TOWN DEVELOPMENT PLAN

Town of New Castle
Westchester County, New York

November 1989

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Prepared by

New Castle Planning Board
Westchester County, New York

Frederick P. Clark Associates
Rye, New York

November 1989

DEDICATION

This ***Town Development Plan*** is affectionately dedicated to our former Chairman, Arnold N. Spurr. During the nine years Arnold served on the Planning Board —for more than seven of them as its Chairman —he was a strong and dedicated leader in a time that will be seen in retrospect to have been one of momentous change in New Castle.

Tireless in the service of the Board, armed with an intimate knowledge of the Town's road network and housing stock, Arnold spent unheralded hours tramping sites, studying plans, taking phone calls from fellow residents. As a practitioner of marketplace capitalism in his daily life, Arnold had no large theoretical axes to grind on the Planning Board. Practical to the core, and recognizing change as a challenge to be embraced, Arnold sought the best result for the town he loved.

We, his Planning Board colleagues, salute Arnold for his leadership —effective, resolute and patient. We thank him for the abiding lessons learned under his tutelage. New Castle owes an incalculable debt of gratitude to Arnold for a job well and faithfully done. Accordingly, it is altogether fitting and proper for us to dedicate our Town Plan —our charter for the future and, in so many ways, a testament to his stewardship —to Arnold with our profound thanks and warm regards.

TOWN OF NEW CASTLE
WESTCHESTER COUNTY, NEW YORK

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TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

*Follows page referenced

*Follows page referenced

*Follows page referenced

INTRODUCTION

A community is developed over the years as the result of hundreds of individual and group decisions to buy land, subdivide land and build houses; decisions to locate and construct new businesses; and decisions by community officials to improve and create new public facilities. Whether all these decisions made separately and over a relatively long period of time will add up to a convenient and attractive community depends on how well they are related to the community's objectives as expressed through a well-considered development plan.

New Castle has had a long history of comprehensive planning for its future. Its first Town Plan was adopted by the Planning Board in 1958. Barely a decade later, the growth pressures on the Town were such that a reevaluation of the Town's direction was needed and work on a new plan was underway. This effort resulted in the adoption of the 1968 ***Town Plan of Development***. That document has served the Town since that time, but not without periodic change and refinement. Since its original adoption, the Town Plan has been amended on at least a half dozen occasions, with the most significant changes occurring in 1977 with the adoption of the ***Millwood Plan***, in 1979 with the adoption of a modified Townwide residential development policy and in 1983 with the adoption of a Plan Map change that subsequently paved the way for the development of a substantial research/office facility by a major international manufacturing corporation.

Since the rapid growth of the 1960s and early 1970s, new and different planning problems have also arisen, not the least of which is the challenge faced by the Town of preserving New Castle as a special place to live in the face of continuing development pressures that threaten to damage the Town's sensitive environmental features. So that New Castle may better plan for these new and changing circumstances, the Town Plan has again been updated and revised.

The New Castle ***Town Development Plan***, represented in graphic form on the Development Plan Map along with accompanying text, sets forth a future development policy for the Town. It presents an up-to-date set of guidelines on which to base New Castle's future development, guidelines that are related to present conditions and the anticipated nature of future development pressures, taking into account the pertinent changes in such matters as land use, the environment, demography, fiscal conditions and legislation that have been underway since the last comprehensive update of the Town Plan was completed in 1968.

The ***Town Development Plan***, once adopted by the Planning Board, should become the fundamental tool for guiding Town development over the next several years. It should not be thought of as a rigid blueprint, however, but rather as a general guide to the Town's growth. The proposals of the Town Plan do not have the authority of law or

regulation; instead they are broadly based recommendations for future development and improvement in New Castle over a long period of time.

In order to remain valid, the ***Town Development Plan*** must be open to refinement and improvement, where and when necessary, to reflect new conditions and problems, or to take account of changing goals and policies. However, the Town Plan should be modified only after thorough study indicates that such changes are in New Castle's long-range interest. A continuing planning program should be maintained so that the Town Plan can be of continuing value in guiding the community's growth in an orderly and satisfactory manner. Such a planning program is one key to the successful implementation of the Town Plan.

The character of New Castle's future development will be the composite result of individual actions taken not only by the Planning Board, but also by the Town Board, the Zoning Board of Appeals, the Conservation Board, the Board of Architectural Review, other Town agencies and officials, the school districts serving the Town, Westchester County, New York State and Federal agencies. Actions taken by private individuals and organizations will also influence the Town's character. To the extent that these activities are consistent with the policies and recommendations of the Town Plan, the most desirable development of New Castle as now foreseen can take place.

Finally, it must be emphasized that it is not intended that all of the ***Town Development Plan***'s recommendations be implemented overnight. Some features of the Town Plan should be carried out right away, while other recommendations should be scheduled for implementation over the next several years. Other proposals may not be needed or feasible for many years. All decisions, however, should be continually related to the direction and character of development recommended for New Castle in its Town Plan.

Since the adoption of the Town's first zoning regulations in 1928, New Castle has placed great importance on sound town planning. The 1958 ***Town Development Plan*** and the 1968 ***Town Plan of Development*** have served this community well. The 1989 ***Town Development Plan*** owes much to these prior Town plans.

Basic Studies

EXISTING LAND USE

An analysis of land and its use is one of the major elements of research necessary to prepare a community development plan. For virtually any long-range planning purpose, it is important to know where and how much land is presently developed for residences, businesses, recreation and open space, community facilities and other uses, and how much land remains undeveloped and available for future uses. This information is studied to discern the character of the existing pattern of land use and to provide a foundation on which to base the formulation of planning goals and policies that will guide the pattern of future development.

A land use survey was first completed for New Castle in 1956 as part of the Town's initial long-range planning effort which produced the 1958 ***Town Development Plan***. Similarly, the results of the 1966 survey became a key data source used in the preparation of the 1968 ***Town Plan of Development***. In 1974, a comprehensive survey of existing land use was again undertaken in conjunction with a reexamination of the Town's residential development policies.

The following analysis is based on a lot-by-lot field survey of the use of land in New Castle conducted in 1984. The results of this survey are shown graphically on the "Existing Land Use" map originally prepared at a scale of one inch to eight hundred feet, which is available for viewing at the offices of the Town Building and Engineering Department in the New Castle Town Hall. It has also been reproduced in this Plan as Figure 1 following page 4. The findings of this latest survey have played an important role in the preparation of this Plan, although additional weight has now also been given to the limitations on the use of land that are posed by natural development restrictions.

EXTENT OF DEVELOPMENT

The Town of New Castle encompasses an area of approximately 14,975 acres, or 23.4 square miles. In 1984, 5,210 acres (35%) of this area were occupied by residential uses, 176 acres (1%) were occupied by business and industrial uses, and 3,512 acres (23%) were occupied by public and semipublic uses. An additional 910 acres (6%) were used for streets, highways and rights-of-way. The total land area in use was 9,808 acres, or 65.5% of the Town.

Land in use includes developed land as well as all public and private lands committed to open space preservation or held for watershed protection or recreation. While hardly intensively used, these open space areas have been set aside for a specific purpose and should be considered as part of the "developed" land area. The Town's appearance in 1984 was enhanced by the fact that nearly 13% of its total area consisted of land committed to these nonintensive uses. Other important features

contributing to the open space character of New Castle were undeveloped public land, cemeteries, and the landscaped rights-of-way of utility lines and the Town's three major limited access highways— the Taconic State Parkway, the Saw Mill River Parkway and the (unbuilt) Briarcliff-Peekskill Parkway. It should be recognized, however, that some of the privately-owned land may be in a transitional kind of use and have potential for future development. The former Hudson Hills Country Club is an example of this.

The remaining 5,167 acres (34.5%) were classified as undeveloped in 1984. Of course, not all the undeveloped land may be suitable for development, but its future use could significantly affect the Town's character. In 1958, when the first Town Plan was prepared for New Castle, approximately 66% of its total land area was considered undeveloped. As of 1966, when a comprehensive update of the Town Plan was underway, this figure had dropped to about 53%. By 1984, only 35% of New Castle was still considered to be undeveloped. Between 1966 and 1984, nearly one-fifth of the Town's total land area was developed, with most of this activity occurring during the first eight years.

Figure 2 graphically illustrates these trends in land use for New Castle from 1966 to 1984. During the 1974-1984 decade, land in residential use increased to exceed the amount of undeveloped land (5,210 acres versus 5,167 acres, respectively), although both categories represent about 35% of the total Town area. The amount of land in public and semipublic use also increased, to nearly one-fourth of the Town land area.

Between the 1966 and 1974 land use surveys, residential development filled in the central portion of the Town, thereby linking the Millwood and Chappaqua areas with nearly continuous single-family residential development. Development since 1974 has followed the same pattern as in the previous decade; new subdivisions have filled in most of the remaining large parcels in the central part of the Town. Undeveloped areas along the edge of the continuously developed part have now been developed as well, thus leaving most of the undeveloped part of the Town at its eastern and western ends.

CHARACTERISTICS OF LAND USE

A more detailed comparison and analysis of the trends in land use since 1966 are presented in Table 3 following page 5. A quick glimpse at this table reveals that New Castle continues to be a predominantly single-family residential community. In 1984, over half the land in use was in residential use; nearly 95% of this area was developed with single-family homes. Land used for this purpose increased by 46% between 1966 and 1984. However, an examination of the remaining 291 acres in residential use discloses several significant changes in the pattern of residential land use since 1974.

First, 96 acres were occupied by multifamily housing, as a direct outgrowth of the 1979 amendment of the 1968 Town Plan and subsequent adoption of multifamily residential zoning amendments. The developments that were completed or underway in 1984 as a result of this modification in the Town's residential development policy include

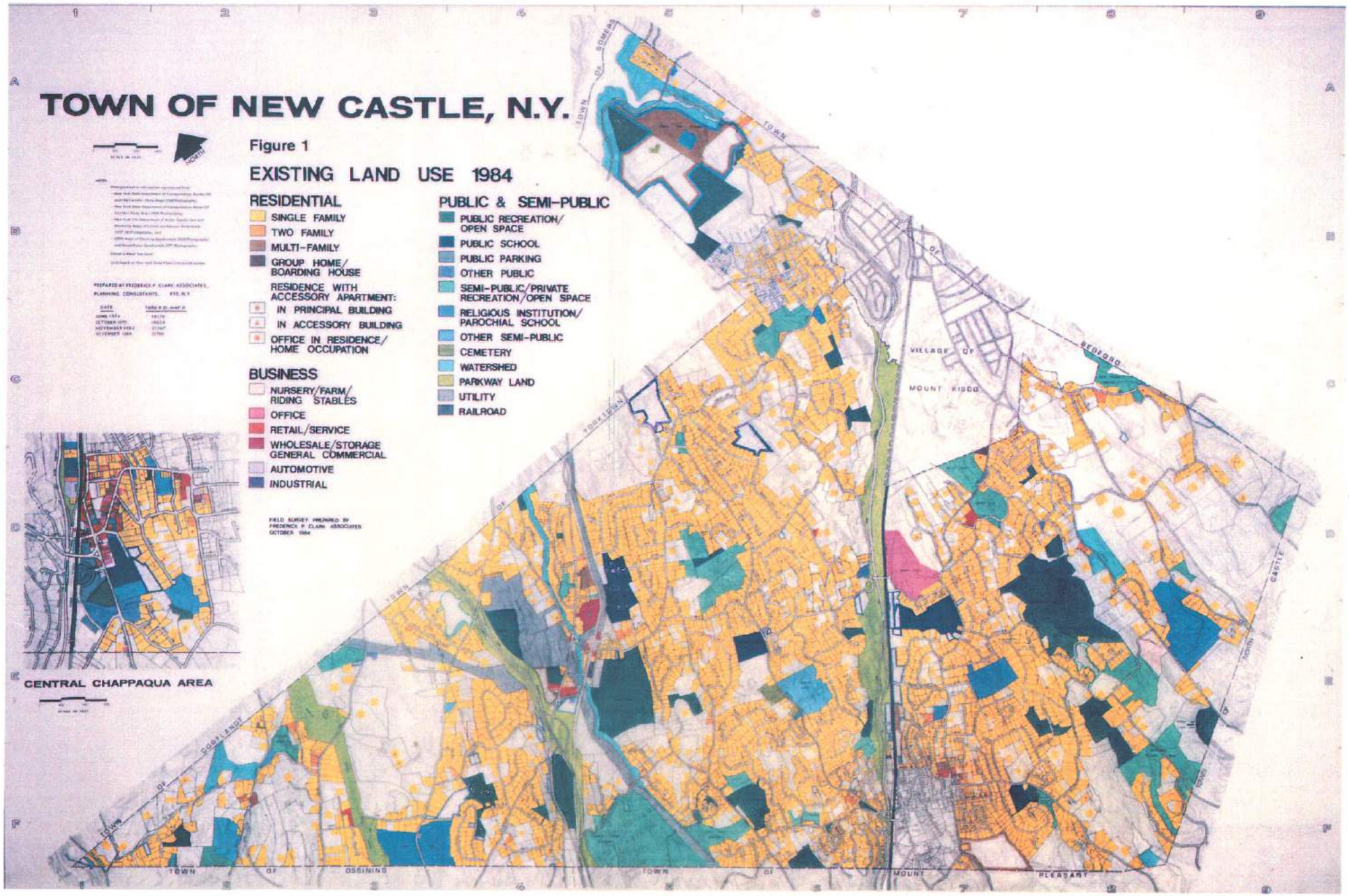
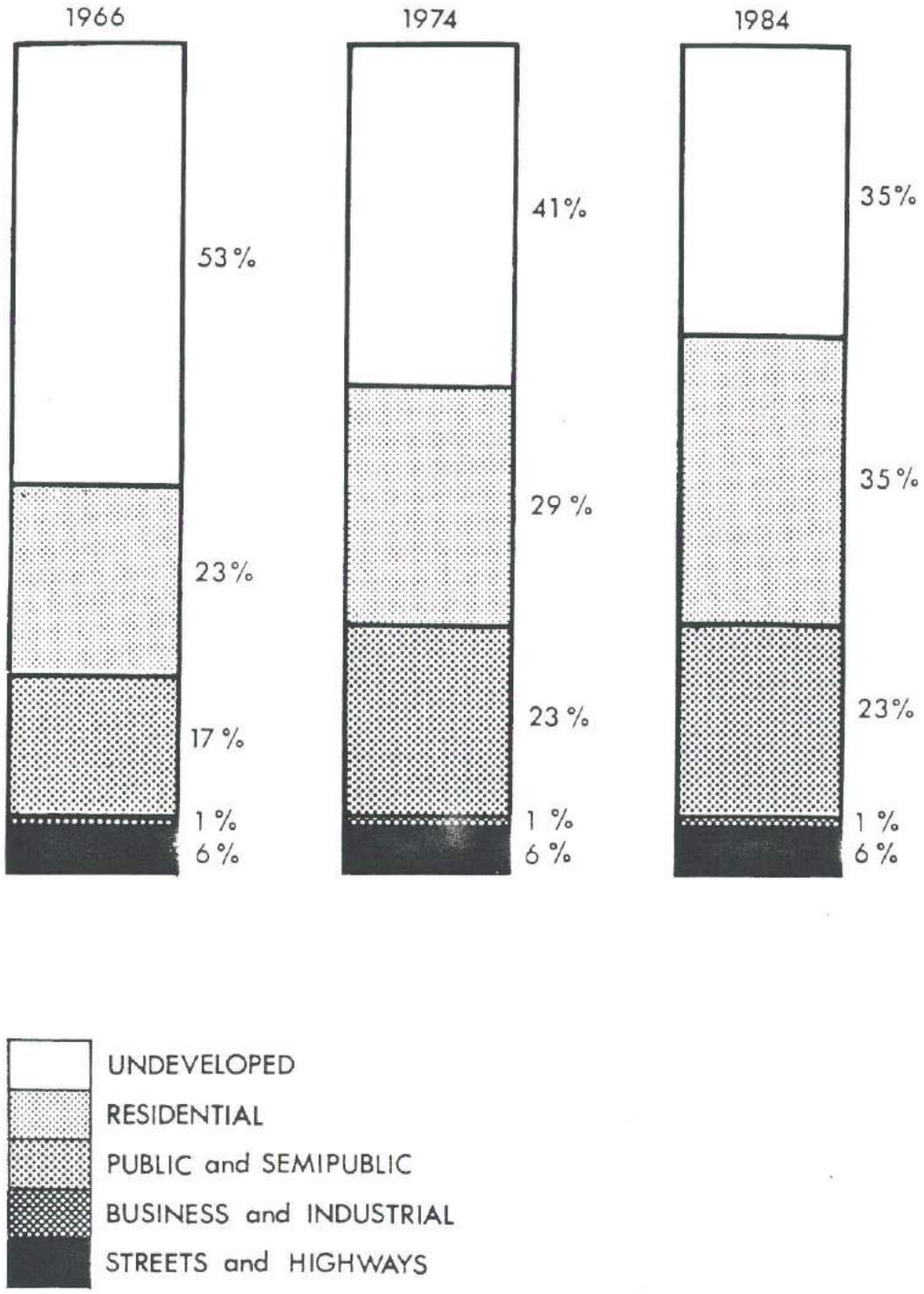

