I.

KEY FINDINGS OF SURVEYS AND ANALYSES REPORT

PHYSICAL CHARACTERISTICS

In the past, the Southampton Community has benefited materially because of its unique physical characteristics, much more so than most communities. They have been the resource on which the resort economy, the shellfish industry and farming have been based. Until relatively recent times the community's development and population have not been sufficient to create any major problems with respect to these natural resources.

Now it is apparent that the evolution of the human community could result in the destruction of these very natural features upon which such high value was placed in the past. Furthermore, this evolution projected into the future could cause such imbalances in nature that its impact might be felt well beyond the boundaries of the community itself.

With these possibilities in mind, it is essential that any planning program for the future must be concerned with the relationship between the human community and its physical environment. A reasonable balance must be inherent in the future planning policy.

Land Form and Topography

The Southampton Community has a total area of 109,530 acres of land and water. Of this area, 89,570 acres are land and 19,960 acres, or about one-sixth, are water. It has an estimated shoreline of 658 miles extending along the northern and southern bays and creeks, and also along many ponds. This shoreline also includes some of the finest ocean beach (27.3 miles) found anywhere along the Atlantic Coast. Numerous ponds, freshwater swamps and tidal marshes are dispersed throughout the community adding not only ecological value, but scenic interest as well.

The topography of the Southampton Community is generally well suited to land development. Grades exceeding 15 percent, which may be considered excessive for most building types, constitute a mere four percent of the community.

Barrier beach sand dunes are extremely important in the protection of main land areas from the onslaught of ocean storms. The vulnerability of the barrier beach has been amply demonstrated by its history of channel break throughs and flooding.

Sketch #1 shows the relationship between the various terrain features described in this report and a schematic representation of the water cycle which maintains the critical ground water reservoir supply.

Watersheds and Drainage Lines

The ridge line of the Ronkonkoma moraine divides the Southampton Community into two major watersheds. Streamflow, north of this ridge line, is northward to Great and Little Peconic Bays, Flanders Bay, Noyack Bay and Sag Harbor. South of the ridge line, flow is southerly feeding the many creeks forming the estuaries of Moriches, Moneyboque, Quantuck, Shinnecock, Tiana and Mecox Bays. In the more southerly portion of the community some stream flow is collected by lakes and ponds, which do not have a free-flowing outlet to the bays or ocean. On occasions, during severe periods of rain, many of these lakes and ponds swell, causing local flooding.

Weather Features

Southampton Community is part of the Atlantic Coastal Plain, its climate being directly influenced by the ocean. The ocean has a moderating effect upon the community's temperatures resulting in mild winters and relatively cool summers. The precipitation, being rather evenly distributed throughout the year is in itself a desirable aspect for agrarian pursuits when combined with the long growing season available to the community.

The relatively mild winters and cool summers coupled with the high probability for sunshine days between May and August provides the Southampton Community with an ideal type climate in which to live and follow recreational pursuits. These weather aspects are particularly encouraging for the senior citizen who wishes to escape severe variations in temperatures. Except for an occasional storm which inflicts severe damage in low-lying coastal areas, the community has no climatic drawback.

Surface Water Pollution and Classification

Most adjacent tidal waters have been given the highest rating, i.e. a classification of SAV. by the New York State Water Resources Commission. However, some of the headwaters of Flanders and Moriches Bay had been given a lower classification essentially because of the pollution from duck farms. Some pollution was also attributed to extensive marina and canal development.

In the future, it is deemed necessary that pollution control of all fresh surface waters be given a role of increasing importance since it may be necessary to include such waters in the community's inventory of drinking water supply.

Ground Water Elevations

Water table contours do change over periods of time based upon the net difference between precipitation, evapotranspiration, direct runoff, and man's use. It is evident that the water table generally rises during the spring and recedes from about June on. This seasonal drop in the ground water elevation during the summer would reflect the increased summer residential population and visitors and farm irrigation.

Soils

Locally, there are approximately 19 different soil types: The Bridgehampton soils, intermixed with a high percentage of Haven soils and a lesser percentage of Riverhead soils, found in the outwash plain east of the canal, extending from the Shinnecock Indian Reservation to East Hampton Town. These are generally considered the best area of agricultural soils in the county.

Soils such as Carver and Plymouth predominate over the broad area covered by the terminal moraine. Some problems may be inherent in this group in relation to development because of spotted severe grades. Also, the group's excessive drainage qualities may cause pollutants from septic tanks and cesspools to more readily penetrate the soil and thus reach the ground waters of the upper glacial aquifer.

Ecology

The waters and uplands of the Southampton Community abound in a multiplicity of life forms which are intricately inter-dependant for support. Within the ecosystem, numerous subdivisions exist dependant upon varied environmental conditions. The fact that freshwater flow from the land areas into the estuaries diluting the salt content of the ocean tides, has an important influence on the types of plants and animals which select this area for their habitat. Nowhere in this vast complex marine environment are waters as fertile in food supply as they are in the tidal marshes of the estuaries.

The Southampton Community has benefited greatly from its total marine environment and may be expected to gain much more in the years to come, provided this resource is properly managed. It has, and still provides abundant catches of various table and industrial finfish; its shellfish harvest in all by oysters, and as of late, bay scallops has been excellent, sport fishing and waterfowl hunting as recreation and tourist attraction are on the increase; swimming and other water sports activities

are also on the rise. In addition, and in less apparent terms, the marine environment with its open spaces and attractive land-falls has been an elixir to both resident and tourist alike. The preceding data indicates the significance of the adjacent ocean and bays as a resource to the community. However, the direct productivity of this marine environment as a food source to man is predicated to a great extent, on the conditions of the inner bays, the harbors, and the sal. ponds and marshlands of the estuaries.

