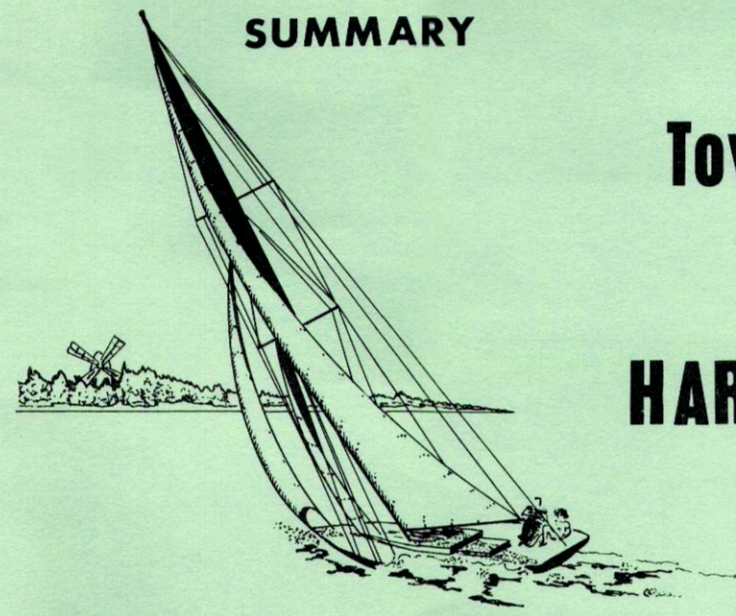


**MASTER PLAN
SUMMARY**



**Town of
HARWICH**

Massachusetts

Metcalf & Eddy, Inc. • Engineers & Planners
Boston • New York • Palo Alto

JANUARY, 1968

HARWICH PLANNING BOARD

Carl L. Clapp, Chairman
Albert E. Wynnott, Vice-Chairman
Charles F. Coleman, Jr., Clerk
Charles R. Lee
John P. Micodemus

The preparation of this report was financially aided through a federal grant from the Urban Renewal Administration of the Housing and Home Finance Agency under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.

SUMMARY PLAN

Town of Harwich, Massachusetts

This is a summary of the 1966-67 Harwich Master Plan.

The purpose of this summary is to enable interested persons to gain an over-all knowledge of the plan and its major recommendations. For the detailed statistical and graphic data and the complete range of proposals, it is necessary to refer to the Master Plan report which has been presented to the Harwich Planning Board.

The preparation of this plan during the past two years reflects the combined efforts of the Planning Board, the other town officials, state and regional officials, and the planning consultant. The result is the Harwich Master Plan, the highlights of which are set forth in this folder. These highlights are presented in three general sections: Background Studies, 1960 Development Plan, and Effectuation Program. A Summary Plan Map is also presented to locate the major plan recommendations.

The Master Plan of Development is intended to be a point of departure. It is hoped that the process of planning will be continuous, since there is no final plan for a town. Harwich must constantly look ahead, making new plans and programs to reflect its ever-changing needs. Only in this way can Harwich hope to achieve the goals it sets for itself.

HARWICH

MASTER PLAN

SUMMARY

BACKGROUND STUDIES

Area of Influence

The unique character of Cape Cod is expressed in its indigenous landscape and architecture composed of ocean and sandy beach; salt marsh and salt creek; ever-present cranberry bogs; ponds surrounded by pine woods; virgin areas of native plants and wild-life; houses with naturally weathered shingles; small towns with neat, wood-frame commercial buildings; and boat yards, harbors, sailboats, and old rambling inns on the ocean. These are the major elements which contribute to the total effect of Cape Cod and are also those in the greatest danger of destruction by insensitive and uncontrolled development.

Existing Land Use

A relationship between the development pattern and the water can be readily observed. Within one mile of Nantucket Sound the land is largely developed and consists almost exclusively of residences and commercial (retail, service and lodging) uses. The other principal residential and commercial area is Harwich Center. Smaller residential centers are located in North Harwich, between Hinkley's and Long Ponds, around Josephs and Bucks Ponds, in East Harwich and adjacent to Pleasant Bay. The remaining residential uses are strung out singly or in small groups along highways and streets and around ponds throughout the town.

The most noticeable aspect of commercial land use is its linear pattern along Route 28 - the principal highway, connecting the centers of the various towns lying on the southern side of the Cape. Industrial and kindred and institutional uses are distributed individually and largely on small parcels throughout the town.