TOWN OF NEW CASTLE, N.Y.
Figure 1
EXISTING LAND USE 1984
RESIDENTIAL
SINGLE FAMILY
TWO FAMILY
MULTI-FAMILY
GROUP HOME/ BOARDING HOUSE
RESIDENCE WITH ACCESSORY APARTMENT:
IN PRINCIPAL BUILDING
IN ACCESSORY BUILDING
OFFICE IN RESIDENCE/ HOME OCCUPATION
BUSINESS
NURSERY/FARM/ RIDING STABLES
OFFICE
RETAIL/SERVICE
WHOLESALE/STORAGE GENERAL COMMERCIAL
AUTOMOTIVE
INDUSTRIAL
PUBLIC & SEMI-PUBLIC
PUBLIC RECREATION/ OPEN SPACE
PUBLIC SCHOOL
PUBLIC PARKING
OTHER PUBLIC
SEMI-PUBLIC/PRIVATE RECREATION/OPEN SPACE
RELIGIOUS INSTITUTION/ PAROCHIAL SCHOOL
OTHER SEMI-PUBLIC
CEMETERY
WATERSHED
PARKWAY LAND
UTILITY
RAILROAD
FIELD SURVEY PREPARED BY FREDERICK P. CLARK ASSOCIATES OCTOBER 1984
CENTRAL CHAPPAQUA AREA
TOWN OF OSSINING
TOWN OF MOUNT PLEASANT
VILLAGE OF MOUNT KISCO
TOWN OF NEW CASTLE
TOWN OF SOMERS
TOWN OF YORKTOWN
TOWN OF SCARSDALE
TOWN OF BEDFORD

Figure 2

TRENDS IN LAND USE - 1966 TO 1984
TOWN OF NEW CASTLE



Source: Land Use Surveys conducted by Frederick P. Clark Associates

Table 3

EXISTING LAND USE - 1966, 1974 AND 1984
TOWN OF NEW CASTLE

Type Of Land Use	1984[a]		1974		1966	
	Area (Acres)	Percentage of Total Land In Use	Area (Acres)	Percentage of Total Land In Use	Area (Acres)	Percentage of Total Land In Use
Single-Family	4,919	50.2%	4,348	49.1%	3,380	48.4%
Two-Family	36	0.4%	20	0.2%	11	0.2%
Multifamily	96	1.0%	4	X	1	X
Group Home/Boarding House	3	X	N.C.		N.C.	
Residence with Accessory Apartment	133	1.4%	N.C.		N.C.	
Office in Residence/Home Occupation	23	0.2%	7	0.1%	14	0.2%
TOTAL RESIDENTIAL	5,210	53.1%	4,379	49.5%	3,406	48.8%
Public Recreation/Open Space	787	8.0%	623	7.0%	349	5.0%
Public School	167	1.7%	231	2.6%	133	1.9%
Public Parking	9	0.1%	8	0.1%	7	0.1%
Other Public	22	0.2%	11	0.1%	14	0.2%
Semipublic/Private Recreation/Open Space	743	7.6%	723	8.2%	606	8.7%
Religious Institution/Parochial School	508	5.2%	494	5.6%	363	5.2%
Other Semipublic	88	0.9%	103	1.2%	177	2.5%
Cemetery	15	0.2%	14	0.2%	14	0.2%
Watershed	355	3.6%	322	3.6%	192	2.8%
Parkway Land	491	5.0%	534	6.0%	534	7.7%
Utility	291	3.0%	288	3.2%	163	2.3%
Railroad	37	0.4%	25	0.3%	25	0.4%
TOTAL PUBLIC AND SEMIPUBLIC	3,512	35.8%	3,374	38.1%	2,577	36.9%
Nursery/Farm/Riding Stables[b]	39	0.4%	28	0.3%	7	0.1%
Office	78	0.8%	78	0.8%	78	1.1%
Retail/Service	30	0.3%	35	0.4%	31	0.4%
Wholesale/Storage/General Commercial	19[c]	0.2%	45[d]	0.5%	44	0.6%
Automotive	7	0.1%	7	0.1%	5	0.1%
Industrial	5	0.1%	8	0.1%	3	X
TOTAL BUSINESS AND INDUSTRIAL	176	1.8%	195	2.2%	168	2.4%
Streets and Highways	910	9.3%	889	10.0%	827	11.9%
TOTAL LAND IN USE	9,808	100.0%	8,848	100.0%	6,978	100.0%

Note: A small portion of the acreage differences between land use categories in different years may be attributed to a variety of factors including judgment on classification of uses, different measurement equipment or techniques, etc.
X = Less than 0.1%.
N.C. = Not completed in 1966 and 1974 analyses.

(a) For a synopsis of land use trends since 1984, refer to the discussion of "Development in Progress."
(b) The comparable 1974 category "Nursery/Greenhouse" was expanded. 1974 acreages were adjusted to reflect this change.
(c) Decline resulted from discontinuation of Nestle's use of Crystal Spring Road property for spring water extraction.
(d) Includes 20 acres classified as "Extractive (Quarries, Wells)" in 1966.

Source: Land Use Surveys conducted by Frederick P. Clark Associates

Chappaqua Commons, Chappaqua Mews (now called Chestnut Oaks) and Old Farm Lake in the Chappaqua hamlet, and Ledgewood Commons and Pheasant Run in the Millwood hamlet.

An additional 133 acres of residential land contained single-family residences with accessory apartments—another new type of multifamily housing that was created as a result of the 1979 amendments to the Town Plan and accompanying zoning amendments. This land included an estimated 24 accessory units in the R-2A District, 41 in the R-1A District, 20 in the R-1/2A District, 9 in the R-1/4A District and 2 in the I-G District, for a total of 94 accessory apartment units as of 1984. This category included both recently approved accessory apartments and units listed on the Tax Assessor's records as two-family units but judged in the field to be single-family dwellings with accessory apartments. An historical trend with respect to accessory apartments cannot be documented since they were not counted in previous land use surveys. However, it is likely that many of these units existed in the years of previous surveys but were not identified as two-family units, since they did not appear to be such based on visual inspection.

The increase in land used for residential purposes between 1966 and 1984 was accompanied by an increase in land used for public and semipublic purposes. While this latter category accounted for a slightly smaller proportion of the overall land area in use, a total of 935 acres had been added to the public and semipublic category by 1984, with most of this acreage set aside for recreation and open space purposes.

Land used for public recreation and open space more than doubled during this 18-year period, with an increase of 438 acres. Most of the new public open space land was set aside as part of the subdivision review and approval process. Some of the more recent subdivisions that resulted in the dedication of substantial areas of open space include the Weingarten Subdivision, Hemlock Hills Subdivision, Whippoorwill Lake Subdivision and Breckenridge Subdivision. The category of semipublic and private recreation and open space land also experienced a moderate increase in acreage, despite the loss for recreation use of the Hudson Hills Country Club and a portion of the Whippoorwill Country Club. Much of this land was set aside for open space purposes as a result of its acquisition by private conservation groups, such as the Nature Conservancy, Saw Mill River Audubon Society and several wildlife sanctuaries.

In 1984, business and industrial development continued to account for a very small and declining portion of the land area in use—less than 2%. Although some new commercial developments were completed between 1966 and 1984, including the construction of the A&P Shopping Center in Millwood and the Quaker Hill (Talbots) Shopping Center at the corner of Bedford Road and King Street in Chappaqua, the discontinuation of a spring water extraction operation near Crystal Spring Road caused an overall decrease between 1974 and 1984 in the amount of land used for business and industrial purposes. By 1984, the Town had experienced a net increase of only eight acres committed to business and industrial purposes over the 18-year period since 1966.

New residential development between 1966 and 1984 was accompanied by a corresponding increase in the number of roads built in New Castle and in the amount of land thereby included within street rights-of-way. By 1984, an additional 83 acres of land had been added to this category, which accounted for over 9% of all developed land in the Town.

LAND USE BY ZONING DISTRICT

A comparison of existing land use within the Town's zoning districts highlights some significant features of the distribution of land by zoning district and also of the distribution of undeveloped parcels. New Castle in 1984 was divided into 14 zoning districts, 4 of which were added since the preparation of the 1968 Town Plan. Two additional zoning districts —B-RO-4 and B-PO —were also considered to be part of the Town's zoning regulations, but neither is currently mapped. Current zoning policy provides for the development of the Town as a predominantly low density residential community, with limited amounts of higher density (including multifamily) residential development, campus-type office development and nonresidential supporting facilities in areas of appropriate character. In 1984, 96.4% of the total Town area was included within one of the seven residential zoning districts, with the remaining 3.6% located in one of the seven mapped nonresidential zoning districts.

The residential districts can accommodate a wide range of development types from single-family homes on two-acre lots to multifamily units at a density range of up to 20 two-bedroom dwelling units per acre. As indicated in Table 4, the single-family residential districts in 1984 encompassed 95.6% of the Town's land. The R-1A District was the largest, with a total of 6,718 acres, followed by the R-2A District, with a total of 6,303 acres. The R-1/2A and R-1/4A Districts together included another 1,285 acres. The remaining 125 acres of residentially-zoned land were zoned for multifamily use in three different districts, all of which were created in 1979. These include the MFPD, MFR-M and MFR-C Districts. It is also important to recognize that multifamily development may be possible in the other residential zoning districts when compliance with specific development standards can be satisfactorily demonstrated. Modification of the Town's zoning policies in 1979 to include provisions for the development of multifamily housing was mandated by the New York courts as a result of litigation in ***Berenson v. Town of New Castle***.

In 1984, the R-2A Districts were located principally at the eastern and western ends of the Town. Most of the central portion of New Castle outside the Chappaqua and Millwood hamlet centers was within the R-1A District. The R-1/2A and R-1/4A Districts encompassed the areas surrounding the Chappaqua and Millwood hamlet centers and were also located in Kisco Park, in Stanwood and in a small area along the southern border of Mount Kisco. Multifamily zones were located in or near the Chappaqua and Millwood centers.

Business and industrial zones accounted for the remaining 544 acres of the Town's land. The largest of these was the B-RO-150 District, created and mapped in 1983.