The community should clearly provide for these ecosystems in the land use plan. It is essential to do so as early as possible because of the pressures exerted upon shore front property. In a recent investigation by the U.S. Fish and Wildlife Service it was found that 3,582 acres of wetlands has been destroyed in Suffolk County since 1954. This destruction in the main was directly or indirectly attributed to pressures for housing. The second most important cause of wetland loss was due to marina or dock construction. Although carefully controlled dredging of limited depth, such as the seven foot maximum set by the Board of Trustees of the Freeholders and Commonalty of the Town of Southampton, may often times be of gener al benefit, too often the spoils from these projects are deposited upon the tidal marshes. This has a most dire consequenc the destruction of the very ecosystems discussed earlier.

Upland Environment

As in the case of the marine environment, the ecological system of the uplands includes interactions between many types of plants and animals. The largest animal, the deer, ranges widely throughout the community but has a preference for the areas adjacent to good agricultural areas where he is sometimes considered a nuisance. It is interesting to note that he does not favor the vast, undeveloped moraine of the western portion of the town. The generally poorer soils of this area produce little in the way of food. Many varieties of birds and game and pan fish inhabit the marshes, uplands and fresh water ponds of the community.

Also, numerous associations of vegetation have been classified locally by both the professional advisors to the Conservation Advisory Council of the Town of Southampton and by the staff of the New York State Office of Planning Coordination. In the case of the latter, eight large areas were recommended for their particular value or use. The master plan should include these areas in its evaluations of a total resources preservation and park system plan.

Scenic Features of the Future Community

The very form of the land and waterbodies provides a scenic setting beyond compare for the Southampton Community. The land form of the Southampton Community is dominated by three basic terrain features: the ridge of the Ronkonkoma Moraine; the streams, estuaries and bays; and the barrier beach. All three play a significant role in the character of the community. Without them, Southampton would not be Southampton. The ridge provides panoramic views in almost every direction and a fine backdrop in contrast to the outwash plain and beaches. The stream, estuaries and bays are natural articulators which distinguish the many hamlets and villages from each other. The barrier beach with its numerous tidal marshes provides a continuing view across the bays and within a short walk, magnificent overlooks of the oceanfront. Views of all aspects of Southampton's beauty are now possible, whether on foot, in a vehicle or from a boat. The continuance of these features for the enjoyment of the general public, both resident and visitors, would be of significant factor in establishing, for all time, the quality of the community's appearance.

Another feature of the Southampton Community is its historic past which can be viewed both as specific locations of building, or street frontages and local areas of historic activity. It may be expected that a well conceived master plan would consider all such aspects of community quality coordinating them in one program of preservation for the enjoyment of present and future generations.

EXISTING LAND USE

Extent of Community Development, 1966: Discounting the water area, the Southampton Community was 42 percent developed in 1966 and 58 percent vacant. The Village of Quogue was 27 percent developed and the Village of Southampton was 49 percent developed. The unincorporated area of the town was 41 percent developed. Southampton Community's land use "mix" includes 58 percent of the developed area in public and private recreation, agriculture, the RCA communications area and the Suffolk County Air Force Base, which are all considered extensive uses. Some of these may be subject to future land use change to more intensive uses. Residential land uses, which house the bulk of the summer population as well as the year around population, account for only 21.2 percent. This percentage, taken with those characteristically more intensive commercial land uses and such others as the institutional and industrial land uses, totalled about 30 percent of all developed land. Roadways and

parking account for the last 12 percent. Intensive development is primarily concentrated in the Village of Southampton and the Hamlet of Hampton Bays.

Examination of land use on a school district basis revealed that for districts west of the Shinnecock Canal vacant land comprised approximately two-thirds of each district. East of the canal, for the most part, it was less. However, a number of these latter districts have high percentages of their districts in agricultural use. To date, local school districts have depended in large part on the tourist oriented commercial land uses and on the fact that seasonal housing does not produce school pupils to maintain a reasonable balance of school revenue in relationship to expenditures. The degree to which this will continue to be true in the future is open to serious question at this time.

BUILDING AND ENVIRONMENTAL CONDITIONS

1960 Census of Housing

Since only sound housing units with all plumbing facilities are considered to be in a standard condition, it is notable that the community had 14,352 such units in 1960, or 86.6 percent of its total housing inventory. Of the remaining 2,221 housing units, 335 only lacked some plumbing while 1,440 were deteriorating and 446 were dilapidated. It was noted that the greatest proportion of deficient housing falls into the classification of deteriorating housing units, i.e.,housing which can be improved if extra effort were exerted to do so. It constituted better than one-half of the 2,221 substandard housing unit total.

1969 Building and Environmental Conditions Survey

In April of 1969, a "windshield" survey of building and environmental conditions was made by McCrosky-Reuter. The findings confirm the fact that a large number of deteriorating and dilapidated housing units still exist in the Southampton Community. While some areas have undergone substantial improvement, others appear to have become more blighted. The perpetuation of blight appears in those areas which are predominantly non-white. The areas where it appears that individually deteriorating or dilapidated units have been either rehabilitated or removed, are predominantly white. This may be a sign that more affluent families are moving in. There are also indications that conversion of former seasonal units for year around use has improved the outward appearance of many of these buildings.

