with ocean perch. It is clear even now that regional competition is already gathering momentum.

There is significant interplay among the ports. For many reasons, chiefly economic, appreciable volumes of fish are landed in some ports by vessels from other ports. Thus in 1972, Gloucester Vessels landed \$1 million worth of fish (20% of Boston Total) at Boston. Since 1970,fish has been trucked to the Boston Fish Exchange from other Massachusetts ports (including Gloucester) and from as far away as Canada. It is also a known fact that much of the landings at Newport, R.I. are from vessels from other ports.

There are also parallel processing industries developing in the region (National Marine Fisheries Service). For example, shrimp is being processed in Rockland; in fact some Gloucester shrimp has been sent there for processing. Also, in 1970 Gloucester started processing herring for export to Europe; Portland followed in 1971. Obviously competition is growing and must be planned for.

7.1.2 Foreign Competition

Foreign competition has been a major factor in the decline of the New England fresh fishing industry, by reducing her share of the fish stocks around her coasts and invading her domestic market.

The effect of imports depends on domestic need for the species concerned. As explained earlier, U.S. ex-vessel prices are generally much higher than foreign ones. This tends to attract semi-processed fresh fish, since by the Nicholson Act, completely raw foreign catches cannot be directly landed here. On the other hand, the U.S. lands about 300-400 million pounds of groundfish annually but consumes 1500 million pounds, hence the balance has to be imported (NMFS, "Fisheries of

the United States: Current Fishery Statistics"). In 1972 the average volume (considering processing weight loss) of imported fresh haddock and cod fillets ran at about twice the Gloucester landings of these species (Brown, 1973). The monthly trend showed a parallel with New England landings suggesting elements of direct competition and deliberate importation to stabilize supply.

The herring processing industry in Gloucester depends much on imports to augment local landings. In this case imports contribute to job stability in the industry.

However, imports of species of interest to New England tend to lower prices and hurt the domestic fleet. An outstanding example of this was in 1970 when domestic processors of haddock and greenland whiting had to cut their prices in an attempt to fare better against the foreign importers. But the importers also cut their prices, forcing the domestic processors to more or less give up (NMFS). Accordingly, production was down 32% the next year.

However, sometimes the oversupply also hurts the suppliers.

Frozen Fish

As the U.S. is almost totally dependent on foreign supply in this sector, no foreign competition of the fresh fish kind exists. The import of frozen fish blocks was 355 million pounds in 1972, having increased at roughly 40 million pounds per year in the past few years (National Marine Fisheries Service). Not only does the U.S. need the imports, but the major suppliers (Norway, Iceland, Canada,...)

also have to sell their enormous excesses. However, other markets have been in competition for these products, and with probable exception of Frionor of New Bedford (a Norwegian concern supplied by the home organization) no New England frozen fish processor can be too certain as to steadiness of supply or prices. Future developments here will naturally concern Gloucester as a major frozen fish processor.

7.1.3 <u>Interpretation of Findings with Respect to the Future</u> International Regulations

Coastal Rights Legislation

As a major factor that determines resources available to be fished and, indirectly, those available for import, these (coastal rights) regulations are of importance to every fishing interest. Disagreement has been notable in the past as to who should have what, and in fact led to the 1958 U.N. Law of the Sea Conference. The next conference scheduled has the task to settle this and the coastal political jurisdiction questions for all nations. Of all the diverse interests and ideas involved, the two most relevant for the fishing industry are the 200-mile resource limit idea and the "Coastal Species Approach" idea. By the former a coastal nation would own the resources in two hundred miles of the adjoining sea, whereas by the latter she would largely own the species local to her agreed fishing limit, with quotas fixed for all considering their historical catch records. Political considerations are inseparable from the resource question, and the U.S. has officially favored the second idea. However, the U.S. Fishing Industry pressure is for the first idea although it would still be an advantage if only the second was secured.

The U.S., Canada, Norway, Iceland and some others stand to gain much from having a 200-mile limit while Russia, Poland, Japan, the U.K. and others stand to lose much. The conference outcome is therefore uncertain.

If the 200-mile limit is granted, the rulings are expected to be effective by 1975. It will also take time to replenish the already-overfished grounds, say until 1978. When the benefits come, the domestic fleet will have more resources if by then it is still capable of taking this advantage. Fish imports are also expected to increase as the major suppliers stand to gain, although there will be more markets for them elsewhere. Perhaps more domestic catch will even then be utilized in the frozen fish trade. In any case Gloucester, as an active fishing port and major frozen fish processor, stands to gain.

If the species Approach is adopted, Gloucester also stands to gain although not as much.

If neither is adopted, the U.S. Fishing Industry just has to continue its fight to thrive in the face of changing times and the competition. Hence the attitude should be to work to secure these attractive rulings but to optimize operations with what the industry now has got and what it might expect should the rulings not be made.

Trade Agreements

These also affect critically the welfare of the industry and are again inseparable from international politics. In practice, maintaining the interests of the domestic industry involves continuing activity at successive negotiations. For example, concern has been feit that at the next GATT meeting some member countries will press for annulment of U.S. tariffs on cooked fish products. This, if granted, will hurt the domestic processing industry, and opposition has accordingly been mounted.

Government Aid

It seems that direct government subsidies to the industry are dwindling, perhaps reflecting general official attitudes to such grants. There could be two sides to such aids. For example, Japan last year lost on subsidy to her shipbuilding industry, but Canada has used various forms of subsidies to advantage with respect to her fishing industry. The U.S. situation is not completely parallel since Canada's economy depends much more on the fishing industry than does the U.S. economy.

There are, however, two specific areas where government help is vital. These are provisions of adequate and continuing technological aid, and the provisions of a legal framework conducive to real progress of the industry. There has been much pressure to get the Nicholson Act revised. Some would even have processed fish imports restricted, but in the light of retalitory measures common in international

trade and politics, caution must be exercised.

Direction of efforts towards securing technological and legal assistance from the government is probably the most realistic and beneficial for the industry.

Operating Methods

Perhaps more important than external aid and imposed limitations on the industry is the optimal use of whatever now exists. Some facets of the operating methods are herein examined.

Species Diversification

The success of Gloucester's shrimp and herring fisheries has confirmed the increasing need for diversification. Many factors determine the success of new fisheries. Steady supply, markets for by-products (e.g. the ready market for fishmeal from Gloucester's herring processing), stable market, (e.g. Gloucester shrimp prices sagged in 1970 because of oversupply), are important 'National Marine Fisheries Service). Still as all New England ports are now feeling the pinch of resourse diminution, it is conceivable that eventually each port would be involved in almost all the available fisheries. Canada in 1968-1969 proved commercial northern shrimp fishery feasible in the Maritime Coast, but to date no commercial Canadian fishery exists in this sector, yet potential competition with the Gloucester industry exists (NMFS). Considering existing and anticipated regional competition, it appears that species diversification is only at its beginning now.

Fishing Vessels

Observation reveals that quite a large number of New England vessels are old and not close matches for foreign vessels fishing the same grounds. There are problems of high and rising insurance costs, the Differential Construction Subsidy has been cancelled, and labor, maintenance, and other costs are high. Vessel owners appear to have the most problems, some operating at a loss (Noetzel, 1972). Actions to alleviate this situation are increased productivity, allowance to purchase foreign vessels, reduction of import dues on fishing gear, lower insurance premiums, etc. Some of the above are in proposed legislation (Gloucester Fisheries Commission, April 23, 1972).

A few years ago it was thought that one solution was the immediate introduction of large, factory-type vessels. Of the two that came into service, one is now tied up and the other is operating on the West Coast of the U.S. These ventures were apparently unprofitable. Basically, due to scarcity of resources, these vessels could not be used to capacity. However, if favorable coastal rights legislation is passed and/or if present midwater trawling experiments give substantial yields, then the time may be ripe for large vessels.

The Gloucester shrimp fishery has benefited from the standard vessel design employed, as repair shops need smaller tool and equipment inventories, and savings have been put at up to 30% (J. Ackert, New England Fisheries Association). Movement towards cooperative operations of groundfish vessels will be beneficial under present circumstances. Methods employed for the great diversity of species fished makes an absolute optimum vessel design not feasible, but if and when new vessels are built the greatest possible optimization should be considered.

<u>Training</u>

Gloucester's fishing labor has been largely sustained by waves of immigrant groups. The need has long been recognized and suitable legislation was secured around 1963 to facilitate immigration for the sole purpose of fishing. In the past two years about two hundred Sicilian fishermen have joined the Gloucester fishing fleet (Kolbe, 1973). That Gloucester youth have little interest in a fishing career is illustrated by many instances. Past experience with on-the-job training programs for fishermen (since discontinued) confirm the general reluctance to go to sea. A Fishery Vocational course was started at the Gloucester High School some time ago, but was discontinued due to lack of student interest. The responses of the Gloucester High School sample to our questionnaire (March 1973) reveal that this attitude has not changed. 4% indicated first preference for fresh fish employment and only 1% frozen fish.

Students indicated that employment on land was more attractive.

A change in this situation can probably be effected only through more education of the youth, designed particularly to convince them of the appeals of the industry. The processing sector is not without its training problems also. Currently the need for training programs for fishcutters is being felt keenly.

More effort towards organizing sustained training programs will benefit all parts of the industry. The U.S. Department of Labor through its Manpower Development Program will be of help. New Bedford is known to have taken the most advantage of this program.

The Market

Local market: The fish consumption per capita of the U.S. has been fairly constant for about fifty years. It has been increasing slightly recently. Table 7-11 shows some part of the trend. Low overall figures (compare (1967) Norway 70.0; U.K. 25.7) indicate possible potential. It also appears that direct fresh fish (besides shellfish) per capita consumption has been falling, with possible constancy or slight increase over the past two years. Large and increasing volumes of frozen cod, pollock, halibut, and haddock imported annually show that the American consumer taste has not changed much even though these species are no longer caught by the domestic fleet in former quantities. Hence a clear task exists to convince the American consumer that species caught by the domestic fleet are as tasty or more so than their traditional taste dictates. This is important for Gloucester as a leader in diversification. However, promotion of foreign trade in underutilized species will bring more immediate benefit to the local economy.