Table 4

SUMMARY OF LAND USE BY ZONING DISTRICT - 1984[a]
TOWN OF NEW CASTLE

Zoning District	Total Land Area (Acres)	Percentage Of Total Town Land	Land In Use[b] (Acres)	Percentage Of Total Town Land In Use	Percentage Of Total District Land In Use	Undeveloped Land[c] (Acres)
R-2A	6,303	42.1%	3,310	33.7%	52.5%	2,993
R-1A	6,718	44.9%	5,136	52.4%	76.5%	1,582
R-1/2A	908	6.1%	673	6.9%	74.1%	235
R-1/4A	377	2.5%	292	3.0%	77.5%	85
MFPD	66	0.4%	65	0.7%	98.5%	1
MFR-M	43	0.3%	24	0.2%	55.8%	19
MFR-C	16	0.1%	16	0.2%	100.0%	0
TOTAL RESIDENTIAL	14,431	96.4%	9,516	97.0%	65.9%	4,915
B-RO-150	185	1.2%	0	0.0%	0.0%	185
B-RO-20	94	0.6%	79	0.8%	84.0%	15
B-RO-4	0	—	0	—	—	0
B-PO	0	—	0	—	—	0
B-D	50	0.3%	40	0.4%	80.0%	10
B-R	113	0.8%	99	1.0%	87.6%	14
B-RP	12	0.1%	11	0.1%	91.7%	1
I-P	29	0.2%	22	0.2%	75.9%	7
I-G	61	0.4%	41	0.4%	67.2%	20
TOTAL BUSINESS AND INDUSTRIAL	544	3.6%	292	3.0%	53.7%	252
TOTAL TOWN LAND	14,975	100.0%	9,808	100.0%	65.5%	5,167

X = Less than 0.1%.

(a) For a synopsis of land use trends since 1984, refer to the discussion of "Development in Progress."
(b) Includes land approved but not yet developed for multifamily use.
(c) Includes 149 acres of undeveloped and uncommitted land owned by the Town, County, State or School District.

Source: Land Use Survey conducted by Frederick P. Clark Associates, October 1984.

Most of this 185-acre district is the site of a former country club (Hudson Hills) in the West End, but at the time of the 1984 land use survey was classified as undeveloped. The 94-acre B-RO-20 District contained the Reader's Digest office complex. These two office districts combined represented over half the land zoned for business and industrial uses in 1984. The remaining business and industrial zones were located in the Chappaqua and Millwood hamlet centers.

The amount of undeveloped land in each zoning district varied considerably in 1984. The R-2A District was the least developed of the single-family residential districts, with 52.5% of its land in use, as compared to 76.5%, 74.1% and 77.5% of the land in use in the R-1A, R-1/2A and R-1/4A Districts, respectively. The MFR-M District was effectively the only multifamily district that still contained undeveloped land, since several approved projects were under construction in both the MFPD and MFR-C Districts. The business and industrial zones were, for the most part, developed in 1984. The principal exception was the B-RO-150 District. However, it has since been committed to the development of an IBM research/office facility. In addition, the B-RO-20 District still contained 15 acres of undeveloped land. Most of the remaining 52 acres of undeveloped land in the business and industrial zones were scattered in small parcels.

The undeveloped land in the R-2A District represents an especially significant factor affecting the overall character of the Town since it is now largely responsible for defining New Castle's more rural environments. Since much of this land is held in large parcels by a relatively few individuals, any circumstances that prompt one or more of these property owners to develop or otherwise dispose of their land holdings could cause a noticeable impact.

DEVELOPMENT POTENTIAL UNDER CURRENT ZONING

Information on the amount of undeveloped land identified as part of the land use survey in combination with an estimated average lot size for future residential development can be used to derive an estimate of potential residential growth in New Castle. By adding this figure to existing development, a projection of the Town's ultimate residential development level under current zoning policies can be made. This was last calculated in 1979 in connection with the analysis of proposed multifamily housing amendments that were subsequently adopted as part of the 1968 Town Plan. However, the 1979 estimate may no longer be valid for a number of reasons. First, some parcels that were undeveloped in 1979 were subsequently committed to other uses. Second, some parcels previously identified as potential multifamily sites were developed with other types of uses or at lower densities than originally estimated. Finally, stricter wetlands regulations and other new environmental requirements are likely to cause the number of potential future dwelling units to be reduced.

Table 4 includes a calculation of the amount of undeveloped land in each of the Town's zoning districts as of 1984. Application of each zoning district's minimum lot size requirement to these undeveloped land figures would not take into consideration the

loss of potential building lots attributable to road construction, design constraints and environmental limitations. For this reason, the typical "yield" per acre in each of the Town's single-family residential zoning districts was based on a study of subdivisions approved since 1974, when these figures were last computed. This analysis led to the application of the following residential development potential factors:

- R-2A District - 0.35 lots per acre
- R-1A District - 0.64 lots per acre
- R-1/2A District - 1.13 lots per acre
- R-1/4A District - 1.98 lots per acre

Viewed another way, to develop a single-family subdivision in the R-2A District, one would need a parcel size of roughly 2.9 acres per residence. The comparable figures for the R-1A, R-1/2A and R-1/4A Districts would be 1.6, 0.9 and 0.5 acres, respectively.

The development potential factors listed above were applied to all undeveloped land in the single-family districts, excluding those parcels identified in 1979 as potential sites for multifamily development. Additional potential multifamily units were determined by adjusting 1979 estimates. Those sites identified in 1979 for potential multifamily development that were subsequently developed for other uses were excluded. The Dellwood and Yeshiva Farm Settlement sites were added as sites of potential multifamily development.

Table 5 on the following page summarizes the results of this analysis based on the amount of land that was classified as undeveloped at the time of the 1984 land use survey. If all undeveloped land that could be used for residential purposes was developed with such uses, it is estimated that an additional maximum of 3,543 units could be built in New Castle under 1984 zoning. Including existing units, which were estimated to total 5,016 as of October 1984 (when the land use survey was completed), the ultimate theoretical dwelling unit potential would be 8,559.

It is estimated that the Town's housing stock as of January 1, 1988 represented 61% of the projected maximum dwelling unit potential. However, it is highly improbable that the maximum residential development potential will be reached in the near future, since new units have been added to the Town's housing stock at a rate of about 60 per year since 1980 and because the greatest regional development pressure is now being felt by communities to the north of New Castle.

It should also be emphasized that this projection is not based on an actual lot-by-lot hypothetical subdivision layout that considers the detailed development constraints of each undeveloped parcel. Such constraints were only considered to the extent that they have been encountered in the recent subdivisions that were studied. In fact, since the land that remains undeveloped tends to be that which is more difficult to develop, it is likely that the residential development potential factors used in this analysis may actually inflate the potential of the remaining undeveloped land, thereby overstating the Town's ultimate residential development potential under 1984 zoning. For example, within the R-2A District approximately 15% of the undeveloped acreage was under

Table 5

RESIDENTIAL DEVELOPMENT POTENTIAL UNDER CURRENT ZONING - 1984[a]
TOWN OF NEW CASTLE

Zoning District	Gross Undeveloped Land (Acres)	Additional Dwelling Units			Total
		Single-Family	Multifamily[b]	Accessory Apartments[c]	
R-2A	2,993	927	263		1,190
R-1A	1,582	924	406		1,330
R-1/2A	235	245	52		297
R-1/4A	85	168	0		168
MFPD	1[d]	0	177		177
MFR-M	19	0	186		186
MFR-C	0	0	74		74
TOTAL IN RESIDENTIAL DISTRICTS	4,915	2,264	1,158		3,422
TOTAL IN BUSINESS DISTRICTS	—	0	46		46
TOTAL IN ALL DISTRICTS	4,915	2,264	1,204	75	3,543

(a) Since 1984, some of the undeveloped land on which this analysis was based has been developed or approved for development, as summarized in the discussion of "Development in Progress." As a result, the Town's remaining development potential is now less than indicated on this table.

(b) Includes dwelling unit potential for development of multifamily units on undeveloped sites identified in Multifamily GFEIS as well as on Dellwood and Yeshiva Farm Settlement sites. Previously identified sites that have since been committed to other uses have been excluded. Also includes potential from developments under construction on sites that were not classified as undeveloped in 1984 land use survey. These include: Old Farm Lake, Pheasant Run and Chappaqua Mews.

(c) Estimated additional units Townwide by the year 2000 (based on recent trend of approximately 5 units per year).

(d) Considered to have no development potential since it is part of the abandoned Putnam Division Railroad right-of-way.

Sources: Land Use Survey conducted by Frederick P. Clark Associates, October 1984
Final Generic Environmental Impact Statement - Multifamily Housing, October 9, 1979
Chapter 60 (Zoning) of the Code of the Town of New Castle
Town of New Castle Planning Board project files

water, classified as wetlands or within the 100-year flood plain. Another 22% was composed of slopes of 25% and greater. Thus, in the aggregate, 37% of this undeveloped land was encumbered by environmental characteristics that could restrict its practical development potential. These environmental restrictions accounted for approximately 29% of the undeveloped land in the R-1A District, 32% in the R-1/2A District and 19% in the R-1/4A District. The generalized environmental characteristics of all the land in New Castle that was classified as undeveloped in 1984 are summarized in Table 6 on the following page.

DEVELOPMENT IN PROGRESS

By necessity, land use surveys are based on a particular point in time. Development in New Castle, however, has been a continual process. Development projects often take a long period of time from the date they are first proposed to the date construction is ended and the project is fully occupied. An examination of the level of development activity in the Town since the latest land use survey was completed in 1984 provides additional insight into recent land use trends. The characteristics of these more recent development projects are presented in Table 7 on page 15.

Nineteen residential developments containing four or more housing units had received approval of the New Castle Planning Board but were not fully constructed as of January 1988. Of the total 740 acres encompassed within these projects, approximately 683 acres were included in the undeveloped category at the time of the 1984 land use survey. Five approved nonresidential projects included another 199 acres previously classified as undeveloped. When construction of these projects is completed, there will be nearly a 17% decrease in the 1984 Townwide total of undeveloped land. There will also be a net increase of 466 new housing units—226 single-family detached, 6 single-family attached and 234 multifamily—and of about 680,000 square feet of new nonresidential floor space. The land included within the single-family and multifamily residential land use categories (excluding the recreation and open space components) will increase by approximately 10% and 147%, respectively, while the land included within the office and retail categories will increase by 188%.

Fourteen additional major residential development projects were before the Planning Board for approval as of January 1988. While all of them may not reach the construction stage as originally proposed, they provide an indication of the current level of development activity in the Town. In total, these projects involve the prospective construction of 437 housing units, composed of 113 single-family detached, 12 single-family attached and 312 multifamily units, on about 557 acres of land classified as undeveloped in 1984.

Table 6

ENVIRONMENTAL ANALYSIS OF LAND CLASSIFIED AS UNDEVELOPED IN 1984 LAND USE SURVEY TOWN OF NEW CASTLE

Zoning District	Total Area (Acres)	Percentage Of Total Area Containing:	
		Wetlands[a]	Slopes 25% and Over
R-2A			
Approved[b]	243	20%	26%
Proposed[c]	507	15%	18%
All Other	2,243	15%	22%
Total	2,993	15%	22%
R-1A			
Approved	411	13%	17%
Proposed	58	13%	13%
All Other	1,121	12%	18%
Total	1,582	12%	17%
R-1/2A			
Approved	29	2%	31%
Proposed	-	-	-
All Other	206	15%	16%
Total	235	14%	18%
R-1/4A			
Approved	-	-	-
Proposed	-	-	-
All Other	85	11%	10%
Total	85	10%	9%
MFPD			
Approved	-	-	-
Proposed	-	-	-
All Other	1	0%	12%
Total	1	0%	12%
MFR-M			
Approved	12	22%	0%
Proposed	-	-	-
All Other	7	5%	35%
Total	19	15%	15%
MFR-C			
Approved	-	-	-
Proposed	-	-	-
All Other	-	-	-
Total	0	-	-
B-RO-150			
Approved	185	1%	13%
Proposed	-	-	-
All Other	-	-	-
Total	185	1%	13%
B-RO-20			
Approved	-	-	-
Proposed	-	-	-
All Other	15	0%	0%
Total	15	0%	0%
B-D			
Approved	-	-	-
Proposed	-	-	-
All Other	10	12%	0%
Total	10	12%	0%
B-R			
Approved	1	0%	0%
Proposed	-	-	-
All Other	13	0%	16%
Total	14	0%	11%
B-RP			
Approved	*	14%	0%
Proposed	-	-	-
All Other	1	86%	0%
Total	1	80%	0%
I-P			
Approved	-	-	-
Proposed	-	-	-
All Other	7	85%	0%
Total	7	85%	0%
I-G			
Approved	1	0%	98%
Proposed	-	-	-
All Other	19	0%	78%
Total	20	0%	83%
Total Town	5,167		

*Less than 0.5 acres

(a) For purposes of this analysis, includes streams, ponds, lakes, wetland soils as defined by Town wetlands law and 100 year flood plain. Data obtain from latest environmental data base maps prepared in 1985, not from actual subdivision or site plans.

(b) Reflects area of sites for which development proposals were approved as of January 1988.

(c) Reflects area of sites for which development proposals were submitted but not yet approved as of January 1988.

Sources: Land Use Survey conducted by Frederick P. Clark Associates, October 1984. Environmental Data Base maps prepared by Frederick P. Clark Associates, July 1985. Town of New Castle Planning Board project files.