The "windshield" survey of 1969 generally revealed improvement of housing conditions in seasonal housing areas where the building lot size was sufficient to permit rehabilitation, up-dating or conversion to year around use. The continuance of housing problems in seasonal housing areas principally results from the original overcrowding of the sites because there is insufficient space on the lot in which to replace these units with more substantial and modern housing. Several locations are particularly noteworthy with respect to seasonal housing problems. They are primarily located in the Hamlet of North Sea and on the barrier beach north of Cold Spring Pond.

All of the year around problem areas existing in 1969, also existed in 1960. They include several blocks in the Riverside-Flanders area; the northwestern portion of Quiogue; the northwestern portion of the Village of Quogue; along the Bridghemapton-Sag Harbor Turnpike and Narrow Lane in Bridgehampton; along Snake Hollow Road; on North Magee Street in Tuckahoe and along David Whites Lane and Halsey Avenue in the Village of Southampton. Scattered deficient housing was also noted on the Shinnecock Indian Reservation. In most of these areas, there are a great number of mixed land uses, including such incompatible uses as junkyards, warehousing, mining and varied commercial activity. The most concentrated problems were found in the Riverside-Flanders and the Bridgehampton-Sag Harbor Turnpike-Narrow Lane areas.

Most of these latter areas were inhabited by non-whites, according to the records of the 1960 Census. The 1969 "windshield" survey confirms that this is also true at this time.

It is imperative that the whole question of seasonal and year around housing problems as it relates to both building and environmental conditions, be dealt with in the community's Master Plan and the Neighborhood Analysis.

STREETS AND HIGHWAYS AND TRANSPORTATION FACILITIES

Existing Streets and Highways

Within the Southampton Community there are over 510 miles of existing streets and highways. This does not include streets. These exist on paper only as a result of undeveloped but officially filed, subdivision plats, which have not been improved sufficiently for travel. Within the Community, New York State highways comprise approximately 30.24 miles of the total while those on the county system account for 72.74 miles. Together they form the arterial system. West of the Shinnecock Canal, this

system generally follows the two shore lines, serving the several hamlets and incorporated villages along their way, with radial routes out of the Hamlet of Riverhead crossing the land area between them. Riverhead is the principal focal point, being the County Seat and major business center of the eastern five towns. Just south of this hamlet, five southern radial roads join at the traffic circle within the Southampton Community. East of the Shinnecock Canal, Sunrise Highway Extension (N.Y.S. Route 27) County Road 39 - 39A, and Montauk Highway serve as the major east-west arterial highways.

Of the principal highways and streets constructed to date, only 4.20 miles have limited access. This means that over 97 miles of the existing state and county system offer potentials for direct access from abutting uses. Despite the arterial nature of most of the system, many of these roads have limited rights-of-way and pavement widths, considering the dual function they serve. Since much of the existing development is sparse and dispersed, few problems now exist. In time, as land uses fill in the voids, the conflict in the two functions will become more pronounced.

Proposed Highways

A number of highways are proposed for the Southampton Community and its environs. Two of these major east-west express highways are on the state system. One, which does not enter this community, but nonetheless, will improve access to it, is currently under construction. This is the Long Island Expressway (N.Y.S. Route 495). It will enter the Town of Riverhead approximately 1.8 miles west of the Southampton Town Line, circle north of the Hamlet of Riverhead and extend easterly to meet the improved Route 25 west of Mattituck. The other, Sunrise Highway (N.Y.S. Route 27), is nearly ready for contract awarding and will proceed directly into the community from its present terminus at Moriches-Riverhead Road. When complete, traffic will be able to move rapidly to the Shinnecock area. Presently, four alternates are being considered between Tuckahoe and East Hampton. It is important that the one finally selected should be consistent with the community's best interests as determined by the Master Plan. Other imminent proposals include Cross River Drive (County Road 105), which will form an easterly by-pass road around the Riverhead business district, and the Port Jefferson-Westhampton Road (County Road 111).

Traffic Counts and Traffic Movement

The traffic volume counts and turning movement studies reveal

some interesting findings. First of all, they reveal the influence that Riverhead has as a year around traffic generator. Of those roads leading into Riverhead traffic circle, differences between the summer counts and those in the spring and fall are the least of all counts shown. The average weekly increase in the summer does not exceed 20 percent while weekend traffic does not exceed 42 percent. This may be contrasted with other areas in the highway system where the counts increase by from 94 to 185 percent.

Major Street and Highway Design Problems

In the Southampton Community traffic increases during the summer months appear to engender certain highway design problems not particularly noticeable during the rest of the year. In addition, traffic conflict at intersections and at locations of high curb parking demand is apt to be critical during this same season because there are more vehicles on the roads. On the other hand, some problems are built-in consequences of the general alignment and sight distances on certain major streets and highways.

The Southampton Community has many streets under the several jurisdictions of control which are relatively narrow, have poor alignment grades and sight distance. Numerous blind drives and intersecting streets also exist. An inventory should eventually be made of each, and improvements initiated. Detailed review of local accident records would aid in setting priorities. In terms of new streets, appropriate standards in the Subdivision Regulations will insure good future design. These problems apply to some of the principal streets and highways including Montauk Highway (C.R. 80), N.Y.S. Route 24, County Road 39, Old Country Road (C.R. 71), North Sea-Noyack-Sag Harbor Road (C.R. 38), Ponquogue Avenue, and Main Street (Village of Southampton), as follows:

Montauk Highway (C.R. 80): Montauk Highway's problem stems primarily from its alignment and current lack of adequate capacity during seasonal peak traffic movements. It is only a two-lane road which is called upon to perform the function of a major highway during such periods. In addition, it must provide access to abutting land uses.