The acres of each developed and open space land use, together with percentages, are as follows:

Use	Acres	Percent of developed	Percent of total
Developed			
Intensive agriculture	560.2	14.8	3.9
Residential	1,671.2	44.2	11.7
Retail and service	57.8	1.5	0.4
Lodging	103.1	2.7	0.7
Industrial and kindred	197.6	5.2	1.4
Institutional	86.9	2.3	0.6
Circulation	1,108.1	29.3	7.7
	3,784.9	100.0	
Open Space			
Nonrecreational	613.1		4.3
Recreational	7,918.2		55.2
Wetlands and water	2,026.2		14.1
Total	14,342.3		100.0

Based on present trends, it is predicted that by 1980 developed land in Harwich will increase from the present 3,800 acres (including circulation) to 5,800 to 6,500 acres. It is expected that the principal increase in land use will be residential.

Physiography

The natural resources of Harwich are exceptional in variety and amount. In addition to approximately 4 miles of salt-water beach frontage, the town contains all or portions of 16 fresh-water ponds each over 10 acres in size (Great Ponds), seven other smaller fresh-water ponds, two fresh-water creeks (Herring and Red Rivers), a salt-water creek (Muddy Creek), and hundreds of acres of cranberry bogs, salt marshes, and other wetlands. Over 75 percent of the town area is covered with woods, principally of the pine variety. Based on the U. S. Soil Conservation Service soil survey the percent of land that is suitable for various general land uses is shown as follows:

	Percent of Land		
	Suitable*	Difficult to develop	Not suitable
Residential, commercial, industrial, or similar developed uses and buildings	0	75.4	24.6
Streets	41.4	23.4	35.2
Woodland	3.7	0.6	95.7
Wetland-wildlife	8.2	4.0	87.8
Conservation or recreation open space	100.0	0.0	0.0
On-lot sewerage	40.0	22.4	37.6
On-lot water	73.2**	1.4**	25.4
On-lot drainage	74.1	3.8	22.1
Sanitary landfill	40.0	35.4	24.6

*Usually defined as particularly suitable.
**If no source of groundwater contamination is located nearby.

There are many areas in Harwich serviced by a public water system where the predominant use is already too small to support a private on-lot sewerage system. Principal areas are south of Route 28, east and south of Route 39, around inland ponds such as Josephs, Bucks, and Long, and adjacent to Pleasant Bay.

In other areas, where dependency is upon both on-lot water and sewerage systems, existing lots are completely inadequate in size to offset the danger of well contamination. In the area south of Route 28 lots are generally too small in size for service by private drains.

Population

The U. S. Census taken in April, 1960 recorded 3,747 persons living in the Town of Harwich. The State Decennial Census of 1965, also taken in the spring, recorded 4,830 persons. The estimated 1960, 1965, and 1980 year-round and summer peak populations are indicated below:

Components	1960	1965	1980
Summer residents including rental cottages	10,850	11,955	15,270
Hotel and motel guests	1,300	1,661	2,744
Other overnight guests	380	358	591
Day-trippers	3,500	4,025	5,915
Year-round residents	3,747	4,830	9,400
Total	19,677	22,829	33,920

The bulk of the year-round population is living in Harwich Center, West Harwich, Harwichport, north of Route 28, and South Harwich. The greatest change between year-round and summer populations occurs near Nantucket Sound.

The most marked increases in population composition between 1950 and 1960 were in the under 5-14, and 65 and over age groups. The most marked decreases during this same period were in the 15-20, 21-34, and 25-34 age groups. Harwich is becoming a town consisting principally of persons at both ends of the age spectrum-preschoolers, teenagers, and retired persons.

Housing

The number of seasonal residences has increased 239 percent since 1940, while the number of year-round residences has increased only 57 percent. Of all housing units in Harwich in 1960, 64.2 percent were summer residences. In comparison with its neighbors, Harwich has the lowest median resale value per occupied dwelling unit and the second lowest median number of persons per occupied unit.

It is estimated that there are about 400 motel, 321 hotel and 150 guesthouse rooms in the town.

To house the estimated 1980 population, both year-round and seasonal residents, about 3,000 more housing units would be needed. Of these, about 1,000 should be seasonal and the remaining 2,000, year-round.