Table 7

DEVELOPMENT IN PROGRESS - NOVEMBER 1984 TO JANUARY 1988[a]
TOWN OF NEW CASTLE

Project Status	Zoning	Previously Undeveloped Site Area (Acres)[b]	Land Use[c]
Projects Approved But Not Yet Completed[d]			
Yeshiva Farm Settlement - Croton Lake Road	R-1A	0*	12 MF
Hemlock Hills - Campfire Road/Hilltop Drive	R-1A	16*	14 SF
Pires - Barnes Road/Somerstown Turnpike	R-1A	4*	4 SF
Golub-Winston - Croton Lake Road	R-1A	25*	10 SF
D & J Concrete - Schuman Road	I-G	1	22,140 sq. ft. warehouse/office
Perlson - South Greeley Avenue	B-RP	0.1*	9,000 sq. ft. retail/office (3,600 sq. ft. retail)
Weingarten - Crow Hill Road	R-2A	67	17 SF
The Laurels - Neustadt Lane	R-2A	33	11 SF
Random Farms - Saw Mill River Road/Millwood Road	R-1A	175*	103 SF + rec. land
King Street Hill Associates - Highland Avenue	B-R	0*	9 MF (1 SF)
Bayswater - Sarles Street	R-2A	75	20 SF
Flinn Capital Corp. - Cowdin Road	R-1A	36	7 SF
Holmes & Kennedy/Brosgol - King Street	B-R	0.4*	5 MF + 4,125 sq. ft. office
Kaen/Weller - Shingle House Road	R-1A	7*	2 SF
Riverwoods - Croton Avenue	R-1A	128*	148 MF
Cornell Woods - Saw Mill River Road	R-1/2A	29*	20 SF + 6 SFA
149 King Street - King Street	B-R	1*	18 MF (10,200 sq. ft. retail)
Roane Building - South Greeley Avenue	B-RP	0*	12,600 sq. ft. retail office (6,700 sq. ft. automotive)
Mario Development Corp. - Deepwood Drive	R-1A	7	5 SF
Bailey Farms Institute - Barnes Road	R-1A	13	Research Institute (1 SF)
IBM Hudson Hills - Croton Dam Road/Pines Bridge Road	B-RO-150	185*	655,000 sq. ft. research/office
Whippoorwill Woods - Whippoorwill Road/Carolyn Place	R-2A	48	14 SF + rec. land
Stone Creek - North State Road	MFR-M	12	42 MF
Chiselhurst - Frog Rock Road	R-2A	20	5 SF
Projects Proposed But Not Yet Approved[e]			
Yeshiva Farm Settlement - Croton Lake Road	R-1A	0*	203 MF
Dellwood - Sheather Road	R-2A	141*	109 MF (2 SF)
Whippoorwill Meadows - Whippoorwill Road	R-2A	55*	16 SF
North Fork - Paula Place/Kerry Lane/Lawrence Farms Crossway	R-2A	45	12 SF
Wampus Estates-Armonk Road	R-2A	71	18 SF
Little Lake Estates-Glendale Road	R-2A	17*	5 SF
Grace Development Co. - Grace Lane	R-2A	46	7 SF
Cohn - Pines Bridge Road	R-2A	15*	6 SF
Fireside Homes - Pines Bridge Road	R-1A	21*	9 SF
Apple Farms - Pines Bridge Road	R-2A	9*	3 SF
Stony Hollow - Quaker Street	R-1A	29*	15 SF
Mannion - Old Roaring Brook Road	R-2A	24	9 SF
Bleier - King Street	R-2A	10*	3 SF
Brandywyne - Brandon Drive	R-2A	74	12 SF + 12 SFA

(a) Includes all residential projects containing a total of four or more dwelling units and all nonresidential projects under construction, approved or proposed between November 1984 and January 1988.

(b) Total site area may be larger (designated by *) if some or all of parcel was partially developed or used for another purpose at time of October 1984 land use survey. For purposes of quantifying the decrease in undeveloped land, the previously developed portions of a parcel were excluded.

(c) SF - single-family detached dwelling unit(s)
SFA - single-family attached dwelling units
MF - multifamily dwelling units
Rec. land - recreation land
If site was previously developed in whole or part, this number reflects only the net additional development. Discontinued land uses are shown in parentheses.

(d) Some projects may have been approved prior to completion of the 1984 land use survey but construction had not yet begun as of October 1984.

(e) Includes projects currently under review or for which additional approvals are required before a building permit can be issued.

Sources: Land Use Survey conducted by Frederick P. Clark Associates, October 1984.
Town of New Castle Planning Board project files

If all the approved and the proposed developments were to be constructed, the following approximate changes in the data presented previously on the results of the 1984 land use survey would occur after a period of several years:

- The undeveloped land category would decrease by about 1,440 acres (28%), reducing its percentage of total Town area from 35% to 25%. Of the undeveloped land still remaining, on an aggregate basis 14% is under water, classified as wetlands or within the 100-year flood plain; another 20% is composed of slopes of 25% and greater.

- The single-family land use category would increase by about 923 acres (19%), increasing its percentage of total Town area from 33% to 39%.

- The multifamily land use category would increase by about 282 acres (294%), increasing its percentage of total Town area from less than 1% to 3%.

- The total number of housing units would increase by 903, of which 339 would be single-family detached units, 18 would be single-family attached units and 546 would be multifamily units.

ENVIRONMENTAL FACTORS

New Castle has an extremely attractive physical setting with many natural assets. Among these are its rivers and streams, lakes and ponds, wetlands, hills, forested areas and unique scenic vistas. The Town has seen its development both dependent on and shaped by the physical features of the land. Historically, gently sloping areas became farmland while stream valleys became attractive sites for mills, the subsequent development of transportation and utility systems, and finally of residential settlements. Lands containing rough terrain and extensive wetlands were left undisturbed as these areas were uneconomical for use.

Today, regional development pressures and technological advances in construction methods have made it possible, albeit not always desirable, to develop land that was once considered unbuildable. As the Town's population density has increased from only 68 persons per square mile in 1920 to nearly 10 times that figure (659) in 1980, the pressures on the natural environment have become greater and have increasingly stressed the relationship between people and the land. Compounding this already delicate environmental situation is the reality that most of the easily developed land in New Castle has already been subdivided and developed. To a large extent, future development pressures will be focused on the more difficult terrain that has in the past been left undisturbed.

In analyzing New Castle's natural environment, it must be recognized that since the Town is already 65% developed, many of the major decisions affecting the Town's natural resources have already been made. An understanding of the natural environment, however, provides a firm basis for sound development practices and land conservation on the remaining undeveloped land and for future environmental protection of the sensitive resources that exist throughout the Town. While this information should not be used as a substitute for the site-specific analysis that should accompany any new development proposal, it provides a comprehensive overview of the characteristics of the Town's natural environment.

The environmental data base compiled for New Castle contains the basic information concerning topography and slopes, surface hydrology, vegetation, bedrock geology and soils, and development constraints and potentials that can be used in channeling development to the most suitable sites, thereby preserving fragile lands, and in formulating environmental protection regulations. A detailed data base of this type was first established for the Town in 1974 as part of a natural resource inventory compiled by the New Castle Conservation Board. Although some of the information gathered in that study remains valid and is still considered current, the latest inventory completed in 1985 is largely composed of updated and supplementary material. It includes the following interpretive maps originally prepared at a scale of one inch to eight hundred feet, which are incorporated herein by reference and are available for

viewing at the offices of the Town Building and Engineering Department in the New Castle Town Hall:

- Slopes (July 1985)
- Surface Hydrology (July 1985)
- Habitat (1974)
- Bedrock Geology (1974; updated July 1985)
- Soils Base Map (July 1985)
- Erodibility (July 1985)
- Wet and Poorly Drained Soils (July 1985)
- Septic Tank Absorption Fields/Soil Potential Index (July 1985)
- Building Development/Soil Potential Index (July 1985)
- Underground Utilities/Soil Potential Index (July 1985)
- Environmental Data Base Summary (July 1985)

TOPOGRAPHY AND SLOPES

New Castle is characterized by very irregular topography and is composed of rolling, often steep hills, stream valleys and numerous wetlands. Elevations range from approximately sea level to about 750 feet above sea level. The lowest lying land is found at the northwestern end of the Town where its municipal boundary comes to a point, touching the banks of the Croton River about 1.3 miles upstream from the Hudson River. The highest point is found at the eastern end of the Town, northeast of the intersection of Oregon Road with Sarles Street near the New Castle/Bedford Town border.

The most extensive areas of high elevations within the Town are found in the vicinity of Hog Hill Road; near the Roaring Brook School; east of McKesson Hill Road and Cross Ridge Road; north of Lawrence Farms Crossway; east of King Street in the vicinity of Devoe Road and Haights Cross Road; to the east and west of Whippoorwill Road southeast of the Glazier Arboretum; in the vicinity of Sheather Road and Tripp Street; and east of Sarles Street. In these areas, elevations generally exceed 600 feet above sea level.

As part of the preparation of this Plan, the 1974 "Steep Slopes" map for New Castle was completely updated to reflect a comprehensive slope analysis based on the U. S. Department of Agriculture - Soil Conservation Service slope classification system that assigns a letter designation to each slope group as follows:

A: 0%-3%
B: 3%-8%
C: 8%-15%
D: 15%-25%
E: 25%-35%
F: 35%-60%

The steepest slopes (35%-60%) within New Castle are, for the most part, concentrated along three parallel north-south axes: west of the Saw Mill River Parkway; the Taconic State Parkway/Saw Mill River Road corridor; and east of Spring Valley Road. Other smaller areas of steep slopes (25%-60%) are scattered throughout the Town.

Most of New Castle's land falls within the 8%-25% slope range. There are also substantial areas of 3%-8% slopes east of the Saw Mill River Parkway and in the vicinity of Pines Bridge Road. The portions of the Town having slopes of 3% or less are primarily wetland areas.

The use of land with slopes of up to 15% for development purposes usually does not require any special treatment for protection of slopes other than the application of standard soil erosion and sedimentation control measures. Construction on slopes between 15%-25% requires closer control and possibly special design considerations. While developments built on these slopes have presented opportunities for creative architecture and site planning, sufficient vegetation and tree growth must be preserved and building coverage limited in order to prevent erosion in these areas. Slopes of 25% and greater usually present significant restrictions to development and should generally be avoided. If development is to be considered at all for these areas it must be closely monitored to prevent serious detrimental environmental impacts.

SURFACE HYDROLOGY

Drainage

New Castle is divided into four major drainage basins, with each major basin divided into smaller subbasins. The "Surface Hydrology" map delineates the drainage divides that separate one watershed from another. The largest portion of the Town is part of the Croton River Basin, which is composed of eight smaller watershed areas. This basin, which includes virtually all of New Castle north of the Millwood hamlet, Roaring Brook School, Chappaqua hamlet and most of the area north of the North Castle town line, drains into the Croton Reservoir via the Croton River, Indian Brook, Bailey Brook, Still Lake, Cornell Brook, Gedney Brook and Kisco River.

The next largest drainage basin is the Lower Hudson River Basin, consisting of three smaller watershed areas that drain into the Hudson River via Oliver Pond, Pocantico River and Saw Mill River. This basin includes most of the West End of New Castle, the area between the Millwood and Chappaqua hamlets south of Millwood Road, Quaker Street and Roaring Brook Road, and the area west of King Street north of the Mount Pleasant town line.

A small portion of the Town, generally between King Street and the Whippoorwill Country Club south of Devoe Road, is part of a single subbasin (Kensico) of the larger Bronx River Basin. An even smaller area of the Town, containing land surrounding Wampus Pond and the southern portions of Sheather Road and Tripp Street, is part

of a single subbasin of the Upper Long Island Sound Basin and drains into the Byram River, through Greenwich and finally into Long Island Sound.

The majority of New Castle's land drains into drinking water reservoirs, including the Croton Reservoir (part of New York City's water supply system as well as that of many communities to the north that draw water from New York City aqueducts) and the Indian Brook Reservoir (part of the Village of Ossining's water supply system). Particular care will need to be taken in planning for future development so that streams that flow into these reservoirs can be safeguarded.

Water Quality

The water quality classifications of the major streams and water bodies in New Castle as determined by the New York State Department of Environmental Conservation are shown on the "Surface Hydrology" map. The water quality standards are based on the water's quality at the time it was sampled as well as its best recommended usage. Dissolved oxygen and bacteria levels are important considerations in the classification system.

Classes AA and A waters are suitable for drinking; Class B waters are swimmable; Class C waters are suitable for the survival and propagation of fish; Class D waters principally serve a drainage function, but are also suitable for secondary contact recreation such as boating. It should be noted that the Class D designation does not necessarily imply polluted waters. Streams are also classified as "D" if they are extremely small and/or intermittent and are thus unable to support fish, or if they have not yet been sampled.

Flood Plains

In the late 1970s, major watercourses within New Castle were studied as part of the National Flood Insurance Program and the limits of the 100-year flood plain and 500-year flood plain were mapped. These maps became effective on September 5, 1979 with their adoption by the Town. At the same time, the Town also passed regulations amending the zoning law and subdivision regulations, which limited the type and amount of development that could occur within the 100-year flood plain. Those areas of the Town located within the 100-year flood plain as mapped in 1979 are identified on the "Surface Hydrology" map.

Wetlands

Wetlands are generally defined in this Plan as lands having somewhat poorly, poorly and very poorly drained soils as identified by the Soil Conservation Service, as well as lands that support wetland vegetation. These areas are shown on the "Surface Hydrology" map, along with areas identified as "sensitive soils." Sensitive soils are those that may under certain circumstances function as wetland soils, and in those instances should be protected, but need not be specially protected when they do not so function.

