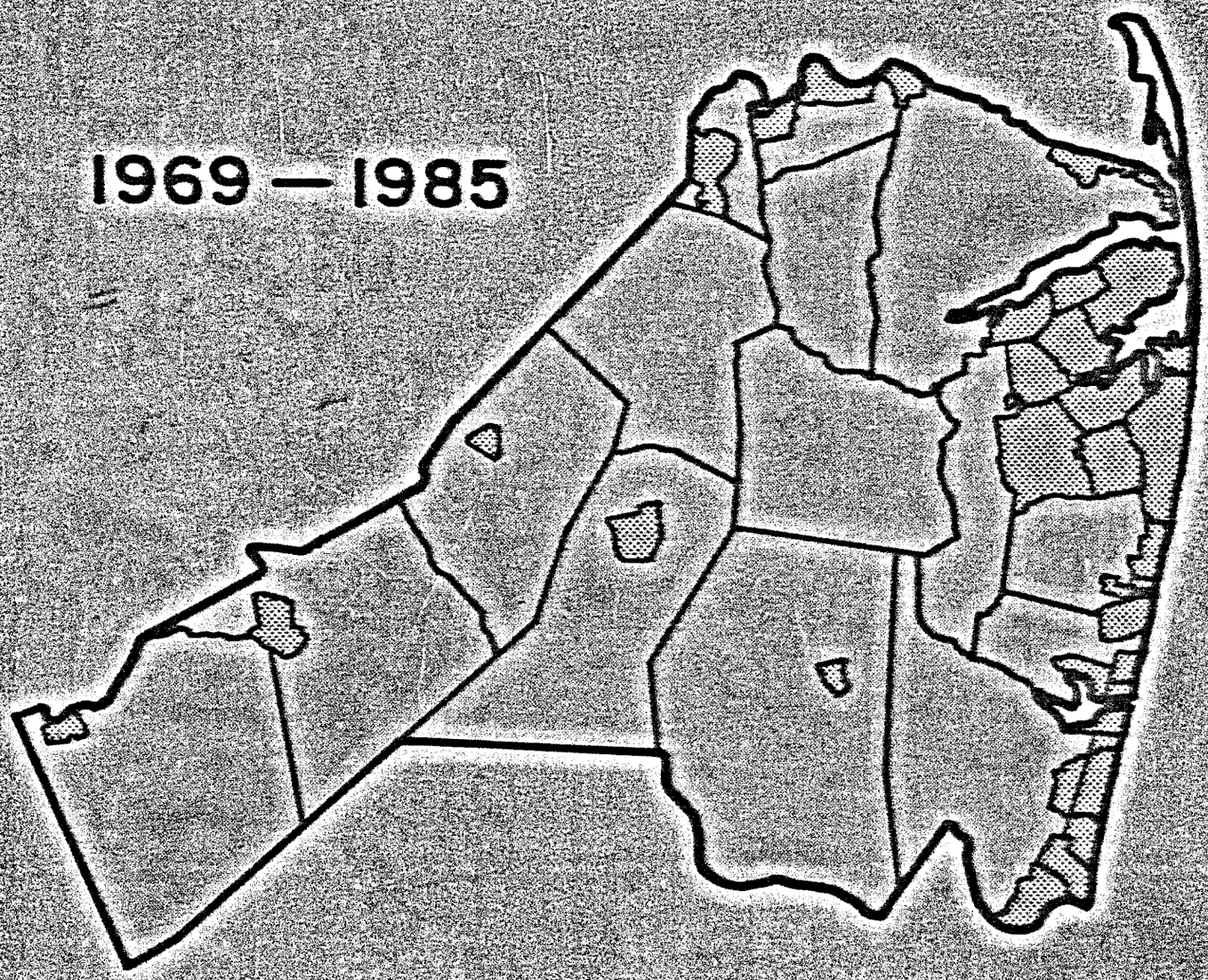
GENERAL DEVELOPMENT PLAN

1969 — 1985



MONMOUTH COUNTY

PREPARED BY MONMOUTH COUNTY PLANNING BOARD

OCTOBER 1969

ABSTRACT

TITLE:	Monmouth County General Development Plan
AUTHOR:	Monmouth County Planning Board
SUBJECT:	A Comprehensive General Development Plan for Monmouth County Integrating the Recommendations and Conclusions for Land Use, Transportation and Public Facilities
DATE:	November, 1969
LOCAL PLANNING AGENCY:	Monmouth County Planning Board
SOURCE OF COPIES:	Clearinghouse for Federal Scientific Information, Washington, D.C. Monmouth County Planning Board Court Street & Lafayette Place Freehold, New Jersey 07728 HUD Regional Office Library Region II 6th and Walnut Streets Philadelphia, Pennsylvania 19106
HUD PROJECT NO:	N.J. P-69
SERIES NO:	5
NO. OF PAGES:	105

ABSTRACT: This report contains a number of conclusions, recommendations and proposals in the form of maps, charts and written text which present the desirable pattern for guiding the future growth of Monmouth County. The General Development Plan report summarizes the basic studies on physical characteristics, land use, population, housing, economic base and circulation and transportation. It contains an analysis of the future development potential of the residential, commercial, industrial, agricultural and resort elements of the County's economy. The General Development Plan consists of proposals for land use, circulation and public facilities. A financial analysis of the cost of these proposals is included. The report contains twenty maps and diagrams and thirteen tables.

MONMOUTH COUNTY

Report No. 5

GENERAL DEVELOPMENT PLAN

No. 1 Land Use and Physical Characteristics

Published in November 1967

No. 2 Population and Housing

Published in April 1968

No. 3 Economic and Social Survey

Published in January 1969

No. 4 Circulation and Transportation

Published in October 1969

Note: The preparation of this report was financed in part through an Urban Planning Grant from The Housing and Home Finance Agency, under the provisions of Section 701 of The Housing Act of 1954, as amended.

The remainder has been financed by local funds and by an appropriation of the State of New Jersey as part of The Expanded State and Regional Planning Program.

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8.0 GENERAL DEVELOPMENT PLAN

8.1 GENERAL INTRODUCTION

The General Development Plan is the final report in a series on Monmouth County to be completed by the Monmouth County Planning Board with the aid of a Grant from the Federal Government under the Housing Act of 1954, as amended. The County is shown on the accompanying map in relation to other areas.

The overall objective of this program is to provide Monmouth County with a comprehensive long-range development program which will include recommendations on land use, circulation and public facilities. These proposals were formulated after giving consideration to the metropolitan pressures influencing the County.

The location of Monmouth County in relation to New York City and Philadelphia is graphically illustrated by Figure 1. The close proximity of the County to these metropolitan areas and the urban corridor that is developing in New Jersey between them is apparent from this map.

The Monmouth County Planning Board officially divided the County into six planning areas for organizational and statistical purposes on May 15, 1967. Before doing this careful consideration was given to such factors as land area, population - present and future, number of municipalities and natural boundaries. In this series of reports, data has been organized by these planning areas, the boundaries of which are delineated on Figure A.

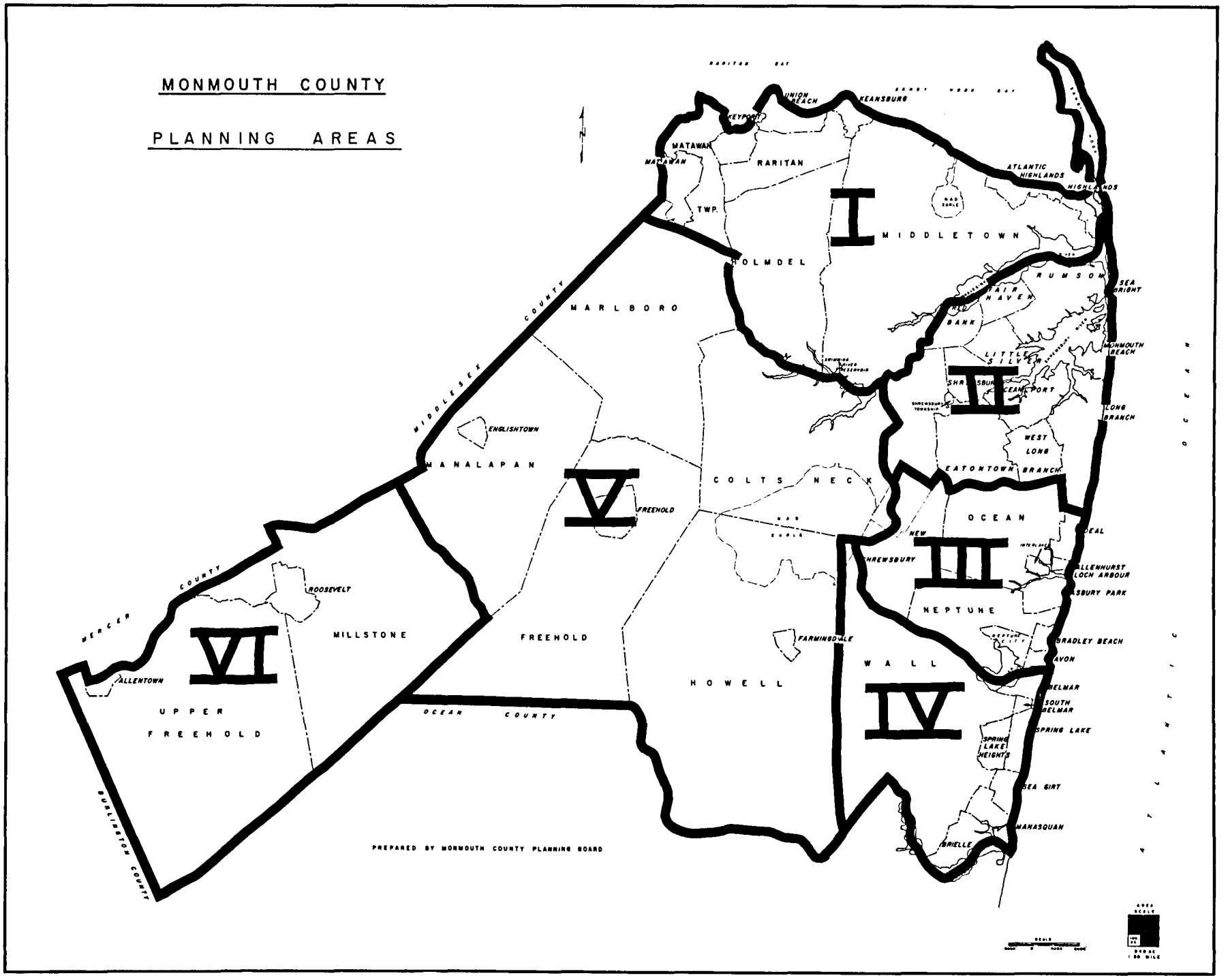

MONMOUTH COUNTY
PLANNING AREAS
RARITAN BAY
SANDY HOOK BAY
UNION BEACH
KEANSBURG
KEYPORT
MATAWAN
MATAWAN
RARITAN
TWP.
HOLMDEL
MIDDLETOWN
ATLANTIC HIGHLANDS
HIGHLANDS
RUMSON
SEA BRIGHT
FAIR HAVEN
BANK
LITTLE SILVER
MONMOUTH BEACH
SHREWSBURY
OCEANPORT
LONG BRANCH
WEST LONG BRANCH
EATONTOWN
MARLBORO
MIDDLESEX COUNTY
ENGLISHTOWN
MANALAPAN
FREEHOLD
COLTS NECK
OCEAN
NEW SHREWSBURY
ALLENHURST
LOCH ARBOUR
ASBURY PARK
NEPTUNE
BRADLEY BEACH
AVON
BELMAR
SOUTH BELMAR
SPRING LAKE
SPRING LAKE HEIGHTS
SEA GIRT
MANASQUAN
BRIELLE
WALL
HOWELL
FARMINGDALE
FREEHOLD
MILLSTONE
ROOSEVELT
MERCER COUNTY
ALLENTOWN
UPPER FREEHOLD
OCEAN COUNTY
BURLINGTON COUNTY
I
II
III
IV
V
VI
PREPARED BY MONMOUTH COUNTY PLANNING BOARD

FIG. A

8.11 GOALS AND OBJECTIVES OF THE COUNTY MASTER PLAN

The proposals and recommendations of the County Master Plan are designed to accomplish a series of interrelated goals and objectives based on the needs and requirements of the people of the County. The measurement of existing conditions and potential for various land use patterns established the framework within which these goals and objectives were established. In arriving at these, economy, efficiency and convenience were carefully considered.

LAND USE

1. The provision of three areas of urban development selected and delineated on the basis of existing development patterns and projected development pressures. These areas would be confined, shaped and separated by areas of public open space and low density of development. The urban development areas should contain approximately 90% of the population increase projected to 1985. This pattern as reflected on the plan would have the dual objective of allowing services and facilities to be more economically provided to concentrations of population while preserving necessary open space.
2. The use of the neighborhood unit as the basic building block for newly developing residential areas designated for urban development as urban service areas. Local park, school and recreation areas will be an integral part of each neighborhood unit

and there would be a variety of housing types and lot sizes to meet the needs of the broad population spectrum. Figure 11 illustrates a typical neighborhood design incorporating these features.

3. The concentration of new and expanded commercial activities in existing and proposed shopping centers and districts as indicated on the Master Plan. Strategic locations were selected for these commercial centers which will relate to the highway plan.

4. The reservation of specific locations for economic development activities including industrial areas and areas for office and research facilities. The emphasis in selecting industrial areas was proximity to interchanges on the Freeway System and the availability of existing and proposed utilities. In recognition of the increased interest in locating administrative office and research facilities in Monmouth County a category for these activities was included in the plan. These areas were selected with emphasis on the aesthetic character of the area. To accomodate the anticipated increases in employment and allow for alternatives in site selection, 20,000 acres are provided on the plan for industrial development and 3,000 acres for office and research facilities.

5. The establishment of a series of green belts and parks closely related to major stream courses, by 1985. These areas would have multiple benefits in preserving the environment of Monmouth County and augment the

opportunities for development of programs in total water management in the future. The goal which would provide for the ultimate needs of the County is 10% of the County's land area in this category.

PUBLIC FACILITIES

1. The timely provision of sanitary sewerage facilities to urban service area designated on the Plan in accordance with the adopted Master Sewerage Plan. The goal and objective for this program should be the construction of regional sewerage facilities in all drainage basins tributary to the Raritan Bay and Atlantic Ocean by 1975, designed with interceptor capacity to meet the ultimate requirements of each watershed. An additional objective is the expansion and consolidation of sanitary sewerage systems in planning areas 5 and 6 including intensification of treatment by 1975.
2. The extension of water supply service to urban service areas in accordance with the Water Supply Plan which is nearing completion. The development of the first phase of the Manasquan River Project by 1975 for the South Shore Area and the Southern Section of the Monmouth Consolidated Franchise Area, providing 10 million gallons of water per day. To meet additional County requirements by 1985, the second phase of the Manasquan Program should be completed with the necessary transmission

facilities to reinforce various systems dependent on ground water supplies. The ultimate objective of the Water Supply Plan is to improve dependability through interconnection and unification of all systems in the County.

TRANSPORTATION

1. The most critical transportation need in the County is the completion of an integrated system of freeways by 1975. This would include Routes #18, #35, #I195 and the northern extension of Route #38 to Route #18. These freeways are vital to the Land Use Proposals of the Plan and the separation of regional traffic to high speed limited access facilities.

2. The improvement of various highways classified as primary arterials which serve as major feeders to the freeway system and carry major traffic movements between principal traffic generators in the area. The routes which should be improved or modernized by 1975 include Routes #33, #35, #9 and #66. These improvements should include widening to accomodate four moving lanes, separation of traffic by direction with medians or barriers and intersection improvement.

3. The secondary arterial highways on the Plan should be protected by timely acquisition of right-of-way. The secondary arterial system should be improved through a program of construction on existing and proposed roads in this classification. The objective is to create a County road system with uniform design

standards by 1985.

4. The major collector road system delineated on the Plan should be protected by the protection and preservation of right-of-way by the municipalities for all of the Plan proposals. Systematic improvement of these roads should be undertaken as development pressures dictate.

5. An important objective of the Plan is the improvement of the main line of the New York and Long Branch Railroad for the convenience of our rail commuters. This goal is supportive of the Land Use Plan since these commuters are a high income group residing in residential areas with low density standards. The improvements should include electrification of the entire line and station improvements as indicated on the Plan.

8.12 PROJECT METHOD AND PROCEDURE

The development of the plan included a series of preliminary steps designed to measure the potential for various types of land use and economic development. Existing conditions were carefully measured tc identify factors which would influence or restrict development. The potential for residential, commercial, industrial, agricultural and resort development was then measured with emphasis on the impact of metropolitan pressures on the County. Taken in combination, the existing conditions and potential for future development established the limits or framework within which planning must take place in the County. After considering and testing various alternative patterns of development, the most desirable pattern of land use was then selected and necessary public facilities were integrated into the Plan.

8.2 SUMMARY AND ANALYSIS OF EXISTING CONDITIONS

8.21 PHYSICAL CHARACTERISTICS

The study of physical characteristics revealed that over 70% of Monmouth County's land area was free of physical impediments - excessive slopes or poor drainage that would limit or restrict intensive development.

There are three areas which can be readily identified as concentrations of land with steep slopes in Monmouth County. They are the Mount Pleasant Hills area of Marlboro, Colts Neck, and Holmdel Townships, the Navesink area of Middletown Township and the central

portion of Millstone Township. Such areas are extremely difficult and expensive to develop. Roads and utilities are difficult to provide and serious erosion problems can be created by the removal of trees and natural vegetation, and these can be costly to correct. These areas should definitely be designated for very low density development or park and conservation use.

Areas of poor drainage shown in Figure 1A either swamps, marine tidal marsh or flood plains adjoining streams or brooks - are not suitable for development and should be incorporated into public ownership or protected by easements. Fortunately, much of the swampland is already in public holdings - Earle Naval Ammunition Depot and Turkey Swamp Hunting and Fishing Reservation and the remainder should be reserved for this purpose.

The importance and significance of the natural drainage system - the streams and brooks of the County cannot be over-emphasized. There are several compelling reasons why the natural drainage system should be protected - either by public ownership or easements along streams and adjoining lands. These include:

A. The rate of storm water runoff will increase as farmland is converted to more intensive use. The most economical means of accommodating this increase is by reinforcing the natural drainage system through protection and improvement of streams and brooks.

B. The area adjoining streamsprovides the most economical location for trunk and interceptor sanitary sewer mains since a sewer collection system is most economical with gravity flow.

C. The areas adjoining streams with well defined banks were left in their natural state by farmers to prevent erosion. These wooded strips should be retained for their dual function of erosion control and their aesthetic value in providing visual barriers between developments, in the form of green areas.

D. The protection of streams and adjoining lands also provides sites for ponds which will function to control storm water runoff, recharge ground water and add to the recreational and aesthetic value of the area.

The General Development Plan will delineate these drainage and conservation areas along the streams that should be protected and saved from encroachment. Figure 1b delineates the boundaries of the natural drainage basins of the County. These basins are the basic planning units for surface water supply, sanitary sewerage systems and storm water runoff. The size, configuration and existing and projected patterns of development are the primary determinants in planning for water supply and sanitary and storm sewers in each drainage basin. Figure 1b also indicates by red lines the boundaries of Regional Sewerage

MONMOUTH COUNTY

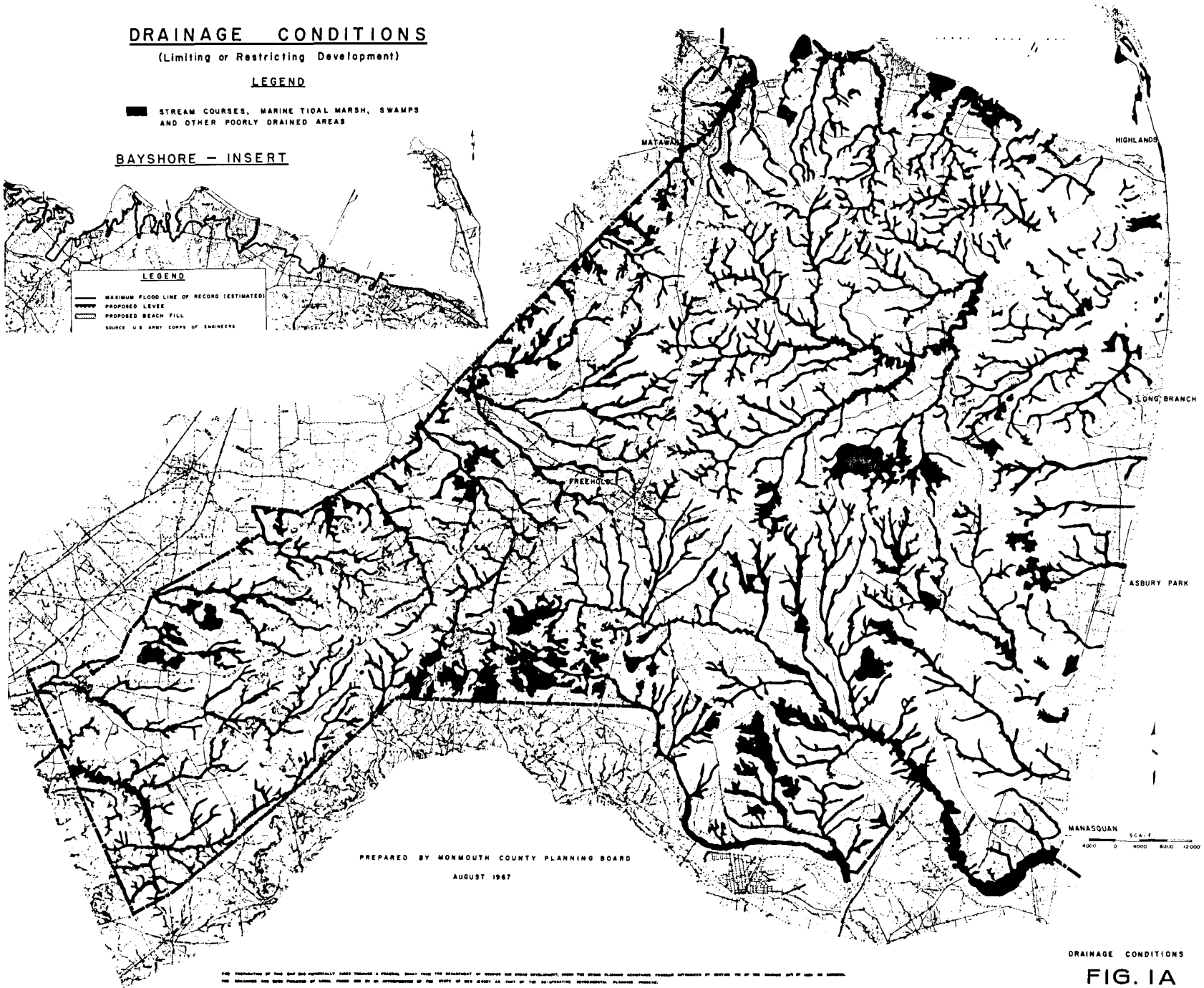
DRAINAGE CONDITIONS

(Limiting or Restricting Development)

LEGEND

STREAM COURSES, MARINE TIDAL MARSH, SWAMPS AND OTHER POORLY DRAINED AREAS

BAYSHORE – INSERT



PREPARED BY MONMOUTH COUNTY PLANNING BOARD

AUGUST 1967

DRAINAGE CONDITIONS

FIG. IA

Areas of the County. The Sewerage Plan is linked to one comprehensive plan since future requirements for sanitary sewerage service are based on the pattern of development in the Land Use Plan. The Sewer Plan which was developed by engineering consultants shows the location and capacity of proposed regional facilities including interceptors, treatment plants, and outfall lines. This plan which was adopted on April 18, 1966 has already proven a valuable guide in directing the planning of investments in sanitary sewerage facilities on a regional basis in the County.

The Water Supply Plan which is being completed by Elson T. Killam Associates, Engineering Consultants, and will be adopted as part of the County Master Plan will provide for the full development of the surface water potential of the watersheds flowing to the Atlantic, to serve the Coastal Region of the County, leaving the ground water resources principally for the western part of the County and industrial use.

The study will examine all the potential sources for development of surface water supply. Two watersheds flowing to the Delaware in Western Monmouth - Assunpink and Crosswicks Creek have long range potential which will be measured against future County requirements for public water supply. A key feature of this plan will be regional transmission facilities to

integrate the major sources of supply and unify the various water distribution systems in the County.

8.22 LAND USE

The study of the existing use of land is one of the most important basic elements in a comprehensive planning program. The existing pattern of land use - both land and buildings - an important determinant when decisions are made as to the location, character and extent of community and regional facilities, such as highways and utilities.

The existing Generalized Land Use Map - Figure 2 provides an excellent visual picture of the existing use of land in the County. When studied and analyzed in combination with Table 1, the tabular summary of land use, a quantitative summary can be obtained as well. It is extremely significant that while the County has been in the path of much urban development during the past two decades, only 31.9% of the available land had been intensively utilized for urban development up until 1966. A total of 207,800 acres remained in the non-urbanized state - being either wooded or lying vacant or being used for agricultural purposes. This represents 68.1% of the County's land area. When the approximately 29,000 acres that are influenced by topography and the 58,000 acres that have poor drainage conditions are considered, there still remain over 120,000 vacant acres in Monmouth County that have no impediments to urban development.