Foreign Market: Gloucester's drive for the foreign market has been beneficial, with the leaders of industry manifesting consciousness of the need to exploit foreign markets for available species currently underutilized in the U.S. (Gloucester Fisheries Commission, 1973). Europe and Japan seem to be the main targets of this effort, so far. More attention to the developing countries and landlocked countries that can absorb fish protein will also be rewarded, since species diversification warrants market diversification for stable production. The outlook in this field is bright since many foreign markets already exist for underutilized species found off New England.

Fish Landing Sales: It is perhaps of more economic importance to Gloucester as a major fishing port, with high unemployment, than to other New England ports, to

Table 7-1

U.S. Fish Consumption (pounds/capita)

	1950	1955	1960	1965	1970	1971	1972
All Products	11.8	10.5	10.3	10.9	11.8	11.4	р 12.2
Fillets & Steaks			1.64	1.68	2,19	2.06	
Sticks & Portions			.63	1.12	1.73	1.63	
Shrimp			1.08	1.24	1.44	I.40	1.4 ^p
			ů.	= prellmir	ıary		

Source: NOAA N.M.F.S., "Fisheries of the United States: Current Fishery Statistics", various issues. attract as many fresh fish landings as possible. Fresh fish processors should also be attracted. Table 7-2 gives an idea of the appreciation in value of fish at various stages of processing. Presently substantial quantities of fish caught by Gloucester vessels are landed at other ports (see Chapter 2). The fresh fish sales method is an important factor in attracting landings. In this respect, an auction system for fresh fish would attract more landings in Gloucester, it seems from a comparison of New England ports, landings and ex-vessel prices. The Fishermen's Union already has the empowering clause in their contract now to start an auction whenever they want, although inquiries revealed that they are split on the point. A fish auction for whiting was attempted in 1968 after the Union protested low exvessel prices. The price rose about 1/2¢ per pound (National Marine Fisheries Service).

Occupational Diversification

Gloucester, by natural setting, is endowed with many resources. Sometimes additional benefits may be derived from jointly exploiting these resources. The tourist trade of Gloucester has had more volume to it than value to date. One scheme whereby the tourists might spend more and the fishermen benefit more, even on a part-time basis, is to arrange day fishing trips for tourists. The question of insurance will have to be worked out but the success of this venture at some foreign ports shows it can be done.

7.2 Industrial Section - Non-Fishing

It has been established that the industrial parks are an economic and environmental plus for the city. However, they have not yet proven if they can successfully attract outside businesses to the area. To continue to maximize the economic benefits derived from the parks, the labor force must be upgraded. For existing firms to grow and for new clean industry to be attracted to the area, a skilled labor force must be available. Even if the surrounding towns can supply the skilled personnel, Gloucester will lose out on the salaries generated for non-Gloucester residents.

A quick conclusion could be drawn to educate, train, and upgrade the existing unemployed population of the city, but this is not an optimum solution. Gloucester's

Table 7-2

Sample Prices (φ/lb .) of Flshery Products (Gloucester, Boston, New Bedford), 1971

	Average ex-vessel (Gloucester)	Imported Blocks (primary wholesale)	Fillets imported dome	stlc i	Cooked Fis mported do	sh Sticks omestic	Raw Bread imported (ed Portions dome stic
Cod	13.5	43	45	ı	ł	61	1	53
Haddock	32.5	44	62		1	63	1	58
Ocean Perch	1 5.0	39	30 (s	kin or	-			
Pollock	7.8	32	32		ł	44	1	43

Source: National Marine Fisheries Service "New England Area Fisheries - Annual Summaries"., various editions. unskilled unemployed do not wish to work year round as long as they can trade jobs among themselves and collect unemployment benefits during interim periods.

The fish processing industry has tried training programs which have met with minimal success. It is an unattractive industry to many and the working conditions are unpleasant.

The Addison Gilbert Hospital provides practical nurse training and technician training but most of the enrollees come from other communities. The question should be investigated as to why local talent is not motivated to take advantage of the program.

7.2.1 <u>Skills Mix</u>

Gloucester should attempt to prevent an increase in her unemployment rate above its present level and attempt to upgrade the skill level of the labor force. One way to accomplish this is to discourage immigration of underskilled people.

A healthy skills mix will result with the attraction of new industry to the area. These firms will bring with them some highly skilled personnel who will relocate here and will attract those with skills to move to Gloucester. At this juncture, Gloucester needs to decide what the optimum gain is in the area of housing.

7.2.2 Family Housing

Apparently the city finds Federally sponsored low-cost housing attractive because the people say nothing against it. However, this type of housing attracts unskilled and semiskilled people. By providing more family housing areas, Gloucester could gain the following:

- 1) Taxes gained from new industry relocating here
- Property taxes from skilled population purchasing family dwellings
- 3) Higher payroll and increased spending in Gloucester.

At present, Gloucester's low-cost housing accomodates approximately 1100 persons (Interview Study of Housing Authority). In addition, there are about 200 vacant year round housing units available for the low rent of \$91 per month, as reported by the 1970 census (1970 Census Housing Characteristics'. Gloucester residents have voiced their desire for more single family dwellings rather than more low-cost housing. The long range gain for the city would be greater by halting more low cost housing. The initial cost of upgrading vacant housing and providing locations for new housing developments may not initially be wholly compensated in tax returns, at their present rate, but the long range gain will be greater in decreased unemployment, higher wage rates, etc.

In order to upgrade the skills mix of the labor force and optimize income from industry and housing, a closer look should be taken at Gloucester's property tax structure. At present property improvements are more heavily taxed than subsidized housing. This factor also attracts unskilled people to the area.

7.2.3 Industry and International Markets

In terms of type of industry to attract to Gloucester, it has been a consensus that clean industry is desired, industry with national or international markets, also. Another consideration should be the meshing of industry compatible with Gloucester's desire to maintain her seafaring air. Opportunities in the recreational boating business are a natural starting point for such an investigation.

The demand for outdoor recreation is growing at a rapid rate. In particular, the demand for pleasure boating activities has been estimated at 3.8% per year (U.S. Bureau of Outdoor Recreation, 1965). In 1970 the U.S. population went motor boating approximately 157 million times. By 1980 the number of motor boat outings is expected to have risen to 228 million. Recreational boating today is a big business marketing 3.15 billion dollars in 1968. In Gloucester the 1969 planning board's consultant prepared a report which stated that every marina or boat yard operator in Gloucester in his survey cited demand far exceeding the supply (Phil Herr, 1969). Present capacity for recreational boats in Gloucester is 1200. (Gloucester Times, June 23, 1973). Sailboating is also growing. Boatbuilding seems worth investigating as a logical and lucrative industry, in keeping with Gloucester's seafaring tradition.

7.2.4 Marine Activity Center

It is also recommended that development of a marine activity center be explored. The center would include facilities for boat mooring and launching, sport fishing, restaurant and lounge facilities grouped together. Another related grouping would

be boatbuilding and sales, also a servicing area. This particular proposal would fit in with the wishes of the community concerning harbor development, also with zoning proposals.

Though boatbuilding and servicing is directly related to tourism and a seasonal activity, it would provide stable, year round jobs. The city can take affirmative steps to encourage this type of industry by properly coordinated zoning for harbor use.

7.3 Retail Trade and Tourism

7.3.1 Tourist Survey

In order to learn what the tourist impact on Gloucester is, a tourist questionnaire was given to 450 visitors to Gloucester.

The questionnaire (see Appendix II-b) consisted of twelve questions administered on two days, 30 August and 1 September, 1973.

Our findings showed that most visitors to Gloucester are from New York (38%) with Massachusetts second (17%) and Connecticut third (8%). The largest parties are bus tours from New York and their only stops are at the Gloucester statue and one of the restaurants along the harbor.

The majority of visitors (65%) spend one day or less in Gloucester. Most often people are passing through on their way to Maine or Rockport. Of those who remain overnight, 60% stay in a hotel or motel; others with friends (17.0%), in campgrounds (15.4%), in guest houses (4.6%) or in rental cabins (3%).

Most visitors are couples with no children (36%). Other visitors include couples with one child (21.5%) and two children (24.5%).

The people who visit Gloucester come for several reasons. The majority (64%) visit for no special reason other than general siteseeing. Although most are influenced to visit Gloucester because of its historical heritage (63.5%) few know what is actually there. Comments made by visitors indicated they associated Gloucester with early America and fishing yet were somewhat surprised to see that the city "looks no different than my hometown". People also visit Gloucester spec-ifically to eat at one of the many seafood restaurants (11.3%). Visiting the

beaches (9.4%), shopping (7.5%), boating (3.8%) and visiting relatives (4.0%) are other reasons for their presence in Gloucester.

The amount of money spent in Gloucester by tourists is another area of concern. Since most people are passing through Gloucester little or no money is spent by them. Over 60% of the tourists felt they would not be spending any money in Gloucester.

Of the 450 people interviewed, only 24% felt they would spend anything on shopping for gifts, food, clothing, etc. The money spent on shopping can be described in the following amounts: less than 5 - 17%

\$5-6	36%
\$7-10	27%
more than \$10	20%

Similarly, only 24% of all the people traveling through Gloucester would spend money for lodging. The majority (56%) spend \$5-\$10 per person, per day for overnight accomodations.

The largest response made concerning money is for restaurants. Of the 450 responses, 168 (37%) felt they would spend money at a restaurant. Over 60% of the 168 felt they would not spend more than \$10 per person, per day.

In the area of boating and recreation sampling was not adequate to validate statements concerning visitors who arrive by private boat from elsewhere.

The last two questions of the questionnaire dealt with areas of dissatisfaction and areas of possible improvements to attract tourists for a longer stay or repeated visits. Four areas were often repeated:

- The lack of availability of campgrounds and camping facilities limits many people to one day visits since they must find a place to stay before nightfall.
- Many people are disturbed by the roadsigns within the city. The mixed variety and often hidden signs create confusion for Gloucester visitors.
- 3) Similarly, traffic congestion is another apparent problem to the tourist. Most visitors feel the heavy concentration of industry along the waterfront and on a main road adds to the problem of congested traffic.