Economy

Between 1950 and 1964 year-round employment increased from 352 to 632 persons, principally in manufacturing; retail trade; finance, insurance and real estate; and service trade. As for year-round, seasonal employment also has kept pace with increases in seasonal population. Retail and service trades account for most of the local employment, and are subject to severe seasonal variations. In 1964, the number of employees in these two groups was reduced by 842 between August and November. It is estimated that approximately 40 percent of the resident labor force or approximately 500 persons during the winter work outside of Harwich.

Many Harwich year-round residents argue that they are not realizing any significant degree of prosperity from Harwich's resort industry and that they would be better off without emphasis on it. Retired persons are a "basic industry" for Harwich, since their money comes from "off-cape" and it is spent locally. The census figures indicate that about 100 men and 200 women were in the retired classification in Harwich in 1960. In Harwich, 13.8 percent of the present taxable property is owned by retired year-round residents.

For local-year-round employment, perhaps the best opportunity is a space-using, locationally free institutional use; such as, a music school, preparatory school, small college, or an arts and crafts school. Many retirement communities in Florida have attracted small arts and crafts industries employing large percentages of retired persons.

Year-round commercial potential is based principally on population growth. Seasonal commercial potential is based on a combination of actions by both the town and private interests. As an example, motel development could be encouraged through zoning; but in contrast, the setting of increased lot size, setback and parking requirements along Route 28 also could decrease the future seasonal commercial base.

Planning District Analysis

Six concentrations or areas of blight or potential blight were found from field surveys - three were along Route 28 and the others were in the "campergrounds", the Harwichport business area, along Route 39 and along Route 124. In addition, there are many scattered dilapidated and deteriorating individual buildings located in the town.

The principal causes of blight in the southern or built-up portions of the town are heavy traffic flow and congestion, age and/or inadequate original construction of commercial buildings, lack of adequate plumbing facilities, and lack of off-street parking facilities.

The principal cause of blight in the northern or largely undeveloped portions of the town is poor yard maintenance. Some danger, principally in areas adjacent to ponds, also exists regarding excessive building density on soils unsuitable for development without both public water and sewerage systems.

1980 DEVELOPMENT PLAN

Development Goals

These major goals were selected in collaboration with the Planning Board and other town officials after discussion of alternatives and their implications upon the future development of Harwich.

- The unique scenic qualities of Cape Cod should remain forever a part of Harwich life.
- Man-made elements of the environment should be appropriate and harmonious in the natural setting and in relation to other man-made elements.
- Harwich should continue to remain principally a town of one-family detached homes. Only a small portion of the town should be devoted to apartments, hotels, or motels.
- Various village names, such as Harwichport, South Harwich, West Harwich, etc., should be gradually subordinated in favor of emphasizing the municipality of Harwich.
- The median value per dwelling unit should be increased.
- The commercial base should be sized principally for service to the year-round and summer residents of the population. Except for businesses in existing villages, future retail and service commercial areas should consist of relatively few shopping centers distributed throughout Harwich and several small limited business areas along Route 28 - both dependent upon automobile transportation. The average lot and building size of all commercial establishments should be increased significantly.
- No particular encouragement should be given to attracting manufacturing, except where it will employ retired persons or will not require a public sewerage system.
- Private or public institutional uses should be encouraged to locate in Harwich.
- Future lot sizes should be determined by land suitability. Whereas a public water system should be designed and extended to serve almost the entire town, a public sewerage system should be designed and built only where it is needed as a definite public health measure. Minimum lot sizes set by the zoning-by-law for undeveloped portions of the town should be based on suitability for on-lot sewerage systems.
- Over 20 percent of the town area should be set as permanent open space. There should be a system of greenways connecting various activity centers throughout the town.
- No further encouragement should be given to increasing public use of existing salt-water beaches or landings, or constructing additional such facilities. The public use of similar inland fresh-water facilities should be encouraged.

Future Land Use

A variety of land uses have been recommended including: residential, commercial, industrial, institutional, agriculture, wetlands and water.

Four types of residential densities are shown - rural estate, low, medium, and high. Different densities are provided to provide proper adjustment to variations in existing development patterns, land suitability, proposed service areas for sanitary sewers and water, and distance to the beach. Four types of commercial areas are proposed - general, highway and shopping center, resort and service, and resort and hotel.