TABLE I

1966 EXISTING LAND USE

MONMOUTH COUNTY

Type of Use	Number of Acres		Percent of Total Area		Percent of Developed Area	
RESIDENTIAL	40,580.5		13.29		41.66	
One Family	38,846.2		12.72		39.88	
Lot Size Less Than 10,000 Sq Ft.		8,722.0		2.86		8.95
Lot Size 10-30,000 Sq. Ft.		16,177.5		5.30		16.61
Lot Size 30,000 Sq.Ft.2.5Acres		9,144.6		3,00		9.39
Lot Size 2.5-10 Acres		4,802.1		1.57		4.93
Multiple Dwellings	1,016.2		0.33		1.04	
Hotel,Motel,Rooming Houses	718.1		0.24		0.74	
BUSINESS	3,269.6		1.07		3.36	
INDUSTRIAL	4,434.1		1.45		4.55	
Light Industry & Public Utilities		3,512.0		1.15		3.61
Heavy Industry		922.1		0.30		0.95
PUBLIC AND QUASI-PUBLIC	34,900.9		11.43		35.83	
Parks		4,926.4		1.61		5.06
Public Schools & Buildings		3,085.2		1.01		3.17
Quasi-Public Blds.& Open Uses		7,765.6		2.54		7.97
Churches		449.2		0.15		0.46
Cemeteries		720.1		0.24		0.74
Federal Government		15,051.2		4.93		15.45
Garden State Parkway		2,903.2		0.95		2.98
BEACH OWNERSHIP	434.0		0.14		0.45	
Private		69.0		0.02		0.07
Public		321.0		0.11		0.33
Quasi-Public		44.0		0.01		0.05
ROADS AND STREETS	13,796.6		4.52		14.16	
TOTAL DEVELOPED AREA	97,415.7		31.91		100.00%	
AGRICULTURE,WOODLAND & VACANT	207,870.7		68.09			
TOTAL AREA	305,286.4		100.00%			

MONMOUTH COUNTY

GENERALIZED LAND USE MAP

LEGEND

RESIDENTIAL

- SINGLE FAMILY
- MULTI-FAMILY
- HOTELS, MOTELS, ROOMING HOUSES & TRAILERS

COMMERCIAL

INDUSTRIAL & PUBLIC UTILITIES

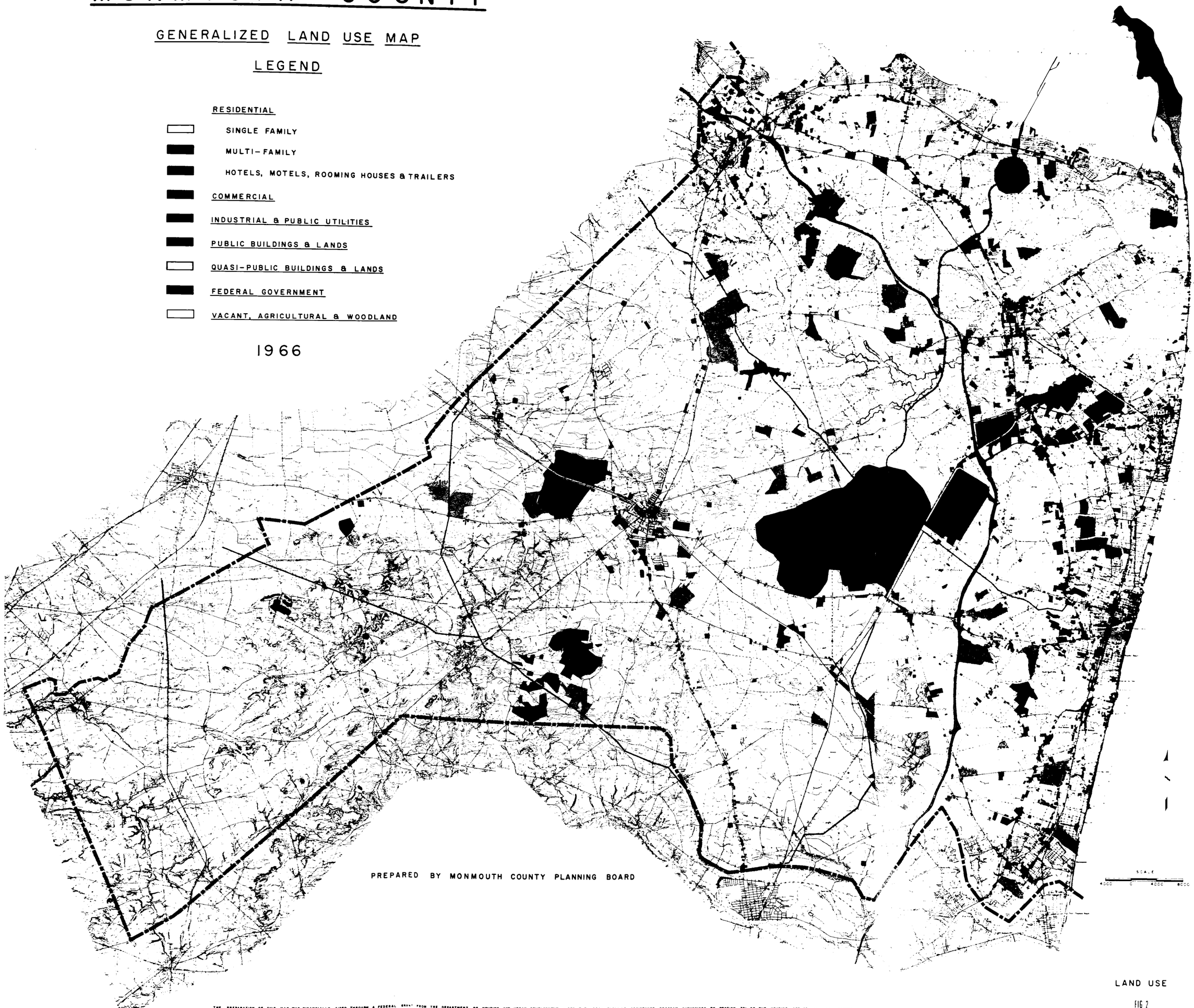
PUBLIC BUILDINGS & LANDS

QUASI-PUBLIC BUILDINGS & LANDS

FEDERAL GOVERNMENT

VACANT, AGRICULTURAL & WOODLAND

1966



PREPARED BY MONMOUTH COUNTY PLANNING BOARD

LAND USE

FIG 2

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954 AS AMENDED.
THE REMAINDER HAS BEEN FINANCED BY LOCAL FUNDS AND BY AN APPROPRIATION OF THE STATE OF NEW JERSEY AS PART OF THE CO-OPERATIVE GOVERNMENTAL PLANNING PROGRAM.

The early intensive residential development of Monmouth County took place in areas adjacent to the Ocean and bays and in the older, rural centers such as Freehold, Farmingdale, Englishtown and Allentown while most of the recent development has been occurring in corridors along State Highways #9, #34, #35 and #36 and the Garden State Parkway. Besides the more recent single family residential development in the corridors along the highways, the amount of land devoted to multiple dwellings has increased over 110% since an earlier land use survey in 1958. Concentrations of multiple dwellings are clearly visible from Figure 2 in the Boroughs of Eatontown, Red Bank and Matawan as well as the cities of Asbury Park and Long Branch. The Hotel, Motel and Rooming House land use category has grown also, some 120% in the last several years. It is important to notice the locational pattern of the new development. Close examination of Figure 3 reveals the location of new motels "back from the shore", particularly along Routes #35 and #66.

Despite the growth in the other categories of residential land use, one family residential accounts for just about 40% of the developed land of the County.

Business and commercial uses occupy 3269 acres, or 3.36% of Monmouth County. Included in this category are retail stores, professional and business offices, banks, service establishments, and other miscellaneous

types of business and commercial uses. Most of the early development took place in the downtown areas of the older towns. While the newer commercial development has occurred principally along Route #35 and the other state highways. The implications of the trend toward strip commercial development are apparent. Highways such as Route #35 are over capacity and the multiple number of access and egress points further aggravates traffic conditions. One of the key objectives of the General Development Plan is to concentrate commercial development as much as possible.

Industrial uses in Monmouth County occupy 4434 acres or about 4.55% of the County's developed land. Included here are light industrial uses which are of such a scale or character that they present no serious hazard to neighboring properties from fire, smoke, noise or odors, and heavy industrial activities which may be of a dangerous or nuisance producing character. Most of these are older uses generally located adjacent to rail lines with the exception of such things as dumps and slaughter houses which are at scattered locations.

An average of some 200 acres of land per year have been consumed for industrial development purposes in the 1960's. The pattern that is emerging is apparent from study of Figure 2. While the earlier development was generally in the older centers along the Coast, the newer development is in the more open areas to the West.

It is generally taking place where there is good highway access and utilities are available or will be in the near future. Monmouth County presently has less land devoted to industrial uses than the 10-12% that is considered normal, but it is expected that as the program to attract desirable industrial uses continues successfully, the County will move closer to having a more normal percentage of its land used for industrial purposes in future years.

In contrast to the industrial category, Monmouth County has a greater amount of its developed land devoted to public and quasi-public uses than usual - some 35.83%. Not only does the County have several Federal installations such as Earle Naval Ammunition Depot, Fort Monmouth, Camp Wood, Camp Cole, Camp Evans and Fort Hancock, but there are other large tracts in this category also. These include Marlboro State Hospital, Turkey Swamp Hunting and Fishing Grounds, Monmouth Battlefield and Allaire State Parks, Boy and Girl Scout Reservations and numerous golf courses. In addition lesser amounts of land are used for local parks, public schools and buildings, quasi-public buildings, churches and cemeteries. The unusually large amount of land devoted to these uses provides an excellent base of firmly committed open space uses from which further proposals can be made in order that the County will have open space and low density residential areas that will confine and surround the

areas of more urban development.

Developed beach areas - public, quasi-public and private occupy 434 acres of land along the Monmouth County Coastline while existing roads and streets in the County utilize 13,796 acres.

Having reviewed and analyzed the present use of land in the County, consideration will now be given to the 207,870 acres of Monmouth County's land as that can be classified as not being used intensively for urban purposes. It is presently either being used for agricultural purposes or is simply woodland or vacant.

Even utilizing the most liberal population projections, much of this land will remain untouched for many years, since the supply of land available for development is several times the projected demand for the next twenty years. It is necessary that planning for Monmouth County take this factor into account. Agriculture should be encouraged to remain by integrating it into the County Land Use Plan and thus making the amenities it generates available to all residents of Monmouth County - both new and old. Wooded areas particularly along stream courses, should be retained to avoid drainage problems, and to provide breaks between intensive development.

Existing land use which utilizes 31.9% of the County's land is important but with about two-thirds (68.1%) of the County's land yet to be developed, there remains a wonderful opportunity to mold and shape Monmouth County into a well planned area, and to avoid the costly mistakes so common in

other areas such as North Jersey where congestion and pollution abound.

8.23 POPULATION AND HOUSING

Monmouth County is an integral part of the New York Metropolitan Region and is subject to the population and economic forces at work in the Region. The increasing number of persons forming households, the scarcity of land in the core, and inner areas of the County and the large amount of land that will be consumed in absorbing the anticipated metropolitan growth are all factors playing a part in the future development of Monmouth County. Figure 3 includes the 1968 and 2000 population estimates of the Monmouth County Planning Board. The current estimates are based on building permit and certificate of occupancy data received annually from municipal building inspectors. For January 1, 1968, the estimate was 445,300 and for January 1, 1969 the figure was 459,750.

The Regional Plan Association has estimated that by 1985, six million people will be added to the 16 million living in the 22 County Metropolitan Region in 1960. An additional four million may be expected by the year 2000, which will give the Region a population increase of ten million in forty years. Regional Plan has estimated that by 1985, Monmouth County will have a population increment of three-quarters of a million people.

Before determining its future projections, the Monmouth County Planning Board staff did considerable research and analysis of growth rates - both past and present - of various counties in the New York Metropolitan Region and it also carefully considered future estimates of other agencies - Tri-State Transportation Commission and the New Jersey State Department of Conservation and Economic Development. The projections finally decided upon are a 1985 population estimate of 735,000 persons and a 2000 figure of 1,025,000. These projections for Monmouth County anticipate a relatively constant growth rate through the year 2000.

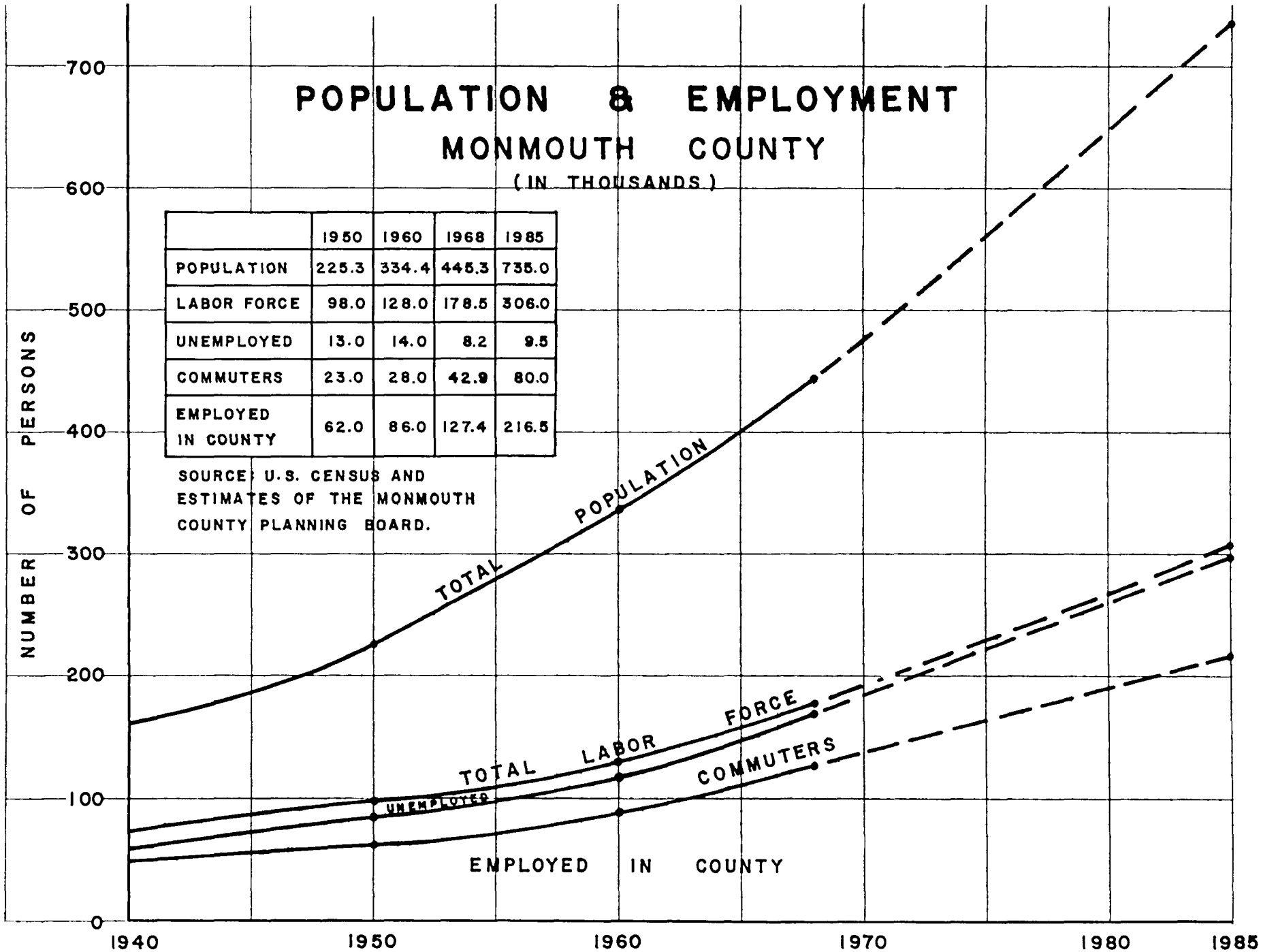
The 1968 municipal population estimates and future population projections for the years 1985 and 2000 are summarized in Table 2. These projections indicate that Planning Area V (Freehold Region) will continue to experience a very rapid rate of growth, nearly tripling in population between now and 1985. In absolute terms the gain is over 110,000 persons in this timespan. Another 130,000 are expected to be added by the year 2000. Planning Area V can be expected to account for 38% and 44% respectively, of the population growth during these periods. Planning Area VI is expected to have a very high rate of growth, but in absolute terms is only expected to grow by some 68,000 persons by the year 2000.

Planning Areas I through IV, which constitute the coastal area of the Monmouth County, all will continue to

TABLE 2
MONMOUTH COUNTY MUNICIPAL POPULATION PROJECTION
BY PLANNING AREAS*

	MUNICIPALITIES	1968 POPULATION	1985 POPULATION	2000 POPULATION	PER CENT INCREASE 1968-1985	PER CENT INCREASE 1985-2000
AREA I BAYSHORE		133,050	199,700	241,200	50.0	20.8
	ATLANTIC HIGHLANDS BOROUGH	5,040	6,200	7,000	23.0	12.9
	HIGHLANDS BOROUGH	3,750	5,000	6,700	33.3	34.0
	HOLMDEL TWP.	5,430	16,000	25,500	194.7	59.4
	KEANSBURG BOROUGH	7,400	9,500	12,000	28.3	26.3
	KEYPORT BOROUGH	7,720	12,000	14,000	55.4	16.7
	MATAWAN BOROUGH	8,220	12,000	13,000	46.0	8.3
	MATAWAN TWP.	17,430	29,000	32,000	66.4	10.3
	MIDDLETOWN TWP.	51,430	75,000	90,000	45.8	20.0
	HAZLET TWP.	20,200	26,000	29,000	28.7	11.5
	UNION BEACH BOROUGH	6,430	9,000	12,000	40.0	33.0
AREA II		111,060	136,100	158,300	22.5	16.3
	EATONTOWN BOROUGH	14,510	20,000	20,500	37.8	2.5
	FAIR HAVEN BOROUGH	6,320	7,000	8,000	10.8	14.3
	LITTLE SILVER BOROUGH	6,130	7,200	8,500	17.5	18.1
	LONG BRANCH CITY	31,620	35,000	40,000	10.5	14.3
	MONMOUTH BEACH BOROUGH	1,890	3,100	4,100	64.0	32.3
	NEW SHREWSBURY BOROUGH (NORTHERN PART)	7,880	10,500	12,000	33.2	14.3
	OCEANPORT BOROUGH	9,510	12,700	14,000	33.5	10.2
	RED BANK BOROUGH	13,290	15,000	18,000	12.9	20.0
	RUMSON BOROUGH	7,630	9,500	12,000	24.5	26.3
	SEA BRIGHT BOROUGH	1,380	2,000	3,000	44.9	50.0
	SHREWSBURY BOROUGH	3,660	4,500	6,500	22.9	44.4
	SHREWSBURY TWP.	1,100	1,600	1,700	45.4	6.2
	WEST LONG BRANCH BOROUGH	6,140	8,000	10,000	30.3	25.0
AREA III		82,700	117,300	144,700	41.8	23.4
	ALLENHURST BOROUGH	830	1,000	1,200	20.5	20.0
	ASBURY PARK CITY	19,310	22,000	25,000	13.9	13.6
	AVON-BY-THE-SEA BOROUGH	1,910	2,750	5,500	44.0	100.0
	BRADLEY BEACH BOROUGH	4,710	6,000	7,000	27.4	16.7
	DEAL BOROUGH	2,270	3,100	4,000	36.6	29.0
	INTERLAKEN BOROUGH	1,250	1,300	1,400	4.0	7.7
	LOCH ARBOUR VILLAGE	300	350	400	16.7	14.3
	NEPTUNE CITY BOROUGH	5,070	7,300	9,200	44.0	26.0
	NEPTUNE TOWNSHIP	28,350	39,000	45,000	37.6	15.4
	NEW SHREWSBURY BOROUGH (SOUTHERN PART)	1,030	3,500	6,000	239.8	71.4
	OCEAN TOWNSHIP	17,670	31,000	40,000	75.4	29.0
AREA IV SOUTHSHORE		43,440	67,800	95,100	56.1	40.3
	BELMAR BOROUGH	5,960	7,500	10,000	25.8	33.3
	BRIELLE BOROUGH	3,610	5,600	6,500	55.1	16.1
	MANASQUAN BOROUGH	4,990	6,400	7,400	28.3	15.6
	SEA GIRT BOROUGH	2,240	2,900	3,200	29.5	10.3
	SOUTH BELMAR BOROUGH	1,740	2,100	2,500	20.7	19.0
	SPRING LAKE BOROUGH	3,500	3,800	4,500	8.6	18.4
	SPRING LAKE HEIGHTS BOROUGH	4,380	7,000	11,000	59.8	57.1
	WALL TWP.	17,020	32,500	50,000	90.9	53.8
AREA V		66,850	179,900	309,500	195.9	72.0
	COLTS NECK TWP.	5,490	11,500	20,000	109.5	73.9
	ENGLISHTOWN BOROUGH	1,200	1,900	3,000	58.3	57.9
	FARMINGDALE BOROUGH	1,140	2,500	3,500	119.3	40.0
	FREEHOLD BOROUGH	10,470	12,000	13,000	14.6	8.3
	FREEHOLD TWP.	10,080	32,000	65,000	217.5	103.1
	HOWELL TWP.	18,700	50,000	90,000	167.4	80.0
	MANALAPAN TWP.	11,220	35,000	60,000	211.9	71.4
	MARLBORO TWP.	8,550	35,000	55,000	309.4	57.1
AREA VI		8,200	34,200	76,200	317.1	122.8
	ALLENTOWN BOROUGH	1,660	3,200	4,200	92.8	31.2
	MILLSTONE TWP.	2,990	14,000	35,000	368.2	150.0
	ROOSEVELT BOROUGH	780	3,000	5,000	284.6	66.7
	UPPER FREEHOLD TOWNSHIP	2,770	14,000	32,000	405.4	126.6
AREA I-IV		370,250	520,900	639,300	40.7	22.7
AREA V & VI		75,050	214,100	385,700	185.3	80.1
TOTAL		445,300	735,000	1,025,000	65.1	39.5

*SOURCE: MONMOUTH COUNTY PLANNING BOARD STAFF



	1950	1960	1968	1985
POPULATION	225.3	334.4	445.3	735.0
LABOR FORCE	98.0	128.0	178.5	306.0
UNEMPLOYED	13.0	14.0	8.2	9.5
COMMUTERS	23.0	28.0	42.9	80.0
EMPLOYED IN COUNTY	62.0	86.0	127.4	216.5

SOURCE: U.S. CENSUS AND ESTIMATES OF THE MONMOUTH COUNTY PLANNING BOARD.

FIG. 3

grow but at a diminishing rate as they approach their ultimate holding capacity. Planning Area I (Bayshore) is expected to have the most growth in absolute terms - an increase of 88,000 persons by the year 2000. In percentage terms the South Shore Area (Planning Area IV) will more than double by the year 2000.

The present and future population distribution pattern in Monmouth County is shown by Figure 4, with each dot representing 100 persons. The black dots represent the 1968 population, red the estimated increase between 1968 and 1985 and green the 1985 to 2000 increment. The population distribution pattern that will emerge will result in practically a complete "filling in" of the residential areas east of the Garden State Parkway, with many of the older communities experiencing more intensive development. This map will prove a valuable aid in determining the location, character, and extent of the need for facilities - both public and private - in Monmouth County.

There is a significant relationship between the age characteristics of people and their choice of type of housing. The Monmouth County Planning Board Staff has done considerable research and analysis into this subject because of its planning implications. The accompanying illustration - Figure 5 shows three population pyramids - one for Monmouth County in 1960 and for typical new one-family residential developments and also for the new one and two bedroom garden apartments. The pyramid for Monmouth County is one

that could be considered to be standard for most areas. The narrowing of the age groups - particularly the 20-24 year olds - is a reflection of the reduced birth rate caused by the Depression in the 1930's.

The pyramid on the left provides an excellent indication of the population characteristics of the families that are moving into Monmouth County. The vast majority are couples between 25 and 39 who have children in the 0-14 age groups. About 40% of these children are in pre-school under 5 age groups and it is these children who represent increased future school requirements.

The third pyramid presents a meaningful picture of the characteristics of the persons that are occupying new garden apartment projects having a combination of one and two bedroom units. There are major differences with the other pyramids. The largest age group represented is the 20-24 year olds - the group that is one of the smallest on the other two pyramids. There is a tapering off of the other age groups above this, except that there is a bulge in the 60-69 year olds reflecting the senior citizens who desire this type of housing. Another significant fact is that the number of school age children is very small in the range of 0.1 and 0.3 per apartment unit.