 The polluted harbor and beach facilities is another area of discontent for visitors to Gloucester.

7.3.2 Retail Trade Survey

In September, 1973, through the cooperation of Mr. Neil Davis and the Cape Ann Chamber of Commerce, we were able to distribute questionnaires to retail store owners located in the center of town (See Appendix II-C). The purpose was to determine how tourism affects retail businesses and to find out what Gloucester might do to benefit the shop and store owners in the center of town and near the harbor.

Questionnaires were also distributed on Rocky Neck and along East Gloucester. These were specifically given to art galleries which are directly affected by tourists.

It was found that all the retail businesses in the center of town who responded to the questionnaire were open twelve months of the year. The majority of stores is small, with 65% having less than five employees at any one time during the year. When asked what months, if any, were peak months, August, November and December were indicated. Different types of stores had different peak months but most appeared to do best in the summer and near the end of December.

Most sales were to local people (89%), with non-local people contributing little to the retailers' incomes. In most cases, non-local people contributed less than 10% to a store's yearly income. However, comments made on the questionnaires indicated that if tourism were increased, the retailer felt he would benefit directly or indirectly. When asked how the tourist trade could be increased, most commented that retaining the historical flavor of Gloucester was most important. Suggestions included restoring of old buildings rather than new construction. Several felt new construction in the downtown area is not in character with Gloucester.

The questionnaires given to art gallery owners in East Gloucester revealed obvious dependence on visitors to Gloucester. Almost all studios operate during the summer months only, and 80% receive 91% or better of their business from nonlocal people. When asked how Gloucester might improve tourism, answers were consistent: clean up the waterfront and harbor.

7.3.3 Concluding Statements and Recommendations

From the surveys, it is not difficult to recognize the detrimental effects tourists have upon Gloucester. Most visitors drive through Gloucester, parking for a short time to view the harbor or eat, and then continuing on their way to Rockport or Maine. Little money is spent in the downtown area and, except for the summer months, little is spent in East Gloucester and Rocky Neck.

Ways in which Gloucester may benefit more from the visiting tourists include:

 Harbor and downtown area to be more attractive to the resident and tourist alike. Retailers would gain from more trade with non-local people.

2) Controlling the flow of tourists through Gloucester. Limit use of streets in downtown area and waterfront to pedestrian use during peak summer days. A tourist will not buy if he remains in his car.

3) Using advertising media, the city should promote Gloucester during the Spring and Fall months in order to lengthen the tourist season to more than the three summer months.

4) The polluted harbor and beach facilities is another area of discontent for visitors to Gloucester.

7.4 Transportation

Rail freight service to Gloucester is a small percentage of the total freight traffic through the city, and is only significant for the fact that it does exist. Any expansion would depend on the needs of existing and future industries within the city. But the line is there if it is needed, and the railroads are always look-ing to attract customers.

7.4.1 Rail Service

The B & M passenger line is in a generally run down condition, the cars themselves are old and not kept up. They are also without air conditioning in the summer. Though the number of weekend passengers remains constant, the number of weekday passengers is on the decline.

Despite the shortcomings of its present condition, there seems to be great potential for expanded use of the "Gloucester Branch". This potential is in two areas, more commuter use and more tourist use.

The Massachusetts Transportation Planning Commission has predicted a 45% growth in transit travel, in the region, by 1990 (Massachusetts Boston Transportation Planning Review 1972). This would be accompanied by extended rapid transit lines and improvements in, and expansion of, commuter train lines, such as the B & M. So a very real possibility is that a sizeable community of commuters will develop in Gloucester. This could have numerous effects on the character and ambiance of Gloucester, and should be planned for, or planned against, but should not be ignored.

It was shown previously that tourists are willing to pay more than commuters, to ride the train to Gloucester. With a little imagination, more tourists could probably be convinced to ride the train. This could have the double benefit of reducing the tourist caused traffic jams that can be unbearable on summer weekends, and serve as a vehicle to induce more spending on the part of the tourist while in town.

Possible schemes for attracting more tourists to the railroad are myriad. One idea is to run an excursion deal which would include train tickets, meals, lodging and perhaps some kind of seafaring enterprise, like a trip on a fishing boat.

Another possibility, rather European in nature, would be to rent bicycles at the railroad station, and indeed, to set up a number of bike paths throughout the city. As it stands now, bicycles cannot even be taken on the train – and this is the year of the "energy crisis" and the "bike revival".

7.4.2 Roads and Highways

By far, Gloucester's worst problem in the area of transportation is automobile congestion. Traffic entering the city along Route 127A does not flow at an even rate when there is heavy boat traffic through the draw bridge. The worst congestion is created during peak season in the summer. The result is that an overabundance of cars enters the intersection for left turns at Rogers Street.

Major traffic flow to Rockport is thus siphoned along the waterfront, intermixing with tractor-trailer traffic to the fish processing plants.

The number of automobiles registered in Gloucester is growing and this, coupled with tourist traffic indicates continued and growing congestion problems but little planned road construction.

Shuttle Bus Service

Another recommendation is to install a shuttle bus at the rail station. It would have two routes, one through Main Street and down to the Gloucester Fisherman statue and back. The other would run from the station around Rocky Neck and on to Rockport, with a stop at the Good Harbor Beach.

The combination use of train and bus would appreciably reduce auto traffic along the waterfront and would bring revenue to the city in several ways:

- 1) shuttle fare
- 2) exposure to shops along Main Street
- 3) better circulation of tourists on Rocky Neck resulting in more spending there
- reduced auto congestion at Good Harbor Beach and institution of a walk-in fee to the beach
- 5) By offering shuttle service to Rockport, there is a greater potential for people to stop in Gloucester and spend some of their money before going on to Rockport. This results in money spent in Gloucester as well as the shuttle fare, rather than losing both as passengers bypass Gloucester to go straight to Rockport.

It is also recommended that a large parking lot be constructed at the end of Blackburn Circle with similar shuttle service from there. This would reduce the traffic congestion coming off Route 128 and create a pedestrian atmosphere on Cape Ann.

Taking care of Gloucester's auto traffic problem will directly relate to better use of the existing tourist resource without necessarily attracting increased numbers. Correcting the congestion problem will also restore to Gloucester a bit of her historical atmosphere by reducing noise and bringing the city into a relaxed pace. Her retail business district along Main Street would benefit, thus making possible grossly needed restoration and upgrading of facilities and enterprises.

Scheduling of Trucks

Without incurring any great expense partial solution to traffic congestion is possible through scheduling of trucks and tractor trailer rigs. Truck traffic along Rodgers Street could be limited to specific hours of the day or night, restricting truck traffic during peak congestion periods. It is strongly recommended that traffic engineering studies be initiated to determine possible routing alternatives and scheduling for through traffic.

This would tie in with the interrelationship of harbor traffic and trucking. The frozen fish processing plants dominating the waterfront must coordinate their scheduling to help alleviate the traffic tie-up on Rodgers Street.

7.4.3 Harbor Use and Shipping

Problem areas cited in harbor use include unrelated and sometimes incompatible uses as tourist oriented facilities adjoining industrial land uses. Much cannot be changed since industries and restaurants, cannot be moved readily, but harbor zoning can be instituted to keep the same mistake from continuing into the future.

Piers and Mooring

Existing piers are mostly wood decks on wood piles and over 30% are dilapidated or deficient in some way. Use of pier facilities is generally controlled by those providing fuel services to ships.

Docking facilities are inadequate for fresh fish boats and small boats. The Gloucester Fish Pier is not extensively used for fresh fish activities, in spite of the fact that Gloucester citizenry is in favor of a fresh fish market.

Zoning and Pollution

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Harbor water is polluted and has a blighting influence. Clean up of the harbor will enhance future uses. Harbor use ties in directly with the desired image of Gloucester. To enhance and restore her fishing heritage, harbor zoning could be instituted to designate specific areas for industrial use, for docking, for excursion boats and fresh fishing boats, etc. If pedestrian walkways are desired, a retail area might be planned for, i.e. fresh fish market. If this is desired, existing zoning must be much more specific, keeping areas separate. For example in the

fresh fishing industry only fresh fish related uses are permitted to be installed within that zoned area.

Waterfront

The varied uses and low profile of the waterfront has created a homogenized and somewhat uninteresting elevation of Gloucester from the water. Across Rogers Street the higher profile is an abrupt difference. More public spaces adjacent to the harbor and more rentable space on the waterfront could be made available if vertical spaces along the waterfront could be better utilized. The community values survey indicated a strong preference for more public "green" spaces on the waterfront. It also showed that most people would desire a fresh fish market on the waterfront. If higher elevated structures were constructed more space at street level could be allocated for public use and yet offer rentable space for commercial use.

Harbor Traffic

Conflicting traffic within the Inner Harbor has created some problems of circulation and berthing among the fresh fish trawlers, frozen fish vessels and pleasure craft. An objective would be to minimize interference and cross traffic afloat. These might be alleviated if development of the Inner Harbor were allowed to become commercial, restricting the development of more marinas for pleasure craft. Part of the moorings along Rocky Neck in Smith Cove should be reserved for tourists who arrive by boat and desire to shop or visit in Gloucester, using whatever shuttle system available to travel about the city. Marine services for pleasure craft should also be located in the same area allowing the visitor in transit to purchase fuel and maintain his craft. Restaurants and shops would be easily accessible and Gloucester would certainly benefit by providing the boat owner with a complete marina from which he may visit Gloucester by bicycle or shuttle bus and then return to an already serviced craft to continue his trip. By providing more appealing facilities for boat owners the congestion on the highways serving Gloucester might be reduced.