Circulation

Harwich is well served by arterial highways, such as State Routes 28, 124, 39, and 137. Most of the local traffic is carried on these two-lane facilities. Route 28 is the most important street and highway in Harwich.

Since 1960 the average daily traffic (ADT) on Harwich highways has increased from 10 to 20 percent per year. However, ADT does not give a true picture of traffic volumes in Harwich. During the summer months, particularly on weekends and holidays, daily traffic is 10 to 20 times the ADT.

Based on past trends the 1980 ADT on Highways in Harwich will be two to three times the present traffic. However, the pattern of increase by individual highways could change drastically. Another two lanes added to Route 6 could increase its traffic dramatically. An increasing congestion of Route 28 would cause drivers to seek alternative means, such as a combination of Great Western Road, Main Street, and Route 39, to travel east and west through the town. The major circulation recommendations are as follows:

Route 6 - add two lanes and build an additional interchange with Depot street.

Route 39 - widen and realign.

Route 124 - widen and realign. The present offset in alignment of Depot Street in Harwich Center by moving Sisson Road in an easterly direction between Parallel and Main Streets to meet Pleasant Lake Road.

Route 137 - widen and realign.

Great Western, Chatham, Depot, and Queen Anne Roads - improve to meet arterial highway standards. If the proposed new interchange is not constructed when the freeway is increased to four lanes, the improvement of Queen Anne Road should be given a high priority.

Bank and Oak Streets - relocate Bank Street between Parallel and Main Streets to meet Oak Street and extend Oak Street to Queen Anne Road.

Harwich and the State Highway Department jointly should prepare and implement as under the jurisdiction of the State Highway Department, the elimination of left-hand turns onto or from adjacent properties; a reduction in the number of intersecting streets and driveways; an improvement in traffic channelization and signalization; an increase in minimum lot sizes and setbacks of buildings and signs in the zoning-by-law; the elimination of all utility poles and trees within 15 ft. of the pavement; and similar measures and design controls.

Walking and bicycling should be encouraged not only for health and recreation but also as an alternative to the automobile. If facilities are provided for the pedestrian and the bicyclist, a portion of the present traffic problems in Harwich could be eliminated.

Schools

The Town of Harwich presently operates its public schools on a K-2-2-4 grade-level system, i.e., Kindergarten and Grades 1 through 4 in the elementary school; Grades 5 and 6 in the intermediate school; Grades 7 and 8 in their own building; and Grades 9 through 12 administered as the senior high school. The junior and senior high schools share the campus-type group of buildings on Oak Street. The major school recommendations are as follows:

Elementary (Grades K-6) - Before 1972, the older part of the existing intermediate school should be renovated and modernized. Before 1975, the existing campus should be enlarged by about five acres and another building (10 to 12 classrooms) should be erected on this site extension. Classes could be divided so that three buildings could serve the lower, middle, and upper elementary grades (K-2, 3-4, and 5-6).