One of the major recommendations that the Monmouth County Planning Board Staff will make as a result of these studies is that garden apartments be made an integral

POPULATION DISTRIBUTION

1968-1985-2000

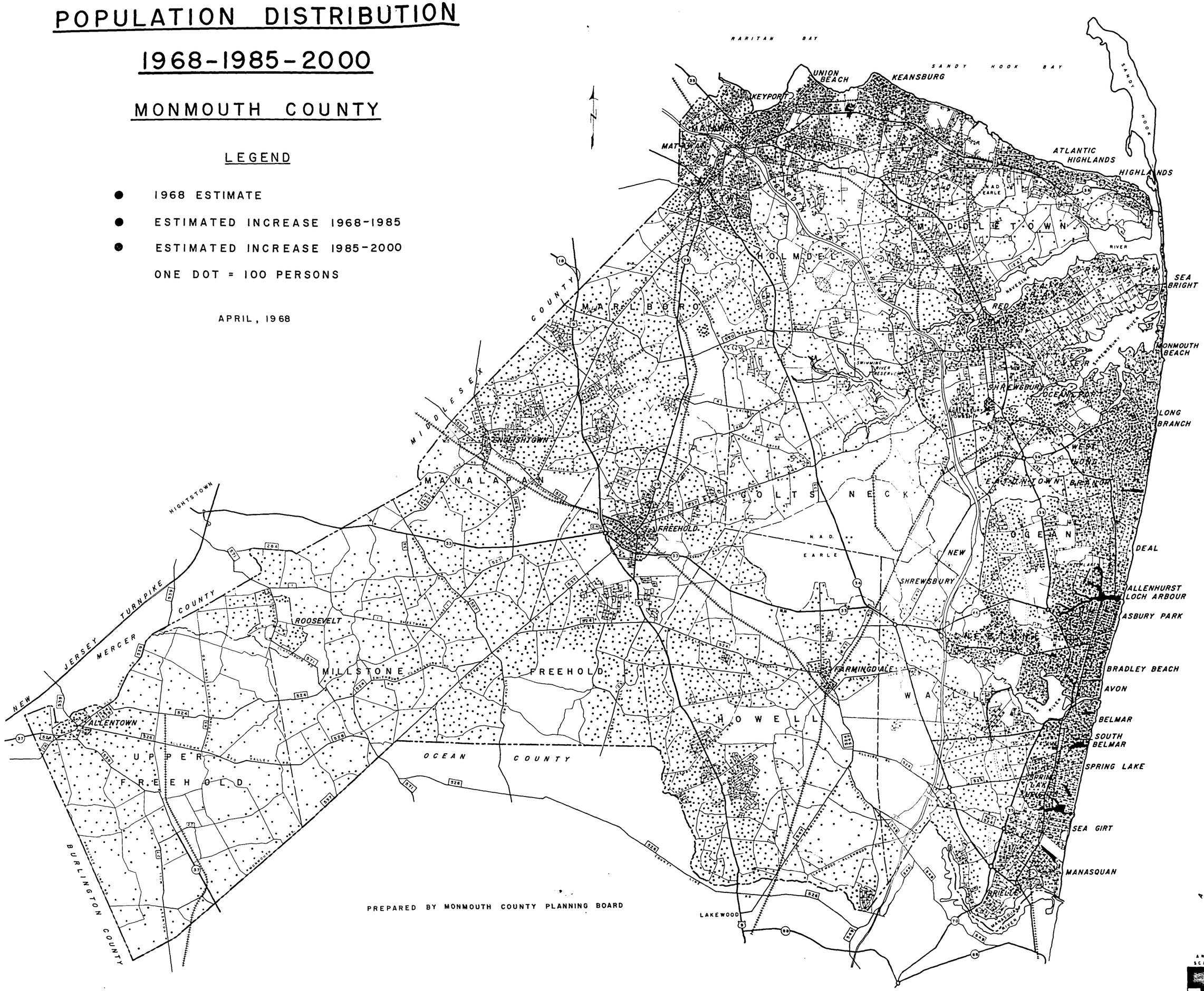
MONMOUTH COUNTY

LEGEND

- 1968 ESTIMATE
- ESTIMATED INCREASE 1968-1985
- ESTIMATED INCREASE 1985-2000

ONE DOT = 100 PERSONS

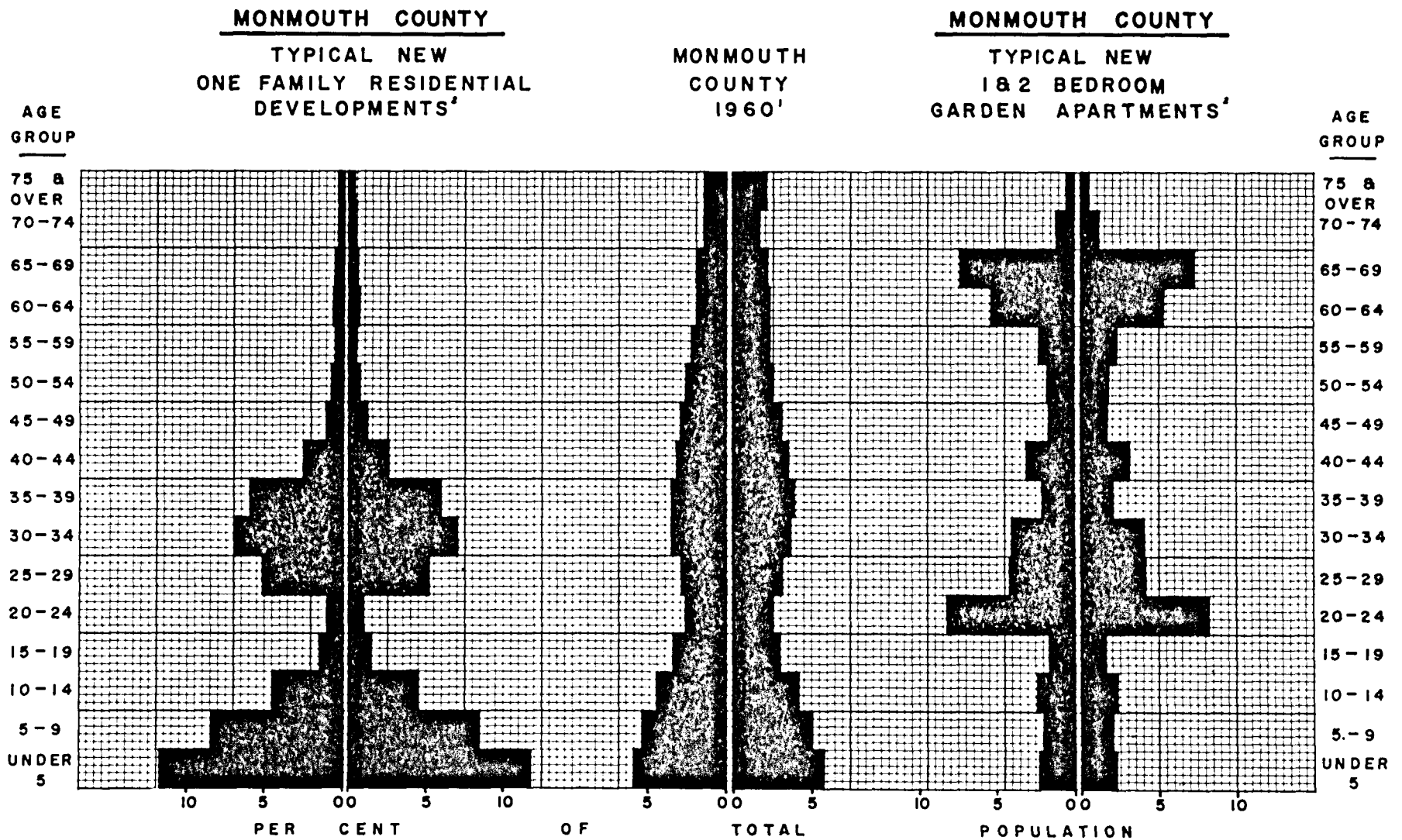
APRIL, 1968



THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954 AS AMENDED.
THE REMAINDER HAS BEEN FINANCED BY LOCAL FUNDS AND BY AN APPROPRIATION OF THE STATE OF NEW JERSEY AS PART OF THE CO-OPERATIVE GOVERNMENTAL PLANNING PROGRAM.

FIG. 4

POPULATION PYRAMIDS



SOURCE: U.S. CENSUS BUREAU[1] AND MONMOUTH COUNTY PLANNING BOARD SURVEYS[2]

FIG 5

part of new neighborhoods. There are several distinct advantages to this proposal, since it will assure a better balanced age composition which will mean that there will be less of an impact on schools. In addition, it will result in garden apartments being made part of the original design, instead of being located on land that happens to be skipped over after urban development occurs. Further, by taking full advantage of this relationship between population and housing it makes it possible for a person, whatever his age or marital status, to find suitable and desirable housing in the newly developing areas of Monmouth County, relieving people of the necessity of moving to new locations when their housing requirements change.

The number of housing units in Monmouth County grew by some 33,000 units during the 1950-1960 decade. In the eight years since the 1960 census the total number of housing units has grown by another 30,000. While the growth in units averages about 4,000 per year, the increase has not been evenly distributed. It rose from about 2,000 units in 1960 to over 5,000 units in 1965, and has since declined to 3,200 in 1967. A number of factors have an influence on the rate of housing growth. These include the availability of credit, local zoning regulations and National economic conditions.

The rate of growth of housing in the County has been greatest in the Route #9 corridor (Planning Area V) since

1960. In terms of percentage gain it is approximately double that of any other area of the County. In absolute terms the greatest increase in dwelling units has occurred in the Bayshore (Planning Area I) over 9,000. Planning Area V is second with 6,175.

One of the most dramatic changes in the housing stock of Monmouth County has been the increased number of multi-family units particularly garden apartments that have been constructed. As can be observed from Table 3, only 9.2% of the housing stock in Monmouth County was the multi-family type in 1960, but since that time just about one-third of new housing constructed has been in the multi-family category. This recent trend in Monmouth County is typical of what is happening in the suburban counties of the New York Metropolitan Region. The New York Regional Plan Association has pointed out how a wave of apartment construction continues to roll outward from the core of the Metropolitan Region toward the outer counties. That wave reached Monmouth County in 1962, and it continues to engulf it at the present time. It can be expected that a quarter to a third of the new housing units built in the County in the next two decades will be the multi-family apartment type.

TABLE 3

DWELLING UNITS IN MONMOUTH COUNTY

	TYPE OF HOUSING UNIT					
YEAR	Single Family	Per Cent of Total	Multi-Family***	Per Cent of Total	Other	Total
1950*	63,800	77.2	8,415	10.2	10,453	82,668
1960*	97,488	84.3	10,694	9.2	7,437	115,619
1960**	1,939	97.3	53	2.7		1,992
1961**	1,998	85.1	349	14.9		2,347
1962**	3,566	78.3	991	21.7		4,557
1963**	3,441	73.3	1,252	26.7		4,693
1964**	2,328	49.5	2,379	50.5		4,707
1965**	2,660	52.9	2,369	47.1		5,029
1966**	2,278	56.5	1,757	43.5		4,035
1967	2,201	68.4	1,015	31.6		3,216
1960-1967 Total	20,411	66.8	10,165	33.2		30,576
1967 Total	117,899	80.6	20,859	14.3	7,437	146,195

* Existing Housing - United States Census

** Based on data from Municipal Building Inspectors

*** Three or more housing units per structure

PREPARED BY MONMOUTH COUNTY PLANNING BOARD STAFF

8.24 ECONOMIC BASE

As revealed in Figure 3, the total labor force of Monmouth County has grown from 128,000 persons in 1960 to 178,500 in 1968, and it is projected to 306,000 persons in 1985. The increase in the labor force is due not only to the in-migration of new residents, but also will be affected by the increase in high school and college graduates who will enter it. In 1967 there were 4,800 high school graduates in Monmouth County and this number is expected to climb to about 12,000 by 1985. Many of those who enter the labor force directly from high school are not well equipped to meet the qualifications of the jobs available. This is true on the national scene as well as in Monmouth County and clearly points up the need for more and better vocational training programs. In Monmouth County the Vocational Board of Education has conceived a program that is serving an increasing number of students each year. This past September Brookdale Community College - a County sponsored institution - opened and is now providing additional opportunities for 1300 in post-high school training.

In 1960 census information revealed that there was a higher percentage of workers in the "professional" and "managerial" employment categories and less in the sub-professional groups. There is also a higher percentage of government workers than normal which emphasizes the importance of the major Federal government installations.

As can be noted from Figure 3, Monmouth County depends for about one job out of four on out-of-County employment. Commuters have increased from 25,000 persons in 1958 to an estimated 42,900 persons in 1968 and it is projected that they will number 80,000 persons by 1985.

A breakdown of the employment by industry group within the County is shown in Table 4. The relative importance of each of the employment groups is easy to ascertain from this table. Presently Services, Government, Trade and Manufacturing rank one to four in order of importance. All of these groups can expect considerable growth by 1985, but the number of persons employed in manufacturing will climb the most - more than doubling to 47,800 persons in 1985. It is expected that manufacturing will rank second just below Services by 1985. Despite the fact that Agriculture has been one of the historic and traditional foundations of the economy of Monmouth County, most phases of it are in a decline due to the increasing pressures of urbanization. There seem to be two exceptions to this trend. The number of horses in the County has risen from 2,200 in 1960 to approximately 10,000 in 1968 according to surveys done by the State Department of Agriculture. A second encouraging sign up to now has been that the number of nurseries and the acreage devoted to this use has grown in the County. If these trends continue, it seems likely that such intensive and specialized uses as these can survive and

TABLE 4

EMPLOYMENT BY INDUSTRY GROUP - MONMOUTH COUNTY

			1968 - 1985 Increment	
	1968	1985	Absolute	%
Agriculture & Mining	2,900	4,300	1,400	48.3
Construction	7,300	12,800	5,500	75.3
Manufacturing	22,900	47,800	24,900	108.7
Transportation Communication & Utilities	6,000	9,600	3,600	60.0
Trade	28,400	40,600	12,200	43.0
Finance Insurance Real Estate	4,500	7,400	2,900	64.4
Government	24,600	41,200	16,600	67.5
Services	30,800	52,800	22,000	71.4
TOTAL	127,400	216,500	89,100	69.9

SOURCE: MONMOUTH COUNTY PLANNING BOARD ESTIMATES

prosper in a growing suburban environment.

Monmouth County has long been considered one of the leading resort Counties of New Jersey. Employment in industry groups of a resort or seasonal nature has risen from an estimated 9,000 in 1958 to approximately 10,000 in 1968. While resort-oriented employment has increased in Monmouth County, it is at a lesser rate than many of the other industry groups.

Overall Effective Buying income per household in Monmouth County has risen from $7,606 in 1961 to $10,162 in 1967 - a 33.6% gain, according to data obtained from Sales Management magazine. As is apparent from study of Table 5, this income is not evenly distributed. Both Asbury Park and Red Bank lag far behind the County increase while Middletown Township, one of the newly developing areas that is attracting out-of-County residents to it, exceeds the County gain by five percentage points. However, overall in the County, there is little doubt as to what has been happening to incomes: they are rising substantially both due to overall national trends and to the in-migration of new residents who have considerably higher incomes. Another trend of somewhat lesser magnitude is the attraction to the Shore area of senior citizens. This accounts somewhat for the higher percentage of low incomes in some of the older municipalities. It also re-emphasizes the problem of low-income blighted areas in several of them.

It is essential to have an understanding of the tax base and financial picture of local governments before a General Development Plan is proposed. The Economic Base report of this series contains detailed information on several aspects of the financial picture of local government - assessed valuation, apportionment of taxes, debt and the rate of tax collection and they will not be dwelt on further here. Figure 13 which is included in a later section of this report provides a good visual insight as to the tax base of the County. The dependence of the County on single family residential property is clearly visible. It is over 10% higher than the corresponding figure for the State as a whole. The County figure is also less when comparing the County against the State in the Apartment, Commercial, and Industrial groups. In the farm, and vacant land categories, the Monmouth County figure is higher at this time than the State as a whole.

Study of Table 6 provides information as to the tax base of each of the planning areas and municipalities of the County. As might be expected, Planning Areas I - IV, the Monmouth Coastal Region of the County, all depend on taxes from single family residential properties for about 70% of their tax revenue. Interestingly, Planning Area V, which is essentially the Route 9 corridor that is just now developing, is fast approaching the 70%; it is currently 64.7. With the exception of Planning Area VI, which remains

TABLE 5

EFFECTIVE BUYING INCOME PER HOUSEHOLD

	1961	1967	% Increase 1961 - 67
Monmouth County	7,606	10,162	33.6
Asbury Park	5,836	7,114	21.9
Eatontown	8,470	11,228	32.6
Freehold	7,353	9,793	29.6
Long Branch	6,309	8,432	33.6
Middletown Township	7,913	10,991	38.9
Neptune Township	6,505	8,611	32.4
Red Bank	7,784	9,362	20.3

SOURCE: "SURVEY OF BUYING POWER," SALES MANAGEMENT MAGAZINE

TABLE 6

MONMOUTH COUNTY

1968 REAL PROPERTY ASSESSMENTS

PER CENT DISTRIBUTION

BY LAND USE CATEGORY

		VACANT	RESIDENTIAL	FARMING	COMMERCIAL	INDUSTRIAL	APARTMENT
AREA I		3.1	76.6	0.9	9.0	7.8	2.6
	ATLANTIC HIGHLANDS BOROUGH	3.6	75.4	0.0	12.0	0.3	8.8
	HAZLET TOWNSHIP	3.7	82.7	1.0	12.4	0.1	0.0
	HIGHLANDS BOROUGH	3.0	67.8	0.0	26.7	0.3	2.1
	HOLMDEL TOWNSHIP	4.7	40.7	4.4	2.8	47.4	0.0
	KEANSBURG BOROUGH	2.6	78.4	0.0	13.7	0.4	4.9
	KEYPORT BOROUGH	3.0	59.9	0.0	24.3	3.8	8.9
	MATAWAN BOROUGH	1.9	67.6	0.0	9.4	1.3	19.8
	MATAWAN TOWNSHIP	2.0	82.7	0.3	4.4	8.1	2.6
	MIDDLETOWN TOWNSHIP	2.9	88.5	0.4	7.7	0.4	0.1
	UNION BEACH BOROUGH	3.8	82.0	0.0	5.5	8.7	0.0
AREA II		3.4	68.1	0.3	17.9	1.7	8.6
	EATONTOWN BOROUGH	4.2	34.8	1.0	30.8	6.7	22.5
	FAIR HAVEN BOROUGH	1.6	94.5	0.0	3.9	0.0	0.0
	LITTLE SILVER BOROUGH	4.3	89.1	0.8	5.7	0.0	0.0
	LONG BRANCH CITY	2.0	61.9	0.0	16.8	0.7	18.6
	MONMOUTH BEACH BOROUGH	7.4	74.3	0.0	5.6	0.0	12.7
	NEW SHREWSBURY BOROUGH (Northern Part)	4.0	83.5	1.8	9.7	1.1	0.0
	OCEANPORT BOROUGH	2.7	56.2	0.0	40.7	0.0	0.5
	RED BANK BOROUGH	2.7	50.5	0.0	30.8	2.7	13.3
	RUMSON BOROUGH	4.8	90.3	0.0	4.7	0.0	0.2
	SEA BRIGHT BOROUGH	5.9	45.7	0.0	40.2	0.0	8.1
	SHREWSBURY BOROUGH	4.1	72.7	0.1	23.1	0.0	0.0
	SHREWSBURY TOWNSHIP	0.0	0.0	0.0	0.0	0.0	100.0
	WEST LONG BRANCH BOROUGH	2.5	78.1	1.0	11.1	7.0	0.4
AREA III		2.3	68.8	0.2	19.2	1.5	8.0
	ALLENHURST BOROUGH	1.0	71.2	0.0	10.6	15.2	1.9
	ASBURY PARK CITY	2.2	35.9	0.0	36.9	0.4	24.6
	AVON-BY-THE-SEA BOROUGH	2.3	84.8	0.0	9.5	0.4	2.9
	BRADLEY BEACH BOROUGH	1.1	71.2	0.0	13.3	0.3	14.0
	DEAL BOROUGH	3.3	90.7	0.0	3.8	0.0	2.1
	INTERLAKEN BOROUGH	0.9	99.1	0.0	0.0	0.0	0.0
	LOCH ARBOUR VILLAGE	4.2	80.9	0.0	13.4	0.0	1.5
	NEPTUNE CITY BOROUGH	2.5	56.3	0.0	24.2	4.6	12.4
	NEPTUNE TOWNSHIP	3.0	72.3	0.2	21.7	1.2	1.7
	NEW SHREWSBURY BOROUGH (Southern Part)	16.3	33.1	3.6	25.1	22.0	0.0
	OCEAN TOWNSHIP	0.7	81.2	0.3	11.1	0.4	6.3
AREA IV		9.0	72.1	1.4	13.0	1.1	3.4
	BELMAR BOROUGH	2.0	72.3	0.0	16.5	0.9	8.3
	BRIELLE BOROUGH	3.7	81.6	0.0	12.4	0.0	2.3
	MANASQUAN BOROUGH	4.4	82.6	0.0	11.3	1.0	0.6
	SEA GIRT BOROUGH	2.8	91.0	0.0	5.3	0.0	0.8
	SOUTH BELMAR BOROUGH	1.7	82.5	0.0	10.5	1.4	3.9
	SPRING LAKE BOROUGH	35.6	52.3	0.0	12.1	0.0	0.0
	SPRING LAKE HEIGHTS BOROUGH	0.5	69.1	0.0	15.3	0.2	15.0
	WALL TOWNSHIP	6.6	68.0	4.6	15.3	2.7	2.9
AREA V		6.5	64.7	13.0	10.8	3.9	1.1
	COLTS NECK TOWNSHIP	6.0	62.4	23.1	7.2	1.3	0.0
	ENGLISHTOWN BOROUGH	1.9	68.8	0.0	22.7	4.9	1.6
	FARMINGDALE BOROUGH	2.7	68.2	0.5	14.8	12.0	1.9
	FREEHOLD BOROUGH	1.8	64.1	0.0	22.2	6.4	5.4
	FREEHOLD TOWNSHIP	9.6	61.7	6.1	13.5	7.9	1.2
	HOWELL TOWNSHIP	4.2	67.5	17.5	8.3	2.5	0.0
	MANALAPAN TOWNSHIP	5.3	74.0	15.2	5.2	0.3	0.0
	MARLBORO TOWNSHIP	14.5	54.9	18.6	7.5	4.2	0.3
AREA VI		3.8	46.6	42.2	6.0	1.2	0.2
	ALLENTOWN BOROUGH	1.3	86.4	1.4	11.0	0.0	0.0
	MILLSTONE TOWNSHIP	7.2	42.6	41.8	5.5	2.5	0.4
	ROOSEVELT BOROUGH	1.4	84.9	7.2	2.1	4.4	0.0
	UPPER FREEHOLD TOWNSHIP	2.2	31.1	61.1	5.5	0.0	0.1
	MONMOUTH COUNTY TOTAL	4.3	70.2	3.2	13.8	3.6	4.9

SOURCE: MONMOUTH COUNTY TAX BOARD

essentially a rural area, all other areas of the County have a spectacular percentage gain in the value of apartments. Of the total valuation in the County, apartments now rank third behind the single family residential and commercial categories. This is documentary evidence that the trend towards apartment construction in suburban counties foreseen by Regional Plan Association has reached Monmouth County. The Monmouth County Planning Board staff has concluded in the past on the basis of its own studies, along with many others that are available and are detailed in the "Study of Garden Apartments in Monmouth County" prepared in March 1967, that apartments constructed with good standards at the proper location in the right communities can be of considerable benefit. They not only provide housing, especially suited for senior citizens and the 20-30 year age groups who do not desire or cannot afford single family housing, but they also provide considerable tax benefit for the municipality.

In both the commercial and industrial land use categories Monmouth County lags behind the State. The difference between the County and State is only 2.7% in the commercial category, while the percentage for industrial in the State is more than three times greater than for Monmouth County. Both of these situations are not unexpected. Commercial development tends to follow population gains rather directly and thus more and more commercial development of all types has occurred as the

County continues to urbanize. Major contributing factors to the relative lack of industrial ratables are the 43,000 commuters who work outside the County and the employment in tax exempt Federal installations.

Study of ratables in relation to population is most significant. The range of ratables per capita in Monmouth County varies from $3,917 in Allentown Borough to $19,806 in Sea Girt Borough. Another unit of measure that is becoming increasingly significant as school costs take an increasingly greater share of the tax dollar is valuation per public school child. Equalized valuation per public school child has increased from $25,485 in 1963 to $28,677 in 1968. While small gains have been made in both valuation per capita and per public school child, the real problem that faces all communities in New Jersey today - spiralling governmental costs is graphically illustrated by Figures 5a and 5b. These "pie" charts drawn to scale depicting the revenue raised for municipal, school and county purposes in 1950, 1960 and 1966. The total revenue needed for all purposes has more than quadrupled since 1950, while just since 1960, there has been nearly a doubling of the revenue needed.

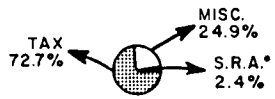
While the population of the County was growing 33.1% in the 1960-68 period, the revenue required for County, school and municipal purposes increased 72.0%, 206.3% and 46.5% respectively. These figures clearly illuminate the overriding problem facing New Jersey Communities today; the spiraling per pupil cost of education.