Wetlands and sensitive soils cover a considerable portion of New Castle's land and are found along many of the Town's rivers and streams. The wetlands in New Castle are an integral part of the Town's hydrological system. Individual wetlands are not isolated entities, but rather part of a larger wetlands and drainage system. Upland wetlands play a major role in maintaining the functions and integrity of downstream wetlands and flood plains. Several important functions are served by these wetlands, including the following:

- Wetlands act as natural sponges, retaining runoff during storms. One acre of wetlands can hold 330,000 gallons of water when flooded to a depth of one foot. This water then leaves the wetland with considerably slowed velocity, thus minimizing downstream flooding. However, this capacity is not unlimited. Prolonged changes in the water level can alter a wetland's vegetative characteristics.

- Wetlands serve as erosion control areas. They trap sediment carried from upland areas before it reaches streams, ponds and drinking water reservoirs. If this sediment were allowed to reach the watercourses and water bodies, it would result in the erosion of stream banks and deterioration in water quality. However, excess sediment can also adversely affect wetlands.

- Some wetlands are underlain by pervious sands and gravels and occur over water-bearing bedrock formations. Water from these wetlands can percolate through the gravel and recharge the underground aquifer. If the aquifer is sufficiently thick, the water it maintains can be substantial. Water that percolates through wetland gravels can also travel through cracks in the bedrock to other aquifers.

- Many pollutants are carried into wetlands by storm water runoff. Wetlands serve to trap by-products of automobile combustion. They also trap nitrates and phosphates that are washed from fertilized lawns. Wetland plants consume phosphates, thus preventing them from fertilizing the water in downstream lakes and streams and helping to keep those water bodies free of algae.

- Wetlands are important ecological resources. They are productive areas that serve as a source of nutrients for freshwater fish. Wetlands provide breeding, nesting and feeding grounds, and cover for many forms of wildlife, waterfowl and songbirds. While they do not necessarily contain endangered plant species, wetlands may contain plant species that are unusual or uncommon in a particular area. Wetlands provide recreational areas for fishing, hiking and bird watching. They are unique and interesting areas for environmental education purposes. Wetlands can also form open space corridors that may be used to maintain the rural character of the community.

As the Town becomes more developed, the need for preservation of these wetland functions will continue to become more acute. New Castle has a long history of demonstrating sensitivity to wetlands, having adopted its first wetlands law in 1972,

three years before the New York State Freshwater Wetlands Act was enacted. This law was completely revised in 1979 and has been amended several times since then in an effort to ensure maximum protection of these sensitive and valuable environmental resources.

VEGETATION

Vegetation is the most rapidly changing natural resource within the Town. The characteristics of New Castle's surface vegetation are summarized on the "Habitat" map, prepared in 1974 based on the Land Use and Natural Resource (LUNR) inventory prepared by Cornell University for the New York State Office of Planning Services. Assuming no changes brought about by development, those areas listed as forest brushland on the "Habitat" map are now 14 years closer to being a mature forest; abandoned croplands and pasturelands are becoming forest brushland; many of the shrub wetlands are now young wooded wetlands. The extent of the mapped wetlands within the Town has grown, stemming from more exact delineation methods and/or actual gains in wetland areas caused by increased storm water runoff from developed lands. Despite this continual metamorphosis, the overall pattern of vegetation does not change radically over a ten- or twenty-year period without the occurrence of some highly visible, dramatic event such as fires, insect infestations, violent storms or man's activities.

Knowledge of the overall pattern of vegetation serves as a guide to preserving this resource and assessing the impact of its potential loss. The exact vegetative habitat characteristics of a given parcel of land can and should be studied in detail when change is being considered for that parcel. In reality, the actual area of natural habitat in virtually all categories of vegetation has decreased within the Town, directly as a result of new development. Continued development will put increasing pressure on the remaining vegetative habitats to support more wildlife and/or to exist within a smaller operating ecosystem. Both of these alternatives can bring about additional problems for developed areas. Furthermore, vegetation is an important factor in flood prevention and erosion control. Additionally, it is valuable for its scenic beauty.

BEDROCK GEOLOGY

New Castle is underlain by three separate geological formations that are oriented in a generally north-south direction: Manhattan Schist, Inwood Marble and Fordham Gneiss. As shown on the "Bedrock Geology" map prepared in 1974, Inwood Marble underlies the least amount of area and is found in five distinct locations: along a band crossing Glendale Road west of Dawning Lane; along the Spring Valley Road corridor; along the Saw Mill River Road corridor from Echo Lake northward and along the Taconic State Parkway corridor generally east of Echo Lake; along the Metro-North Commuter Railroad corridor; and along the Whippoorwill Road corridor generally between Whippoorwill Park and Frog Rock Road. With the exception of the Pines Bridge Road area, Manhattan Schist underlies the remaining areas of the West End of

New Castle. The only other area of Manhattan Schist is found between the Saw Mill River Parkway and a north-south line generally connecting the Mount Kisco Country Club with the southernmost point of King Street at the New Castle/North Castle Town border. The remainder of the Town is underlain by Fordham Gneiss. The general characteristics of each of these geological units are described in Table 8 on the following page.

Any underground geological structure that yields a significant amount of water is called an aquifer. Three types of water-bearing substrata are found in the New Castle area: crystalline bedrock, till and stratified drift. Marble or limestone is the most productive type of bedrock, particularly in lowland areas where it is overlain by water-bearing deposits of outwash. The "Bedrock Geology" map identifies the approximate location of fractures, as shown in the ***Westchester County Environmental Planning Atlas*** published in 1982. It is the intersection of these fractures and lineaments that are the areas of potentially highest yield for ground water. The most significant of these areas were also identified as part of the ***Areawide Waste Treatment Management Plan*** (208 Study) completed for Westchester County in 1978. Within New Castle, ten such areas of fractured bedrock exist, as shown in Figure 9 preceding page 25.

A second source of ground water is till, which consists of unstratified glacial deposits consisting of intermingled clay, sand, gravel and boulders. Deposits of till having a wide range of thicknesses are distributed throughout New Castle, particularly on the uplands but also in some valley areas. Till has a relatively low permeability and, except where it contains sandy lenses, yields only a few gallons of water per minute to dug wells. Till overlays the majority of New Castle's bedrock and can be expected to limit ground water quantity in surficial deposits to small domestic supplies. Till may be overlain by wetlands containing organic soils or strains of alluvial soils and may function as a confining layer over some bedrock aquifers.

A third source of ground water is stratified drift, which consists of interbedded layers of sand, gravel, silt and clay deposited in stream valleys and lowlands by the meltwater of receding glaciers. According to the "208 Study," seven different areas of stratified drift have been identified in New Castle, as shown in Figure 9. The greatest well yields can be derived from the sand and gravel portions of stratified drift deposits near large streams. However, the same factors that make such areas valuable as water sources also make them susceptible to contamination. Stratified drift deposits are covered by soils with high percolation rates that allow rainfall and runoff to easily recharge the ground water. Unfortunately, these soils also easily transmit water containing pollutants. Because ground water moves very slowly, contaminants may go undetected for some time. Even after pollutants have been discovered, it may not be possible to rectify the situation.

It is, therefore, important to prevent contamination to aquifers by controlling land use activities above their recharge areas. Protection of the primary and secondary recharge areas is particularly important. Any land use that would result in solid waste leachate, road salt, petroleum, or domestic or industrial water percolating into the ground water should be strictly controlled and, if possible, prohibited in aquifer

Table 8

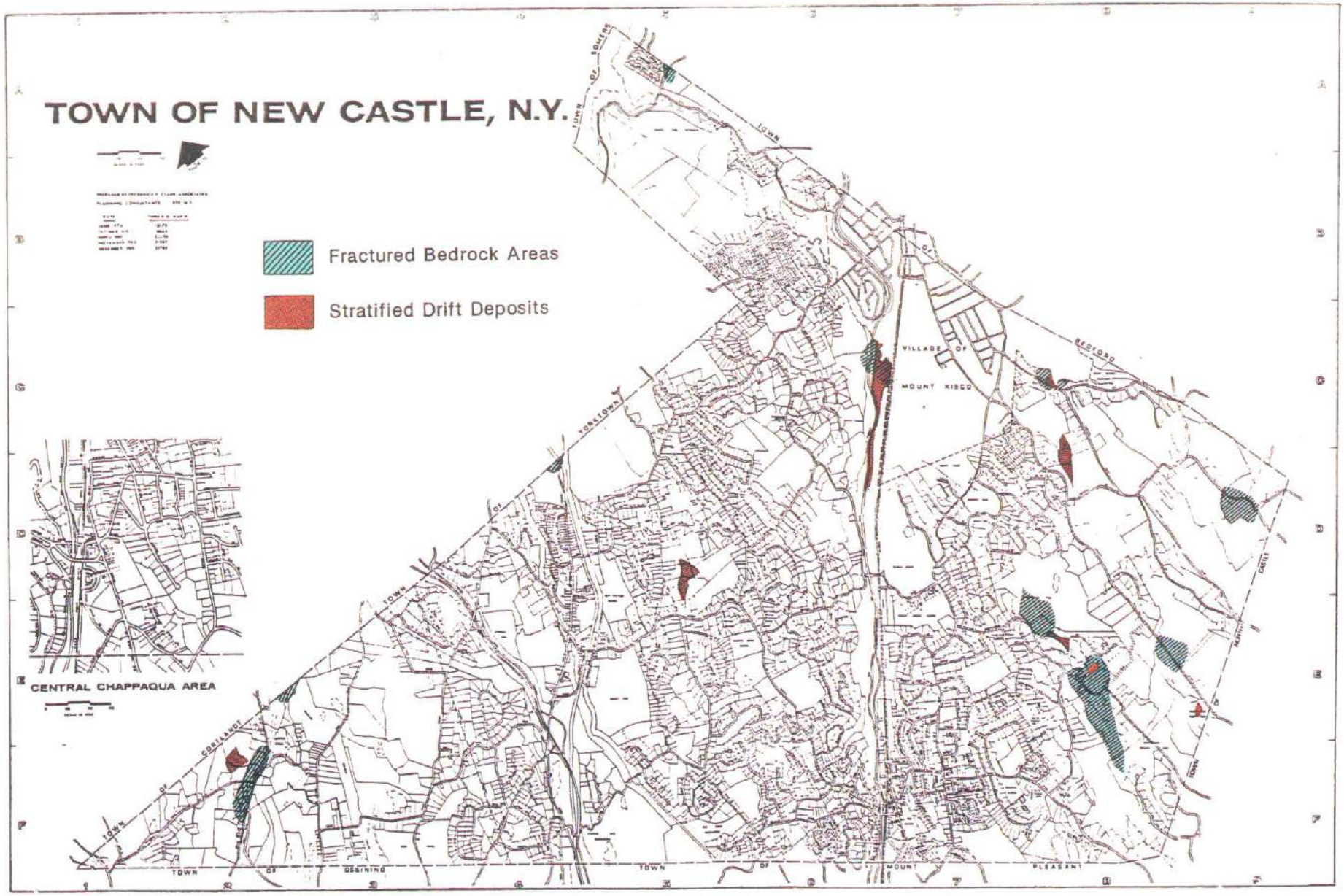
GEOLOGICAL CHARACTERISTICS
TOWN OF NEW CASTLE

Geological Unit	Topography	Weathering	Structure	Hydrology	Median Depth of Wells (Feet)	Median Well Yield (Gallons Per Minute)
MANHATTAN SCHIST Coarse Mica Schist and Mica Gneiss	Rolling to hilly uplands	Slight	Metamorphic foliation dominant; foliation generally parallel to bedding; jointing irregular; many large and small faults and fault zones.	Major wells are in major faults; permeability is via secondary fractures.	300	44
INWOOD MARBLE Marble, Crystalline Limestone and Dolomite	Commonly underlies valleys	Generally fresh when exposed; weathers to calcareous sand.	Complexly and tightly folded; foliation well developed locally.	Water in solution; openings along joints and faults; best wells are in flat valleys; permeability is via secondary fractures and chemical weathering zones.	280	20
FORDHAM GNEISS Biotite, Quartz, Feldspar Gneiss	Rolling to hilly uplands	Weathers to micaceous clayey or sandy residual soil.	Extremely complicated; differs locally; foliation plane dominant; dips steep to moderate but locally horizontal; joints strong; large and small joints widespread.	Water in weathered zone near surface; maximum yields are from major fault zones; permeability is via secondary fractures.	157	11

Source: "Engineering Geology of the Northeast Corridor, Washington, D.C. to Boston, Mass. (1967)," Miscellaneous Geologic Investigations, Map I-514-A (Sheet 6 of 7)

Figure 9

AREAS FAVORABLE FOR GROUND WATER DEVELOPMENT
TOWN OF NEW CASTLE



Source: Westchester County ***Areawide Waste Treatment Management Plan*** (1978)

recharge areas. It is also important to keep these areas as open as possible so that the aquifer can be recharged. In New Castle, several of these areas have already been afforded a protected status because they are part of the Town's committed open space system, composed of designated watershed lands and public, semipublic or private recreation lands and sanctuaries. However, some of these aquifer areas lie under land that has already been developed or is still undeveloped.

While work undertaken in preparing this Plan has produced comprehensive information on many of the Town's natural resources and environmental characteristics, data on aquifers and water resources remains generalized. As New Castle continues to develop, the need for accurate detailed information on water resources will become increasingly important.

SOILS

An awareness of soil properties is an important aspect of the environmental management approach to planning. The origins and physical properties of soils have, to a great extent, determined the existing land use in given areas and have important implications for future development. Ignoring or misinterpreting the characteristics of soil cover or geological formations may result in structural failures, higher construction and maintenance costs, or erosion and drainage problems. Consideration of the engineering properties of the soils present on a site should be an integral part of any site design.