N.Y.S. Route 24 (Riverhead-Hampton Bays Road): This highway also has many curved sections and intense development at its western end. The principal problem found is the congestion at the Riverhead traffic circle.

County Road 39: County Road 39 had the second highest incidence

of accidents in 1966. There, in addition to the many intersecting streets, summer traffic is very heavy.

Old Country Road (C.R. 71): Old Country Road receives heavy summer use yet the alignment and pavement are poor.

North Sea-Noyack-Sag Harbor Road (C.R. 38): This rather narrow road is a very winding one with poor sight distances.

Ponquoque Avenue-Shinnecock Avenue-Foster Avenue: These roads carry appreciable traffic to the beach on summer weekends.

Existing Bus Routes and Service

Three bus lines serve an extensive area which has an overall population density too low and too auto-oriented to be financially strong on the basis of passenger fares only. Therefore, the future potential for services in the Southampton Community would seem to be limited unless good bus passenger traffic generators develop along a given potential route or unless government subsidies are provided for the poorer routes.

The Shelter Island South Ferry

Shelter Island is linked to both the north and south forks of Long Island by year around ferry service. There is a further link from the north fork at Orient Point to New London, Connecticut. Of these ferry linkages, the South Ferry lands in the Southampton Community at North Haven. The service is somewhat increased during summer months. Experience has indicated that there is a certain amount of truck traffic and also some through automobile traffic from Connecticut. The latter through traffic is particularly notable when the Bridgehampton races are being run.

The Shinnecock Canal and Channel Traffic

The growth of boat traffic through the Shinnecock Canal from 1930 through 1968 has been phenomenal. It was noted that the total traffic remained at a high level between 1960 and 1965, but that in 1968, the volume increased from 22,442 boats to an estimated 27,000 boats for a nine month period. A second interesting figure is that for commercial boats in 1950. They hit their peak then and have been declining ever since.

Airports

Since airports and their activity generally have a significant impact on land use over a broad area, in addition to providing

a unique kind of access to the community, it is necessary to inventory and study those which are within and just outside the Southampton Community. It is also important to recognize that these findings cannot be translated from the past directly into the future since every experience and every analysis indicates that air transportation, both commercial and private, is growing at a substantial rate. In terms of operational movement at airports, this will be particularly evident in terms of private and instructional flying. It is also noteworthy that the final location of the fourth New York Metropolitan Area Air Terminal has not been settled yet.

The Suffolk County Air Force Base, until recently limited to military operations, is the only airport in the Southampton Community. Data on air traffic at the Air Base are not available at this time. There are two runways, a northeast-southwest runway 9,000 feet long and a northwest-southeast runway 5,000 feet long. Both have 1,000 foot overrun pavements. Standards for military airports are more stringent than those for civilian airports. Therefore, the existing airport runway obstruction zones would be more than ample if the Air Base were to be converted to general aviation use.

The Grumman Peconic River Plant Airport, commonly referred to as the Calverton Airport, is a second large scale facility of a specialized nature. Located just north of the Southampton Community in the Town of Riverhead, it is owned by the United States Navy and operated by the Grumman Aircraft Engineering Corporation as its testing facility. As a result, the airport is not open to the public or available for general aviation traffic. However, commercial airlines do use it for training and practicing on instrument operations with their standard aircraft. In addition, it is listed as an alternate airport for the Pan American Airlines. A 1968 estimate of aircraft operations at this airport indicated 22,000 annual take-offs and landings by local aircraft, and 5,500 annual take-offs by itinerant aircraft for a total of 27,500 operations over the year. Peak months are July and August. The Calverton Airport has two runways, a northwest-southeast runway that is 10,000 feet long and a northeast-southeast runway that is 7,000 feet long. Both are paved.

The Calverton Airport has been the subject of much speculation with reference to its potential future use as the fourth major air terminal in the New York Metropolitan Area. This has been proposed by the Metropolitan Transportation Authority and suggested by several other organizations. However, at this juncture such proposals have been set aside in favor of establishing an entirely new location. If the proposal were

to be re-activated and the Calverton Airport did become the fourth air terminal, its capacity and aircraft traffic would be radically increased. In terms of the Southampton Community, this has significance since the existing northwest-southeast runways is the principal runway.

Unlike the two major airports, the East Hampton Airport is a general aviation facility owned and operated by the Town of East Hampton. Flight activities include charter and air taxi service, flying instruction and the Starflight Airline which averages two departures per day. There are 36 aircraft based on the field: 31 single engine aircraft and five multi-engine aircraft. The total number of operations estimated in 1967 was 28,000. The Town of East Hampton has recently engaged a a consultant to prepare a master plan for future development of the airport. Although the results are not available at this time, it would be well to note that the airport site is limited to the north by a high tension power line and to the south by the Long Island Railroad. A less significant restriction lies immediately to the east of the site - a road and electric pole line. Thus, in a very preliminary way, it would seem likely that any runway expansion might be limited to the east-west runway and further that such expansion might be westerly in the direction of the Southampton Community. The considerations leading to the future land use plan, and to the master plan generally, should take this into account.