REVENUES FOR MUNICIPAL, SCHOOL AND COUNTY PURPOSES

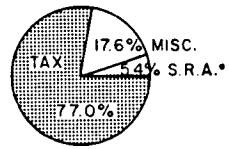
IN

MONMOUTH COUNTY

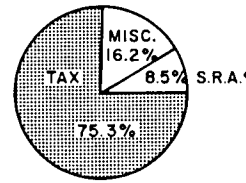
COUNTY



1950
$4.1M

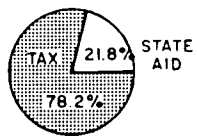


1960
$9.3M

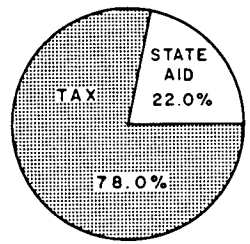


1966
$16.0M

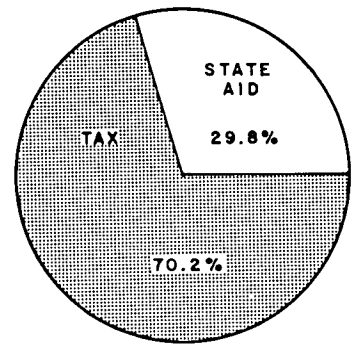
SCHOOL



1950
$7.4M

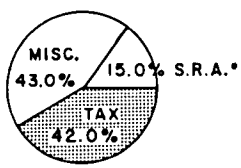


1960
$28.2M

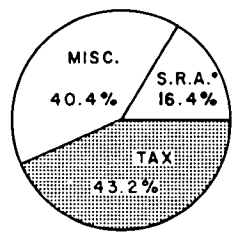


1966
$58.2M

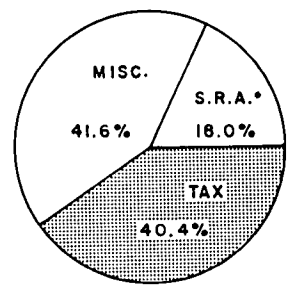
MUNICIPAL



1950
$12.4M



1960
$27.3M



1966
$40.0M

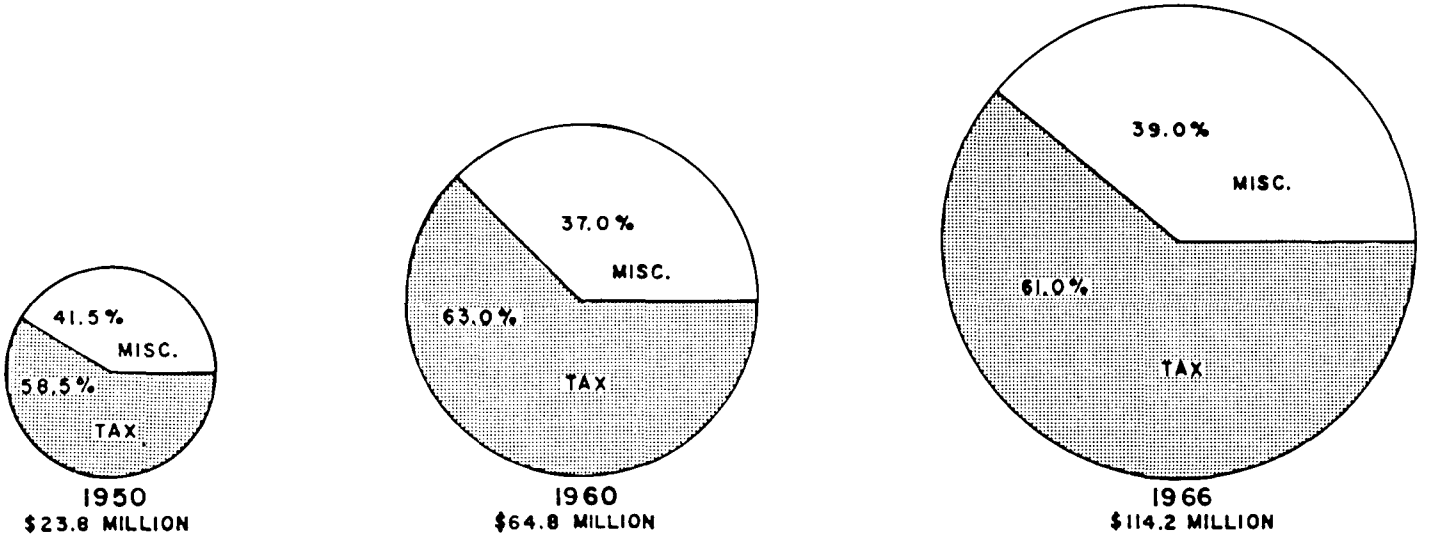
M = MILLIONS OF DOLLARS
*SURPLUS REVENUE APPROPRIATED

SOURCE: ANNUAL REPORT – DIVISION OF LOCAL FINANCE.

FIG. 5A

REVENUES FOR MUNICIPAL, SCHOOL AND COUNTY PURPOSES IN MONMOUTH COUNTY

COMBINED - (COUNTY, SCHOOL AND MUNICIPAL)



SOURCE: ANNUAL REPORT - DIVISION OF LOCAL FINANCE.

FIG. 5B

The growth in the amounts needed for County and municipal purposes are definitely in the proper range considering increased costs and the greater range and depth of services that the County and municipalities must provide as they become increasingly urban. While these two factors are present in the rise in school costs, a much greater contributing factor is the increased per pupil cost of education. According to figures developed by the County Superintendent of Schools, it has risen from $378.52 in the 1959-60 school year to $642.29 in the 1967-68 school year - a percentage increase of 70%. When figures are developed for the next couple of school years, even greater annual increases will undoubtedly occur.

There is no doubt that the local property tax is becoming increasingly burdensome especially for young families and senior citizens, living on fixed incomes, who own and maintain their own homes. An unfortunate by-product of this situation is that much of the planning and zoning regulations that are developed for communities in New Jersey have the underlying purpose of eliminating or discouraging land development that is not an asset tax-wise. Thus, while the State faces the prospect of a population increase of six million people by the year 2000, current zoning regulations in many New Jersey communities discourage the development of housing for anyone except the upper income levels. If this situation is to be reconciled, the dependence on the property tax must be substantially reduced.

If the Residential Land Use and Housing proposals of the County General Development Plan are to have any serious chance of implementation by the municipalities, a series of steps are needed to shift the tax burden away from the local homeowner. These could include:

A. A program of 'tax sharing' by the Federal government to return a percentage of Federal income tax directly where it was collected.

B. More reliance on broad based State wide taxes allocated for increased State aid for elementary and secondary education. These taxes automatically grow, reflecting inflationary forces, and produce increased yields with increased prices and wages with a constant tax rate.

C. The shifting of governmental functions to a governmental unit which has a balanced tax base and a large enough population base to allow efficient and economical operation. The New Jersey County and Municipal Government Study Commission is preparing a report with recommendations on shifting governmental functions to the units of government which could most effectively carry them out.

Employment Distribution, both existing in 1968 and projected for 1985, for Monmouth County are shown in Figures 6 and 7. Table 7 indicates the location of employment of workers living in Monmouth County. Planning Area

TABLE 7

COUNTY OF EMPLOYMENT

MONMOUTH COUNTY EMPLOYED WORKERS-1968

IN THOUSANDS (000)

County Employed	No.	%
Monmouth County	127.4	74.8%
Out of Monmouth County	42.9	25.2%
Essex County	7.1	4.2%
Hudson County	3.3	1.9%
Middlesex County	9.0	5.3%
Union County	4.2	2.5%
Other North Jersey Counties	1.6	0.9%
Total North Jersey Counties	25.2	14.8%
New York City	12.2	7.2%
Other New Jersey	3.9	2.3%
Other	1.6	0.9%
Total	170.3	100.0%

Source: Monmouth County Planning Board Estimates

MONMOUTH COUNTY

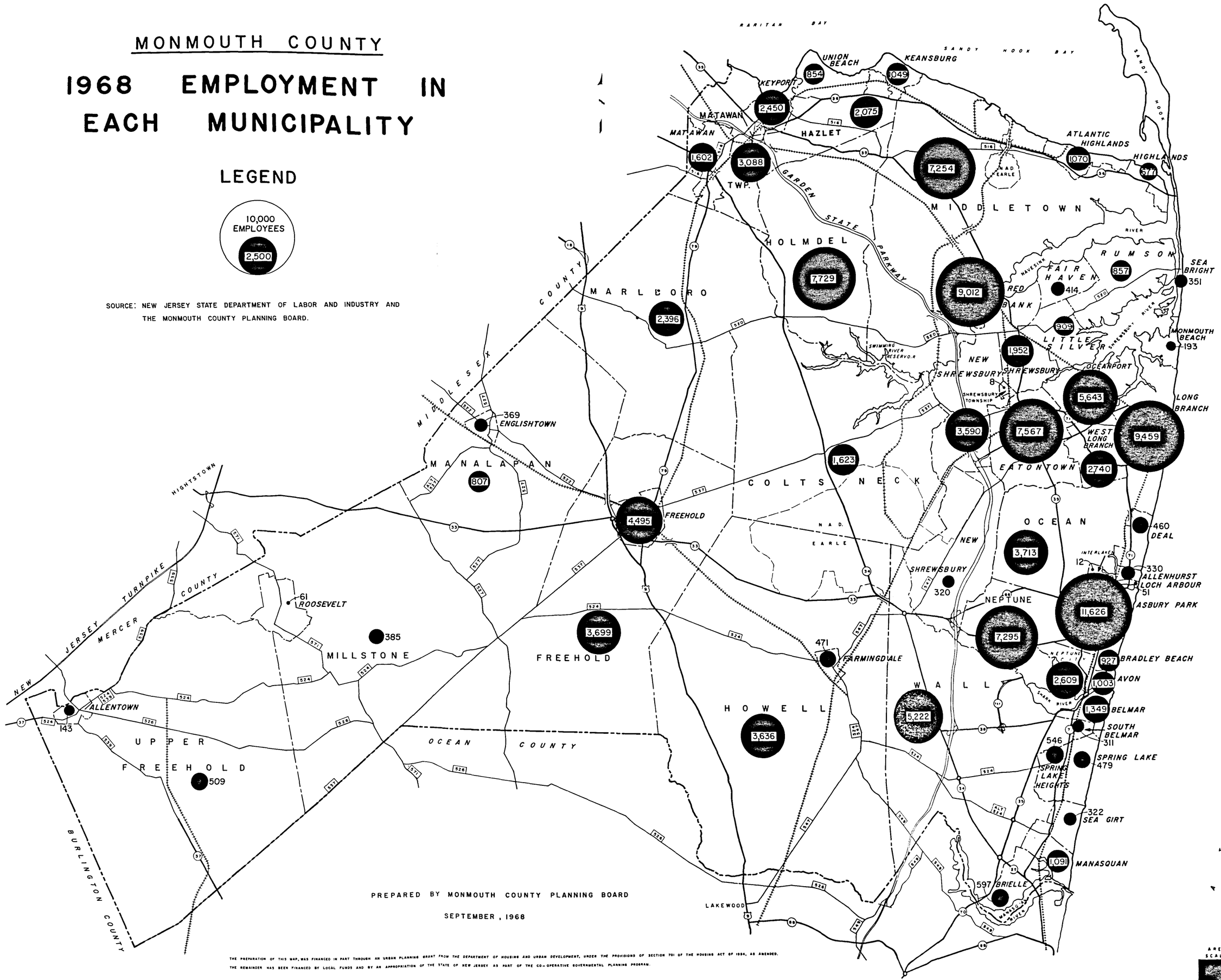
1968 EMPLOYMENT IN EACH MUNICIPALITY

LEGEND

10,000 EMPLOYEES

2,500

SOURCE: NEW JERSEY STATE DEPARTMENT OF LABOR AND INDUSTRY AND THE MONMOUTH COUNTY PLANNING BOARD.



THE PREPARATION OF THIS MAP, WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.
THE REMAINDER HAS BEEN FINANCED BY LOCAL FUNDS AND BY AN APPROPRIATION OF THE STATE OF NEW JERSEY AS PART OF THE CO-OPERATIVE GOVERNMENTAL PLANNING PROGRAM.

FIG. 6

II, better known as the Red Bank-Eatontown-Long Branch area, clearly emerges as having the heaviest concentration of employment in 1968 - just about one third of the County total.

Planning Areas I and III each have about a quarter of the County employment. There are concentrations of employment in several of the newly emerging areas of the County, particularly the Townships of Holmdel, Middletown, Wall, Howell and Freehold.

The projections of employment for each municipality in 1985 done by the Monmouth County Planning Board staff are indicated in Table 8. These municipal projections were made only after a careful evaluation of present and future trends, zoning regulations, acreage available and existing, and proposed transportation facilities and utility services. Figure 7 portrays graphically, to scale, the 1985 employment by municipality. The pattern that emerges when these two maps are compared is most clear. There is a reinforcement of present employment centers. The Asbury-Neptune, Middletown and Red-Bank-Eatontown-Long Branch areas, in particular, show this trend. Even more apparent is the growth in Western Monmouth where all the municipalities have big employment gains.

Knowing the location of future employment it is possible to relate transportation and utility services to it. The General Development Plan will be meaningful in terms of reflecting employment growth as well as the popu-

lation and other changes that will occur.

8.25 CIRCULATION AND TRANSPORTATION

A picture of how Monmouth County's population growth relates to the traffic on its highways can be seen from Table 10. The amount of automobile travel generated by residents of Monmouth County has grown from 880 million vehicle miles in 1950 to 1.36 billion in 1960 to 2.2 billion in 1968. These are increases of 54.5% and 61.8% respectively in these time periods compared to population percentage gains of 48.4% and 33.2% respectively during the same periods. Projections to 1985 indicate that the population is expected to increase 65.1% by 1985 while the vehicle miles of travel generated will grow some 92.1% by 1985.

This situation is highlighted by studies of the Tri-State Transportation Commission which indicate that presently Monmouth County has the lowest number of persons per motor vehicle of any County in the New York Metropolitan Region. It is expected that Monmouth County will continue in this position in future years since the pattern of development it is experiencing - relatively low-density residential - does not lend itself to support of public transportation. With the exception of commuter service in the two urban corridors, bus service is in danger of becoming extinct and therefore the great reliance of Monmouth County families on the individual automobile is expected to continue in future years.

TABLE 8
1968 - 1985 INCREMENT IN EMPLOYMENT
BY MUNICIPALITY

		EMPLOYMENT		INCREMENT	
		1968	1985	Absolute	Percent
AREA I	ATLANTIC HIGHLANDS BOROUGH	1,070	1,290	220	20.6
	HIGHLANDS BOROUGH	677	800	123	18.2
	HOLMDEL TOWNSHIP	7,729	10,940	3,211	41.5
	KEANSBURG BOROUGH	1,049	1,290	241	23.0
	KEYPORT BOROUGH	2,450	3,090	640	26.1
	MATAWAN BOROUGH	1,602	2,290	688	42.9
	MATAWAN TOWNSHIP	3,088	5,680	2,592	83.9
	MIDDLETOWN TOWNSHIP	7,254	11,750	4,496	62.0
	HAZLET TOWNSHIP	2,075	3,690	1,615	77.8
	UNION BEACH BOROUGH	854	1,160	306	35.8
AREA I TOTAL		27,848	41,980	14,132	50.7
AREA II	EATONTOWN BOROUGH	7,567	13,300	5,733	75.8
	FAIR HAVEN BOROUGH	414	550	136	32.9
	LITTLE SILVER BOROUGH	909	1,230	321	35.3
	LONG BRANCH CITY	9,459	10,040	581	6.1
	MONMOUTH BEACH BOROUGH	193	360	167	86.5
	NEW SHREWSBURY BOROUGH (Northern Part)	3,590	8,970	538	149.9
	OCEANPORT BOROUGH	5,643	6,280	637	11.3
	RED BANK BOROUGH	9,012	9,590	578	6.4
	RUMSON BOROUGH	857	920	63	7.4
	SEA BRIGHT BOROUGH	351	520	169	48.1
	SHREWSBURY BOROUGH	1,952	3,170	1,218	62.4
	SHREWSBURY TOWNSHIP	8	30	22	275.0
	WEST LONG BRANCH BOROUGH	2,740	3,440	700	25.5
AREA II TOTAL		42,695	58,400	15,705	36.8
AREA III	ALLENHURST BOROUGH	330	340	10	3.0
	ASBURY PARK CITY	11,626	12,210	584	5.0
	AVON BY THE SEA BOROUGH	1,003	1,050	47	4.7
	BRADLEY BEACH BOROUGH	927	990	63	6.8
	DEAL BOROUGH	460	500	40	8.7
	INTERLAKEN BOROUGH	12	20	8	66.7
	LOCH ARBOUR VILLAGE	51	60	9	17.6
	NEPTUNE CITY BOROUGH	2,609	3,060	451	17.3
	NEPTUNE TOWNSHIP	7,295	10,030	6,265	37.5
	NEW SHREWSBURY BOROUGH (Southern Part)	320	1,420	1,100	343.8
	OCEAN TOWNSHIP	3,713	6,920	3,207	86.4
AREA III TOTAL		28,346	36,600	8,254	29.1
AREA IV SOUTHSHORE	BELMAR BOROUGH	1,349	1,410	61	4.5
	BRIELLE BOROUGH	597	770	173	29.0
	MANASQUAN BOROUGH	1,091	1,400	309	28.3
	SEA GIRT BOROUGH	322	340	18	5.6
	SOUTH BELMAR BOROUGH	311	340	29	9.3
	SPRING LAKE BOROUGH	479	520	41	8.6
	SPRING LAKE HEIGHTS BOROUGH	546	900	354	64.8
	WALL TOWNSHIP	5,222	12,840	7,618	145.9
AREA IV TOTAL		9,917	18,520	8,603	86.8
AREA V	COLTS NECK TOWNSHIP	1,623	3,510	1,887	116.3
	ENGLISHTOWN BOROUGH	369	530	161	43.6
	FARMINGDALE BOROUGH	471	730	259	55.0
	FREEHOLD BOROUGH	4,495	5,260	765	17.0
	FREEHOLD TOWNSHIP	3,699	11,740	8,041	217.4
	HOWELL TOWNSHIP	3,636	12,810	9,174	252.3
	MANALAPAN TOWNSHIP	807	9,290	8,483	1,051.2
	MARLBORO TOWNSHIP	2,396	10,230	7,834	327.0
AREA V TOTAL		17,496	54,100	36,604	209.2
AREA VI	ALLENTOWN BOROUGH	143	370	227	158.7
	MILLSTONE TOWNSHIP	385	2,840	2,455	637.7
	ROOSEVELT BOROUGH	61	610	549	900.0
	UPPER FREEHOLD TOWNSHIP	509	3,080	2,571	505.1
AREA VI TOTAL		1,098	6,900	5,802	528.4
	COUNTY TOTAL	127,400	216,500	89,100	69.9

SOURCE: MONMOUTH COUNTY PLANNING BOARD STAFF ESTIMATES

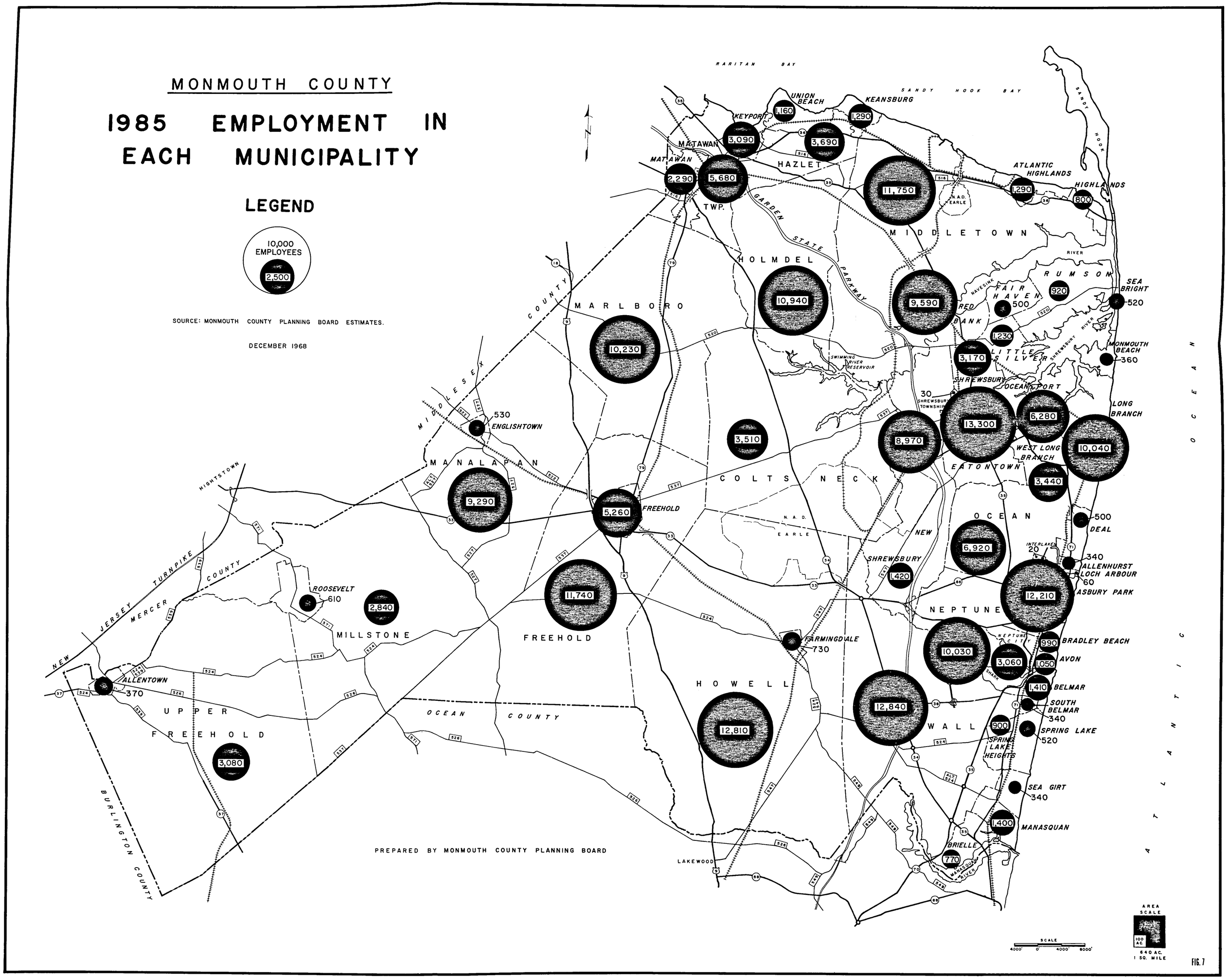

MONMOUTH COUNTY
1985 EMPLOYMENT IN EACH MUNICIPALITY
LEGEND
10,000 EMPLOYEES
2,500
SOURCE: MONMOUTH COUNTY PLANNING BOARD ESTIMATES.
DECEMBER 1968
RARITAN BAY
SANDY HOOK BAY
SANDY HOOK
UNION BEACH 1,160
KEANSBURG 1,290
KEYPORT 3,090
MATAWAN 3,690
MATAWAN TWP. 2,290
HAZLET 5,680
MIDDLETOWN 11,750
ATLANTIC HIGHLANDS 1,290
HIGHLANDS 800
N.A.D. EARLE
GARDEN STATE PARKWAY
HOLMDEL 10,940
MARLBORO 10,230
RUMSON 9,590
FAIR HAVEN 920
RED BANK 500
LITTLE SILVER 1,230
SEA BRIGHT 520
MONMOUTH BEACH 360
SHREWSBURY 3,170
OCEANPORT 30
SHREWSBURY TOWNSHIP
LONG BRANCH 13,300
WEST LONG BRANCH 6,280
EATONTOWN 8,970
COLTS NECK 3,510
ENGLISHTOWN 530
MANALAPAN 9,290
FREEHOLD 5,260
OCEAN 10,040
DEAL 500
NEW SHREWSBURY 1,420
OCEAN 6,920
INTERLAKEN 20
ALLENHURST 340
LOCH ARBOUR 60
ASBURY PARK 12,210
ROOSEVELT 610
MILLSTONE 2,840
FREEHOLD 11,740
FARMINGDALE 730
NEPTUNE 10,030
NEPTUNE CITY 990
BRADLEY BEACH
AVON 3,060
BELMAR 1,050
SOUTH BELMAR 1,410
SPRING LAKE 340
SPRING LAKE HEIGHTS 900
SEA GIRL 520
340
MANASQUAN 1,400
BRIELLE 770
WALL 12,840
HOWELL 12,810
ALLENTOWN 370
UPPER FREEHOLD 3,080
LAKEWOOD
MIDDLESEX COUNTY
MERCER COUNTY
OCEAN COUNTY
BURLINGTON COUNTY
NEW JERSEY TURNPIKE
HIGHTSTOWN
SWIMMING RIVER RESERVOIR
NAVESINK RIVER
SHREWSBURY RIVER
MANASQUAN RIVER
OCEAN
ATLANTIC
PREPARED BY MONMOUTH COUNTY PLANNING BOARD
SCALE
4000' 0' 4000' 8000'
AREA SCALE
100 AC
640 AC. 1 SQ. MILE

FIG. 7

TABLE 9

MONMOUTH COUNTY

TRAFFIC INDICATORS

	1950	% Increase	1960	% Increase	1968	% Increase	1985
POPULATION (In Thousands	225	48.4%	334	33.2%	445	65.1%	735
MOTOR VEHICLES (In Thousands)	88	54.5%	136	47.1%	200	83.8%	367.5
PERSONS PER MOTOR VEHICLE	2.56		2.46		2.225		2.0
ANNUAL VEHICLE MILES (In Millions)	880	54.5%	1,360	61.8%	2,200	92.1%	4,226
DAILY VEHICLE MILES (In Millions)	2.4	54.5%	3.7	61.8%	6.0	92.1%	11.6

Source: N.J. Auto Lists, Inc., and Monmouth County Planning Board Estimates

There is a steady narrowing of the once vast gap between year-round and seasonal traffic in the County. This is due, of course, to the steady growth in permanent population and increased local employment and commercial activity in Monmouth County. The highest traffic volume in the County is recorded on the Garden State Parkway north of the Matawan interchange. In 1967 the A.A.D.T. (Annual Average Daily Traffic) at that location totaled 46,676 vehicles. Route 35 is the heaviest traveled of the land service highways in Monmouth County with a A.A.D.T. at the northern end of the County of 28,050. At other points it is even more - 32,000 at the Navesink River Bridge and 30,000 in Belmar. Congestion from internal work trips within the County is beginning to reach serious proportions in and near the major centers of employment with major bottlenecks at the locations just mentioned above as well as in the Red Bank-Eatontown-Long Branch area, the Asbury Park-Neptune area and in Freehold Borough.

There are a total of 42,900 Monmouth County residents who commuted to jobs outside the County in 1968. Over 87% of them travel to New York City and the urban counties of Northern New Jersey. There are 12,800 of them who use public transportation - 7,200 use rail and 5,600 use buses while 24,600 commute by automobile. The high volumes at the northern boundary of the County on the Garden State Parkway and Route 35 have already been mentioned. In addition, State Highway Routes 34 and 9 carried 13,830 and

26,000 vehicles, respectively, at the northern County boundary. Route 9 has experienced the most impressive increases in traffic flow. At the northern end, the A.A.D.T. rose from 9,940 in 1960 to 26,000 in 1968, an increase of 162% in only 8 years. A critical problem is developing at the Raritan River Bridge crossings where northbound commuters from the Counties of Monmouth, Ocean and parts of Middlesex all must use either the Garden State Parkway or Route 9 to cross the Raritan River and reach their places of employment to the north.