Ferry Service

Another method of reducing automobile traffic is to initiate excursions similar to the situation suggested for passenger train service in section 7.4.1, but to apply it to a ferry service which would originate in Boston and serve Gloucester and Rockport. Arriving either in Gloucester or Rockport, the visitor can tour Cape Ann by bicycle or by riding the shuttle bus service. In order to avoid harbor congestion the ferry should dock on the East Gloucester side of the harbor or perhaps along Rocky Neck. In Boston the ferry could dock in close proximity to allow easy use of the Mass transit system. The feasibility of such a project could be examined as one alternative to relieving growing traffic congestion.

Shipping

As Gloucester is becoming less diverse in the type of goods it imports and exports, it might be losing a potential source of income from import-export trading. Many ships arrive with block frozen fish to be cut and packaged yet leave empty or only partially filled. A study should be made to find what possibilities exist of exporting frozen meat or other frozen goods which would supplement Gloucester's income from its import trade.

Another possible method of increasing Gloucester's trade is to examine the possibilities of becoming an importer of oil or gas. This would provide another source of income without increasing traffic.

7.5 <u>Coastal Zone Management and City Government</u>

The federal Coastal Zone Act has already been presented so that citizens of Gloucester might understand the importance of delineating an overall management plan for Gloucester. In the light of the preceding data and analysis the following recommendations are suggested to the people and city government of Gloucester:

7.5.1 <u>Blue Ribbon Committee</u>

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The City of Gloucester should set up as soon as possible a blue ribbon committee with wide citizen participation to study the ramifications of the new Federal Coastal Zone Management Act and proposed state legislation such as the Saltonstall bill.

Following the report of the above committee, the City of Gloucester should set about complying with such acts to the fullest extent possible so that the people and city government of Gloucester will have the maximum amount of say in the future of the city.

7.5.2 Inventory of Resources

The City of Gloucester should begin as soon as possible to compile an inventory of its resources using the reports of the State Department of Natural Resources and of the Gloucester Conservation Commission and the Gloucester Historical Commission whenever these are helpful.

Once a listing of resources has been compiled, the City of Gloucester should set about constructing a set of development priorities, articulating all priorities from most to least important. These priorities should be communicated to the state governmental departments, both executive and legislative, so that Gloucester can assure itself of a real place in the planning of the coastal zone which is about to get underway.

The city and people of Gloucester should immediately make a concerted effort to find out why the Department of Natural Resources has taken three years since the public hearing of January 12, 1973 to issue its order placing the 1,000 acres of saltmarsh in Gloucester under state protection. The city and people of Gloucester should demand such an order as soon as possible.

7.5.3 Obtain funding

Since both the Gloucester Conservation Commission and the Gloucester Historical Commission have been stymied in their efforts to get moneys for Gloucester under their usual funding approaches to the federal government, the City of Gloucester should explore ways of getting funding for the activities of these commissions under the Federal Coastal Zone Management Act which has special provisions for ecological and historical/cultural resources in the coastal zone.

7.5.4 Anti-pollution Investigation

The City of Gloucester and its people should undertake an investigation to see whether the anti-pollution orders of the Massachusetts Water Resources Commission given in 1967 have been implemented by the Massachusetts Water Resources Commission itself and the Gloucester Housing Department. The investigation should also explore the following questions:

- a) Does the new water treatment plant need supplementation by another plant or by expansion of the new facility?
- b) Should other measures be taken to improve the water of the harbor?
- c) What additional measures are needed to save the increasingly polluted shellfish fisheries?

7.5.5 City Government

Finally, since the new Coastal Zone legislation means a drastic change in the way Gloucester must develop in the future, a blue ribbon committee with a wide participatory base should be set up to see whether the present form of city government structure should be modified so as to better serve the Gloucester of the future. The following should be examined:

1. Issuance of an official statement of <u>policy</u> by the city government concerning the future of Gloucester with respect to growth within the city is needed. This should include a stringent set of guidelines for use of such potent powers as the city council's "special permit".

2. Establishment of a formal means of <u>communication</u> between all agencies of the city government concerned with this growth policy. Interactive efforts of the decisions of one group upon those of another should be recognized and dealt with accordingly.

3. Expansion of the <u>planning</u> effort within the city should be taken more seriously. Such an effort will, of necessity, require the expansion of budgets for such groups as the Planning Board, Fisheries Commission and Tourist Commission.

The two surveys taken in March 1973 indicated that the desires and hopes of the residents of Gloucester were not reflected in the existing environment. This would indicate in order for a full-time planner to creatively reflect these desires he must be allowed to serve the public at large, not individual self-interested groups.

Proposal and Concluding Remarks

Using the foregoing data base and recommendations as background information, we now propose a way in which Gloucester might become more attractive to both residents and potential industries. Gloucester must recognize that a change in attitude regarding planning is in order. No longer can Gloucester take a passive stance; the community must become aggressive and more adept in its planning effort and in management of its available resources.

The data indicates two main areas in which Gloucester should concentrate its efforts: (1) solving Harbor Use Problems and (2) Solving the Transportation Problem. Transportation, in this case being defined in the broadest sense, is the transport of people and goods over the entire Cape Ann area.

8.1 <u>Solving Harbor Use Problems</u>

Since Gloucester desires to maintain its historical relationship to the sea and also improve its economic situation, the first step in making the city more attractive aesthetically and economically would be to improve the waterfront and Harbor situation.

8.1.1 <u>Cleanup of Inner Harbor</u>

The harbor has always been the focal point of a port city and Gloucester is no exception. By improving that focal point the entire city improves in quality for residents, visitors and industry alike. One of the first areas of effort should be in monitoring and controlling the sources of pollution for the Inner Harbor. The Inner Harbor, which is surrounded by land on three sides, cannot adequately clean itself by tidal action. No tidal action will clean all solid wastes which are dumped by residents, visitors, industry or by the city itself. Gloucester should first correct its own contribution to the harbor pollution, by improving the effluent that is pumped into the harbor, and then go about examining industry and residents for violations of pollution. Obviously, this is not a simple nor inexpensive task, but considering that Gloucester desires to be more attractive, the city must allocate funds for environmental improvement.

After complete and careful inventory of facilities, Gloucester should condemn and have all dilapidated buildings and piers destroyed and removed from the waterfront. No serious planning can be performed if potentially unsound or hazardous structures are allowed to remain.

Standards should be set and maintained for existing mooring and docking facilities. All facilities should be inspected regularly and thoroughly to insure the maintenance level specified by the city. Inspection would also include structures which are built out over the harbor, such as stores, restaurants and various indus-tries.

8.1.2 Non-marine Oriented Businesses

Many businesses along the waterfront have no need or use for the harbor. Some have located there because of the rent or leasing rates or historically used the harbor to receive their goods by boat. Gloucester should strive to develop the Inner Harbor with "water oriented" interests. "Water oriented" would have to be defined by the city, and might include any person or business who is dependent solely on waterfront location for reasons of economics or aesthetics. The city should prepare a program whereby it might exchange land in the industrial park or elsewhere for waterfront sites. It might lease land elsewhere with initially little or no rent to those businesses that are not contributing to the waterfront's intended purpose. Power of Eminent Domain is also an applicable tool in helping Gloucester achieve that end.

8.1.3 Marine Activity Center

Based upon the various surveys which were taken, a Marine Activity Center is proposed which would profitably aid in making Gloucester a more pleasant place to work and live. The center could be developed on an existing pier and in an existing structure or structures. Possible locations might be Fort Point, Harbor Cove or the State Pier.

The purpose of the Marine Activity Center would be to encourage "water oriented" businesses to locate there and to develop an environment which will attract tourists, revealing to them the fishing port of Gloucester, from an historical point of view, both past and present. Center facilities would include a fresh fish market, restaurants, tourist information center and small shops catering to visitor and resident alike. Also included would be the docking berth for a ferry which would operate between Gloucester and Boston. Room to berth other vessels such as sailing schooners and fishing trawlers might be provided as tourist attractions. Berthing for people arriving by boat should be incorporated in the same facility.

Tours of the harbor and all of Cape Ann could originate from this point.

The Inner Harbor would once again become the focal point of Gloucester and the Marine Activity Center would serve as the focal point of the harbor.

8.1.4 Frozen Fish and Other Industries

The frozen fish industry has helped Gloucester maintain its image as a fishing port. It is helping Gloucester stem the gap economically between a declining fresh fish industry and an uncertain future. But there is an optimum situation before an industry begins to make more demands on a community than it contributes. Gloucester should carefully evaluate the present situation and determine where the frozen fish industry is in relationship to optimum performance for Gloucester and for the industry itself. The jobs created and the tax revenue for the city should be evaluated with harbor and street congestion, power consumption and contribution to the general attractiveness of the city. These tradeoffs would help Gloucester to decide if the growth of the frozen fish industry has reached optimum proportions and to determine if additional growth need be on the waterfront itself or might take place on some site in the industrial park.

At the same time, industries which are "water oriented", such as boatbuilding, marine supply and repair yards, should be encouraged and aided in developing on waterfront sites.

8.1.5 <u>Waterfront Access</u>

As Gloucester develops the waterfront to once again be the focal point of the city, the ease with which the pedestrian or motorist moves about the harbor becomes important. Public access to the waterfront should not be discouraged by fences, guards and "no admittance" signs but rather encouraged wherever people might get the flavor of a historical fishing port. The construction of "people piers" for

viewing the harbor, fishing fleet or recreational boats should be placed at strategic points around the Inner Harbor, interconnected by pedestrian boardwalks as along Pavilion Beach. The "people piers" and boardwalks should be developed with attractive plantings, plenty of benches for relaxing and a raised observation deck which affords a view of activity on the piers, the nearby waterfront, and in the harbor itself.

8.2 Solving Transportation Situation

Transportation has always been the lifeline of Gloucester. Fixed-route transportation, such as rail and shipping was responsible for Gloucester's early development, allowing her to become a great fishing port and distribution center for fish products. Later, the construction of highways allowed automobiles and trucks to be used in a very flexible manner, transforming the old city into a busy metropolis.