Railroad

The Montauk Division of the Long Island Rail Road is the only line serving the Southampton Community. Regular passenger service is limited to only four trains per day(two in each direction) for both weekdays and weekends. During the summer the number increases to provide for resort bound weekend passengers. The busiest passenger stations (1965-1967) were Westhampton and Southampton while the most active freight stations (1963-1967) were Bridgehampton and Quogue. In recent years rail freight on Long Island has been off about 20 percent while deficits have more than doubled. As a result, the passenger service of the Long Island Rail Road is called upon to make-up for the freight deficits.

The railroad does provide service to the Southampton Community which cannot be denied. However, this service is slight when compared to other modes of travel and freight service. The advent of new highways, the low population densities existing and expected in the immediate future, and the lack of heavy type, base industries will do little to promote a financially healthy railroad in eastern Suffolk. The railroad's greatest

financial benefit and its public service to eastern Long Island will come in the comfortable quality form of transportation it provides passengers between the metropolitan centers and the resort community. Regular daily commuting will probably increase at low to moderate rates dependent upon improved service under presently conceived modernization programs.

COMMUNITY FACILITIES

Recreation

The increasing trend towards greater leisure time has placed the need for parks and recreational areas in a higher priority than ever before. As an essential community service, they provide for the needs of persons of all ages and interests in addition to contributing to the general liveability and attractiveness of the community. Consideration of sites for potential parks and recreational areas should begin long before actual needs evolve so as to prevent the loss of the most attractive and suitable sites. This summary will deal with the various categories into which both public and private recreation areas have been classed for purposes of evaluation. Following is a brief discussion on the significant aspects of each category:

Public Upland Parks and Play Areas: These upland parks do not generally have bathing as a major emphasis, but offer a variety of recreation pursuits, both passive and active. Of the several county parks in the Southampton Community only Sears Bellows can be considered to be a developed upland park. The 646 acre park offers a large variety of recreational pursuits. In effect this park, plus the Flanders Club, combines to form a continuous greenway between Tiana Bay and Flanders Bays.

The Town of Southampton has only one large upland park, the 100 acre Elliston Memorial Park, most of which is undeveloped. There are approximately 12 town and village upland parks within the Southampton Community most of which are quite small - under 10 acres - therefore not particularly useful as community-wide active recreation sites. Of this number six of the park sites are presently undeveloped.

Throughout the Southampton Community, the public schools are the foremost source of local playgrounds and playfields. The 14 school sites which have a total of 126.5 acres of land set aside for recreation, are available for community use after normal school hours. It is expected that 20.2 of the acres which

are presently undeveloped provide expansion potential that could be further amplified by more intensive development of some of the existing playgrounds. It was found that while nearly all school sites had playground equipment, only three had softball diamonds, and five had tennis courts. As these are sports which have a special appeal to adults, the small number of such public facilities offered throughout the Southampton Community suggests they be given special consideration in future expansions of school playgrounds and other public recreation areas. While school playgrounds do serve the community, they are subject to possible future decreases in area, as school needs increase for building sites. As this occurs, it will be necessary for local government to take on a greater share of this function.

Public Bathing Facilities and Beach Access Points: In the Southampton Community public bathing facilities and beach access points are a most important feature in light of the unique potential of its physical character and summer resort appeal. Use of the beaches is almost entirely in the summer months when the total population ranges between 100 and 135 thousand persons. This figure includes both resident population and day trip visitors.

Shinnecock Inlet Park on Dune Road is the only Suffolk County beach facility within the Southampton Community but it is essentially undeveloped. The Town of Southampton operates ten beach facilities. All except W. Scott Cameron beach, are open to the general public on a fee basis. In addition, the Villages of Quogue and Southampton each operate beaches which are restricted to their own residents.

Usage of the public beaches through the Southampton Community has increased by approximately 76 percent between 1967 and 1968, with the greatest increase taking place west of the canal. Most of the public beaches are heavily used on the weekends with the following close to, or over, their parking capacities: Westhampton, Ponquogue, Flying Point, W. Scott Cameron, Elliston Memorial Park.

Private and Semi-Public Recreation Facilities: A great variety of activities are provided by public and semi-public facilities, and in some cases they are the only source of certain kinds of recreation. There are ten golf courses, of which only one, a nine hole course, is open to the general public. The rest are restricted on a membership basis. Approximately 1,755 acres of land are devoted to golf, while 1,375 acres of private land holdings are licensed as shooting preserves.

There are 21 major beach, surf, racquet and yacht clubs located throughout the Southampton Community many providing extensive and diverse facilities. Although they are available only on a limited membership basis, membership is not necessarily of a selective nature. In addition, there are six vacation camps located in the Southampton Community with a total capacity of 560 persons, and occupying 105 acres of land. Also there are many commercial-recreational enterprises, the most significant being the two raceways in Bridgehampton and Westhampton.

Natural Environment Parks and Sanctuaries: These public and private lands have been set aside as areas for the conservation of natural features, resources or ecological systems and wildlife. Their function pre-empts general active recreation pursuits. A total of 1,250 acres are classified as falling within this category.

Park and Recreation Area Needs: On the basis of established standards for park and recreation area needs, the following findings have been noted:

Neighborhood Parks and Play Areas- adequate for present year around population, but not sufficient for summer population. More strategically located areas are needed other than those provided by schools.

Community Parks- approximately 390 acres short of need for summer population, although they are adequate for present year around population. Additional bathing and parking areas will be required well before 1990.

County Parks- possibility exists of an additional 4,000 to 8,000 local acres being needed for future county purposes.