In order to evaluate the adequacy of the highway system it is necessary to compare highway traffic volumes with highway capacity. Figure 8 has been developed which identifies the volume/capacity relationship for all the roads in the County where information was available. As this map clearly indicates, the bulk of the highway mileage in the overloaded categories is on the major State highways: Routes 9, 33, 34 and 35. Even the sections of those highways that have recently been dualized are operating in excess of capacity, highlighting the backlog of highway needs and critical nature of the transportation situation in Monmouth County.

In addition, there are problems of overloading on the two-lane secondary State and County roads, with the greatest concentration of overloading in the Red Bank-Eatontown-Long Branch area (Planning Area II). Many of the overloaded two-lane secondary roads are those which serve as feeders to the more intensively developed areas

COMPARISON OF HIGHWAY VOLUME AND HIGHWAY CAPACITY

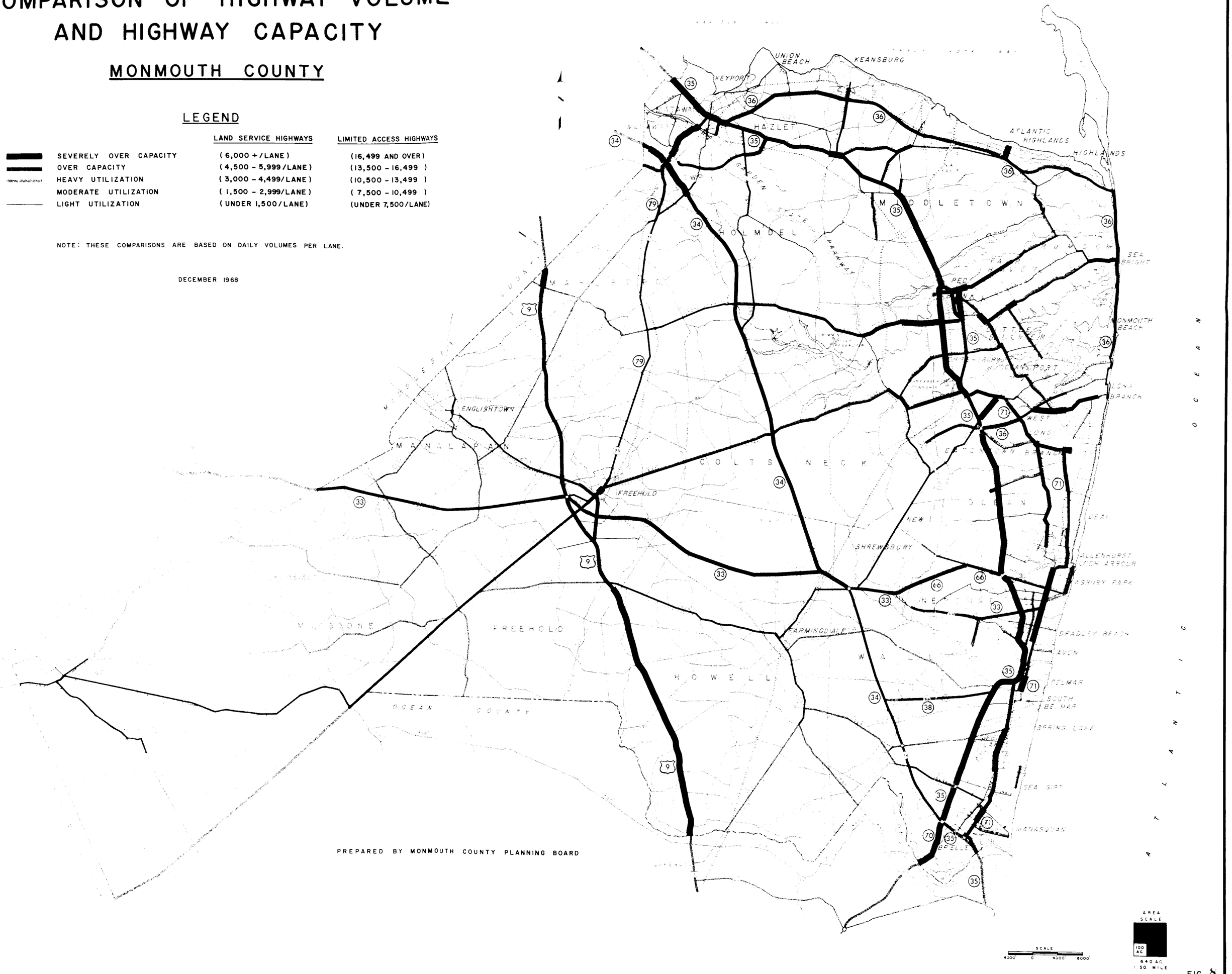
MONMOUTH COUNTY

LEGEND

	LAND SERVICE HIGHWAYS	LIMITED ACCESS HIGHWAYS
SEVERELY OVER CAPACITY	(6,000 +/LANE)	(16,499 AND OVER)
OVER CAPACITY	(4,500 - 5,999/LANE)	(13,500 - 16,499)
HEAVY UTILIZATION	(3,000 - 4,499/LANE)	(10,500 - 13,499)
MODERATE UTILIZATION	(1,500 - 2,999/LANE)	(7,500 - 10,499)
LIGHT UTILIZATION	(UNDER 1,500/LANE)	(UNDER 7,500/LANE)

NOTE: THESE COMPARISONS ARE BASED ON DAILY VOLUMES PER LANE.

DECEMBER 1968



PREPARED BY MONMOUTH COUNTY PLANNING BOARD

FIG. 8

of the County. Examples include Newman Springs Road (Route 520), Shrewsbury Avenue, Rumson Road, Monmouth Road, Tinton Avenue (Route 537), Route 71, River Road in Fair Haven, South Street in Freehold and Leonardville Road in Middletown Township. Other overloaded secondary roads are those which serve as main streets for various central business districts and also carry a relatively high percentage of through traffic. These include Main Street in Matawan Borough, Broad Street and Front Street in Red Bank, Broadway in Long Branch, Main Street in Freehold, Main Street in Asbury Park and Neptune, and F Street in Belmar. Figure 8 is very useful in identifying the problem areas of highway transportation in the County and helping to establish routes for future improvements.

Summarized below are a number of the major conclusions and recommendations of the Circulation and Transportation Report.

a. The most pressing transportation need in Monmouth County is for a system of freeways to provide for fast and safe movement of regional traffic through and within the County and to separate the regional and local traffic movements.

b. There is an urgent need for a north-south freeway paralleling Route 9 and extending from Ocean County through Monmouth County and, most importantly, providing a new crossing of the Raritan River.

c. At the present time only 3% of the mileage in the classified system of roads in Monmouth County is comprised of freeways. This places a disproportionate share of the total traffic flow on land service roads, particularly primary and secondary arteries.

d. The freeway interchange is the point at which the freeway releases its burden of traffic onto the local road network. Interchanges also attract industrial and commercial development, both of which generate additional traffic. Invariably, the local roads leading to a new interchange become very quickly congested and require substantial improvements.

e. In order to realize maximum economies in the construction of all of the necessary elements of the future highway system, it is essential that a program of advanced acquisition of right-of-way be undertaken. It is generally recognized that right-of-way costs are the greatest single variable in the total cost of highway construction. Advanced acquisition allows communities to plan for the proper location of land uses in relation to future highways and prevents the disruption and costs of blasting through built-up areas.

f. Much of the congestion occurring on Monmouth County's roads results from signalized intersec-

tions which have a capacity significantly lower than that of the approaching roadway. These situations require the widening of the roadway at the intersection to provide for separate right and left turn lanes.

g. It has been demonstrated through national safety records that there is a direct relationship between highway design standards and traffic safety. This relationship is graphically supported by the fatality rates on the Garden State Parkway which ranged from 0.7 and 1.71 fatalities per 100 million vehicle miles since 1963, one of the best safety records in the nation.

h. Future highway planning in Monmouth County will require particular attention to the following problems: the need for adequate access to major employment centers, the provision of bypass routes around already congested areas, the separation of roadways which are serving two traffic corridors on a single alignment, the elimination of intersections with more than two roads intersecting at or near the same point, and the elimination of regional through traffic from the land service highways.

i. Industrial parks and large individual industrial plants generate high volumes of traffic during

relatively short periods of time, thus requiring a road network which provides for the immediate dispersal of traffic into four basic directions before that traffic reaches an intersection.

j. The use of marginal access roads or reverse frontage along primary and secondary arterial roads is necessary to protect the traffic carrying function of those roads.

k. Commuter bus service between Monmouth County and the major places of employment in New York City and North Jersey has generally improved to meet rising demand, but local internal bus service is on the verge of extinction.

l. Although rail passenger service has deteriorated since 1959, there are prospects for significant improvements resulting from the proposed electrification of the New York and Long Branch Railroad.

m. In addition to the proposed electrification of the New York and Long Branch Railroad, it will be necessary to provide for substantial increases in the number of parking spaces and to make some alterations in the fare structure if the railroad is to realize its full potential.

n. The proposed Garden State Thruway should be designed to permit the future construction of a high speed rail line in its median, in order to provide commuter rail service to the extensive corridor of development now taking form along Route 9 from Madison Township in Middlesex County to Dover Township in Ocean County.

These points that are summarized above will bear a direct and important relationship to the Circulation and Road Plan that is proposed in a later section of this report.

8.3 FUTURE ECONOMIC DEVELOPMENT POTENTIAL

The Monmouth County Planning Board staff estimates that the population of Monmouth County will grow from 445,300 in 1968 to 735,000 in 1985, and 1,025,000 by the year 2000. Employment in the County is expected to grow from 127,400 in 1968 to 216,500 in 1985, a gain of 69.9%. The purpose of this section of this report will be to examine and measure what this growth will mean in terms of the major land use elements - residential, commercial, industrial, agriculture and resort.

8.31 RESIDENTIAL

Monmouth County is an integral part of the New York Metropolitan Region and thus will continue to experience the outward pressure for expansion from this region. The County is within easy commuting distance of the employment centers of North Jersey and New York City. This means that Monmouth County will continue to draw on and tap the housing market of a large portion of the entire Metropolitan Region. The survey of new one family developments in the County revealed that over 61% of the new residents came to Monmouth County from North Jersey and New York City. Most of these families are in the upper middle and upper income ranges, where the cost of commuting is not a critical or deciding factor. These trends are expected to continue with approximately 100,000 additional housing units being constructed

by 1985; about a third of which will be apartments - both garden and high-rise.

8.32 COMMERCIAL POTENTIAL

Commercial development is directly related to population and therefore Monmouth County can be expected to experience business growth in proportion to the number of additional people living in the County. Commercial development should be confined as much as possible to planned shopping centers rather than being strung out along highway frontage. Shopping Centers can be defined as a group of commercial establishments, planned, developed, owned and managed as a unit, with off-street parking provided on the property. They are related in their location, size, and types of shops, to the trade areas they serve and have evolved into three separate types, each distinctive in its own function. They are:

A. Neighborhood Center - with the supermarket as the principal tenant.

B. Community Center - with a large variety store or junior department store as the major tenant.

C. Regional Center - with one or two full-line department stores as the major tenants.

As clearly illustrated by Table 10, which identifies the major commercial centers of the County and

the changes in retail sales volumes during the 1954-67 period, shopping centers have been capturing the bulk of the increment in retail sales during the past decade. Asbury Park, Long Branch, Red Bank and Freehold - all classified as Regional Commercial Districts - show absolute gains of 4.8% to 49.9% in the 13 year period. In contrast, the remainder of the County has gained 143% in sales volume and Eatontown Borough, where Monmouth Shopping Center is located, is up more than ten times the 1954 figure. The total share of the County's retail sales for the four older towns has dropped from 49.3% of the total in 1954, to 28.8% in 1967 at a time when the overall sales increase was 100.4%.

It is apparent that if the older downtown areas are to continue to flourish, more efforts must be made to revitalize them. Improved appearance, traffic circulation, adequate parking and creation of a center of commercial activity, similar to what has just been completed in Belmar where an urban renewal program has been completed, and has alleviated and overcome some of the problems of an older commercial district, must be undertaken by other communities if these older commercial districts are to survive.

Some efforts have been made in this direction by several of the communities. The General Development

TABLE 10
MONMOUTH COUNTY RETAIL SALES VOLUMES
IN $1,000.00

MUNICIPALITY	* 1954	% OF TOTAL	* 1958	% OF TOTAL	* 1963	% OF TOTAL	** 1964	% OF TOTAL	** 1965	% OF TOTAL	* 1966	% OF TOTAL	* 1967	% OF TOTAL
ASBURY PARK CITY	58,369	18.0	60,699	15.8	64,075	12.3	67,773	12.0	69,651	11.5	69,276	11.0	68,848	10.6
ATLANTIC HIGHLANDS BOROUGH	4,452	1.4	4,993	1.3	7,003	1.3								
BELMAR BOROUGH	16,009	4.9	12,980	3.4	15,335	3.0								
BRADLEY BEACH BOROUGH	6,083	1.9	5,544	1.4	4,942	1.0								
BRIELLE BOROUGH					5,411	1.0								
EATONTOWN BOROUGH	5,363	1.7	7,832	2.0	39,164	7.5			57,257	9.5	66,573	10.6	76,858	11.8
FAIR HAVEN BOROUGH	3,163	1.0	4,531	1.2	4,421	.9								
FREEHOLD BOROUGH	20,531	6.3	19,002	4.9	25,832	5.0	27,816	4.9	29,434	4.9	30,001	4.8	30,780	4.7
HAZLET TOWNSHIP					16,384	3.2								
HIGHLANDS BOROUGH	2,528	.8	2,559	.7	2,589	.5								
HOWELL TOWNSHIP					4,817	.9								
KEANSBURG BOROUGH	9,020	2.8	11,132	2.9	5,567	1.1								
KEYPORT BOROUGH	11,334	3.5	16,421	4.3	14,028	2.7								
LITTLE SILVER BOROUGH	3,205	1.0	8,825	2.3	6,931	1.3								
LONG BRANCH CITY	31,825	9.8	32,597	8.5	33,605	6.4	34,599	6.1	35,308	5.8	34,195	5.5	33,362	5.1
MANASQUAN BOROUGH	7,894	2.4	9,314	2.4	12,248	2.4								
MATAWAN BOROUGH	5,246	1.6	5,877	1.5	12,078	2.3								
MIDDLETOWN TOWNSHIP			15,091	3.9	33,140	6.4	38,100	6.7	42,493	7.0	46,163	7.4	50,189	7.7
NEPTUNE CITY BOROUGH	3,385	1.0	15,338	4.0	21,584	4.2								
NEPTUNE TOWNSHIP			15,114	3.9	26,236	5.1	29,763	5.3	33,480	5.5	35,756	5.7	33,394	5.1
OCEAN TOWNSHIP					10,583	2.0								
OCEANPORT BOROUGH	2,271	.7	1,913	.5	2,441	.5								
RED BANK BOROUGH	49,447	15.3	50,040	13.0	54,016	10.4	55,916	9.9	57,009	9.4	55,452	8.9	54,183	8.3
RUMSON BOROUGH	1,708	.5	1,819	.5	1,812	.3								
SHREWSBURY BOROUGH					10,887	2.1								
SPRING LAKE BOROUGH					3,528	.7								
SPRING LAKE HEIGHTS BOROUGH					2,939	.6								
UNION BEACH BOROUGH	1,112	.3	1,077	.3	1,182	.2								
WALL TOWNSHIP					10,769	2.1								
WEST LONG BRANCH BOROUGH	2,729	.8	3,862	1.0	9,650	1.9								
REMAINDER OF COUNTY	78,572	24.2	78,505	20.4	56,081	10.8	312,185	55.1	280,956	46.4	288,577	46.1	302,129	46.5
MONMOUTH COUNTY	324,264	100.0	385,065	100.0	519,242	100.0	566,152	100.0	605,588		625,993	100.0	649,743	

* SOURCE: CENSUS OF BUSINESS
** SOURCE: SALES MANAGEMENT MAGAZINE ESTIMATES

Plan will provide for by-passes and highway improvements to reduce through traffic in central business districts and facilitate traffic circulation in and around these older commercial areas. These areas form an important segment of the property tax base of these communities and local plans should be developed to improve and modernize these areas so they can effectively compete in the future.

Studies by many agencies, particularly the Tri-State Transportation Commission and Regional Plan Association indicate that growth in office-related operations will be tremendous in the next decade or two in all areas of the New York Metropolitan Region. Special consideration will be given to office type operations, and areas will be set aside exclusively for this purpose in the General Development Plan.

8.33 INDUSTRIAL POTENTIAL

There are widespread local efforts throughout the country today to attract industrial development, not only to provide new jobs for an area, but also to improve the tax base. The Monmouth County Planning Board has recognized the importance of this goal and has full-time staff members devoted to it. There are a number of factors that are increasing the potential of Monmouth County and adjoining areas to the west for industrial development. First is the strategic location of Monmouth County just off the

main stem of the urban corridor that is forming between New York and Philadelphia. In fact the computation of the population center of the entire "strip city" or megalopolis that is forming from Boston, Massachusetts to Washington, D.C. indicated a location in the vicinity of northern Monmouth County. This establishes this area as having particularly good potential for market-oriented industries. Another factor that is increasing the industrial potential of Monmouth County is the scarcity of land in the inner ring counties of the New York Metropolitan Area. This is forcing many industrial plants to the outer ring counties of the New York Metropolitan Area. In areas such as Monmouth County they are able to construct new, modern plants on spacious sites with adequate off street parking and loading facilities with room for growth to replace structures which are many times multi-story, inefficient, obsolete and outmoded.

Monmouth County has an increasing quantity of labor available to it within easy commuting distance and when the freeway system for the County is completed will have even better access to the New Jersey Turnpike and other parts of the Eastern Seaboard.

Monmouth County has a well conceived plan for water supply. A program has been developed by the County to utilize both the surface and ground water

resources of the area in the most efficient and practical way. To further detail this program, a study is currently underway to develop a plan and program for the transmission and distribution of regional supplies serving more than one Municipality or water company. Industrial operations utilizing a medium amount of water - 1 - 2 million gallons per day, should have no difficulty in obtaining an ample supply. Heavy types of industry - utilizing greater quantities of water - are not suitable in Monmouth County, anyway.

The County engaged engineering consultants to develop plans for sewage disposal facilities. The study, dividing the County into 15 regional areas, was completed in 1966, and after a public hearing was adopted on April 18, 1966. Studies and plans in various stages of formation are currently underway in eleven of these regional areas. The long-range outlook for sewerage service throughout most of the urbanizing areas of the County is good.

The County is served by both the Jersey Central and Pennsylvania Railroads for freight rail service. Most of the County's municipalities are in relatively favorable positions - tax-wise when compared to the more densely populated communities of North Jersey.

Having reviewed several factors which determine industrial location, the conclusion is apparent that

Monmouth County is well endowed with an advantageous long-range industrial potential which will accelerate and broaden, as new facilities, particularly freeways and sewer systems become available. The next step is to relate this potential to the number of employees and acreage that will be needed.

After careful review and analysis of estimates by the State and regional agencies, the Monmouth County Planning Board staff determined that an increment of 24,900 manufacturing jobs can be expected by 1985. To allow for flexibility and choice of locations, the General Development Plan will designate approximately 20,000 acres for industrial purposes in Monmouth County. They will be well related to highways, utilities and the other factors that must be given primary consideration in industrial site selection.

8.34 AGRICULTURAL POTENTIAL

When considering the agricultural potential of Monmouth County as a practical matter, consideration need be given only to Planning Areas V and VI known as the Western Monmouth Region. Agriculture has been the traditional and basic economic activity of this region and it is now disappearing at the rate of approximately 3,500 acres per year. Much of the land that is being converted to urban uses is the best and most productive farmland in the region.

Simply considering that there will be an excess of land in relation to the demand for more intensive non-agricultural uses, agriculture seems destined to remain in some locations through 1985 and long thereafter. Some of the more intensive agricultural uses such as nurseries and horse farms are expected to remain and flourish. "Sod" farming has grown significantly in the County in the last several years.

The County Agricultural Agent feels that the Farmland Assessment Law has had a beneficial effect in arresting the trend in the decline in the number of farms in the County. High value per acre crops requiring as little labor as possible have a definite future in Monmouth County.

However, the justification for the preservation of agriculture in the County is not based on the need for agricultural production but on the secondary benefits that accrue to urban development. These benefits include:

(a) Protection of watersheds to allow for complete development of surface water supply by large impoundments.

(b) Provide areas for ground water recharge by slowing the rate of storm water surface runoff.

(c) Reinforces the natural drainage system

by protecting streams and brooks from encroachment and siltation.

(d) Provide areas for wildlife conservation.

(e) Preserves the best of the rural landscape enhancing the aesthetic value of communities.

(f) Provides a reserve area for locating necessary public facilities in the future. This adds to the flexibility of the area in meeting changing conditions.

(g) Establishment of logical limits for intensive development and the accompanying utilities, facilities and services.

The General Development Plan Map designates certain areas of the County which should remain as areas for agriculture, open space and low density development. These areas will not require urban facilities or utilities. Careful consideration was also given in the Plan to integrate these areas with large reservations in public ownership to facilitate their functioning as open space areas.

It is expected that through a combination of means, agriculture will remain a significant factor in the Monmouth County economy. The 1985 employment figure has been projected to 4,300 persons. If

agriculture can remain and prosper, one of the historic and important environmental assets of Monmouth County will be maintained and balance will be supplied to the economy.

8.35 RESORT POTENTIAL

The Monmouth County ocean coastline originally developed as a resort and seashore area and several areas along Sandy Hook Bay have the same characteristic. The Monmouth County Planning Board staff undertook a complete physical inventory of the Coastline strip where resort activities are prevalent. It appears obvious, as a result of this study, that the Shore area of Monmouth County has not fully utilized its potential. Both land and building values are less than would be expected. Many of the existing structures, while sound physically, are aged, obsolete and outmoded which accounts for lesser building values. Much of the coastline is utilized for year-round activities while a considerable percentage is vacant. While there has been some new construction of motels and apartments, the problems of land assemblage and the re-use of land and rising land values all play a part in tempering any trend in this direction in Monmouth County, along the oceanfront.

It is apparent that to utilize the Monmouth County Coastline to its full potential, a better and

more coordinated effort by the 20 communities involved will have to be made to plan and encourage the development of new, modern facilities. One of the future objectives of the Monmouth County Planning Board staff is to develop further the information from its own study of the Shore and utilize information from the State Study of the Shore area. Specific proposals will be made as to the types of uses that can be developed, and which will more fully realize the full potential of the Monmouth County coastline. Through coordinated efforts and planning proposals, it will be possible to see resort activities continue to flourish and remain a significant part of the Monmouth County economy.

8.36 ECONOMIC DEVELOPMENT POTENTIAL* SUMMARY

Monmouth County's future seems assured! Examination of each of the segments that make up the economic base of Monmouth County reveals that while there are problems, each of the major elements will remain significant factors in the Monmouth County economy in the foreseeable future. The County will continue to feel the pressure for urban expansion from the New York Metropolitan Region. Residential development is being accompanied by commercial and industrial expansion. Agriculture and the resort industry, the historic foundations

of the Monmouth County economy, will remain important and viable economic activities. Monmouth County seems certain to continue to have a healthy and balanced economy in future years.

8.4 GENERAL DEVELOPMENT PLAN

The map at the end of this report - Figure 10 is the General Development Plan for Monmouth County. It presents proposals for future land use, road circulation and rail transportation. Each of the major elements of the Plan will be explained and detailed in this section. There will be an evaluation of the cost of the capital improvements that are necessary to implement the Plan. This report will conclude with a section which will outline the means of implementing the Plan.

8.41 ROAD CIRCULATION PLAN

The Circulation and Transportation Study of this series provided the reservoir of information and the foundation on which the highway proposals in the Plan are based. Four basic categories of roads are delineated on the General Development Plan and these are listed below with their principal function defined.

FREEWAYS - Provide entirely for the uninterrupted movement of motor vehicles, with no access to abutting properties. They are designed for high speed regional traffic movements.

PRIMARY ARTERIAL ROADS - Carry traffic to and from the Freeway system and to the major traffic generators within the area. They do provide direct access to adjoining property.

SECONDARY ARTERIAL ROADS - Serve as connectors between the collector system and the primary arterial system. Trip lengths should range between four and ten miles.

MAJOR COLLECTOR STREETS - Form the boundaries of major blocks of land and are intended primarily for short-trip inter-neighborhood traffic and as feeder roads into commercial and industrial areas.

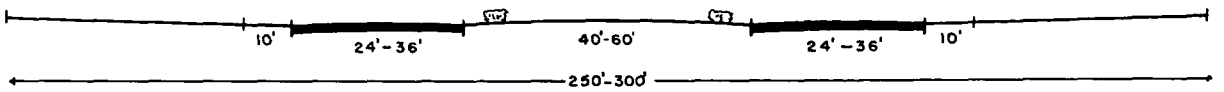
Two other classifications of roads are not considered as an integral part of the General Development Plan for the County. While local collector roads - providing access into residential neighborhoods - and local residential access streets - are shown in half-tone on the Plan map, this is done for locational purposes only. It is beyond the scope of a countywide plan to project the future network of streets of this classification, therefore, just the existing pattern is identified.

The cross-section standards (Figure 9) and the standards for extra widths and sight triangle easements (Figure 9a) are to be considered an integral part of the Proposed Road Plan. The cross-sections for the lower two categories - local collectors and local residential access streets are merely suggestive to the municipalities. Often adjacent municipalities have different cross-section requirements for the same road. It is intended that these standards be adopted as part of the General Development Plan which will serve as a guide to all 53 municipalities of the County.