Ironically, the progress and growth engendered by improved transportation has created problems for current and future transportation. Employment opportunities have moved away from the waterfront and scattered over the entire metropolitan area. As a result, work-oriented travel no longer fits a neat pattern to and from the central business district and waterfront. The automobile has engendered a diffusion of the population. With this reduction in population density, the mass transit system has reduced its service, forcing the suburban/urban traveler to become increasingly dependent on his automobile. Increasing the number of highways or widening existing streets involves staggering outlays of funds and actually only compounds traffic problems.

Therefore, new solutions are needed which can be implemented immediately at little expense. This involves a "balanced system" which as a practical alternative would combine aspects of both mass transportation and private transportation travel. Public mass transit, involving train, ferry and bus use, can serve the needs of many who now ride autos both to and from the central business district and waterfront, also to and from the Boston area.

Enticing more people to the Cape Ann area while simultaneously and proportionally reducing congestion is possible with the use of parking facilities, bus-feeder routes, ferry service and rapid rail transit. An integrated network capable of efficiently serving large areas is needed by which Gloucester may retain its historical charm and yet grow economically.

8.2.1 <u>Scheduling</u>

One solution which could be implemented immediately and would help alleviate some of the congestion in the central business district and particularly the waterfront is scheduling of street usage by trucks.

The use of streets by trucks should be limited to specified hours of the early morning or night, whenever possible. This might appear a problem to retail owners but in most cases it has been found that receiving or shipping of goods at other than regular working hours is more convenient to the store owner and obviously reduces the heavy usage of streets during regular working hours. In many cases, however, this might prove to be overburdensome on the industry or retail store involved and another method is suggested to handle this situation.

The practice of distributing frozen fish and fresh fish products as a ship is being unloaded has created heavy congestion on waterfront streets, especially Rogers Street. The problem is mainly one of logistics, of finding room along the waterfront to park trucks which are waiting to be loaded. As a result heavy truck traffic compounds the problems with the already heavy use of Rogers Street by automobiles.

It would be possible to construct a parking area for trucks near Blackburn Circle with a radio communication office to dispatch trucks to the waterfront as the situation requires. In this manner no more trucks would be on the waterfront than could be loaded at any one time.

Limiting the use of streets and highways obviously will help congestion problems. The immediate implementation of this recommendation would be limited to trucks but could be expanded to automobile use as an interconnected transport system is developed.
8.2.2 Transport System

The following is a description of a possible solution to the problem of people movement within the Cape Ann area. The order in which implementation occurs is a decision which Gloucester itself must make and is strongly dependent upon the degree of cooperation between all people involved. The approach is considerate of the fact that Gloucester may not desire total implementation or step-by-step implementation over a long period of time, as dictated by limited funding. It is hoped that as the transport system is developed the economic return may be indicated immediately to offer more momentum to the total system project.

There are several areas which may be explored at the same time and will eventually merge to form the interconnected transport system.

To encourage the use of bicycles on Cape Ann a system of bicycle paths and/or bridle paths should be developed which would allow a visitor to see the entire Cape Ann area by bicycle or horseback. The coastline, inland woods, and waterfront activity could be viewed at a pace which would be appreciated by the visitor and resident while reducing the pressure of automobile traffic. In winter some of the paths could become controlled roads for snowmobiling or sleighing. This would allow participation without needless destruction of landscape due to abuse or overuse. A simple graphic system would indicate paths, distances to various destinations and possible obstacles one may encounter, such as highway crossings and steep slopes.

As indicated earlier, a shuttle bus service should be developed which would operate only during the tourist season at first and then be extended into the remainder of the year as residents become more familar with the bus service.

The shuttle service would tie in with the train and ferry service and automobile parking areas to transport people to and from the city and Cape area. The bus would follow main arteries operating from sunrise to sunset. The fare would be paid by the day and not by individual rides. As a result, the visitor who comes only for the day would be encouraged to look at Gloucester more thoroughly and stop more frequently. In specific cases of arrival by ferry or train the fare might be part of the excursion rate. This would allow a family from the Boston area to

leave the car at home and use the transport system.

Present deterioration of the mass transit system might be reversed if the B & M passenger line became a part of the transport system for the Cape Ann area. It would be used as discussed in section 7.4.1.

The ferry service, as discussed earlier, could help in alleviating congestion for the city. A small scale operation should be introduced first and only during the summer months.

However, no single part of the transport system will work properly without controlling the use of the automobile. With few exceptions, given a choice of using the automobile and another mode of transportation, people select the automobile.

As Gloucester improves in appearance, using the economic situation as an indicator, she must insure that people will continue to come, despite limited use of the automobile.

If Gloucester begins by solving the harbor area problems, she can also begin limiting the automobile in that area. Congestion would be reduced and people would be stopping in Gloucester instead of passing through. Traffic on Rogers Street and Main Street would be pedestrian for certain peak days of the summer. As the downtown district and other specific areas are developed it would become increasingly easy to limit the automobile if another mode of transportation is developed simultaneously as discussed.

This continuous effort would eventually lead to the limiting of non-resident automobiles to the periphery of Gloucester and restricting use of resident automobiles when peak summer days result in a heavy influx of visitors. Train, bus, ferry and bicycle transportation must keep abreast with particular concern for cost and convenience to both the visitor and the resident.

8.3 Concluding Remarks

Historically, Gloucester has been tied to the sea. Her heart and soul belong to the efforts and heroism of the Gloucester fisherman. Even though the day of the fisherman is passing in terms of the family owned boat and fresh fish catch, the townspeople have voiced a strong desire to retain the tradition and feeling of their fishing heritage.

This study has attempted to examine Gloucester as she is today, pinpointing her weaknesses and strengths. An effort has been made to provide a study of the interrelatedness of problems in the city which must be solved regardless of the direction Gloucester chooses for her future development. Suggestions and options have been presented to give the townspeople a basis for planning and a direction of pursuit.

Considering the nature of the people and of Gloucester herself, a conclusion can be reached that the people are unified in their wish to retain the aura of the best of her former history and yet, from necessity, mesh with the present era to remain economically alive. There is a split concerning how this goal can be reached to best advantage. Contrasting options for development have been explored to provide the townspeople with a basis for choosing a means to a thriving future.

Gloucester should also recognize the consequences of improvement. Population has not changed very much in the last fifty years because of lack of attractiveness and opportunity. As Gloucester succeeds in becoming more attractive, she will be faced with pressures and problems created from rapid and uncontrolled growth, unless a careful master plan is adhered to.

As Gloucester begins to direct her efforts in a specific direction she should be careful in developing her resources. By zoning or limiting the use of a site for a specific purpose the benefit of potential resource may be lost. Instead, the resource which needs developing should be examined. The city should decide what way, (selective zoning, taxation, surcharge, etc.) she can best articulate the desires of the people of Gloucester.

Gloucester must represent the vested interests of her citizens first and outside interests second, hopefully seeking other tools including zoning for implementing a master plan.

Appendices

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APPENDIX I

FISHING PRODUCTS

Ocean perch: the trend has been:

							@6.1	¢/lb.
million pounds	15.8	8.5	3.0	4.7	7.6	12.7	14.4	
	1966	1967	1968	1969	1970	1971	1972	

The lowest on record was 3 million pounds in 1968. Since then the fishing industry has picked up. Rockland, Mass. has for a long time landed more ocean perch than any other N.E. port.

Pollock: As a result of haddock shortages, this fishery was promoted to make up for the loss. Boston and Gloucester have been the principal pollock ports, and in 1972 for the first time, Gloucester landed more (6.3 million lbs. @ 8.2¢/lb.) than Boston (4.03 million lbs. @ 11.9¢/lb.) (Fig. I-1). Whereas Boston landings have fluctuated much, Gloucester landings have climbed steadily.

Whiting: This fishery has manifested a clear downward trend over at least a decade, although ex-vessel prices have been generally much higher. Gloucester still remained in 1972 the major port for whiting landings but with a low volume of 9.3 million pounds @ 8.0¢/lb. (Figure I-2).

Haddock: This fishery enjoyed a glorious past, especially at Boston, its major port. However, heavy foreign competition on the fishing grounds and on the market have drastically cut New England catches. As the species was becoming dangerously rare, the International Commission for Northwest Atlantic Fisheries has since 1970 imposed restrictions on haddock fishing in Georges Bank, Browns Bank and Emerald Bank, and imposed quotas on fishing nationalities '15,000 metric tons for U.S. last year'. Gloucester landed 3.5 million pounds @ 37.2¢/lb. in 1972. This species contributed 13.4% of the total earnings and was the third largest revenue earner after cod and shrimp.

Flounder: This species has been for many years the one most landed in New England. Gloucester's share is sizeable although compared to New Bedford's it is quite small. 1972 flounder landings were Gloucester's fifth largest ex-vessel earner (3.8 million pounds; \$839,265), following ocean perch closely.



Figure I-1 Pollock Fishery

Source: New England Area Fisheries - Annual Summarles, 1972



Cod: The good U.S. market for cod and cod-produced portions, etc. has attracted enormous quantities of imported cod fillets and blocks. Gloucester in 1972 landed 11.7 million pounds and got \$1.99 million on it - the highest for any species.

Sea Herring: This species has had a spectacular increase among Gloucester landings of recent years. It was, by volume the largest single species landed in 1972 (32.7 million pounds; 27% of total 1972 landings). The average price was 1.9¢/lb. ex-vessel. Being a low value fish, there is a reason for landing and importing large quantities. Since about 1970, an industry has developed in Gloucester which processes herring and exports fillets and whole fish to Germany for human consumption. The sea-herring fishery has declined in Europe.

197019711972 10^6 lbs.7.5 @ 2¢/lb.29.8 @ 1.7¢/lb.32.7 @ 1.9¢/lb.

Shrimp: This fishery started in Maine recently but spread to Gloucester in 1968. Gloucester has done so well in this fishery that it has for the past three years done much better than other ports although the price per pound has been less than at Portland. (Figure I-3). In 1972, 7.7 million pounds were landed for 17.2¢/lb., total value was second largest. Industries have grown around the processing and marketing (local and foreign) of shrimp. Some shrimp is sent to Rockland for processing.