A "Soils" base map has been prepared as part of the Town's updated environmental data base compiled for this Plan. This map contains the most recent (May 1985) soils information provided by the Soil Conservation Service at two-acre accuracy and has been used to prepare a series of interpretive maps that assess the relative limitations and potentials of these soils for different types of use. A summary of the characteristics of the soils found in New Castle is presented in Table 10 on the following page.

Natural Soil Groups

Soils can be classified into general natural soil groups based on their form of origin. The soils in New Castle and throughout this region have resulted from glacial activity. The soil types that characterize the Town fall into seven categories that vary by texture, other associated properties and consequent suitability for various types of construction. These soil groups are as follows:

- **DEEP UPLAND SOILS IN GLACIAL TILL** - These soils are fairly coarse in texture and are formed in till, which is a mixture of clay, silt, sand, gravel and boulders deposited by the retreating glacier. Although some of these soils form wetland areas, most are well-drained with rapid permeability. In the past, most of these deep till soils have been farmed.

Table 10

SOIL PROPERTIES
TOWN OF NEW CASTLE

Soil Symbol	Soil Name	Soil Description	HSG	DBR	DWT	Drainage	PERMEABILITY		ERODIBILITY		
							Surface and Subsoil	Substratum	Surface	Subsoil	Substratum
	Deep Upland Soils Formed in Glacial Till										
22	Charlton-Stony	Very stony loam	B	>60"	>6.0'	Well drained	Moderately rapid	Moderately rapid	Low	Low	Low
25	Sun	Silt loam	D	>60"	+0.5-1	Poorly to very poorly	Moderate	Slow	Medium	Low	Low
27	Sun-Stony	Very stony silt loam	D	>60"	+0.5-1	Poorly to very poorly	Rapid	Slow	Low	Low	Low
63	Charlton	Fine sandy loam	B	>60"	>6.0'	Well drained	Moderate	Moderate	Medium	Medium	Medium
68	Sutton	Fine sandy loam	B	>60"	1.5-3.0	Moderately well drained	Moderate	Moderate	Medium	Medium	Medium
110	Urban Land-Charlton Complex	Fine sandy loam-disturbed	-	-	-	Variable	Variable		Variable		
	Upland Soils Formed in Glacial Till with Hardpan Layer										
64	Paxton	Fine sandy loam	C	>60"	1.5-2.5	Well drained	Moderate	Slow	Medium	Medium	Medium
65	Paxton-Stony	Very stony sandy loam	C	>60"	1.5-2.5	Well drained	Moderate	Slow	Low	Medium	Medium
66	Woodbridge	Fine sandy loam	C	>60"	1.5-2.5	Moderately well drained	Moderate	Slow	Medium	Medium	Medium
150	Urban Land-Paxton Complex	Fine sandy loam-disturbed	-	-	-	Variable	Variable		Variable		
160	Urban Land Woodbridge Complex	Fine sandy loam disturbed	-	-	-	Variable	Variable		Variable		
170	Urban Land-Ridgebury Complex	Sandy loam disturbed	-	-	-	Variable	Variable		Variable		
251	Ridgebury	Sandy loam	C	>60"	0-1.5	Poorly drained	Moderate	Slow	Medium	Low	Medium
252	Ridgebury-Stony	Stony sandy loam	C	>60"	0-1.5	Poorly drained	Moderate	Slow	Medium	Low	Medium
	Upland Soils Shallow in Depth to Bedrock										
70	Charlton/Chatfield	Loam with rock outcrops	B	20"-40"	>6.0'	Well drained	Moderate	Moderate	Medium	Low	Low
71	Chatfield/Hollis	Fine sandy loam with rock	D	10"-20"	3-6	Well drained	Moderate	Moderate	Medium	Low	Medium
120	Urban Land-Charlton/Chatfield Complex	Loam with rock outcrops-disturbed	-	-	-	Variable	Variable		Variable		
1251	Leicester	Sandy loam	C	20"-40"	0-1.5	Poorly drained	Moderate		Medium	Medium	Medium
1252	Leicester-Stony	Stony sandy loam	C	20"-40"	0-1.5	Poorly drained	Moderate		Medium	Medium	Medium
	Glacial Stream Terrace Soils										
1	Hinckley	Sandy loam	A	>60"	>6.0'	Excessively drained	Rapid	Very rapid	Low	Low	Low
2	Knickerbocker	Fine sandy loam	A	>60"	>6.0'	Excessively drained	Moderately rapid	Rapid	Low	Low	Low
5	Pompton	Very fine sandy loam	B	>60"	1-2	Moderately well drained	Moderate	Rapid	Medium	Medium	Low
28	Fredon	Loam	C	>60"	0-1.5'	Poorly drained	Moderate	Rapid	Medium	Medium	Low
36	Unadilla	Silt loam	B	>60"	>6.0'	Well drained	Moderate	Rapid	High	Very high	Low
60	Riverhead	Sandy loam	B	>60"	>6.0'	Well drained	Moderately rapid	Very rapid	Medium	Medium	Low
	Alluvial Soils										
311	Fluvaquents	Loam	D	>60"	0-1'	Poorly drained	Moderately rapid	Moderately rapid	-	-	-
	Organic Soils										
101	Carlisle	Muck	D	>60"	+0.5-1.0	Very poorly drained	Moderately rapid		-	-	-
1011	Palms	Muck	D	>60"	+1.0	Very poorly drained	Moderately slow	Moderately rapid	-	-	-
	Miscellaneous Soils										
98	Gravel Pits	Too Variable to Classify									
99	Quarry Pits	Too Variable to Classify									
103	Aquents & Medisaprists Inundated	Too Variable to Classify									
104	Urban Land	Too Variable to Classify									
107	Udorthents Smoothed	Too Variable to Classify									
108	Udorthents Wet Substratum	Too Variable to Classify									

Sources: U. S. Department of Agriculture - Soil Conservation Service
Westchester County Soil and Water Conservation District (May 1985)

- **UPLAND HARDPAN SOILS** - Hardpans are present in upland soils that are formed over compact glacial till. An impervious clay layer makes water penetration beyond a foot or two very difficult. These soils are thus poorly suited for septic field development. These hardpan soils are typically associated with drumloidal formations. Drumlins are cigar-shaped hills left behind by the glaciers. They were formed when an advancing glacier met with a physical impediment. In overriding this impediment, the ice sheet left behind a wake of glacial till. The northern end is usually steeper and blunter than the southern end. The ridge tops of drumlins have usually been cultivated in the past, while the steeper slopes have been used for pasturelands or left as forest.

- **UPLAND SOILS SHALLOW IN DEPTH TO BEDROCK** - These soils are thin, rocky and generally underlain by bedrock within two feet of the surface. Rock outcrops are frequently associated with these soils.

- **GLACIAL STREAM TERRACE SOILS** - These soils were deposited by glacial streams and generally offer few impediments to development. They are present in several areas, primarily on gentle slopes adjacent to lakes, streams and wetlands.

- **ALLUVIAL SOILS** - Soils in this category form the flood plains along rivers. They are poorly drained wetlands that flood on a fairly regular basis.

- **ORGANIC SOILS** - These wetland soils are the result of a natural process in which certain freshwater bodies become filled over time with decayed plants. The process begins when a lake or pond develops a thin zone of water-tolerant plants along its shoreline. As these plants decompose, they form peat which provides a stable platform for the growth of some varieties of trees. The trees in turn decompose to form woody peat. As the process continues, the pond literally grows shut.

- **MISCELLANEOUS SOILS** - Most of these soils have been so disturbed by construction, excavation or filling that they no longer resemble any natural soil type.

In Table 10, the soils found in New Castle are grouped according to their form of origin.

Soil Characteristics

Table 10 summarizes some of the most important characteristics of each soil type. Some soil types are extremely fragile and difficult to develop and, therefore, should be altered only with extreme caution or left in a natural state. In other areas, soils are less fragile and can be treated with more flexibility. A description of each of these characteristics is presented on the following page.

- **HYDROLOGIC SOIL GROUP (HSG)** - This is an indication of the minimum rate of infiltration obtained for bare soil. Four hydrologic soil groups have been defined based on this rate, with "A" representing the highest infiltration rate and lowest runoff potential.

- **DEPTH TO BEDROCK (DBR)** - In New Castle, the depth to bedrock ranges from greater than six feet to right at the surface. Soils where the bedrock is at or near the surface present many problems for development. Blasting is often required to build foundations. Septic disposal is a problem because the effluent flows along the impermeable rock rather than percolating down through the soil. Shallow depth to bedrock soils are also a problem for maintaining mature forest cover. Since roots cannot penetrate the rock to any great extent, trees are susceptible to being blown over during storms with heavy rains and high winds.

- **DEPTH TO WATER TABLE (DWT) AND DRAINAGE** - This refers to the presence and/or level of a seasonal high water table (i.e., the level of the ground water). This level fluctuates with the seasons and is usually highest in the spring because of the influence of melting snow. In soils that are well drained, somewhat excessively drained or excessively drained, there is no indication of a seasonal high water table within 3 feet of the surface. Soils that are moderately well, somewhat poorly, poorly and very poorly drained exhibit an increasingly high water table. In very poorly drained soils, it is at or near the surface for prolonged periods. In moderately well drained soils, the presence of a seasonal high water table within 18 inches to 3 feet of the surface (i.e., a "perched" water table) is often caused by an impermeable layer below the surface.

- **PERMEABILITY** - The permeability of a given soil layer is the characteristic that describes its ability to transmit water and is different from drainage. It varies with the depth of the soil. Permeability is therefore indicated for both the surface and subsurface layers of soil (usually the A and B horizons) and the substratum layers (the C horizon and below). Soils with "hardpan" substratum layers have slow permeability. A hardpan is an impervious clay layer that blocks or slows the downward movement of water. Hardpan soils present severe limitations for the construction of septic fields. Septic effluent flows along the hardpan rather than filtering into the soil. It may run off into streams or travel to the surface if the hardpan layer is shallow enough.

- **ERODIBILITY** - Erodibility is a comparative measure of how susceptible a soil is to erosion. Some soils are naturally more erodible than others. Erodibility may vary with soil depth and may also be different for each layer of soil, i.e., surface, subsoil and substratum. The slope of the soil is not considered in establishing its erodibility classification; however, the severity of erosion will generally increase as the steepness of the slope increases. Erodibility is an important soil characteristic to consider as part of any development decision because it can affect the area to be developed as well as adjacent lands. In

easily erodible areas, rainwater runoff can carry away topsoil and deposit excessive amounts of it in streams. This increase in sediment in streams lowers the quality of the stream water.

A map entitled "Erodibility" has been prepared as part of this Plan to summarize the erodibility characteristics of the Town's soils. An examination of this map reveals that most of New Castle's soils have medium to high surface erodibility, with many of the areas so identified also exhibiting high subsurface erodibility —particularly in portions of the Town that are the least developed at present. This indicates that measures to control erosion and sedimentation are essential components of the development process.

Wet and Poorly Drained Soils

Unlike the classification system used by the New York State Department of Environmental Conservation in defining State-regulated wetlands, wetlands in New Castle are defined by the presence of poorly drained soils as well as wetland vegetation. As a guide to the identification of soil-defined wetland areas in the Town, a map entitled "Wet and Poorly Drained Soils" has been prepared as part of this Plan. This map identifies areas that exhibit poor drainage and ponding; extremely wet or organic soils; and soils subject to flooding or alluvial soils. Soil-defined wetlands are found throughout New Castle. The majority of areas so identified are associated with poor drainage and ponding conditions. These are usually very flat areas where both surface and ground water collect from areas of higher elevation.

Soil Potential Ratings

Historically, the interpretation of soil properties has focused on the concept of limitations, i.e., the degree of limitation that a soil has for a particular use. Ratings of "Slight," "Moderate" and "Severe" were assigned based on national guidelines and no attempt was made to provide a comparative assessment of soils. In the late 1970s, the Soil Conservation Service and the Westchester County Soil and Water Conservation District jointly developed a new system of evaluating soils in terms of their potential for a particular use, which reflected the relative quality of a soil for a specified use compared to other soils in a given area.

The soil potential ratings, ranging from "Very High" to "Low" (and "Unclassified") provide a more comprehensive evaluation of the relationship between soil properties and land use because they are based on an analysis of the pertinent limiting factors and the interaction among these factors in terms of local (Countywide) standards. They reflect consideration of: (1) performance levels; (2) the difficulty or relative cost of applying corrective measures to overcome or minimize the effects of limitations; and (3) adverse social, economic or environmental effects of soil limitations, if any, that cannot be feasibly overcome.

As part of this Plan, three maps have been prepared that depict the soil potentials for representative land uses that have particular applicability to New Castle: septic tank

absorption fields, small buildings without basements and underground utilities. The critical soil factors affecting septic tank absorption field potential are flooding or ponding; depth to bedrock; depth to water table; percolation rates and slope. Based on the Countywide soil potential rating system, much of the Town has a medium to low potential for the installation of septic tank absorption fields. This suggests that the design of septic fields to specific site conditions is of great importance. Proper design can still, in these areas, help to ensure no failure of the system and the resultant contamination to surface and ground water associated with such failure.

The critical soil factors affecting building potential are flooding; depth to water table; slope; and depth to bedrock. The soil potential rating system shows much of the Town as having a medium potential for small building construction. Development in these areas is not restricted, but some degree of extra design and construction caution is necessary. The next largest area within the Town is the low potential group, which implies that even greater care must be taken and/or money expended to ensure the proper development of these areas.