The most significant road proposals on the Road Circulation Plan, and those that should receive the highest priority since they will have the greatest impact on the County, are the limited access freeways. The Plan reflects the roads to which the New Jersey Department of Transportation has given

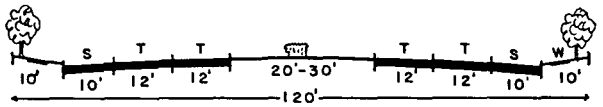
SUGGESTED CROSS-SECTIONS BY HIGHWAY CLASSIFICATION

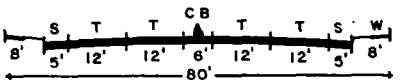
FREEWAY



DESIRABLE MINIMUM

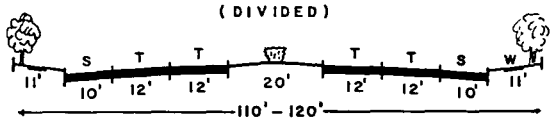
PRIMARY ARTERIAL



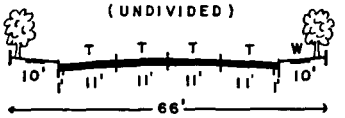


SECONDARY ARTERIAL

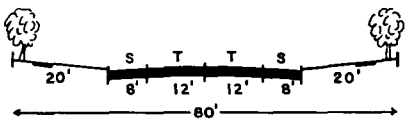
(DIVIDED)

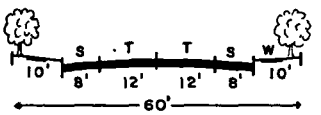


(UNDIVIDED)

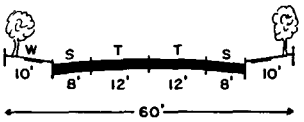


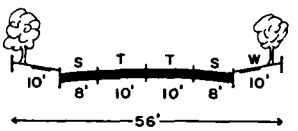
MAJOR COLLECTOR





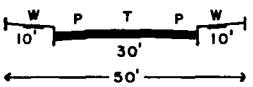
LOCAL COLLECTOR



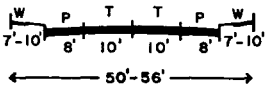


LOCAL RESIDENTIAL

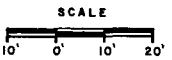
(LOW DENSITY)



(HIGH DENSITY)



SCALE



NOTE

- P - PARKING LANE
- T - TRAFFIC LANE
- S - SHOULDER
- W - SIDEWALK (4')
- CB - CENTER BARRIER
- PLANTING STRIP (4')

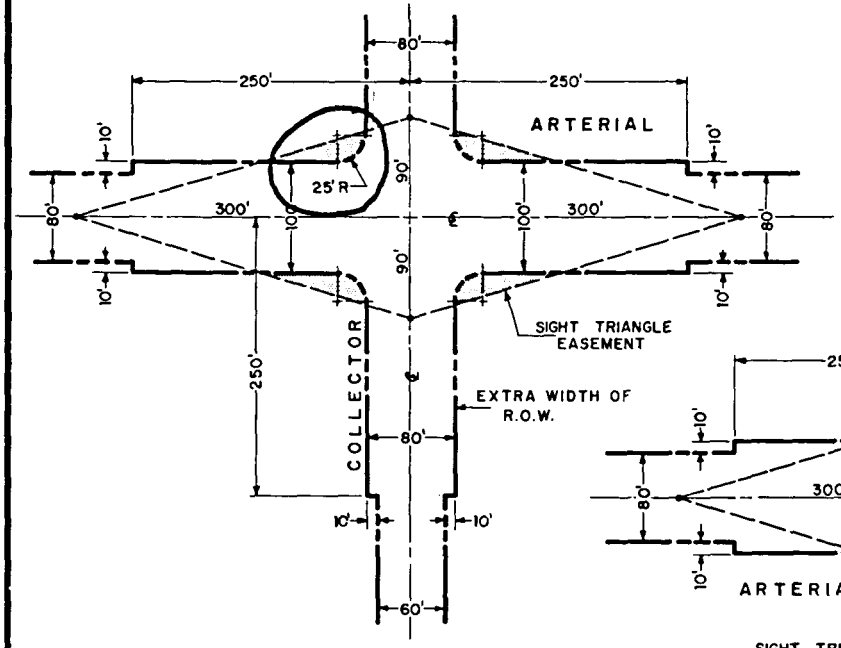
FEBRUARY, 1969

PREPARED BY MONMOUTH COUNTY PLANNING BOARD

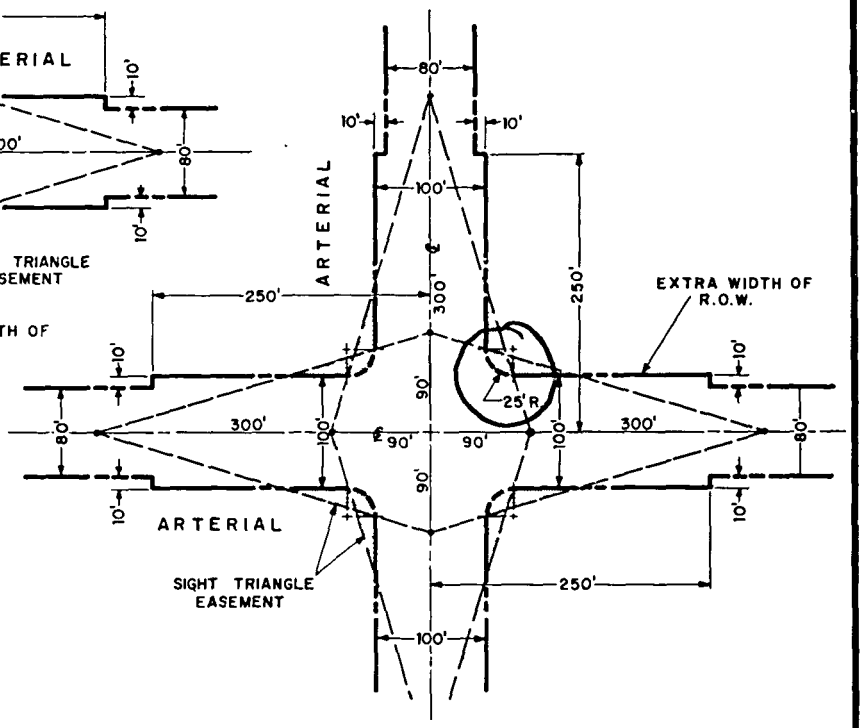
FIG. 9

COUNTY ROAD INTERSECTION DIAGRAMS

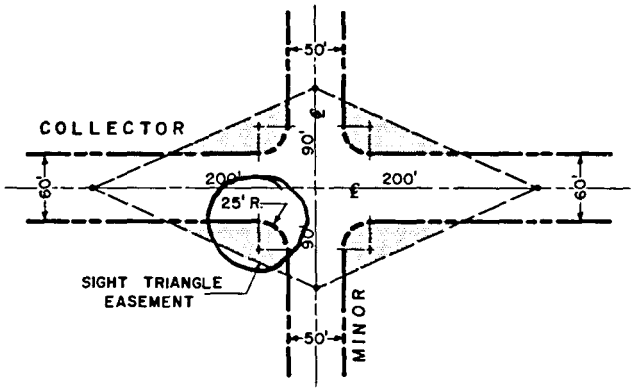
ARTERIAL - COLLECTOR



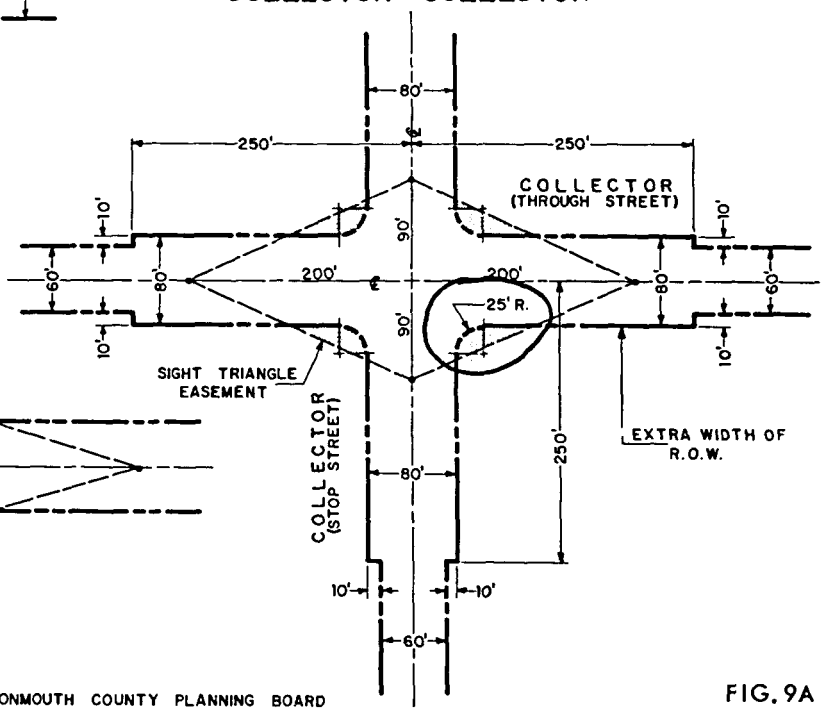
ARTERIAL - ARTERIAL



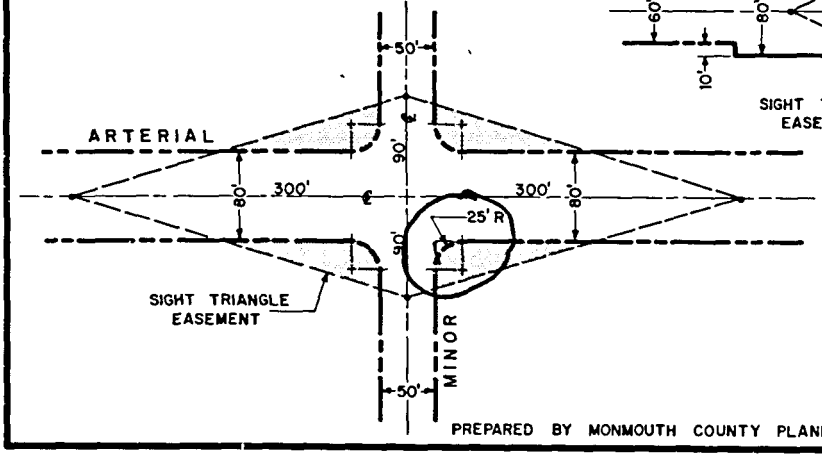
COLLECTOR - MINOR



COLLECTOR - COLLECTOR



ARTERIAL - MINOR



PREPARED BY MONMOUTH COUNTY PLANNING BOARD

FIG. 9A

some status, plus others that the Monmouth County Planning Board feels are vital to create a system of freeways that will interconnect and serve regional traffic throughout the County. Table 11 lists the individual freeway links and the length of each. It is apparent that the Plan recommends a tripling of the present freeway mileage.

Freeway Routes 18, 33, 35 and Interstate Route 195 all are delineated according to alignments that have been finally determined by the New Jersey State Department of Transportation. In the case of Interstate Route 195 the State has just submitted its recommendation to the Federal Bureau of Public Roads and the Monmouth County Planning Board has reluctantly included this alignment as part of its Circulation Plan. The Monmouth County Planning Board has consistently recommended a more northerly alignment for this freeway. It is included as part of the adopted Western Monmouth Plan in this location roughly parallel to the Manasquan River. Since it now seems all but certain that the route known as the "central alignment" will be finally selected, the Proposed Circulation Plan now shows this alignment in location as proposed by the State. The Plan does recommend two additional inter-changes not included as Part of the State's proposal - one at Oak Glen Road and the other at the proposed north-south industrial road parallel to the Howell Township boundary in Wall Township. These additional interchanges would facilitate use of the freeway

in this southern part of the County. The Routes 18, 33 and 35 freeways are shown in the Circulation Plan as finally established by the State Department of Transportation. To accomodate the greatly increased traffic generated by residents living in the State Highway Route #9 corridor, a north-south freeway - better known as the Garden State Thruway has been proposed. This route would extend northward into Middlesex County, provide a new crossing of the Raritan River, and connect with the New Jersey Turnpike in the vicinity of its present inter-change with the Route #287 freeway in Edison Township. This route, originally proposed by the Monmouth County Planning Board in 1965 as part of its Western Monmouth Plan should also extend southward to the Toms River area of Ocean County. It would then be a complete supplement to Route #9 and would accomodate the bulk of the north-south commuter trips as the area continues to grow and develop.

The Route #33 bypass south of Freehold is shown in the location originally proposed in the Western Monmouth Plan Report and this location coincides almost exactly with the alignment selected by the State.

To complete the freeway system in the Western part of the County, a connector freeway is needed to connect Routes #18, 33 and Interstate Route #195. The County Planning Board has long advocated this interconnection which would provide a means for regional traffic to flow smoothly between the freeways of the system and

TABLE 11

MONMOUTH COUNTY

FREEWAY SYSTEM

FREEWAY LINK	MILEAGE Existing	MILEAGE Proposed
GARDEN STATE PARKWAY	26.70	26.70
RT. 18 FREEWAY	--	16.80
RT. 35 FREEWAY	6.20	12.20
RT. 35 FREEWAY EXT.	--	3.10
INTERSTATE RT. I-195	--	16.70
RT. 33 FEEEWAY	--	7.00
RT. 38 FREEWAY	--	9.00
GARDEN STATE THRUWAY	--	12.10
TOTAL MILEAGE	32.90	103.60

would eliminate the necessity of regional traffic having to use primary and secondary arteries to get from one freeway to another. In reviewing the Department of Transportation Master Plan of Highways, the County Planning Baord staff has concluded that it is most logical to extend the proposed Route #38 freeway, presently scheduled to end at Route #195 in Ocean County, northeastward across Route 9 and Route #33 to Route #18 near Stone Hill Road in Colts Neck Township. This extension would provide a vital link in interconnecting the freeway system of the County, making it possible, for example, for a person living in the Red Bank area to get on a freeway, bypass Freehold Borough and go westward to a connection with the New Jersey Turnpike or on to the State capitol of Trenton. If there is one single project that is absolutely essential and vital to the future of Monmouth County, it is this one. The officials and leaders of Monmouth County should make every effort to see that this freeway link is built.

In the Coastal area of the County, the Route #35 freeway is shown from Eatontown to Brielle Circle as proposed by the State Department of Transportation. Part of this freeway is now in use, from Deal Road in Ocean Township to Route #38 in Wall Township. Already there has been a dramatic shift in travel patterns and a savings in travel times in this area as a result of use of this freeway. Completion of

it both northward and southward as soon as possible should be a definite goal. In the 1959 Transportation Report for the Monmouth Coastal Region the County Planning Board indicated it felt it would greatly help circulation in the Red Bank-Eatontown area, if the Route #35 freeway were extended northward to Shrewsbury Avenue. This proposal has been repeated as part of the 1969 Circulation Plan for the County. The Red Bank-Eatontown area (Planning Area II) has the greatest concentration of employment of any area of the County and traffic congestion has continued to worsen.

Study of Figure 8, the comparison of Highway Volumes with Highway Capacity, reveals a number of roads, both County and State, that are over capacity in this area. Coopers Bridge north of Red Bank was a bottleneck when the 1959 Transportation Report was completed and this situation has continued to deteriorate in the past decade. The State Department of Transportation is now studying the possibility of extending the Route #35 freeway northward all the way to the Navesink River. Until this study is completed and because of the difficulty of "blasting through" congested built up areas, the County Circulation Plan shows the Route #35 freeway ending at Shrewsbury Avenue. While it would be desirable to extend this freeway as far as the Navesink River, the County Planning Board feels it could function and greatly alleviate traffic congestion in the Eatontown area if it were constructed even as far as Shrewsbury Avenue. To put it another way, the Monmouth County Planning

Board feels that while it would be desirable to have an extension of the Route #35 freeway northward across the Navesink River, there would be great merit in having it built as far as Shrewsbury Avenue, even if it were found to be unfeasible to find an acceptable alignment northward from Shrewsbury Avenue.

The Primary Arterial System of highways is basically the present State Highway routes. The Circulation Plan anticipates that all of these highways would be brought up to acceptable standards, with four moving lanes of traffic and improvements at intersections and at the present traffic circles. There are only two proposals identifiable on the Plan in connection with the Primary Arterial System. There is a proposed separation of Routes #33 and #34 in the Collingswood Park area of Wall Township. This would provide separate roadways for east-west traffic on Route #33 and for north-south traffic on Route #34 eliminating the present mixing of traffic that takes place in that area.

The other major proposal for the Primary Arterial System is of a longer range nature. If and when the Earle Naval Ammunition Depot were ever abandoned and declared surplus, the Circulation Plan proposes that the Road and Railroad running northward to Leonardo in Middletown Township be converted to a primary arterial highway. The Bayshore Area of the County (Planning Area I) has long been deficient in highway facilities and

the opportunity should not be lost to increase facilities in this area of the County. If this road were connected to the Route #18 freeway at its southern terminus and with the grade separations that already exist at major primary and secondary arteries, it would be most feasible and desirable to convert this right-of-way to a primary artery.

Table 12 indicates the increase in mileage of all the categories of classified roads. What is proposed is nearly a doubling of the mileage of secondary arteries. Further analysis of this proposal indicates that 69.1 miles of the increment in secondary arteries is new construction, while the remainder, 182.3 miles, is upgrading of existing roads (most of which are presently classified as collectors) to secondary arterial standards.

The proposals that are contained in the Circulation Plan for secondary arterials can generally be placed into three major categories:

1. Upgrading of existing roads to secondary arterial standards and connecting these roads in some locations to provide continuous routes.
2. By-passes of existing points of congestion with new alignments.
3. New secondary road alignments where there are little or no existing facilities.

TABLE 12

CLASSIFICATION OF PROPOSED

HIGHWAY SYSTEM

CLASSIFICATION	1969 Existing	1985 Proposed	% Increment
FREEWAYS	32.90	103.60	214.9%
PRIMARY ARTERIAL	146.7	157.8	7.6%
SECONDARY ARTERIAL	260.3	511.7	96.6%
COLLECTOR	681.9*	543.0**	-25.6%
TOTAL	1121.8	1316.10	17.3%

* Major + Local Collectors
** Major Collectors Only

To determine the proposals falling into the first category, close study of Figures 10 in this report and Figure 3 in the Circulation and Transportation Report reveals the changes. Many of the collector roads such as:

a. Navesink River Road

b. Kings Highway - Holland Road

c. County Routes #50

d. County Route #52

e. Dutch Lane Road

f. Pleasant Valley Road - Line Road

g. Gordons Corner Road

h. Union Hill Road

i. Imlaystown-Hightstown Road

j. Province Line Road

k. Jacksons Mill Road

l. West Farms Road

m. Aldrich Road

n. Deal Road

o. West Park Avenue

p. Hance Avenue - Hope Road - Green Grove Road - Jumping Brook Road

q. Cedar Avenue

have been proposed for upgrading. Figure 12 indicates in detail the Monmouth County Highway Plan and the requirements for right-of-way on all County roads.

In the second category - bypasses are proposed around a number of congested areas of the County. These are listed below:

a. Tinton Falls area of New Shrewsbury

b. Farmingdale Borough

c. Freehold Borough

d. Englishtown Borough

e. Allentown Borough

While all of these proposals are important, the Freehold Borough situation highlights the need for these proposals. Traffic congestion in downtown Freehold grows progressively worse. As the County grows, more and more traffic is forced through downtown Freehold even though much of it is destined to points beyond. A series of circumferential routes are proposed around the Borough to eliminate the unnecessary regional traffic that must pass through it due to the present road pattern.

In category three are several proposals:

a. Conversion of the Jersey Central Lines Right-of-Way in the Bayshore Area (if and when abandoned) to a continuous secondary artery from Route #79 in Matawan Borough to Ocean Boulevard in Atlantic Highlands.

b. Main Street Relief Route from Asbury Park to Neptune City.

c. Industrial Road from Wall Street to Hope Road in Eatontown Borough .

d. The connection of Asbury Avenue through Earle Naval Ammunition Depot.

The mileage of Collector roads shows a decline according to Table 12. As has already been mentioned, only major collector roads are considered as part of the General Development Plan. These generally bound large blocks of land. Proposals for new construction of major collector roads fall into three major categories:

a. Realignment and connection of existing roads.

b. Penetration of large blocks of land with collector roads where nothing now exists.

c. Marginal roads along limited access freeways.

The Monmouth County Planning Board staff has made a conscious effort to develop a Road Circulation Plan that will overcome the present deficiencies in the existing network of roads and to provide for the traffic needs of the County in future years through the year 1985. There is no doubt that unless a serious effort is made to implement most of these proposals, the County will continue to experience congestion, more frequently and at more locations. The future development potential of Monmouth County will be greatly enhanced if these road proposals come into being. If not, traffic strangulation could result and the potential for future development - particularly industrial - could be impaired!

8.42 PUBLIC TRANSPORTATION PLAN

The County Plan for Public Transportation includes implementation of the State proposal for electrification of the New York and Long Branch Railroad and consolidation

and elimination of certain passenger stations. New passenger stations would be constructed in Matawan Township at Lloyd Road, Red Bank Borough at the existing freight yards, and between Manasquan and Sea Girt near Route #71 and the National Guard Encampment. Stations to be eliminated are those now existing at Matawan Borough, Hazlet, Red Bank, North Asbury Park, Sea Girt and Manasquan. Implementation of this Plan by the State would do much to improve travel time and conditions and hopefully would attract additional commuter passengers to use these facilities. The Route #9 corridor in Western Monmouth County involves an area of over 200 square miles. The Monmouth County Planning Board staff recommends that provision be made in the center median of the Garden State Thruway for the construction of Rapid Transit Facilities. No passenger rail facilities exist in this area at the present time. In looking at the whole New York Metropolitan Region, this is one of the largest areas that lack rail passenger facilities. Construction of such facilities in the future would do much to enhance the potential of this area and relieve the pressure on highway facilities.

The Monmouth County Planning Board staff recommends as part of its Transportation Plan that the State Department of Transportation give additional study to the possibility of establishing automobile parking areas for commuters - particularly those who commute by bus - at certain strategic locations throughout the County. Certain areas near existing bus stops and Garden State

Parkway interchanges are now being used this way and it seems very logical and desirable to encourage this trend. Whatever can be done to encourage public transportation - either rail or bus - and carpooling will be beneficial in alleviating the increasing pressure on the highway system.

8.43 LAND USE PLAN

The Land Use Plan for Monmouth County is based on the concept that urban type development should be confined to three areas: the coastal area of the County roughly east of the Garden State Parkway, the Route #9 corridor and an expanded urban area pushing out from Trenton to Allentown and eastward. These urban service areas would be separated and confined by areas of open space and rural density development. The open space area between the Garden State Parkway and the Route #9 corridor from the Mount Pleasant Hills area of Marlboro Township southward through Colts Neck and eastern Howell Township would encompass several public and quasi-public areas including:

Marlboro State Hospital

Swimming River Reservoir

Earle Naval Ammunition Depot

Allaire State Park

Another area of open space and rural development lies between the Route #9 corridor and the urban service areas around Allentown Borough. This area would incorporate the hills of Millstone Township which were mentioned earlier as an area that would be difficult to develop intensively as well as the Assunpink Watershed project and the Turkey Swamp Hunting and Fishing Grounds. There is much fertile farmland in this area that would be expected

to remain in this use in the future.

The General Development Plan for Monmouth County allocates acreage to six major categories of land use - residential, commercial, industrial, public and quasi-public, the Garden State Parkway and other streets and highways. Table 13 summarizes by categories and sub-categories the acreage and the percentage of the total land area to be devoted to each use. Each of these categories will be described in more detail in the following sections.

RESIDENTIAL

The Monmouth County Planning Board has long advocated creating urban service areas where there would be residential development of a high enough density to warrant a full range of urban services and facilities, while keeping the development of other areas at such a sparse density that these urban facilities would not be required. Looking at Table 13, one can observe that just about 60% of the County's land area has been allocated to residential use. About 17.8% of the County's land area would be kept in open space and residential development of a rural density. Over one-half of the land proposed for residential would be classified as part of urban service areas. This would include:

HIGH DENSITY (over 10 dwelling units per acre)

MEDIUM DENSITY (4-10 dwelling units per acre)

MEDIUM-LOW DENSITY (1.20-4 dwelling units per acre)

TABLE 13

PROPOSED LAND USE PLAN
MONMOUTH COUNTY TOTALS

LAND USE CATEGORY		ACREAGE	PERCENT OF TOTAL
RESIDENTIAL	High Density	1,784.18	.58%
	Medium Density	10,241.23	3.35
	Medium-Low Density	93,762.54	30.72
	Low Density	20,701.52	6.78
	Rural Density	54,417.75	17.83
	TOTAL	180,906.32	59.26
COMMERCIAL	Center	647.74	.21
	District	383.54	.13
	Highway	8,725.78	2.86
	TOTAL	9,757.06	3.20
INDUSTRIAL	Manufacturing	20,391.41	6.68
	Office & Research	3,059.38	1.00
	TOTAL	23,450.79	7.68
PUBLIC AND QUASI-PUBLIC	Regional Recreation and Watershed	20,592.90	6.75
	Regional Drainage and Conservation	17,492.75	5.73
	Local Drainage and Conservation	12,628.29	4.14
	Local Centers	309.74	.10
	Beach	651.80	.21
	Other Major	18,967.88	6.21
	TOTAL	70,643.36	23.14
STREETS		17,603.87	5.76
GARDEN STATE PARKWAY		2,903.20	.96
TOTAL ALL CATEGORIES		305,264.60	100.00

The areas of Monmouth County that have been designated for rural residential type development (less than 0.5 dwelling units per acre) have already been described. Included in this category are residences on lots of one acre or more - without utilities - agriculture and other uses of an open character. Presently, there is no legal means to guarantee that agriculture will remain, but it is the intent of the Plan to create an environment in these areas, that will be inducive for certain intensive types of agriculture. In addition, the Farmland Assessment Law and the fact there will remain a surplus of land compared to the amount needed for urban purposes will be additional factors that will encourage the continuation of agricultural uses.