Offshore Lobsters: Point Judith, R.I. is the main lobster port in New England. There has been an effort by Gloucester to catch a share of this market. However, landings have steadily gone down from 1969. The price per pound has, however, gone up at all ports, and was \$1.38/lb. (American lobsters) in Gloucester in 1972. Sea lobsters comprised much of the \$600,000 worth of landings made by Gloucester vessels at other ports(National Marine Fisheries Service). Figure I-4 shows landings and prices at Gloucester.

Scallops: This is a really big-money shellfish nowadays, especially in New Bedford where it averaged \$2.00/lb. in 1972. The scallop fishery has all but vanished from Gloucester since 1966 when 80,000 pounds were landed for 46¢/lb.



Source: New England Area Fisheries - Annual Summaries, 1972 143



Figure I-4 Offshore Lobsters

Source: New England Area Fisheries - Annual Summaries, 1972

In 1972, a token 40 pounds were landed for 1.25/lb.

TAB	LE	I-	ł

	TABLE	<u>I-1</u>						
Item	Product Description	prior rate	1968	1969	1970	1971	1972	col. 2
I. wł wi	Fish: fresh, chilled, or frozen; nether or not whole, but not other- se prepared or preserved		·					
110.15	A. Whole, or processed by re- moval of heads, viscera, fins; but not otherwise processed	.5 ¢/1ъ	.4	.3	.2	free	free	1¢/lb
	B. Scaled, whether or not pro- cessed by removal of heads, viscera, fins; but not otherwise processed	•						
110.40	 In bulk or in immediate containers weighing with their contents over 15 lbs_each 	1.0 ¢/Њ	.8	.5	.4	free	free	1.25 ¢/lb
110.45	2. Other	12.5%	5 11%	10%	8.5%	5 7%	6% 2	25%
110.47	C. Skinned and bones and frozen into blocks, each weighing over 10 lbs.	1.0 ¢/Њ	.8	.5	.4	.2	free	1.25 ¢/lb
	 D. Otherwise processed: cod, haddock, cusk, eels, hake, pollack, shad 1. For an aggregate quantity entered in any calender y of 15 million lbs. or 15% of ave. annual consumpti over the last 3 yrs., which ever is greater. (fillets, 	1.87 r.¢/1 on ch- steaks	5 1. b	875 1.	875 1	.875	t.875	2.5 ¢/Ib
110.55	2. Other	2.5 ¢/lb	2.	52	.5 2	.5 :	2.5	2.5
II.	Shrimp, lobster, scallops; prepared or not	free	fre	e fr	ee f	ree fi	ree :	free
ш.	Fish products A. Fish balls, cakes, puddings, pastes, and sauces							
113.01	1. pastes & sauces 2. balls cakes puddings	8%	7%	6%	5.5%	5 4.5	% 49	\$ 30%
113.05	a, in oil	23.5%	22.59	6 20%	17.59	6 15%	12.9	5% 30%

TABLE I-1 (con't.)

Item	Product Description	prior rate	1968	1969	1970	1971	1972	col. 2
113.08	b. not in oil (i) in immediate containers weighing with their con- tents not over 151bs each (a) airtight	h 3%	2%	1.5%	1%	.5%	free	25%
113.11	(b) other	12.5%	11%	10%	8.5%	7%	6%	25%
113.15	(ii) other	1.0 ¢/lb	.9	.8	.7	.5	.5	1.25 ¢/lb
В.	Fish sticks and similar products of any size or shape, fillets, or any other portions of fish which are breaded, coated with batter, o similarly processed or prepared	r						
113.20	1. Neither cooked or in oil	20%	18%	16%	14%	12%	10%	20%
113.25	2. Other	30%	2 7 %	24%	21%	18%	15%	30%

Column 2 applies to communist countries.

U.S. Import Tariff Policy

Source: United States Tariff Commission, "Tariff Schedules of the U.S., Annotated, 1971." T.C. Publication #344.

APPENDIX II-a

COMMUNITY VALUES SURVEY

Distributed to the adult population through the Gloucester Times

March 1973

Statistical results of questions used in survey answered by 287 adults

- 1. In your view, what best describes Gloucester today?
 - a. 44% Gloucester is becoming a less desirable place to live.
 - b. 25% Gloucester is becoming a more desirable place to live.
 - c. 31% Gloucester stays pretty much the same.
- 2. In your estimation, how important are Gloucester's seafaring traditions?

		Today	For the future
a,	very important	53%	61%
b.	important	35%	27%
с.	not very imp ort ant	10%	10%
d.	not important at all	2%	2%

- 3. Should Gloucester spend tax dollars to attract new industry to the area?
 - a. 61% yes
 - b. 39% no
- 4. If Gloucester were to spend \$25,000 of city funds attempting to attract new industry, how should the total be divided between fish-related and non-fishing industries?

<u>fish</u>	all	3/4	1/2	1/4	0
	19%	19%	38%	15%	9%
non-fish	0	1/4	1/2	3/4	all

- 5. Select from the following those two industries, the expansion of which you feel would most benefit Gloucester:
 - a. 29% fresh fish
 - b. 16% frozen fish
 - c. 6% retail business
 - d. 23% manufacturing

- e. 16% tourism (motels, restaurants)
- f. 10% services (repair, medical, etc.)
- 6. Public Spending: If taxes went up 20% how would you want the income spent?
 - a. 20% money to develop non fish related industry
 - b. 11% improved roads and parking
 - c. 13% additional public housing
 - d. 25% more parks and recreation (including public beaches)
 - e. 19% higher salaries for city employees and improved city services
 - f. 12% better schools and higher teachers' salaries
- 7. Population: choose one
 - a. 12% too many people live in Gloucester
 - b. 64% Gloucester is just the right size
 - c. 24% Gloucester needs further development and more new people
- 8. Housing: choose one
 - a. 12% Gloucester has an over-supply of housing
 - b. 28% Gloucester's present housing is adequate.
 - c. 68% Gloucester needs more housing. 'Indicate which type.'
 - a. 42% private homes
 - b. 12% multi-story apartments
 - c. 46% subsidized low-cost housing
- 9. Tourists: choose one
 - a. 11% Gloucester should discourage tourists
 - b. 45% Tourism is at the right level now.
 - c. 44% Gloucester should encourage more tourists to visit.
- 10. Age:
 - a. 1% under 18
 - b. 9% 18-25
 - c.20% 26-35
 - d.29% 36-50
 - e.29% 51-65
 - f. 12% over 65

- 11. Employment: Which of the following best describes the field in which you are or have been employed?
 - a. 6% fresh fish
 - b. 6% frozen fish
 - c. 5% construction
 - d.10% manufacturing
 - e. 4% trucking, railroads, communications, utilities
 - f. 7% public administration
 - g. 10% wholesale & retail trade
 - h. 8% hospitals and health services
 - i. 15% education (teachers, administrators, etc.)
 - j. 8% banking, insurance, real estate
 - k. 12% services (business & repair, personal, other)
 - 1. 9% other
- 12. Are you presently:
 - a. 52% employed by another
 - b. 22% self employed
 - c. 14% unemployed
 - d. 12% retired
- 13. Do you work:
 - a. 59% in Gloucester
 - 41% out of Gloucester
 - b. 78% full time
 - 15% part time
 - 7% seasonally
- 14. Estimated family income from all sources:
 - a. 12% under \$5000
 - b. 28% \$5000-\$10000
 - c. 38% \$10000-20000
 - d. 22% over \$20000

- 15. What section of Gloucester do you live in?
 - a. 17% Annisquam-Lanesville
 - b. 12% Riverview-Riverdale
 - c. 0% Wingaersheek
 - d. 14% West Gloucester
 - e. 8% Magnolia
 - f. 21% Center City
 - g. 24% East Gloucester
 - h. 4% Eastern Point
- 16. How long have you lived in Gloucester:
 - a. 17% 1-5 years
 - b. 10% 6-10 years
 - c. 16% 11-20 years
 - d. 35% 21-50 years
 - e. 22% over 50 years
- 17. Currently a number of different types of activities are found along the Gloucester waterfront. In addition, there are areas not presently in use. Do you think the city should:
 - a. 6% leave the waterfront as it is
 - b. 29% provide more facilities for the fishing boats
 - c. 13% provide more facilities for the processing of frozen fish
 - d. 14% encourage more facilities for tourists
 - e. 38% provide more "green space" (parks, walkways, etc.)
- 19. Some people consider the main features of Gloucester to be such things as its historical tradition, the beaches, quiet residential areas, availability of facilities for pleasure boating and fishing, undeveloped land, etc. Please indicate how important each of the following is to you by ranking them according to the scale below:

		<u>not imp't</u>	<u>some imp't</u>	great imp't	v.g. imp.
a.	plentiful beaches	2%	25%	28%	45%
b.	scenic rocky coast	1%	5%	20%	74%
c.	protected harbor	1%	9%	29%	56%
d.	vacation facilities	19%	36%	32%	13%
e.	marshlands	5%	16%	18%	61%
f.	undeveloped lands	7%	19%	23%	51%
g.	recreational areas	3%	33%	30%	34%

- For each of the following pairs of alternatives, indicate your preference:
 - a. 22% hotel at Rocky Neck
 78% artist's colony at Rocky Neck
 - b. 74% more public beaches
 26% more hotels to encourage tourists
 - c. 8% fill in the marshes for more homes
 92% create a wildlife preserve in the marshes
 - d. 21% another fish processing plant on the waterfront
 79% fresh fish market on the waterfront
 - e. 55% another industrial park
 45% a new low income housing project
 - f. 83% rebuild the stores on main street 17% a shopping center at the drive in
 - g. 24% build homes at Fort Point76% turn Fort Point into a park
 - h. 89% preserve City Hall as a historic landmark
 11% build a new city hall

COMMUNITY VALUES SURVEY

Distributed to Juniors and Seniors at Gloucester High School March 1973

Statistical results of questions used in analysis

Survey answered by 521 students

- 1. Sex: Male 47% Female 53%
- 2. How long has the family lived in Gloucester?