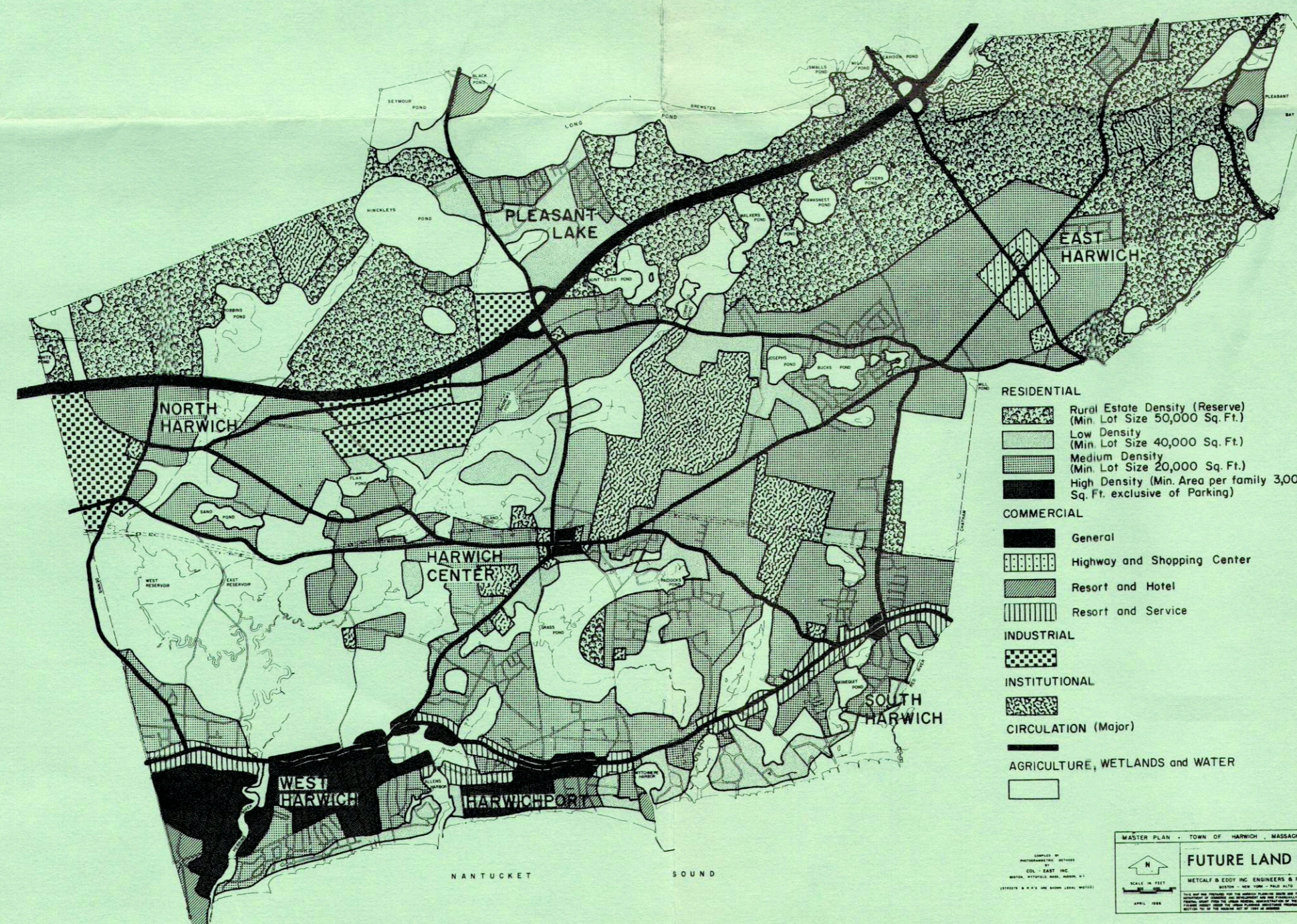
High School (Grades 7-12) - Before 1975, 6 to 10 teaching spaces should be added to the existing junior-senior high school.

Recreation and Conservation

The number and size of existing playground, playfield, and park facilities are inadequate for present, let alone future requirements. The adequacy of public salt water beaches is the greatest problem. The major recreation and conservation recommendations are as follows:

Playgrounds - Five - one each in West Harwich, Harwichport, East Harwich, Pleasant Lake and South Harwich.

Playfields - Combined baseball-softball field with lights behind the high school and an open grassed area for use as a combined football-baseball-softball field plus a hard topped basketball court in each village, except Harwich Center.



Parks - Three - one each in West Harwich, Harwichport, and South Harwich.

Reservations - Three - a large area adjacent to Grass Pond, one adjacent to the Depot town line east of Grassy and Mud Ponds, and the other, adjacent to Chatham east of Depot Road.

Salt Water Beaches - No additional such beaches. Emphasis should be placed on fresh water beaches.

Fresh Water Beaches - One for each Great Pond.

Salt Water Boating - No additional such areas other than those in process (Andrews River and Pleasant Bay).

Fresh Water Boating - One landing for each Great Pond.

Golf Course - A new 18 hole public golf course just north of Harwich Center.

Greenways - A system for the area generally north of Great Western and Chatham Roads.

Conservation and Other Open Space - The acquisition of all existing wetlands over five acres except cranberry bogs.

Recreation Center - An addition of approximately 2,500 sq. ft. to the present recreation building.

Summer Theater (Playhouse) - The present junior theater should be retained for youth groups but, in addition, a new summer playhouse should be constructed on a site west of Brooks Academy.

Golden Age Center - A portion of Brooks Academy is recommended for this use.

Recreation Program - A year-round program, possibly under the directorship of a high school teacher, should be undertaken by 1970.