The critical soil factors affecting underground utilities potential are depth to bedrock; USDA texture (at depths of 20 inches to 60 inches); depth to water table; surface stoniness; and slope. According to the soil potential rating system, the potential for underground utility construction within New Castle is variable, with areas of high, medium and low potential accounting for roughly equal portions of the Town, but with the various areas unequally distributed through the Town. Areas of high potential are concentrated to the east of the Saw Mill River Parkway; along Pines Bridge Road; and in the northern section of the Town between and around Saw Mill River Road and Seven Bridges Road. The largest concentrations of soils with low potential are situated in the southern section of the Town between the Taconic State Parkway and the Saw Mill River Parkway. The map indicates that it would be physically feasible to provide underground utility service to a large portion of the Town when new or expanded development is considered. Of particular concern will be those areas with low to very low potential for both septic tank absorption field development and underground utility installation.

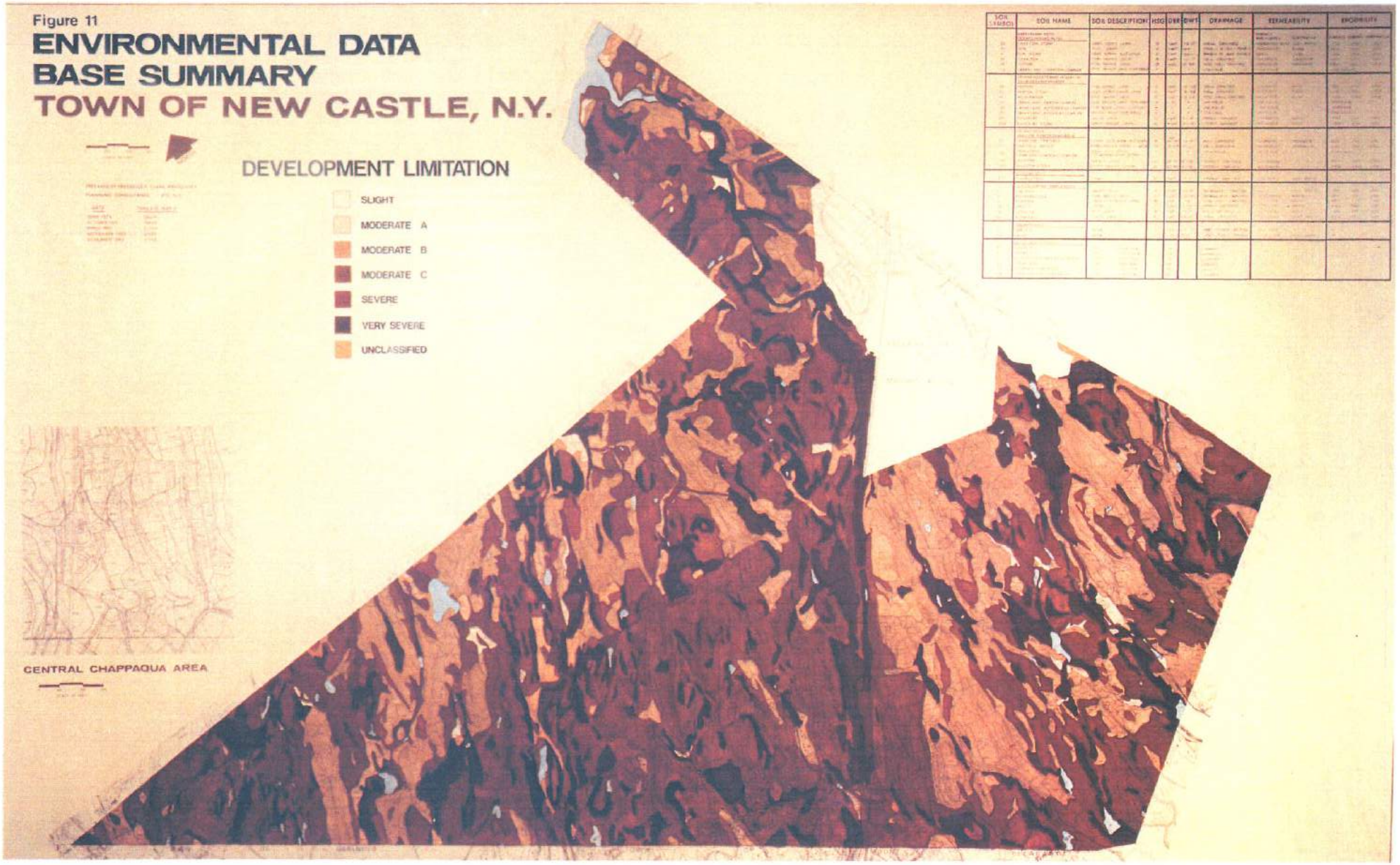
ENVIRONMENTAL DATA BASE SUMMARY

To consolidate and summarize the various elements in the Town's latest environmental data base, a composite map that combines the slope and soil characteristics present in the Town and the soil potential ratings associated with them has been prepared as part of this Plan. This summary map is reproduced herein as Figure 11. Soils have been classified in one of four major development limitation categories: Slight, Moderate, Severe and Very Severe. The characteristics of these categories are described below:

- **SLIGHT LIMITATIONS** - Soils with either A, B or C slopes; only one of the three potential ratings in the medium, low or very low category; and low surface erodibility. These soils present relatively few constraints to development.

Figure 11

ENVIRONMENTAL DATA BASE SUMMARY
TOWN OF NEW CASTLE, N.Y.



- **MODERATE LIMITATIONS**

  Moderate Group A - Soils with either A, B or C slopes; two or more potential ratings as medium, low or very low; and high surface but low subsurface erodibility.

  Moderate Group B - Soils with A, B, C or D slopes; two or more potential ratings as medium, low or very low; and high surface and high subsurface erodibility or worse.

  Moderate Group C - Soils with A, B, C, D or E slopes; all three potential ratings as medium, low or very low; and high surface and high subsurface erodibility or worse.

  Soils having moderate limitations exhibit environmental constraints that can be overcome if proper precautions are taken. To undertake construction activities on these soils, it is likely that additional costs will have to be incurred to ensure that such development occurs in an environmentally acceptable manner.

- **SEVERE LIMITATIONS** - Soils classified as "sensitive" according to the New Castle wetlands law or areas within the 100-year flood plain. Areas with these characteristics present major problems when development is attempted. Unless development proceeds with extreme caution and at low densities on such sites, serious adverse environmental impacts can result.

- **VERY SEVERE LIMITATIONS** - All soils with F slopes or classified as "wetlands" according to the New Castle wetlands law. Lands possessing these characteristics are generally unsuitable for development.

Figure 11 shows that based on this classification system, little of the Town is considered part of the "Slight" category, with only a little bit more assigned to the "Moderate Group A" category. The majority of the Town falls into the "Moderate B" and "Moderate C" groups. The categories of "Severe" and "Very Severe" are distributed evenly throughout the Town, with noticeable concentrations along the Saw Mill River Parkway, on either side of Saw Mill River Road, on either side of Spring Valley Road and between Whippoorwill Road and Armonk Road. An overall assessment of New Castle's natural environment reveals that further development is not easily accomplished in most areas and must be carefully monitored by the Town to ensure that no significant adverse environmental impacts result.

POPULATION AND HOUSING

A primary purpose of long-range planning is to meet the physical, social and economic needs of the people within a community. However, to assess and quantify these needs, at the outset it is necessary to understand the size, distribution and characteristics of the population—both existing and projected. This section presents an overview of the people who have chosen to live in New Castle as they can be identified by age, household relationship, employment, work place, travel characteristics and income. It also provides a description of the characteristics and condition of the Town's housing stock. By comparing 1980 U.S. Census findings to those of earlier censuses, trends can be identified, analyzed and properly related to planning the Town's future.

A statistical review of New Castle residents' characteristics as well as of the Town's existing housing stock follows. The information discussed has, for the most part, been gathered by the United States Department of Commerce - Bureau of the Census, chiefly in the 1980 Census of Population and Housing. Some of the data are based on a 17% sample rather than a 100% data file. All figures have been adjusted to exclude the Village of Mount Kisco, which became a coterminous Town/Village in 1978.

POPULATION

Population Growth

The Town of New Castle has experienced a continuous increase in population since the beginning of this century, although the rate of population growth for each decennial U.S. Census has fluctuated considerably as shown in Table 12. According to the U.S. Census, the population of New Castle increased almost tenfold between 1920 and 1980, to a total of 15,425. The largest percentage increase occurred in the 1920-1930 decade. The largest numerical increase, however, occurred during the 1950-1960 decade, when the population of the Town nearly doubled from 5,312 to 10,163. During the 1970-1980 decade, the Town experienced its smallest numerical and percentage increase in population since 1920. Nonetheless, since the early part of this century, the Town's population has continuously represented an increasing proportion of the County's population.

Based on a review of the Town's residential construction and occupancy trends since 1980, coupled with a projection of average household size, the Westchester County Department of Planning estimates that New Castle's population as of January 1, 1988 was 15,875. This represents an increase of 2.9% over the 1980 U. S. Census figure.

Table 12

POPULATION - 1920 TO 1980
NEW CASTLE AND WESTCHESTER COUNTY

Year	New Castle			Westchester County Population	New Castle as Percentage of Westchester County
	Population	Population Increase by Decade			
		Number	Percentage		
1920	1,580	—	—	344,436	0.5%
1930	3,603	2,023	128.0%	520,947	0.7%
1940	4,403	800	22.2%	573,558	0.8%
1950	5,312	909	20.6%	625,816	0.8%
1960	10,163	4,851	91.3%	808,891	1.3%
1970	14,685	4,522	44.5%	894,104	1.6%
1980	15,425	740	5.0%	866,599	1.8%

Source: U.S. Census

Comparison of Population Growth With Neighboring Communities

As shown in Table 13 on the following page, while the population of Westchester County as a whole declined by 3% during the 1970-1980 decade, virtually all the towns in northern Westchester continued to grow. The exceptions were Bedford and North Castle, which both experienced relatively small losses in population, and Ossining, which experienced a more substantial loss. Much of the population growth that occurred in the northern part of the County bypassed New Castle for the Towns of Yorktown, Somers and Lewisboro, which experienced the largest numerical increases. The Towns of Somers, Lewisboro and North Salem stood out as the communities with the largest percentage increases. By contrast, during the 1960-1970 decade, population growth in the northern part of the County was more evenly distributed among all the towns.

Table 13

POPULATION GROWTH - 1970 TO 1980
NEW CASTLE AND OTHER NORTHERN WESTCHESTER TOWNS

	1970	1980	1970-1980 Change	
			Number	Percentage
NEW CASTLE	14,685	15,425	740	5.0%
Bedford	15,309	15,137	-172	-1.1%
Cortlandt	24,760	26,775	2,015	8.1%
Lewisboro	6,610	8,871	2,261	34.2%
Mount Pleasant	22,462	23,760	1,298	5.8%
North Castle	9,591	9,467	-124	-1.3%
North Salem	3,828	4,569	741	19.4%
Ossining	4,846	4,164	-682	-14.1%
Pound Ridge	3,792	4,009	217	5.7%
Somers	9,402	13,133	3,731	39.7%
Yorktown	28,064	31,988	3,924	14.0%
WESTCHESTER COUNTY	894,104	866,599	-27,505	-3.1%

Note: All figures are based on unincorporated town areas.

Source: U. S. Census

Population Density

Another perspective on population trends is presented by comparing both population and land area. Table 14 shows the change in population density between 1960 and 1980 for New Castle and the surrounding northern Westchester towns. With a 1980 population density of 659 persons per square mile, the fifth highest among the northern Westchester towns, New Castle fell into the upper middle density range. Table 14 also clearly illustrates the dramatic geographic redistribution of population that has been taking place within Westchester County over the past several decades. While the County's population density increased by only 7% between 1960 and 1980, the northern Westchester towns registered significantly higher percentage increases in population density, ranging from a low of approximately 20% in Mount Pleasant to almost 140% in Somers. During this 20-year period, New Castle's population density increased by close to 52%.

Table 14

POPULATION DENSITY - 1960 TO 1980
NEW CASTLE AND OTHER NORTHERN WESTCHESTER TOWNS

	Total Area* (square miles)	Persons Per Square Mile		
		1960	1970	1980
NEW CASTLE	23.39	435	628	659
Bedford	39.71	299	389	381
Cortlandt	34.86	502	710	768
Lewisboro	28.95	144	228	306
Mount Pleasant	24.15	817	930	984
North Castle	26.30	258	365	360
North Salem	23.18	89	146	174
Ossining	3.14	945	1,543	1,326
Pound Ridge	23.26	111	164	173
Somers	32.05	171	293	410
Yorktown	39.42	417	712	811
WESTCHESTER COUNTY	450.07	1,797	1,987	1,925

*Total municipal areas are measurements from the "Generalized Land Use Inventory, Westchester County, New York, January 1980." Total areas include all interior water bodies and to mapped shorelines of the Long Island Sound and Hudson River. The population density for the Town of Bedford has been adjusted to reflect an annexation to Mount Kisco in 1978.

Sources: U. S. Census
Westchester County Department of Planning

Population Trends Within the Town

Within New Castle itself, while all areas of the Town experienced increases in population over the past few decades, this growth was not uniformly distributed. An analysis of the relative rates of growth in New Castle is possible using data on census tracts. Since 1970, the Town has been divided into three census tracts. Prior to that, the Town was composed of only two tracts. As part of a Special Census completed for Westchester County in 1965, the Town was also divided into 14 enumeration districts. These can be aggregated into the three census tracts currently used. Since census data for enumeration districts was not available prior to 1965, an historical analysis of population growth within New Castle must be limited to the 1965-1980 period.

During the 1970-1980 decade, each of the census tracts experienced growth in population, ranging from less than a 1% increase in the western part of the Town to over 13% in the central part. As illustrated in Figure 15, almost 95% of the population increase which occurred during this decade was absorbed by the central part of the Town. By contrast, between 1965 and 1970, the increase in population was more dispersed, with most (51%) of New Castle's growth taking place in the western part of the Town. While all three areas experienced growth between 1965 and 1980, the eastern part continued to represent a declining share of the Town's population.