 Less than 5 years
 6%

 5 to 10 years
 8%

 11-20 years
 26%

 21-50 years
 26%

 More than 50 yrs
 34%

3. What section of Gloucester do you live in?

Annisquam/ Lanesville	8%
Riverview/Riverdale	15%
Wingaersheek	1%
West Gloucester	7%
Magnolia	6%
Center City Gloucester	33%
East Gloucester	19%
Eastern Point	1%

- 4. Estimated family income from all sources: Less than 5,000 7%
 5,000 to 10,000 29%
 10,000 to 20,000 47%
 over 20,000 17%
- 5. Employment status of parents

	Male	Female
Employed full time	85%	87%
Employed part time	9%	5%
Seasonally employed	6%	4%
Unemployed	-	4%

6. Type of work parents engage in, if employed:

	Mother	Father
Fresh fish	4%	15%
Frozen fish processing	8%	5%
Construction	1%	10%
Manufacturing	3%	10%
Trucking, Railroads, Utilities Communication	3%	5%
Public Administration	5%	6%
Wholesales and Retail Trade (including restaurants, stores,		
etc.)	18%	6%
Hospitals and Health Services Education (teachers, school	20%	2%
administrators) Ranking Insurance Real	10%	2%
Estate	4%	5%
Services (business & repair,	160/	169
personal, other)	13%	1076
Professional (doctor, lawyer etc.)	1%	5%
Other	8%	13%

7. Do you plan to:

a)	Stop formal education when you finish high school	27%
b)	Attend a four-year college	40%
c)	Attend a two-year college or trade school	33%

8. Listed below are some factors which people consider in choosing an area in which to live. (1) Assume that you have completed school and are considering jobs in various places in the U.S. Indicate the importance which you would attach to each factor in influencing where you might choose to live and work. (2) Indicate your appraisal of how Gloucester ranks in regard to each factor.

(Results on following page)

8.	Importar attach to <u>factor</u>	Importance you attach to each <u>factor</u>			Your Appraisal of Condition of <u>Gloucester</u>		
	Very Important	Of Some Importance	Not Impt.	Good	Med.	Bad	
a.Low air and water						_ _	
pollution	67%	31%	2%	24%	57%	19%	
b.Good range of							
housing opportunity	57%	39%	4%	11%	60%	23%	
c.Good public trans-							
portation serving are	ea 35%	52%	13%	16%	50%	34%	
d.Good access to re- creational facilities (parks, beaches,							
	.) 65%	30%	5%	43%	39%	18%	
e.Availability of							
medical facilities	80%	19%	1%	50%	45%	5%	
f.Availability of post- high school education al opportunities (colleges, technical	on-						
school etc.)	40%	44%	16%	7%	40%	53%	
g.Large range of job opportunities in area h.Availability of	<u>80%</u>	18%	2%	5%	34%	61%	
modern shopping							
facilities	23%	60%	17%	19%	59%	22%	
i.Absence of class		—					
or racial tension	55%	34%	11%	37%	44%	19%	
J.Efficient city							
government	<u> 68 % </u>	28%	4%	9%	60%	31%	
k.Good public streets and parking facili-							
ties in city	50%	44%	6%	15%	58%	27%	

9.	Would you prefer to	settle in:
	a.Gloucester	31%
	b.Cape Anne Area	29%
	c.Boston Metropol-	
	itan area	3%
	d.Essex	8%
	e.Elsewhere	29%

10. Rate, in order of importance to you, the first two reasons why you might like to remain in the area:

Parents live here	24%
Friends live here	25%
Have a job	9%
Enjoy the area (beaches etc.)	35%
No place else to go	5%
Other	2%

11. Rate, in order of importance, the first two reasons for which you might leave Gloucester:

Better job opportunities elsewhere	51%
Too many tourists	4%
No reason to stay	8%
No future in Gloucester	30%
Too many people in town	5%
Other	2%

12. Assuming you settle in Gloucester, what vocation would you prefer to work in? (rate first three in order of preference)

Fresh fish	3%
Construction	9%
Manufacturing	3%
Public Administration	4%
Hospitals & Health Services	15%
Banking, Insurance, Real Estate	8%
Services (business & repair, personal, other)	15%
Frozen fish processing	1%
Trucking, Railroads, Communications, Utilities	3%
Wholesale & Retail Trade (including restaurants,	
stores etc.)	10%
Education (teachers, school administrators)	15%
Other	13%

13. Currently a number of different types of activities are found along the Gloucester waterfront. Some of these are State Fish Pier (fresh fish processing), frozen fish storage and processing facilities, restaurants, marinas, etc. In addition, there are areas presently not in use.

Do you feel that the city should:

Leave the waterfront as it is	20%
Encourage more facilities for fishing boats	15%
Encourage more facilities for the processing	
of frozen fish	8%
Encourage more facilities for tourists	
(marinas, restaurants, motels)	12%
Provide more "green space" (parks, public	
walkways, etc.)	45%

14. Some people consider the main features of Gloucester to be such things as its historical tradition, the beaches, quiet residential areas, availability of facilities for pleasure boating and fishing, undeveloped land, etc. Please indicate how important each of the following is to you by ranking them according to the number scale below:

	1.	2.	3.	4.
	not	of some	of great	of very great
-	important	importance	importance	importance
1.Plentiful				
beaches	1%	24%	40%	35%
2.Scenic rocky				
coastline	4%	25%	34%	37%
3. Protected				
harbor	3%	20%	33%	44%
4.Vacation				
facilities				
(hotels_motels	3)25%	45%	21%	9%
5.Marshlands	28%	31%	18%	23%
6.Undeveloped				
land	11%	24%	30%	35%
7.Recreational				
areas(parks				
<u>marinas etc.</u>)	2%	20%	36%	42%

- 15. For each of the following pairs of alternatives, indicate your preference:
 - a. Hotel at Rocky Neck 36% Artists' colony 64%
 b. More public beaches 89% More hotels to encourage tourists 11%

c.	, Fill in the marshes for more homes	29%
	Create a wildlife preserve there	71%
d.	Another fish processing plant on	
	the waterfront	31%
	Fresh fish market	69%
e.	Another industrial park	38%
	New low-income housing project	62%
f.	Rebuild stores on Main Street	78%
	Build a shopping center at the drive-	
	in	22%
g.	Build new homes at Fort Point	27%
-	Turn it into a park	73%
h.	Restore City Hall as a historical	
	landmark	77%
	Build a new City Hall	23%

APPENDIX II-b

TOURIST SURVEY

Distributed to visitors of Gloucester

August and September, 1973

Statistical results of questions used in Survey

Completed by 115 parties which represented 450 persons.

1. and 2. Town and State of Residence.

New England (N.H., Mass., Conn., Vermont, Maine, R.I.)	36%
Eastern Seaboard (New York, New Jersey, Penn., etc.)	40%
Mid West (Ohio, Ill., Minn., Mich., etc.)	15%
South (Texas, Ala., Miss., etc.)	1.5%
West (Calif., New Mex., Ariz., Col., etc.)	4%
Foreign (Europe, Canada, South America, etc.)	3.5%

3. How long do you intend to stay in Gloucester?

l day or less	65%
2 days	12%
3 days	11%
4 days	6%
1 week or more	6%

4. How many are in your party?

1	3%
2	36%
3	21,5%
4	24.5%
5	11%
more than 5	4%

5. How many in your party fall into each of the following age groups?

younger than 5	1%
5-12	10%
13-20	13%
21-60	68%
older than 60	8%

6. What is the main purpose of your visit?

general sightseeing	64%
shopping	7.5%
beach	9.4%
boating	3.8%
restaurant	11.3%
other (visiting relatives)	4.0%

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7. If you stay overnight in Gloucester, where will it be?

hotel/motel	60%
guest house	4.6%
rental cabin	3%
summer home	0
friends or relatives	17.0%
camping	15.4%

8. Approximately how much will your party spend on each of the following categories during your stay in Gloucester?

. .

shopping	\$0-5 1 7%	\$5-6 36%	\$7-10 27%	\$10 20%
	\$0-5	\$5-10	\$11-15	\$15
restaurant	31%	30%	17%	22%
lodging	11%	19%	37%	33%
boating				

9. Do you find the following facilities adequate?

YES	NO
77%	23%
61%	39%
77.5%	22.5%
45%	55%
91.7%	8.3%
51.6%	48.4%
	YES 77% 61% 77.5% 45% 91.7% 51.6%

10. What is the principal factor which influenced you to visit Gloucester?

have summer home here	1.6%
marinas	7.9%
restaurants	10.3%
beaches	9.5%
historical heritage of area	63.5%
other (ocean)	7.2%

11. Was there any aspect of Gloucester which you particularly disliked?

The following were repeatedly mentioned:

-not enough campgrounds and camping facilities
-directional signs not sufficient
-traffic congestion
-waterfront overly industrialized
-beach facilities need improvements
-polluted harbor

- .2. What might Gloucester do, which would attract you for a longer stay? Recommendations which were repeated frequently:
 - -listing of all available lodges and restaurants with indication of quality and cost
 - -tours of fishing facilities (fishing vessels, frozen food plants, etc.)
 - -telephone number which makes up-to-date events available to general public.

APPENDIX II-c

RETAIL TRADE SURVEY

September 1973

Statistical results of questions used in survey answered by 20 businesses in downtown area (1). The same survey was conducted in east Gloucester and Rocky Neck for art galleries and results appear as the second percentage in all questions (2).