Private Recreation- any losses in this area may generate an additional need for its equivalent replacement by the municipalities.

Public School Facilities

Within the Southampton Community the public school system educates over 87 percent of all students in grades K-12. At this time there are 13 school districts, three of which are in two or more towns. There is an evident lack of precise boundary identification for most of the districts. This will begin to present more of a problem as further development takes place.

Of the 13 school districts, seven have their own facilities for grades K-12. The remaining eight contract with these districts for the education of the grades they do not provide. Overall, most of the schools in Southampton are being faced with increasing pupil loads. Many of the districts already exceed theur recommend plant capacity.

New growth will have the most immediate effect on the districts west of the canal due to their proximity to the new highways, but all areas of the town will be effected. An additional cause for increasing enrollments are the conversion of seasonal units to year around housing caused, in part, by the pressures on the housing market.

Based on the projected population it is estimated that townwide there will be a need for 107 classrooms by 1975 and 686 classrooms by 1990. School boards should be aware of this potential growth when considering their future needs in terms of site acquisition.

Centralization is a concept which has been explored by many of the districts in past years, in light of anticipated future growth and cost problems. A need for contralization can be justified with respect to the economies of size, both in terms of overall education costs and the provisions of necessary facilities to insure a quality education.

Public Buildings and Facilities

Municipal Buildings: Critical space needs are evident in the Southampton Town Hall which serves most of the functions of town government. Recently, a prefabricated structure has been placed on the small site thus severely limiting parking which is about 20 spaces under what should be considered a minimum. Police facilities are also limited, with overnight lockup space rented in the nearby village hall. Town highway equipment is parked in sites throughout the town, four of which are presently rented and are not adequate.

Libraries: An expanding population, growing leisure time, increasing level of education as well as the need for higher education, all point to an expanding need for library services. Future needs must consider the demands of the seasonal population in terms of collection and hours. New libraries should be so designed and located as to offer those in the community an invitation to enter and utilize the resources available.

Fire Protection: Fire protection for the Southampton Community

is provided by eleven fire departments organized within fire districts or their respective villages. In addition, the Suffolk County Air Force Base maintains a substantial fire protection unit.

Fire protection for the Southampton Community is generally adequate for most areas of the town. Consideration should be given to deficiencies in water supply which exists in some areas in addition to new equipment where needed. A centralized fire alarm system for all districts should also be investigated.

COMMUNITY WATER SYSTEMS AND SOLID WASTE DISPOSAL FACILITIES

Community Water Systems

The Southampton Community is served by 11 water distribution systems operated by two public water districts, the Suffolk County Water Authority (3), and six private water companies. The largest supplier is the Suffolk County Water Authority, serving an estimated 4,990 of the 7,991 customers served by public water supply within the Southampton Community. Those areas within the districts where service is not available, and those areas outside the districts, are all on private individual wells. The only major institutional user having its own supply is Southampton College. Farm irrigation is also a major factor in the use of private, individual wells.

Regarding the adequacy of the community water supply systems throughout the Southampton Community, it can be generally stated that at the present time, severe problems do not exist. In recent years, the Suffolk County Health Department has not been apprised of any significant number of complaints involving the supplies of community water. However, pipe replacement, system linkages and increased pressure will be necessary in the future. Extension of public water supply usually results in most of the cost of new mains, etc., being charged directly to the potential customers.

Anticipated Water Demand

A recent report commissioned by Suffolk County and New York State Department of Health envisions that, out of a total estimated year around resident population capacity for the county of 3,060,000, about 919,000 persons will be in the five eastern towns. Of this number 269,000, or 29 percent will settle in the Southampton Community. These estimates, due to different assumptions, are proportionately higher for the years 1980 - 2020 than the McCrosky-Reuter estimates for year around population. The significantly different assumption is that the county report projects a much greater growth rate for the year around population, including some ultimate breakdown of local zoning,

while McCrosky-Reuter estimates assume the continuance of the substantial seasonal resident population for the next two decades with a somewhat lower year around resident growth rate. Demands for water are not only made by residential uses but by others as well, particularly agriculture.

The county study concludes that the total average daily water usage in the Southampton Community will nearly triple from 4.77 to 13.27 million gallons between 1965 and 1980. Utilizing comparable per capita consumption estimates as the county study and the population estimates projected in this Urban Planning Assistance Program, the 1975 daily water demand is expected to range between 10.36 and 11.32 million gallons, while in 1990 it is expected to range between 17.15 and 18.64 million gallons, or nearly the 19 million maximum daily available yield as estimated by Jacob. At a per capita consumption rate of 150 gallons per capita per day, this supply would support a population of 127,000 year around persons. As a result of the critical nature of Southampton Community's water resources, both Jacob and Mahoney, as consultants to the town, have proposed that the town limit population to a level consistant with its resources. In addition, through careful management of the community's water resouces, they recommend that the community seek to maintain a balanced water consumption budget without importing water or rationing per capita consumption.

Existing Solid Waste Disposal Facilities

Within the Southampton Community there are seven active solid waste disposal sites. All but one are operated and maintained by the Town of Southampton, under the supervision of its highway department. There are also two former sites which are currently inactive. Refuse collection throughout the community is either by commercial cartmen under private contract with households or business establishments and institutions, or by individual residents who carry their own refuse and trash. In addition, scavenger wastes have been dumped at many of the sites. Except for the town's large North Sea disposal site, which is a sanitary landfill operation, all sites are considered as simply open dumps. The goal of both the state and county health departments is to close all such open dumps. The town has already initiated the use of packing units in a transfer operation at two sites. This makes possible convenience of multiple collection points, while maintaining high sanitary standards and efficiency through the operation of fewer sanitary landfill sites.