Tax Titles - The Conservation Commission should be given first refusal on any such land "acquired" by the town.

Public Buildings and Lands

The major public buildings and lands recommendations are as follows:

Town Hall - An addition and a new driveway and parking lot should be built to the west and rear of the existing building. The adjacent house to the west should be demolished.

Police Station - When more space is needed, a wing should be added on the southeast end of the building.

Fire Stations - At least two and possibly three, depending on cooperative arrangements with adjoining towns, are needed during the next 15 years.

Town Library - A new facility should be built on a site created by combining the existing library lot, the one on which the telephone exchange is located, the two vacant lots to the south, and the abandoned adjacent portion of Bank Street. The two existing structures (Brooks Free Library and former telephone exchange building) should be demolished. Alternative arrangements would be the construction of the library as a wing of the junior-senior high school or behind the existing town hall.

Brooks Academy - This should be converted for combined use as an historical museum and a "golden age" center. When Route 39 between Main and Parallel Streets is relocated, it is recommended that a new summer playhouse be erected west of Brooks Academy.

Highway Garage and Equipment Buildings - A new garage should be built "out back" and the existing garage on Sisson Road should be used for garaging light equipment and storage only, demolished or possibly converted for use as a town engineer or public works department office.

Water Department - These buildings should be maintained temporarily in their present location. When a town engineer or public works office is built in the Highway Department area, all water activities also should be transferred to this area and necessary buildings erected to serve them.

Sanitary Sewerage

The entire town depends upon private on-lot systems - septic tanks, cesspools, etc.

There still exists a range of choice in most areas of Harwich between public and private sewerage service. At a minimum, Harwichport and West Harwich should be sewered. With immediate and strict enforcement of adequate zoning, subdivision and sanitary controls and acquisition of large and properly located areas of open space, population density in the remainder of Harwich might be kept low enough that no further extension of the public sewerage system would be necessary in the foreseeable future. The Josephs and Bucks Ponds areas, because of its close location to the town wells, may have to be sewered. Since this area is isolated, a separate public system may be appropriate.

Water

Approximately 90 percent of the buildings in Harwich are served by a public water system. The major water recommendations are as follows:

- To ensure adequate fire protection, carry out the remaining 1965 recommendations of the New England Fire Insurance Rating Association relative to water supply and major distribution.
- Construct additional water mains as needed to serve the recommended 1980 service area.
- Provide additional storage tanks of sufficient capacity not only to meet the requirements for fire reserve but also daily peak demands in excess of the pumping capacity of the wells.

Storm Drainage

Harwich has no man-made public drainage system made up of pipes, culverts, etc. The existing natural system, with the exception of the Herring River and its salt marsh, consists mostly of chains of cranberry bogs and scattered ponds. The major storm drainage recommendations are as follows:

- The Board of Health should not approve any septic tank installation in soil indicated by the Operational Soils Survey as having severe limitations for this purpose without a thorough on-site investigation, and consideration of the time of year and the current level of the water table.
- The acquisition by the town of all wetlands, other than cranberry bogs, is the only way to preserve open space, to protect drainage channels, to protect growth areas for fish, clams, etc., and to prevent wetlands encroachment with subsequent problems of health and sanitation as well as destruction of the natural amenities.

Land Subdivision Regulations

The complete new set of land subdivision regulations submitted to the Planning Board on June 1, 1966 was adopted with modifications on May 29, 1967.

EFFECTUATION PROGRAM

Zoning By-Law

The present by-law became effective June 15, 1951, and has been amended frequently since that date. It is desirable to adapt zoning to new and changing conditions, but the number of amendments since 1951 indicates a condition of continuous semi-emergency. The major inadequacies of the existing by-law include: an overly simple scheme of districting, which does not recognize the complex pattern of existing land use; the lack of modern zoning controls regarding parking, loading, signs, cluster development; etc.; and a format that is so constructed that desired changes are not possible as simple amendments.

We recommend the adoption of the complete new zoning-by-law and map submitted to the Planning Board on January 15, 1968.

Capital Improvements Program

Harwich is in a comfortable but not affluent financial condition. Capital improvements needed during the next six years to give effect to the Master Plan include the acquisition of land for recreation and conservation; construction of sewers and a sewage treatment plant; new wells, water storage and supply lines; a fire station, library and other public buildings; street improvements; and the construction of a system of sidewalks and pedestrian ways.