1. Name of Business

2.	Type of Business		(1)	(2)
3.	Are you open for business a)	12 months	100%	20%
	b)	summer months only	0%	80%
	c)	other (specify)	0%	0%

4. How many people do you employ?

		1-	5	6-1	0	11-1	15	16-2	20	20 or	more
a)	slow periods	65%	100%	12%	0%	18%	0%	0%	0%	5%	0%
b)	peak periods	59%	100%	18%	0%	12%	0%	5.5%	0%	5.5%	0%

5. Which months are your peak earning months?

	(1)	(2)
January	6%	0%
February	4.5%	0%
March	4.5%	5%
April	9%	5%
May	4.5%	12%
June	6%	20%
July	9%	26%
August	13%	22%
September	3.5%	5%
October	7%	5%
November	15%	0%
December	18%	0%

6. What percentage of your total yearly earnings do you make in the sum of the peak months indicated?

1.5

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		(1)	(2)
	20-30%	33%	0%
	31-50%	33%	0%
	51-70%	25%	5%
	71-90%	9%	15%
	91% or more	0%	80%
7. Whe	ere does most of your business	come from?	
		(1)	(2)
	local people	89%	20%
	non-local people	11%	80%

8. Estimate the percentage of your business which comes from non-local people.

	(1)	(2)
10-20%	82%	0%
21-30%	18%	0%
31-50%	0%	0%
51-70%	0%	20%
91% or more	0%	80%

Suggestions or comments on steps Gloucester might take relative to tourism.
 -Advertise recreational facilities available to tourists.

-Restoration of downtown area instead of new construction.

-Retain historical flavor of Gloucester.

APPENDIX III-a

MASSACHUSETTS GENERAL LAWS

Chapter 130, Section 105

<u>An Act Providing for the Protection of</u> the Coastal Wetlands of the <u>Commonwealth</u>

The commissioner, with the approval of the board of natural resources, may from time to time, for the purpose of promoting the public safety, health, and welfare, and protecting public and private property, wildlife and marine fisheries, adopt, amend, modify, or repeal orders regulating, restricting or prohibiting dredging, filling, removing or otherwise altering, or polluting coastal wetlands. In this section, the term "coastal wetlands" shall mean any bank, marsh, swamp, meadow, flat or other low land subject to tidal action or coastal storm flowage and such contiguous land as the commissioner reasonably deems necessary to affect by any such order in carrying out the purposes of this section.

The commissioner shall, before adopting, amending, modifying or repealing any such order, hold a public hearing thereon in the municipality in which the coastal wetlands to be affected are located, giving notice thereof to the state reclamation board, the department of public works and each assessed owner of such wetlands by mail at least twenty-one days prior thereto.

Upon adoption of any such order or any order amending, modifying or repealing the same, the commissioner shall cause a copy thereof, together with a plan of the lands affected and a list of the assessed owners of such lands, to be recorded in the proper registry of deeds or, if such lands are registered, in the registry district of the land court and shall mail a copy of such order and plan to each assessed owner of such lands affected thereby. Such orders shall not be subject to the provisions of chapter one hundred and eighty-four. Any person who violates any such order shall be punished by a fine of not less than ten nor more than one month, or by both such fine and imprisonment.

The superior court shall have jurisdiction in equity to restrain violations of such orders.

Any person having a recorded interest in land affected by any such order, may, within ninety days after receiving notice thereof, petition the superior court to determine whether such order so restricts the use of his property as to deprive him of the practical uses thereof and is therefore an unreasonable exercise of the police power because the order constitutes the equivalent of a taking without compensation. If the court finds the order to be an unreasonable exercise of the police power, as aforesaid, the court shall enter a finding that such order shall not apply to the land of the petitioner; provided, however, that such finding shall not affect any other land than that of the petitioner. The commissioner shall cause a copy of such finding to be recorded forthwith in the proper registry of deeds or, if the land is registered, in the registry district of the land court. The
method provided in this paragraph for the determination of the issue of whether any such order constitutes a taking without compensation shall be exclusive, and such issue shall not be determined in any other proceeding, nor shall any person have a right to petition for the assessment of damages under chapter seventy-nine by reason of the adoption of any such order.

The department may, after a finding has been entered that such order shall not apply to certain land as provided in the preceding paragraph, take the fee or any lesser interest in such land in the name of the commonwealth by eminent domain under the provisions of chapter seventy-nine and hold the same for the purposes set forth in this section.

No action by the commissioner or the department under this section shall prohibit, restrict or impair the exercise or performance of the powers and duties conferred or imposed by law on the department of public works, the state reclamation board or any mosquito control or other project operating under or authorized by chapter two hundred and fifty-two.

No order adopted hereunder shall apply to any area under the control of the metropolitan district commission.

EFFECTIVE DATE: November 23, 1965 (Chapter 768, Acts of 1965)

APPENDIX III-b

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF NATURAL RESOURCES LEVERETT SALTONSTALL BUILDING 100 CAMBRIDGE STREET, BOSTON 02202

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ORDER UNDER GENERAL LAWS CHAPTER 130, SECTION 105

1. The Commissioner of Natural Resources, acting pursuant to Chapter 130, Section 105 of the General Laws, for the purposes of promoting public safety, health and welfare and protecting public and private property, wildlife and marine fisheries, hereby adopts this order regulating and restricting coastal wetlands in the City of Gloucester, County of Essex, Commonwealth of Massachusetts, as delineated in red on plans entitled "Plan of Land in Gloucester", dated and numbered Section 1 thru Section inclusive, which plans are recorded herewith and incorporated herein.

2. This order does not grant any property rights; it does not authorize any person to trespass or injure the property of another; it does not excuse any person from complying with other applicable laws, regulations, by-laws or ordinances.

3. The following uses are permitted on land affected by this order, if otherwise permitted by law:

- A. The construction and maintenance of catwalks, wharves, boathouses, boat shelters, fences, duckblinds, wildlife management shelters, foot bridges, observation decks and shelters; provided that said structures are so constructed on pilings as to permit the reasonably unobstructed flow of the tide and preserve the natural contour of the marsh;
- B. The cultivation and harvesting of shellfish, and worms for bait, including such reasonable excavation of the flats as is necessary;
- C. Commercial and non-commercial outdoor recreation activities including hiking, boating, trapping, hunting, fishing, golf, horseback riding, skeet and trap shooting, and shooting preserves; provided that no structure shall be constructed except in accordance with Paragraph 3A;
- D. The cultivation and harvesting of agricultural or horticultural products; grazing and haying;

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E. The installation of floats upon said coastal wetlands.

4. The Commissioner <u>shall</u> permit the following uses, after written application by the owner and submission of detailed plans, in accordance with such reasonable conditions as he may deem appropriate to protect the public interest. A certificate evidencing any such permission shall be filed in the Registry of Deeds and indexed under the name of the owner of the land:

- A. The construction and maintenance of a driveway of minimum legal and practical width where alternative means of access from a public way to unrestricted land of the same owner is unavailable;
- B. The enlargement to minimum legal and practical width and the maintenance of raised roadways which exist on the effective date of this order;
- C. The installation and maintenance of underground utilities provided the surface of the marsh is restored substantially to its original condition;
- D. The excavation of a small boat mooring slip for non-commercial uses by the owner of the land, provided no spoil is placed upon the marsh.

5. The Commissioner, in his sole discretion, with the approval of the Board of Natural Resources, <u>may</u> permit the following uses after written application by the owner and submission of detailed plans, if he determines the proposed work to be consistent with the purposes of this act; he may impose such conditions as he deems necessary to protect the public interest. A certificate evidencing any such permission shall be filed in the Registry of Deeds and indexed under the name of the owner of the land:

- A. The excavation of boat channels of a size sufficient for single family use; wildlife management impoundments and other such excavations; provided that no fill or other material shall be placed upon the marsh except as may be necessary to construct the retention structure and provide access thereto, and to provide bank stabilization;
- B. The construction of other single lane driveways and paths, including excavation and filling incidental thereto;
- C. The excavation and construction of areas for the cultivation of shellfish and other marine foods;
- D. The construction and maintenance of beaches and boat launching ramps.

- 6. Except where otherwise authorized in paragraphs 3 through 5 above:
 - A. No person shall fill, place or dump on said coastal wetlands any soil, loam, peat, sand, gravel, rock or other mineral substance, refuse, trash, rubbish, or debris;
 - B. No person shall drain or excavate or dredge said coastal wetlands, or remove therefrom loam, peat, sand, gravel, soil, or other mineral substance;
 - C. No person shall perform any act or use said coastal wetland in a manner which would destroy the natural vegetation of the coastal wetland, substantially alter existing patterns of tidal flow, or otherwise alter or permit the alteration of the natural and beneficial character of the coastal wetland.

 As used herein, the word "person" shall include corporations, societies, associations, partnerships, governments and subdivisions and authorities thereof, except where exempted by statute.

8. Any person aggrieved by this Order who has a recorded interest in any portion of the land so affected, within ninety days of receipt of notice thereof, may petition the Superior Court of Essex County to determine whether this Order so restricts the use of his property as to constitute a taking without compensation. A list of the assessed owners of the land so affected is attached hereto and incorporated herein.

WITNESS my hand and seal this _____day of _____1969

Commissioner

APPROVED

THE BOARD OF NATURAL RESOURCES

Commonwealth of Massachusetts

1969

Then personally appeared the said Arthur W. Brownell, Commissioner of Natural Resources and acknowledged the foregoing instrument to be his free act and deed, before me.

My commission expires_____

Notary Public

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The object of this study is to examine the resources of Gloucester. Massachusetts and determine how they may be better utilized. The book, an outgrowth of a research project which was conducted by a multidisciplinary group of students at M.I.T. in the spring of 1973, examines Gloucester's interacting ecopomic, political, technical, social and legal situations. The book goes beyond analysis and sets forth specific recommendations aimed at making a contribution to a better living environment for Gloucester residents and visitors as well. Specific areas of study were fishing, manufacturing, retail trade, tourism, transportation, government, and coastal zone management.

The book is organized into two major parts: the first consisting of an information base, the second describing problem areas and setting forth recommendations. Part t is subdivided into five chapters and describes, after a brief history of Gloucester, the present situation in the areas of economics, employment, transportation, government and coastal zone management. Part II is divided into three chapters and examines options which Gloucester residents might seriously consider. In Chapter six the results of two communityvalue surveys are presented and their implications are discussed. In Chapter seven the data from Part I are distilled, findings are interpreted and recommendations are offered. The final chapter is a proposal, one option, which meshes what Gloucester residents desire with the resources they presently have at their disposal and offers a direction for changing the environment of Gloucester.