It is apparent that in order to keep haulage costs down a new sanitary landfill site, comparable to that at North Sea, must be found in the western half of the community. It is estimated that the 93 acres which Southampton Community has remaining

for sanitary landfill will be used up by 1973. It will also be necessary to acquire up to 157 additional acres so as to provide for the community's needs through the year 1980 and up to 564 acres in 1990. New disposal sites must be carefully selected in terms of costs of operation and initial acquisition, as well as being situated so as not to despoil natural resources.

PARKING FACILITIES STUDY

A survey of central business district parking was made in the Hamlets of Bridgehampton, East Quogue, Hampton Bays and in the Villages of Southampton and Quogue. They revealed that the Bridgehampton and East Quogue business districts are generally providing adequate parking for most of the year. Even on peak summer Saturdays, when curb and offstreet facilities experience maximum usage, many of the more remote spaces are not fully utilized. The major parking problems occur in the more centrally located curb spaces and offstreet lots. The peak demand on such Saturdays occurs in the morning hours along the eastbound curb face of Montauk Highway suggesting that eastbound transients stop for sundry needs. It was also found that at least 89 percent stayed less than one hour.

The Village of Quogue has ample parking capacity with incidental problems, some related to diagonal parking.

On the other hand the business districts of Hampton Bays and the Village of Southampton have distinct parking and circulation problems during summer Saturdays. Occupancy exceeded capacity at all prime curb frontages and in those parking fields which are most convenient to the business uses.

POPULATION GROWTH AND TRENDS

Between 1950 and 1960, Suffolk County had the greatest growth rate of any county in the United States, 141.5 percent. During this same period, the Town of Southampton's population increase was the greatest population of any of the five eastern towns. In fact, nearly 15 percent greater than the sum of the other four towns.

In all census tracts, except SH 104, the percentage of the population age 50 and over significantly exceeded the Suffolk County average, suggesting that many persons use the Southampton Community as a retirement settlement.

Summer Population Estimates

The summer resident population, during typical weekends is estimated to be at least 98,100 persons in 1968, or nearly three times the winter population. Overcrowding of facilities, including private homes, may result in an additional 25 percent on occasions. Based on local experience, some observers believe that it may be as much as four times the winter population. These estimtes do not include the very substantial number of non-resident visitors on day trips.

Projections

The Nassau-Suffolk Regional Planning Board has projected Southampton Community's resident population to the year 1985. This Urban Planning Assistance Program extends this projection still further to the year 1990. The figures are as follows: 45,000 in 1975; 67,000 in 1985 and 84,000 in 1990. In addition, seasonal residents in the community will increase these figures yielding a projected total summertime, weekend population of 120,200 in 1975 and 175,100 in 1990. Day trippers would constitute a surcharge of over 20,000 more persons.

The entire community's saturation population, considering the Town of Southampton's 1966 Zoning Ordinance, could be in the order of 260,000 persons.

ECONOMIC ACTIVITY

General Economic Outline of the Region and the Southampton Community

Although Long Island communities have had a long history of dependence on the New York Metropolitan Region, in the period since the end of World War II this dependency has gradually diminished as local industry, business and services began to develop. Employment increases have been most pronounced in retail and wholesale trade and in the services. Although manufacturing is still the third most prominent employer, it is declining as a percentage of new jobs.

In 1967-1968 most of the new plant construction and expansions of existing plants occurred in the Farmingdale-Amityville and Hauppage areas, producing little pressure for residential growth in the Southampton Community. However, as plant construction continues to increase in Eastern Islip and Brookhaven and the Sunrise Highway is extended easterly, Southampton will come within what can be considered a reasonable commuter driving range. Within the Southampton Community resident employment in various kinds of services predominated, followed by those engaged in retail and construction trades. Agriculture, although important in the overall economic picture, is not a large employer.

Seasonal Housing

Seasonal housing constitutes an important factor in the resort economy that has been established in the Southampton Community. In 1960 private seasonal housing units represented 47 percent, or 7,791 out of 16,573 total housing units. This represents a 142 percent increase over 1950, attesting to the demand for recreational housing. It is now estimated that approximately 10,205 private seasonal housing units exist within the Southampton Community. By 1990 it is estimated that there will be 13,100 such units. It has been noted that if only these year around dwellings which are now used for seasonal purposes become occupied on a year around basis, the population could increase to 53,100. This would have a great impact on the overall community.

Commercial seasonal housing, which includes rental dwelling units, is estimated to have a potential capacity for 5,400 persons throughout the Southampton Community. On the basis of present zoning and the existing rate of increase of such establishments, this capacity could increase to 7,200 persons by 1975 and 11,100 persons by 1990. Consideration must be given to water supply, sewerage, traffic, and other facilities where higher densities of this type are to be located.

Marinas

In the past decade the mushrooming sales and ownership of pleasure boats have brought about a corresponding demand for the necessary supportive services. Representative of this growing industry are the marinas found in the Southampton Community, one of the finest marine recreation areas in the nation. It is estimated that 7,000 boats are based in the Southampton Community. This number is projected to increase by 1975 to 8,600 and 12,500 boats by 1990.

The demand for marina space has resulted in new and expanded facilities in recent years, with most expecting to utilize their full capacity this year.