In developing the Plan, the need became apparent to create an additional residential density category. This has been described as low density development (0.5-1.19 dwelling units per acre) and can be considered sort of a transitional category. In these areas the residential lot size would average about 40,000 square feet but there would be utilities - both water or sewer - either now existing or in the planning stages. Over 20,000 acres have been placed in this category. As might be expected most of these areas are sort of on the fringes of

intensively developed urban service areas. Most of Wall Township west of the Garden State Parkway and south of State Highway Route #38 and west of the Route #35 freeway has been placed in this category. Two other areas have also been so designated because of the character of the residential development that is occurring in them. Most of Rumson Borough and the portion of Middletown Township north of the Navesink River and east of Route #35 generally known as the Navesink and Locust areas have been placed in this category.

Areas with a high density designation (over 10 dwelling units per acre) generally are those where there has been considerable apartment development - both high rise and the garden apartment type. Most of Asbury Park has been placed in this category, along with scattered portions of Matawan Borough, Red Bank, Eatontown, Ocean Township, and Monmouth Beach as well as all of Shrewsbury Township and the Ocean Grove section of Neptune Township.

Those areas that have been classified as medium density (4-10 dwelling units per acre) generally can be termed as the remainder of the older, developed communities that have not been placed in the high density category. Included here are Matawan Borough, about one-half of Matawan Township and Hazlet Township, the Boroughs of Keyport, Union Beach and Keansburg, part of Highlands Borough, Red Bank Borough, the older areas of Fair Haven and Rumson, Sea Bright, the central part of Long Branch, Neptune Township east of Springdale Avenue - Route #33 and

the Route #35 freeway, Bradley Beach and Avon Borough, South Belmar Borough, the West Belmar section of Wall Township, the western half of Spring Lake, Spring Lake Heights, Manasquan and Freehold Boroughs. In total over 10,000 acres of the County's land area - 3.35% of the total, have been placed in this category. All of the land remaining that has not been mentioned has been placed in the medium-low density classification (1.2-4 dwelling units per acre). Over 93,700 acres of the County's land-nearly 31% of the total has been placed in this grouping. Most of the residential development in the past two decades has occurred at this density. Additional acreage particularly in Planning Areas V and VI have been shown for development at this density.

The Monmouth County Planning Board has long felt that the neighborhood unit should be the basic building block for residential development. It advocated this concept in the adopted Western Monmouth Plan and it will be reiterated as part of the overall County Master Plan. Wherever residential development is of a scale and magnitude to make it feasible, the neighborhood unit type concept should be used.

These units would be confined to urban service areas where urban facilities would be available. Such facilities would include utilities - both water and sewer, paved streets with sidewalks, curbs

and gutters, a storm drainage system and an elementary school within walking distance.

The proposed neighborhood units as illustrated by the accompanying design, Figure 11 would provide for 600 families on 350 acres - a gross density of 1.71 dwelling units per acre. Four hundred and fifty of these units would be single family homes and one hundred and fifty would be garden apartment units. Previous studies done by the Monmouth County Planning Board of the relationship between school population and housing indicate that an elementary school population of between 450 and 500 could be expected from such a residential development. This number of students could easily be accommodated in the 18 room elementary school for grades K through 8 that is centrally located in the design.

The proposed typical neighborhood design has has the following additional desirable design features:

A street system designed to discourage through traffic.

Variations in lot sizes for single family homes -

20% are 30,000 square feet

28% are 20,000 square feet

52% are 15,000 square feet

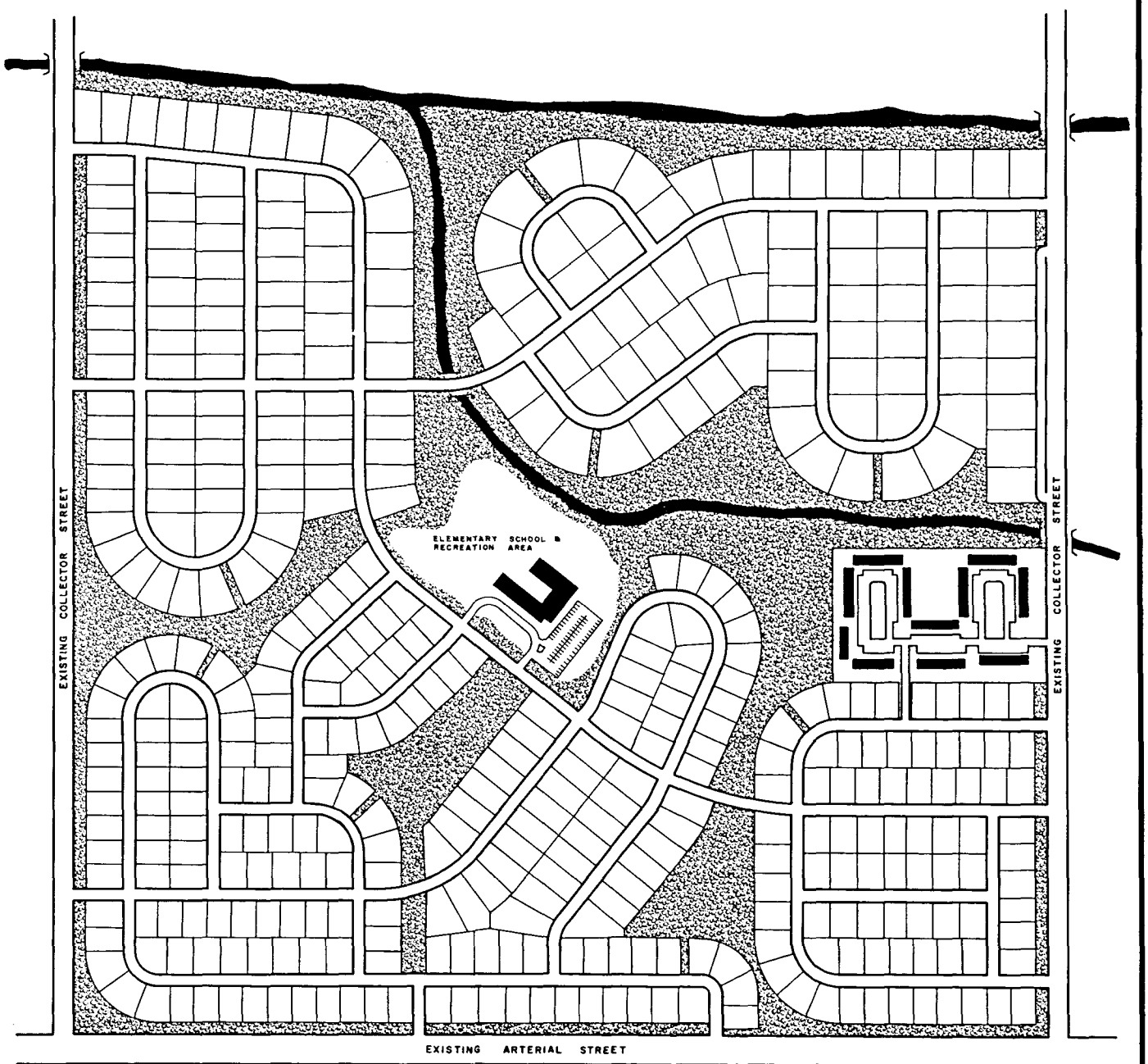
Apartments are located on the periphery adjacent to an exterior collector street.

Streams are protected and preserved and are incorporated into the park and recreation areas.

Green areas extend into all parts of the neighborhood unit.

TYPICAL PROPOSED NEIGHBORHOOD DESIGN

TOTAL LAND AREA - 350 ACRES
STREET AREA - 41 ACRES - 11.7 %
SCHOOL & RECREATION AREA - 83 ACRES
STREET LENGTH - 36,000 FEET
NUMBER OF HOUSING UNITS - 600 ; DENSITY - 1.71 D.U. AC.
NUMBER OF SINGLE FAMILY DWELLINGS - 450
AVERAGE LOT SIZE - 20,800 SQ. FEET
NUMBER OF APARTMENT UNITS - 150; DENSITY - 14 D.U. AC.



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SCALE IN FEET
200 0 200 400

FIG. 11

Green buffer areas separate residential lots from exterior arterial and collector streets.

Neighborhood boundaries formed by major streams and secondary arterial or collector roads. In other areas of the nation the neighborhood unit type development has caught on faster than in New Jersey. It can be hoped and it is urged that municipal officials in Monmouth County, give serious consideration to this overall planned approach to residential development.

COMMERCIAL

A total of 9757 acres has been proposed for commercial and business use. This represents 3.2% of Monmouth County's land area. Normally, commercial uses occupy between three and four percent of the total developed land area of a community or region. The acreage designated in the Plan falls in that range. Approximately 8,700 acres is proposed for highway business use and the remainder would be existing and proposed shopping centers and older business districts.

A regional shopping center is proposed to serve the Western Monmouth area of the County. It is shown in general location in Freehold Township west of Route #9 - bounded by existing Route #33, Route #537 and the Route #33 freeway. It would have a major department store as its lead tenant.

The other major proposal is for a community shopping center at Route #33 and Millhurst Road. It is most interesting and significant that community-type shopping centers have developed at several locations suggested previously in the Land Use Plans for both the Monmouth Coastal Region and Western Monmouth Region. This illustrates that commercial establishments definitely do follow population growth and that their future location can be anticipated and planned.

The General Development Plan indicates the general location of 51 neighborhood-type shopping centers-22 existing and 29 proposed. These are facilities that have a supermarket as their lead tenant. The centers are centrally located to serve the population in four or five neighborhood units. Most of them are located at the intersection of arterial roads that serve the neighborhoods.

The Monmouth County Planning Board staff evaluated the existing use of frontage on State Highways in the County. Much of the frontage in the eastern part of the County is so committed to commercial uses that it was not possible to significantly decrease the frontage to be utilized for this purpose. In the Western part of the County, particularly along #33 and to a lesser extent along Route #9 it was possible to suggest more limited areas for highway commercial use. Uses to be accomodated in highway commercial areas include such things as trucking terminals and lumber yards which need to be well related to the highway system, but which are too large and are not

compatible with other uses in downtown shopping districts or planned shopping centers.

The future of the existing shopping disticts depends much on the approach that is taken to solve the problems of traffic congestion, off-street parking and lack of a center for shopping activities. Efforts should be made to alleviate these conditions through local planning programs. The County Circulation Plan when implemented provides for by-passes and relief routes for several of these older districts. The future of many of them are as service centers. Freehold Borough, Red Bank and Asbury Park fall into this category. It is quite likely that if conscious efforts are made to improve conditions, many of these older downtown areas can remain healthy and viable and play a vital role in Monmouth County's future economy.

INDUSTRIAL

The General Development Plan proposes areas for manufacturing consisting of over 20,000 acres. These areas have been chosen after giving careful consideration to the location of freeways, proposed freeway interchanges and the availability or plans for water, and sewer facilities. This acreage represents a reduction from the 31,200 acres that are already zoned for industrial purposes. However, the anticipated land needed to meet the manufacturing space demand by 1985, plus other employment groups such as construction and the transportation,

and communication categories totals 3,800 acres. The proposed Land Use Plan, therefore, will provide for flexibility in the choice of sites by industrial prospects and space for the future expansion of industrial facilities.

A new category specifically designating areas for office and research plants has been included as part of the Land Use Plan. Over 3,000 acres at about 15 locations, throughout the County have been included. Studies by the Tri-State Transportation Commission and Regional Plan Association indicate that growth in office-related operations will be tremendous in the next decade or two in all areas of the New York Metropolitan Region.

Factors that were considered in selecting the sites in Monmouth County for this purpose were access, availability of utilities and aesthetic character of the area. If these locations that have been designated on the General Development Plan can be preserved for this purpose it will be highly beneficial to the future economy of the County.

PUBLIC AND QUASI-PUBLIC

The General Development Plan for Monmouth County provides for nearly one-quarter (23%) of the County's land area to remain in public or quasi-public use. It would be most desirable if this plan can be implemented since if these public and quasi-public areas can be established, it will do much to separate and confine development while at the same time providing areas for active and passive recreation and preserving the pleasing aesthetic character of the County.

DRAINAGE AND CONSERVATION AREAS

REGIONAL AND LOCAL

The General Development Plan places the natural drainage system of Monmouth County into two classifications. Streams and brooks having a drainage area of not more than 300 to 400 acres have been designated as local drainage and conservation areas. Those with drainage areas in excess of this amount have been shown in a regional classification. Over 30,000 acres and 10% of the County's land area have been placed in these categories.

Many reasons have been cited as to why the natural drainage system should be preserved, protected and reinforced. The General Development Plan, by using these two designations and delineating the stream courses and flood plains, gives status to this idea.

Preservation and protection of these areas will not only assure economical development of drainage facilities, but it also will mean that one of the natural aesthetic assets of the County will remain.

REGIONAL RECREATIONAL AND WATERSHED

This land use category delineates several major public and quasi-public holdings that are either presently existing or are in a stage of acquisition. A total of 20,592 acres will be devoted to regional recreational and watershed use. While some of these projects are primarily planned to benefit areas adjacent to Monmouth County, their secondary benefits to this County are considerable. Their total acreage is

6.75% of the County's land use which means that along with drainage and conservation areas just described, over 17% of the Monmouth County land area is designated for regional recreation and conservation purposes - with much of it remaining in its natural state and available for public use. This is extremely significant since it means that space will be available for recreational purposes and also, that many of the natural assets of the region - streams, brooks, adjacent wooded strips that make the region's environment so attractive, will remain to benefit residents of the County in the future.

BEACH

Areas designated as beach are indicated along the oceanfront and bayfront areas of the County. Most of these areas are presently utilized as public beaches by the municipalities involved. A total of 651 acres has been shown in this category of developed beach.

LOCAL GOVERNMENT CENTERS

The locations of local government centers have been designated on the General Development Plan primarily for reference purposes. There remain about three of the large townships that have not chosen locations for local centers. There would be distinct advantages to these municipalities if

such focal points of activity were created, since the centers tend to give large townships status and identity. Each of the locations selected are centrally located and have reasonably good access to all of the outlying parts of the municipality.

OTHER MAJOR PUBLIC AND QUASI-PUBLIC

This category includes such uses as Marlboro State Hospital, Earle Naval Ammunition Depot, Fort Monmouth, Brookdale College, Rutgers University Agricultural Experiment Stations, golf courses and institutions of a religious or charitable nature with major land holdings. While there is less certainty that all of these uses, particularly the last three, will withstand the pressures of urbanization, it would seem that due to the large supply and availability of land, most of these uses should remain for many decades to come. Some, perhaps, will shift their locations to more remote sections.

Coupled with the other uses of a public and quasi-public nature just described, it is worth repeating that over 23% of the County land is proposed for retention by public or quasi-public agencies. This will assure that large portions of Monmouth County with an open, expansive character will remain.

The General Development Plan indicates by symbol, a good location for public and quasi-public facilities of a regional nature northwest of the Freehold traffic

circle in Freehold Township. It is the intention that this general area would be a good one for educational and other activities of a similar nature on a regional level. It is centrally located, adjacent to arteries leading to all parts of the region, and is within reasonable distance of water and sewer facilities. This general area should receive prime consideration when sites are sought for facilities of this type.

8.44 FINANCIAL ANALYSIS

A graphic illustration of Monmouth County's tax base is given in Figure 13. The dependence of the County on single family residential property is clearly visible. It is over 10% higher than the corresponding figure for the State as a whole. The County figure is also less when comparing the County against the State in the Apartment, Commercial, and Industrial groups. In the Farm and Vacant Land categories, the Monmouth County figure is higher than the State, indicating that the County is less urbanized at this time than the State as a whole.

The coordination and timely construction of capital improvements is essential to implementing the General Development Plan. The Land Use Plan will determine in large measure the location, character and extent of capital improvements necessary to support the various classifications and allocations

of land use.

The County Planning Board staff accumulated and evaluated information for all levels of government and other sources in developing estimated expenditures for public capital improvements for the period 1969 to 1985. All of the figures are based on 1968 dollars and no attempt was made to adjust for anticipated increases in the cost of construction. The study of capital requirements included projects which will be carried out by the state, county municipalities and regional authorities, in addition to public improvements constructed by developers and utility companies for water and sewer.

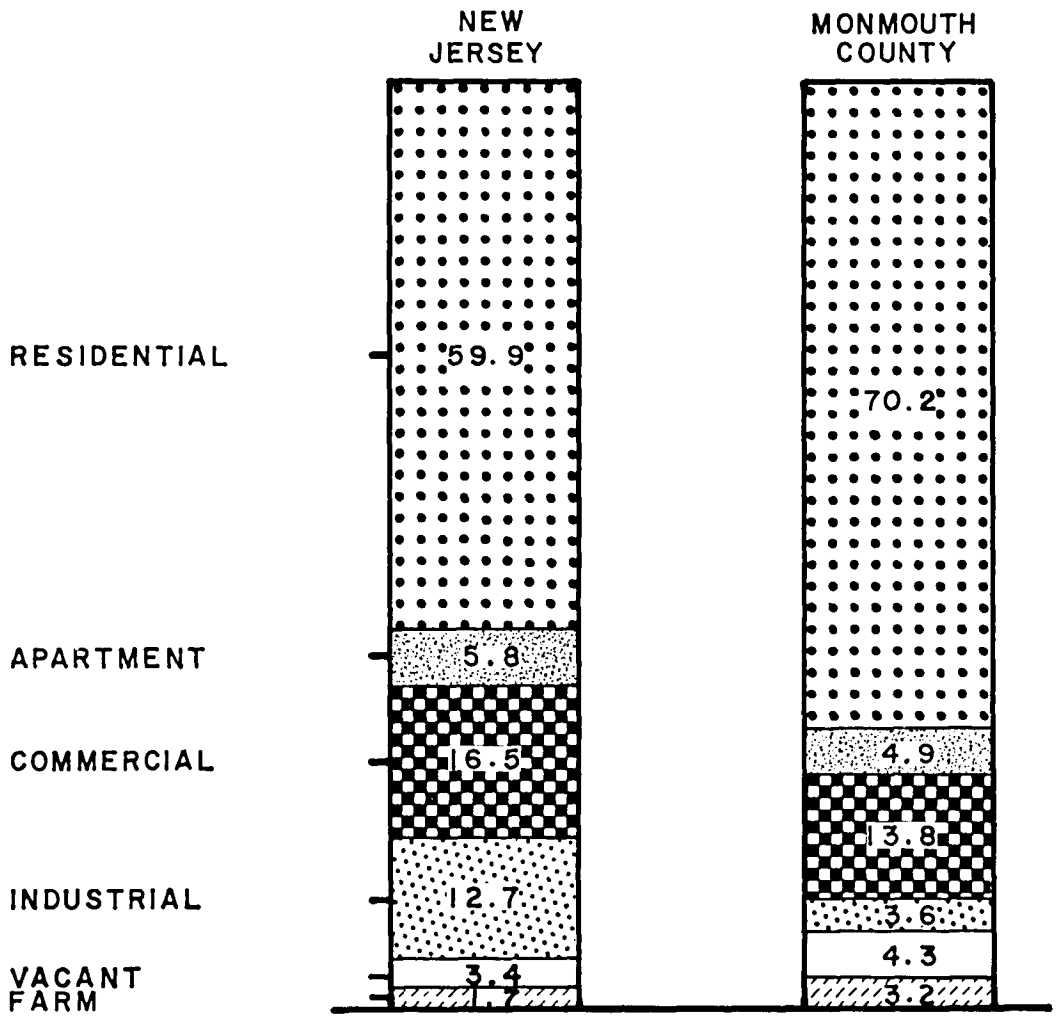
The total as indicated on Figure 14 represents $1,065,000,000. This total is broken down into major functional classifications and by source of funds. While this is a very large sum, over half of it represents projects which have been defined to the point where preliminary or final cost estimates are available.

The six functional classifications in order of magnitude of anticipated expenditures are transportation, education, sanitary sewers, the all other category, water supply and parks and recreation. The first three transportation, education, and sanitary sewerage facilities represent over 75% of the total.

PERCENTAGE OF REAL PROPERTY ASSESSMENT

BY

LAND USE CATEGORY



SOURCE: MONMOUTH COUNTY TAX BOARD AND N.J. DIVISION OF TAXATION, DEPARTMENT OF TREASURY.

FIG. 13

1969-1985
ESTIMATED CAPITAL IMPROVEMENT EXPENDITURES FOR PUBLIC FACILITIES IN MONMOUTH COUNTY

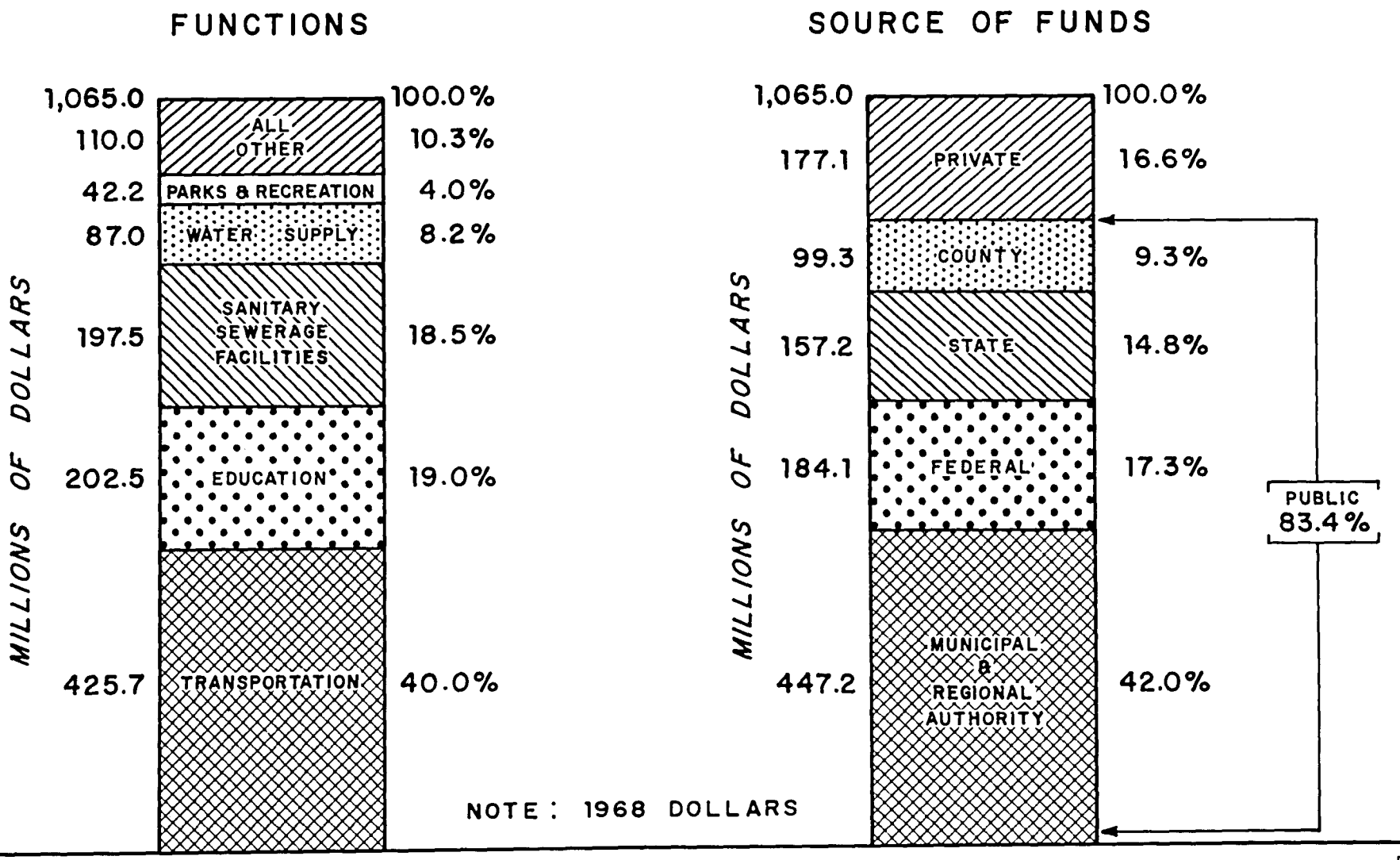


FIG. 14

TRANSPORTATION

Transportation with $425.7 million and 40.0% of the total, to a large extent represents a backlog of accumulated needs which has developed during the past twenty years. While the County population has doubled in the last two decades, only one small section of the Freeway has been completed in the County. The Transportation Bond issue proceeds should do much to rectify the backlog of needs which has developed in the transportation field in Monmouth County. While this category includes both railroads and highway construction, the bulk of this category is made up of monies allocated to Freeway construction by the state with federal participation and improvements to the existing state highway system.

EDUCATION

Education represents a level of expenditures constant with past trends. The $202.5 million represents 19.0% of the total. Elementary and secondary school building has dominated the capital projects undertaken at the local level during the past 15 years. Educational facilities have not been deferred and no appreciable backlog exists at this time. The education total results from a projection of enrollments converted to additional classrooms times the cost per classroom represented by a survey

of recent school building projects. Added to this was the anticipated requirements of Brookdale College and the County Vocational Program.