It is anticipated that some regulation of both boating and the marina industry will be necessary, so as to prevent contamination of valuable wetlands and to prohibit marina locations where they would be incompatible with adjacent land uses.

The Agricultural Economy

While still an important aspect in the overall economy of the Southampton Community, agriculture is beginning to play a de-

clining role. Between 1959 and 1964 the number of farms in Southampton and East Hampton declined from 198 to 171 with a corresponding loss of 5,000 acres from agricultural usage. Potatoes are the major crop.

The continuance of farming in the Southampton Community will depend greatly on the economic stability of Long Island agriculture in a competetive market, and local development pressures for available land. The fact that this community has some of the best agricultural soils in the state is worthy of some extra effort by the municipalities to foster this industry's continuance.

MUNICIPAL FINANCE

This analysis of public finance for the Town of Southampton and for the Villages of Southampton and Quogue reviews data over the 10 year period 1957 through 1966 and, on the basis of the observed general trends, it projects the value of each item studied for 1970 and 1976.

It was found that the true value of assessed properties have been significantly rising in all three municipalities, thereby providing reasonably good capacities for both future operational expenditures and capital expenditures. Projections for 1970 and 1976 suggest that this will continue into the future.

It was also found that, although seasonal residents use community facilities and probably account for a substantial portion of the related expenditures, they produce at least equivalent, if not greater, tax revenues. As the trend towards greater year around population increases, school districts as well as municipalities will be called on to provide additional services in areas presently served on a seasonal basis. At that time tax revenues from these same residences will be called upon to support year around services.

TOWN-WIDE GENERAL PLANNING OBJECTIVES

The Southampton Community is influenced by many of the same socio-economic forces which are acting upon its eastern neighbors. Collectively, they should plan together to establish a high quality, area-wide environment. Presently, most of these neighbors have completed individual master plans and have zoning

ordinances which can regulate the type of growth they will get. Unfortunately, some of the ordinances have not followed the planning objectives of their community's master plan.

Of particular interest is the emphasis being placed on Riverhead's down-town area as the economic center of eastern Long Island. Ancillary to this purpose, several circulatory roads have been proposed to accommodate traffic in the area, some of which will influence land use planning in the Southampton Community. Also of particular note, are the conservation efforts and airport development plans of the Town of East Hampton. In the Brookhaven plan, the contiguous Hamlet of Eastport has been slated for business and industrial expansion.

Within the Southampton Community the three Villages of North Haven, Sag Harbor and Westhampton Beach are essentially residential communities, with the latter two having some supporting commercial and tourist oriented facilities.

It is essential that the Southampton Community master plan reflect no less than the best efforts presently being considered in adjacent communities.

Alternative Town-Wide General Planning Objectives

There are several major policy questions which must be decided before general planning objectives can be established for the Southampton Community. They are as follows:

1. Should primary consideration be given to maintaining a high quality of natural environment while promoting public and private land use development, or, should environmental factors play a secondary role? In part, this question relates specifically to the present practice of filling-in wetlands at the cost of destroying the ecology of the creeks and bays.

2. Should the community continue to develop as a seasonal resort area, or, should it encourage and plan for increased year around population and suburbanization? It can be assumed that the answer to this question is a matter of the degree of encouragement given to development types and related facilities. To some extent, increasing suburbanization poses additional questions, namely: How shall the community economically support itself; should it consider other industries, should it consider intensive commercial development of the barrier beach?

3. Should the community seek to limit population through restricting residential development, and proportionately restricting commercial and industrial development in keeping with its limited fresh water supply and its concern for maintaining the natural environment, or, should it project more intensive development assuming that future technological break-throughs will solve the water problems and that the emphasis on the natural environment should be restricted? Tied to this is the implication that an overdrawn water supply will not only restrict the water supply to residents it will also tend to dry-up fresh water streams, ponds and lakes and to destroy the brackish water in the estuaries, bays and tidal marshes. The impact of these conditions will destroy the unique environment balance and, as a result, the ecological systems for which that balance is essential.

4. Should agricultural pursuits be fostered, or, should they be phased-out to be replaced by other more intensive land development?

5. Should present development practice of suburban-type residential subdivisions scattered over the entire community be continued, or, should an attempt be made to cluster residential development and to concentrate most of it in existing hamlet areas where a variety of housing types and costs, as well as convenient business and community facilities can be provided? In connection with the latter, would extensive business development along highways, commonly referred to as "strip commercial" development be discouraged? Since it is highly unlikely that the concentration of development in the hamlets will result in no suburban development in the outlying areas, some small scattered residential areas may be expected. Given this condition, should small convenience shopping centers be provided in these areas? Should planned residential development, which would offer the convenience and cost savings of clustering as well as the possibilities of open space preservation, be permitted, required or restricted, either in these more open space areas or in all areas?

6. Should the already proposed regional transportation facilities be supported, modified, or further developed in the community master plan? This would include state and county highway proposals, future aircraft use of the Suffolk County Air Force Base, railroad and boat channel improvements.

7. Should historic buildings and places and particularly

fine natural scenic features of the community be considered focal points and special resources of the community to be preserved and protected, or, should they be ignored by the Master Plan and public policy?

Although these questions are sufficiently broad, to suggest many other, more detailed questions the first consideration of the Master Plan must be to resolve such broad issues. The result is set forth as the general planning objectives. With these general policies established, the community can proceed to resolve more detailed questions within this framework through both the Master Plan and its effectuating measures.