SANITARY SEWERAGE FACILITIES

Sanitary sewerage facilities with $197.5 million and 18.5% of the total is a close third to education. When the County Master Sewerage Plan was undertaken, only 10% of the land area of the County was served by public sewers. Most of the development since 1950 was constructed without connecting to a sewerage system and was dependent on individual septic systems. This development represents a tremendous backlog of need. Adding very substantially to the deferred needs are the new water quality standards of the state which will require the improvement and intensification of treatment at existing disposal plants.

The two largest public works projects to be undertaken by local agencies in the County are the Regional Sewerage Systems planned by the Northeast Monmouth County Regional Sewerage Authority and the Middletown Sewerage Authority. Both of these projects are imminent and in combination will total over $60 million.

Critical to a number of regional projects in the County is adequate funding of the Grant Program administered by the Federal Water Pollution Control

Administration and the financing of the state share required under this program. A bond issue is being proposed in the state for 1969 to include funds for sewerage facilities. This is extremely important to the County in the implementation of the County Master Sewerage Plan and the timely construction of badly needed facilities.

WATER SUPPLY

The estimate for water supply facilities is $87.0 million or 8.2% of the total. Water supply expenditures during the next seventeen years will be comprised of the acquisition and development of the Manasquan River Reservoirs, and the regional transmission of this water. Added to this will be the extension and reinforcement of existing systems and further development of ground water supplies.

PARKS AND RECREATION

Parks and recreation totals $42.2 million or 4.0% of the capital requirements to 1985. This total includes proposed expansion and development of state and county parks and the continuation of local development of municipal parks and recreation facilities consistent with recent levels of expenditure. The state "Green Acres" Program and the federal "Open Space" Program have stimulated the acquisition of park and recreation lands in the County by the

state, county and municipalities. Land acquisition for parks and open space is critical to preserving the character of the County and time is running out. Increasing land values and the rate of urbanization are going to make it more difficult in the future to reserve land for this purpose.

ALL OTHER

The all other category represents $110.0 million or 10.3% of the total. The all other category includes a wide variety and range of capital items such as public buildings, urban renewal, drainage systems, beach protection and equipment having a useful life of more than five years. A careful investigation was made of federal census reports of per capita expenditures for capital projects in this category. These figures were applied to the increased population to produce the total estimate.

SOURCE OF FUNDS

The largest category for financing capital improvements in Monmouth County between 1969 and 1985 will be municipalities and regional authorities formed by municipalities joining together. This source of financing approaches half of the total with $447.2 million or 42% of the total. Education and sanitary sewerage facilities account for 63% of the locally financed capital improvement projects. Unless

there are drastic revisions in the tax structure and increased state and federal participation, the local property tax and locally levied services fees for sanitary sewers will support the largest share of our capital requirements.

The federal portion of the Monmouth County capital requirements was calculated as $184.1 million or 17.3% of the total. The bulk of this, 85% represents grants for transportation facilities and sanitary sewers. The assumption was made that the federal programs would be funded in accordance with authorizations made under existing aid formulas.

The state share is $157.2 million or 14.8% of the total with highway construction accounting for over two-thirds of the total. As with federal aid, the assumption was made that the state would provide the funds required of the states under the Federal Water Pollution Control Program for Sanitary Sewerage Facilities.

The estimate for facilities which would be financed by the County $99.3 million or 9.3% of the total is based on the recently adopted County capital improvement budgets. The broadening scope of County government is manifest by the fact that County capital expenditures will involve all of the functional classifications.

The private sector will account for $177.1 million or 16.6% of the total. Most of this is represented by public improvements which will be undertaken in connection with major subdivisions of land and the remainder is utility investment in water and sewerage facilities. The extention and addition of local requirements for improvements under local master plans and subdivision ordinances has shifted an increased share of capital improvements to land developers.

CONCLUSIONS AND RECOMMENDATIONS

(1) Monmouth County has a backlog of capital needs which has developed during the past two decades, particularly in the fields of sanitary sewerage facilities and transportation.

(2) As a growth area many capital projects must be designed for projected future population, resulting in added costs. The sizing of facilities for future needs, particularly sanitary sewers and transportation facilities adds greatly to the cost of projects and provides justification for financing through bond issues which will spread the cost to an expanded tax base and population in the future.

(3) Aggressive efforts should be made to utilize federal and state aid when it fits local programs.

(4) Careful planning can result in substantial savings in capital programs. The advanced reservation of land and rights-of-way for capital projects can save both time and money. Many of the conflicts that arise in undertaking Capital Programs would be eliminated through advanced reservation or acquisition of land required for capital projects.

8.5 PLAN IMPLEMENTATION

The General Development Plan should be considered a dynamic instrument rather than a finished product. Its goals and objectives are firm and the overall comprehensive development pattern suggested should not be altered substantially. However, the details of the Plan are subject to change since the needs of the public are not rigidly predictable particularly over a timespan of two decades.

It will be the responsibility of the Monmouth County Planning Board to provide a continuing, vigorous planning program and to propose amendments to the Plan as future circumstances warrant. This responsibility will include coordination of the efforts of several levels of governments to implement proposals in the Plan and make them aware of the relationship and importance of individual projects to the comprehensive development pattern proposed by the General Development Plan.

The implementation of Land Use proposals will require the cooperation of the municipalities of the County. The County Planning Board will sponsor periodic regional meetings with local officials to encourage the adoption of Master Plans, Zoning provisions and subdivision regulations conforming with the goals and objectives of the County Master Plan. A valuable aid in coordinating local plans are the amendments to the County Planning Enabling Act adopted in 1969 requiring the submission of local planning proposals

to the County Planning Board for review prior to their adoption by the municipality. The review comments will be based on the conformance of the local planning proposals with the County Master Plan.

The timely acquisition of public open space lands to help confine, separate and shape the areas delineated for urban development is also critical to the accomplishment of the Land Use Pattern envisioned in the Master Plan. The capital improvement budgeting procedures and the review of applications for Federal "Open Space" Grants should result in sufficient control to accomplish this objective.

The Economic Development Program carried out as an integral part of the County Planning Program has already proven an effective tool in directing economic activities to areas designed and planned for these functions. The active promotion of private investment in areas designated for manufacturing, office and research facilities on the Master Plan will play an important role in accomplishing the objective of a better balance and self-sufficiency for the economy of the County.

PUBLIC FACILITIES

A Water Supply Plan based on the Land Use proposals of the County Master Plan is being prepared by engineering consultants. This plan will be adopted as a supplementary element of the Master Plan when completed later this year. The plan will be supportive in carrying out the land use objectives of the Master Plan and build on the concepts developed by the County Planning Board for the development of our water resources. The key project in this plan is development of the Manasquan River Watershed in two stages. The implementation of this project is guaranteed through the passage of the 1969 State Water Conservation Bond Act,

which provided funds for the required storage reservoirs. The County is working on a program jointly with the State and the Monmouth Consolidated Water Company to provide for the development, treatment, and transmission of the Manasquan River Supply on a regional basis to provide for an equitable distribution of this water to meet the future requirements of various areas of the County. The County has an adopted Master Sewerage Plan which has been approved by the State Department of Health. This Plan will provide for the timely construction of sanitary sewerage facilities in accordance with the County Land Use Plan to provide service to the existing and emerging urban service areas in the County. The primary means of implementation of the plan will be through regional sewerage authorities operating on a drainage basin basis supported by financial participation by the Federal, State and County governments. The 1969 State Water Conservation Bond Act will provide the necessary state funds to match Federal participation in these regional projects. Approvals by the State Health Department and Federal Water Pollution Control Administration will require conformance with the County Plan. The 204 Review procedure by the County Planning Board will provide a further guarantee of compliance with the County Plan for Sanitary Sewerage facilities.

TRANSPORTATION

The systematic construction of new and improved highway facilities is a vital requirement for the implementation of the County Master Plan. Existing deficiences and projected needs are detailed and amplified upon in the Master Plan.

The greatest need upon which various land use proposals are dependent is the construction of an integrated system of freeways. Periodic meetings with the State Department of Transportation coupled with '204 Review Procedures' should provide the coordination necessary to achieve this objective. In a rapidly growing area like Monmouth County there are multiple advantages to a program of advanced right-of-way acquisition. Not only would significant economies be realized in the cost of land for highways, but once the alignments are finally determined and acquired, it allows communities to plan the proper location of land uses in relation to the future freeway system.

The existing and proposed highways classified as primary arterials are also basically the responsibility of the State Government. The systematic improvement of the carrying capacity and safety features of these roads should be undertaken on a priority basis. Periodic meetings with the State Department of Transportation and '204 Review Procedures' would also be the basis for County participation in the scheduling of improvements in addition to review of the nature of state proposals in relation to the Land Use Plan.

The existing and proposed roads designated as secondary arterials are primarily the responsibility of the County Government. A series of methods and devices are available to the County Government to preserve and develop these facilities on a systematic basis. The foundation of

information in the Master Plan will provide the necessary information for establishing priorities for the County capital improvement budget for the timely improvement or construction of segments of the system and critical intersections. The Site Plan and Subdivision resolutions authorized under the 1969 amendments to the County Planning Act will require right-of-way from developers for existing or proposed County roads in accordance with the standards of the County road resolutions. In addition to requiring the right-of-way, the County will control the location and design of intersections and will require marginal roads or reverse frontage to protect the County road system.

The major collector roads are primarily a municipal responsibility. The County Planning Board will work toward the incorporation of these proposals into municipal Master Plans and provisions in subdivision ordinances to protect the major collector roads indicated on the County Master Plan. This will be done on a continuing basis with review comments on subdivisions submitted to the County Planning Board.

The improvement and revitalization of the New York and Long Branch Railroad including electrification and station improvements as shown on the Master Plan is vital to the future of Monmouth County. This program is under the auspices of the State Department of Transportation and will be carried out with joint

financing by the State and Federal Governments. The required state funds were authorized by the 1968 Transportation Bond Referendum.

In the course of developing the Master Plan proposals a series of special or unique problems beyond the scope of this report and requiring additional information in greater depth and detail were identified. These will be the subject of special studies or programs during the next year.

1. Establishment of precise boundaries of flood plains and areas subject to flooding conditions. This work will be carried out in conjunction with the Corps of Engineers and New Jersey Division of Water Policy and Supply. The County Planning Board will prepare model flood plain zoning provisions for adoption by municipalities with flood prone areas to qualify communities for national flood insurance.
2. Development of a program to establish precise alignments for County road proposals shown on the County Master Plan for a County official map.
3. Development of a plan and program for the protection, preservation and utilization of the beaches and adjoining related areas.
4. The establishment of recommended taking lines for the preservation of the major stream courses and essential adjoining areas to refine the recommendations of the Master Plan. These areas would be identified for conservation or park purposes. This program would be carried out with the cooperation of the Park Department

and County consulting engineers.

MONMOUTH COUNTY GENERAL DEVELOPMENT PLAN

LEGEND

LAND USE

RESIDENTIAL

- HIGH DENSITY (OVER 10 D.U. AC.)
- MEDIUM DENSITY (4-10 D.U. AC.)
- MEDIUM LOW DENSITY (1.20-4 D.U. AC.)
- LOW DENSITY (0.5-1.19 D.U. AC.)
- RURAL RESIDENTIAL (LESS THAN 0.5 D.U. AC.)

INDUSTRIAL

- MANUFACTURING
- OFFICE AND RESEARCH

PUBLIC AND QUASI-PUBLIC

CONSERVATION AND DRAINAGE AREAS:

- REGIONAL
- LOCAL
- LOCAL GOVERNMENT CENTER
- REGIONAL RECREATION AND WATERSHED
- PUBLIC AND QUASI-PUBLIC BEACH
- OTHER MAJOR PUBLIC AND QUASI-PUBLIC

PUBLIC TRANSPORTATION

PASSENGER RAILROAD STATION:

- EXISTING
- EXISTING TO BE ELIMINATED
- NEW

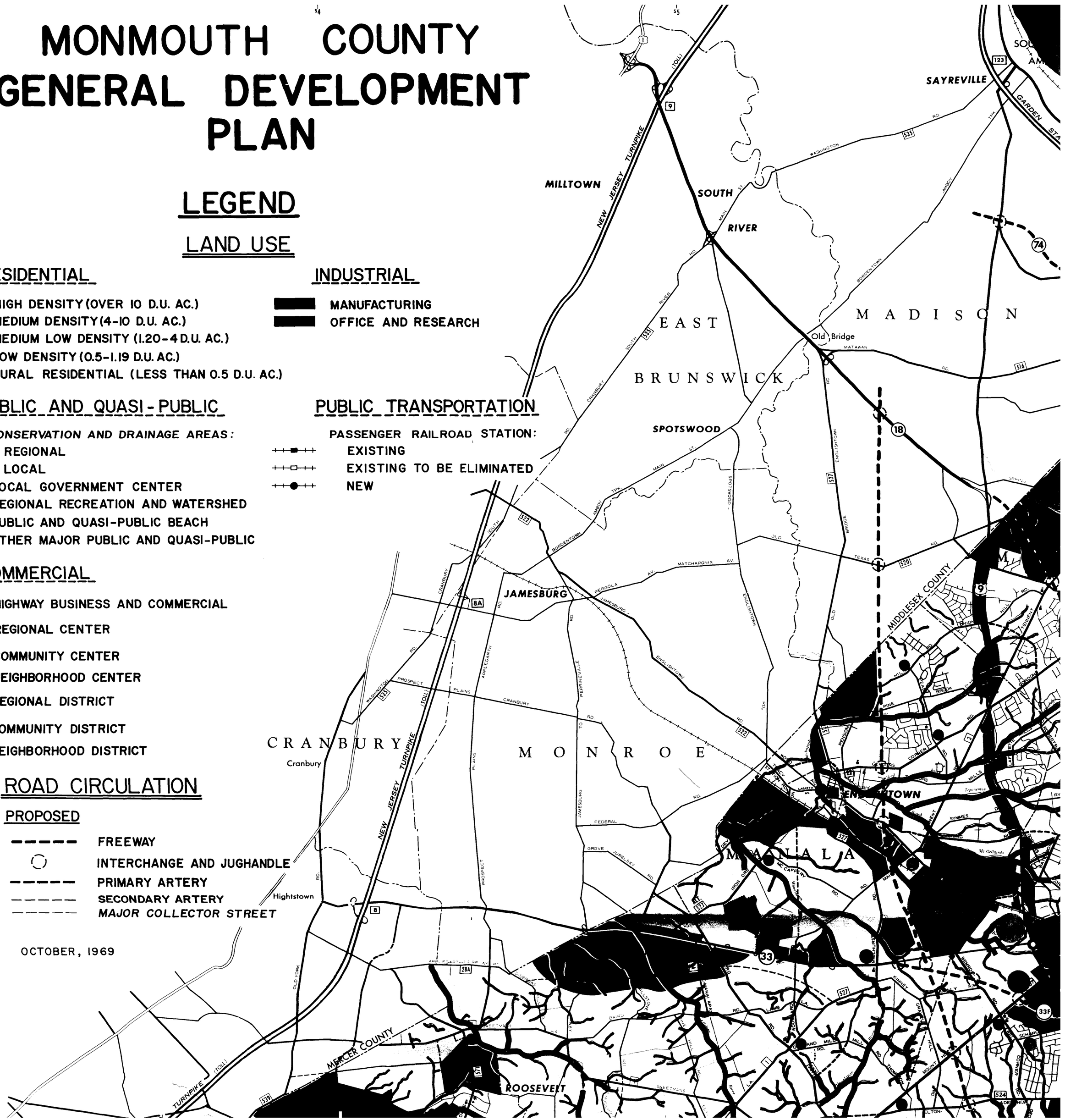
COMMERCIAL

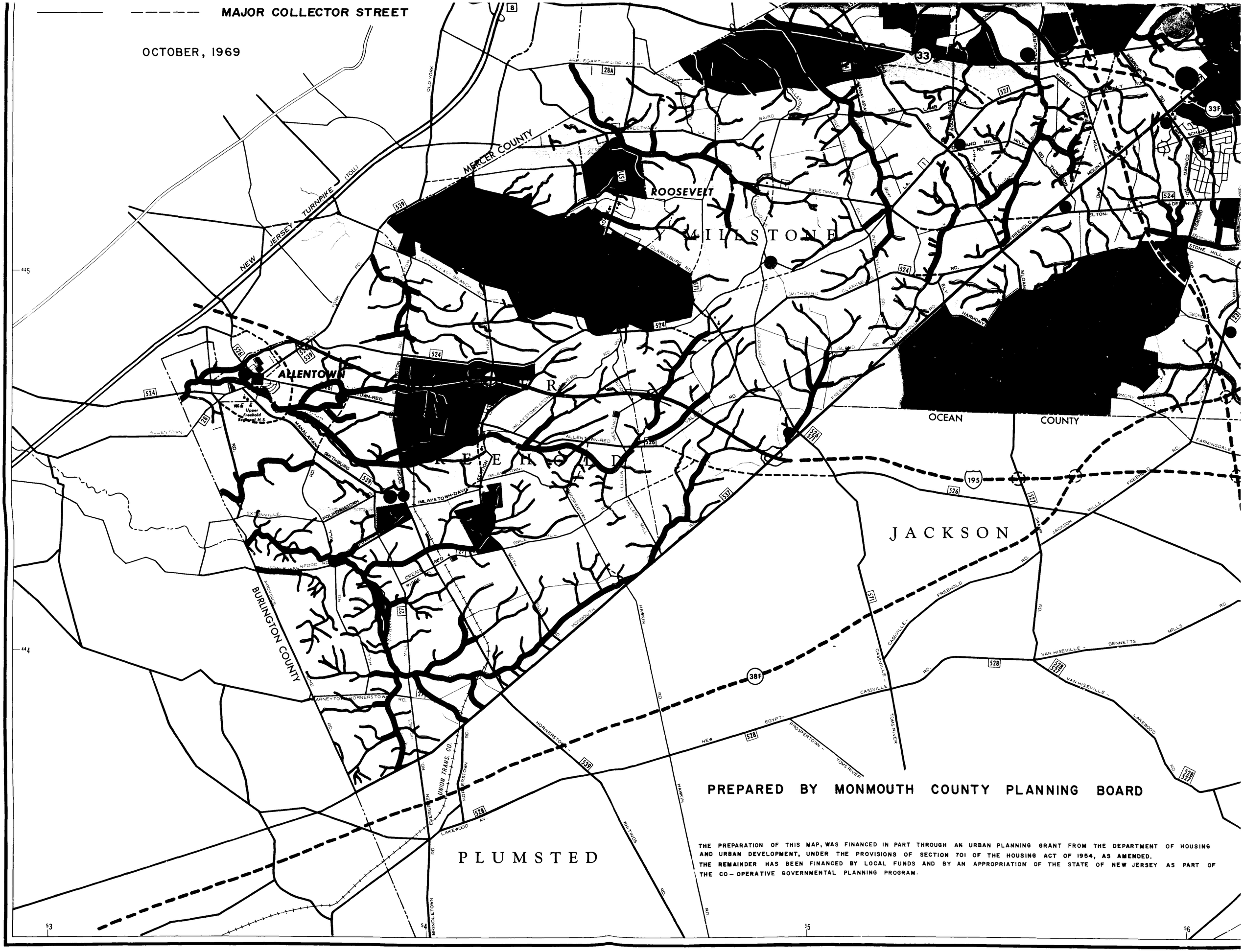
- HIGHWAY BUSINESS AND COMMERCIAL
- REGIONAL CENTER
- COMMUNITY CENTER
- NEIGHBORHOOD CENTER
- REGIONAL DISTRICT
- COMMUNITY DISTRICT
- NEIGHBORHOOD DISTRICT

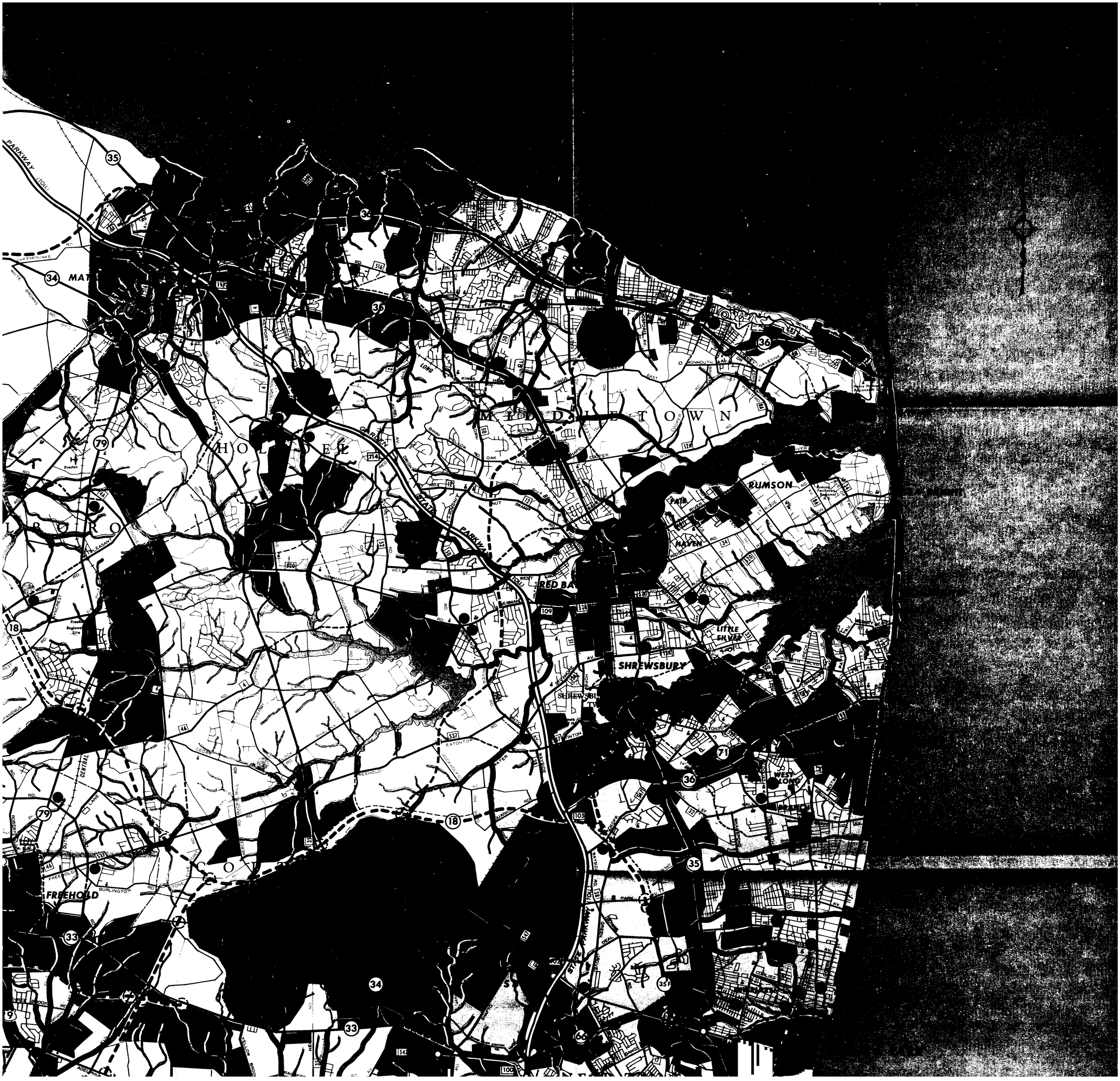
ROAD CIRCULATION

EXISTING	PROPOSED	
		FREEWAY
		INTERCHANGE AND JUGHANDLE
		PRIMARY ARTERY
		SECONDARY ARTERY
		MAJOR COLLECTOR STREET

OCTOBER, 1969




MAJOR COLLECTOR STREET
OCTOBER, 1969
MERCER COUNTY
NEW JERSEY TURNPIKE (TOLL)
ROOSEVELT
MILLSTONE
ALLENTOWN
FREEHOLD
OCEAN COUNTY
JACKSON
BURLINGTON COUNTY
PLUMSTED
PREPARED BY MONMOUTH COUNTY PLANNING BOARD
THE PREPARATION OF THIS MAP, WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.
THE REMAINDER HAS BEEN FINANCED BY LOCAL FUNDS AND BY AN APPROPRIATION OF THE STATE OF NEW JERSEY AS PART OF THE CO-OPERATIVE GOVERNMENTAL PLANNING PROGRAM.



PARKWAY (TOLL)
MIDDLETOWN
HOLMDEL
RUMSON
FAIR HAVEN
RED BA
LITTLE SILVER
SHREWSBURY
WEST LONG BRANCH
FREEHOLD
GARDEN STATE PARKWAY

FREEHOLD
BURLINGTON
THREE BROOK RD.
ADELPHIA
FARMINGDALE
YELLOW BROOK
CRANBERRY RD.
COLTS
MEGILL
SCHOOLHOUSE
BELMAR BLVD.
SOUTHARD
WEST
FORT
PLAINS
GEORGIA
HOLSES
ALDRICH
BROOKS RD.
NEW
PROSPECT
FRIENDSHIP
CHURCH RD.
LOCUST
MAXIM
GLEN
OAK
CENTRAL R.R.
EASY
HERBERTSVILLE
ALLENWOOD
RANDOLPH RD.
ARNOLD BLVD.
GREENVILLE
COUNTY LINE RD.
LANES MILL RD.
CHAPEL
CENTRAL AV.
CEDAR BRIDGE AV.
CROSS ST.
HOPE
LAKEWOOD
BRICK
BURNT TAVERN RD.
GARDEN STATE PARKWAY
(TOLL)
CHAMBERS BRIDGE RD.
BEDFORD
ALLAIRE
OCEAN
SHAFTO
DEAL
PARK
CORLIES
BANGS
GLENDOLA
18TH AV.
CHICAGO BLVD.
BEACON BLVD.
FIRST
POINT PLEASANT BEACH
POINT PLEASANT
BRIDGE AV.
BAY
57
58