As of 1980, New Castle's population was fairly evenly distributed among the three census tracts, with the eastern and western parts of the Town each housing about 30% of the total population and the central part accounting for the remaining 40%. Since the three tracts are not equal in size, however, these figures conceal significant differences in population density. While the Townwide average was 659 persons per square mile in 1980, by census tract they ranged from a high of 872 persons per square mile residing in the central portion of the Town to a low of 529 persons per square mile living in the western part of the Town. The eastern part of New Castle had a population density of 616 persons per square mile. To a large extent, these variations have resulted from historical patterns of settlement that are directly related to the location and adequacy of transportation corridors and that have been reinforced by utility infrastructure and local zoning regulations.

Sources of Population Growth

Population growth results from both "natural increase" (an excess of births over deaths) and "net in-migration" (an excess of people moving into the community over people moving out). New Castle has experienced both types of growth over the years, but the relative proportion of each has varied considerably.

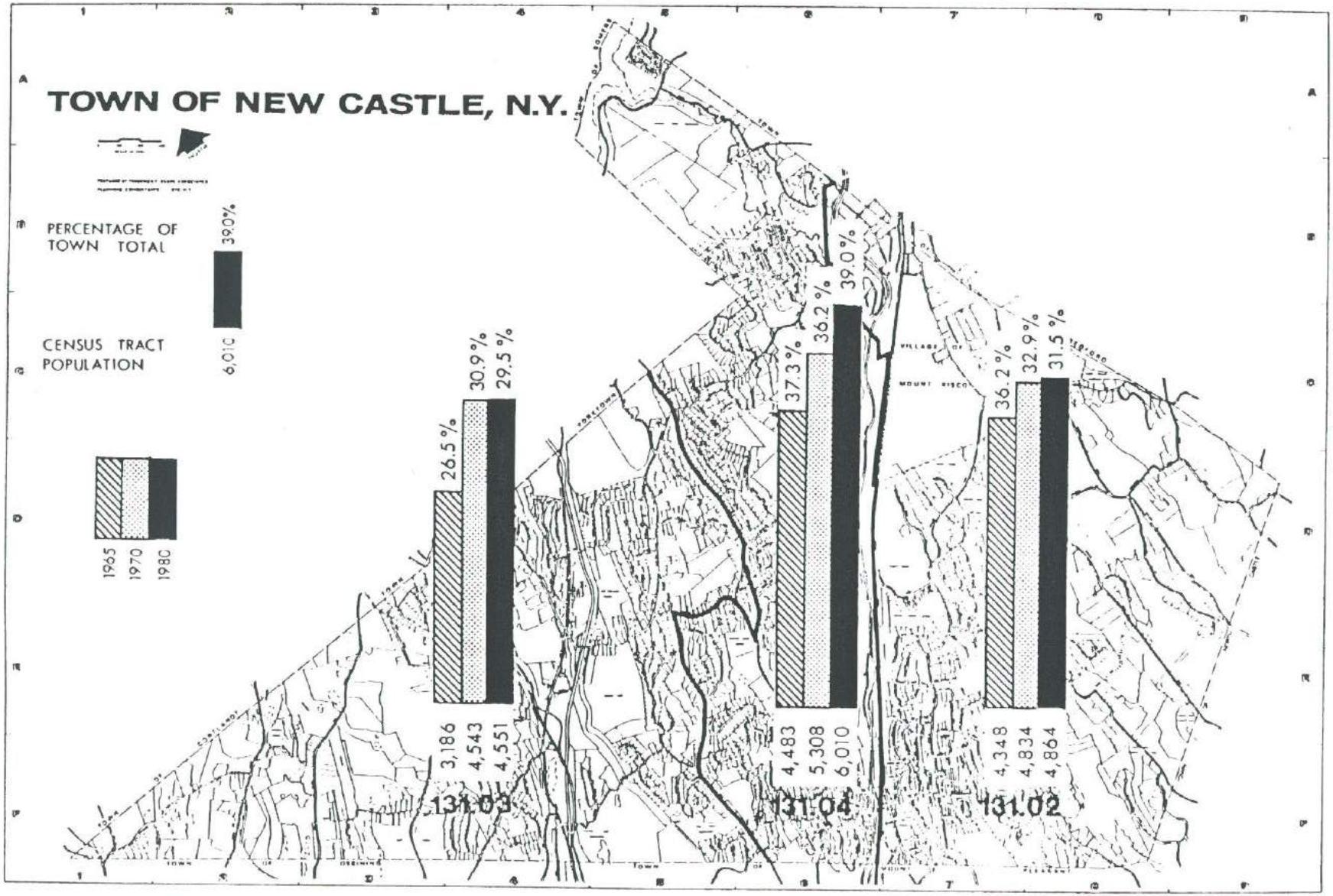
Between 1970 and 1980, in-migration accounted for about 11% of the Town's growth. Between 1960 and 1970, in-migration was responsible for close to 86% of the Town's growth. By contrast, during the 1950-1960 decade, the relative balance between natural increase and net in-migration was similar to the pattern of the 1970-1980 decade.

Since a primary objective of long-range planning is to meet the varied needs of a community's residents, an important aspect of the study of population is an analysis of the underlying components of migration. By using a technique referred to as a "cohort survival analysis," it is possible to estimate both in-migration and out-migration by age group.

Between 1960 and 1980, a substantial amount of out-migration took place within the 20-24 age cohort. This is not surprising since a large percentage of the Town's high school graduates go on to college and post-graduate study. During the second decade, however, a pattern of net out-migration encompassed the 25-34 age cohort as well. During the 1960-1970 decade, this age group experienced net in-migration but

Figure 15

POPULATION BY CENSUS TRACT - 1965 TO 1980
TOWN OF NEW CASTLE



Source: U.S. Census

this trend reversed itself in the subsequent decade and the Town registered a net loss in this category.

Equally significant is the trend that was evident at the upper end of the age spectrum. During the 1960-1970 decade, while the Town experienced a large amount of net in-migration, losses among persons over 55 years of age outweighed any gains that might have taken place in these age cohorts. In fact, based on this statistical analysis, all the Town's net out-migration during this decade could be attributed to the over-55 age cohorts as well as the 20-24 age cohort. During the 1970-1980 decade, the Town experienced a much slower rate of population growth and, along with it, a proportionately smaller amount of net in-migration. Concealed behind these generalized trends, however, was a substantial increase in out-migration among persons 55 years of age and older. Of equal importance is the fact that net losses resulting from migration began with the 45-49 age cohort, unlike the pattern of the 1960-1970 decade.

A number of factors are likely to be responsible for these trends. Among the 20-24 and 25-29 age cohorts, educational pursuits no doubt account for a great deal of net out-migration. Additionally, persons in these age groups may also prefer the amenities available and lifestyle choices possible in urban areas as contrasted with a suburban community such as New Castle. Of equal importance, however, is the high cost of housing in the Town and the predominance of conventional single-family dwellings, which together limit the housing choices available to persons in these age groups.

Among those 55 years of age or older, housing choice and cost are undoubtedly two major factors in the decision to move out of New Castle, although preference for a warmer climate may also be a consideration. The single-family dwelling has constituted the predominant housing type in New Castle because of its obvious utility for raising a family in a suburban environment. However, older families without children living at home —the so-called "empty-nesters" —may find this type of homeownership overly burdensome as well as uneconomical, particularly in view of the fact that family income often decreases around retirement, thus creating pressures to limit housing costs, especially those attributable to educational and recreational services.

Age and Sex Characteristics

As important as the knowledge of total population is to the process of long-range planning, it is equally important to identify those characteristics of the population that affect features of land use and community facilities and services. The number and location of schools, recreational and commercial facilities, and the amount and type of housing that will be necessary in the future, are a function of many demographic factors, including the age, social and income characteristics of the population.

Although the Town's population increased by only a modest amount during the 1970-1980 decade, the age shifts that occurred are significant. As shown in Table 16 and Figure 17 on the following pages, the aging of the population, which has been

identified as a national trend, was also experienced in New Castle, where the median age rose from 31.3 years in 1970 to 33.3 years in 1980. Between 1970 and 1980, the Town experienced a decline in the number of persons under 20 years of age, in both numerical and percentage terms, with a more than compensating increase in the number of persons in the 35-54 age group. At the same time, the number of persons over 65 years of age continued to increase, although this segment of the population has represented an almost constant proportion of the total population since 1960. By contrast, the aging of the population has been even more pronounced in Westchester County as a whole.

Table 16

CHANGE IN AGE COMPOSITION - 1960 TO 1980
TOWN OF NEW CASTLE

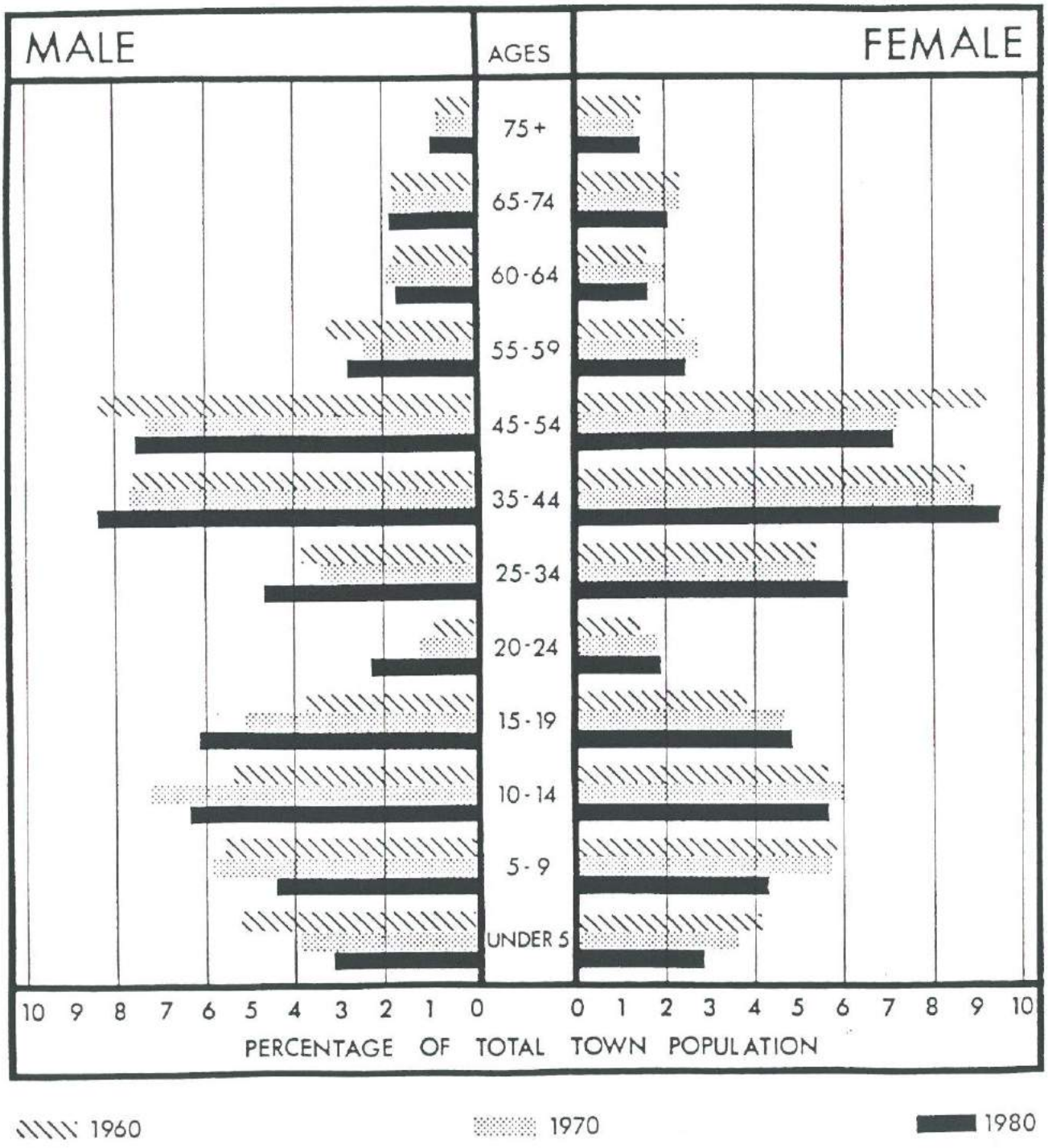
Age Group	1960	1970	1980	Percentage Change	
				1960-1970	1970-1980
Under 5	954	1,091	930	14.4%	-14.8%
5-9	1,163	1,716	1,336	47.5%	-22.1%
10-14	1,113	1,949	1,861	75.1%	-4.5%
15-19	764	1,420	1,695	85.9%	19.4%
20-24	233	425	651	82.4%	53.2%
25-34	927	1,294	1,653	39.6%	27.7%
35-44	1,661	2,462	2,745	48.2%	11.5%
45-54	1,801	2,134	2,270	18.5%	6.4%
55-59	576	754	803	30.9%	6.5%
60-64	330	572	508	73.3%	-11.2%
65-74	421	581	617	38.0%	6.2%
75+	220	287	356	30.5%	24.0%
Total	10,163	14,685	15,425		

Source: U. S. Census

Despite its aging profile and changing structure, in 1980 New Castle essentially remained a family-oriented community, with over 53% of its population composed of school-age children between the ages of 5 and 14 and adults between the ages of 35 and 54. By contrast, the figure for Westchester County as a whole was slightly less than 39%. Both figures were somewhat larger in 1960. Although it is unusual for a community to follow the average profile for the County, the differences between New Castle and Westchester County were striking, as graphically illustrated in Figure 18.

Figure 17

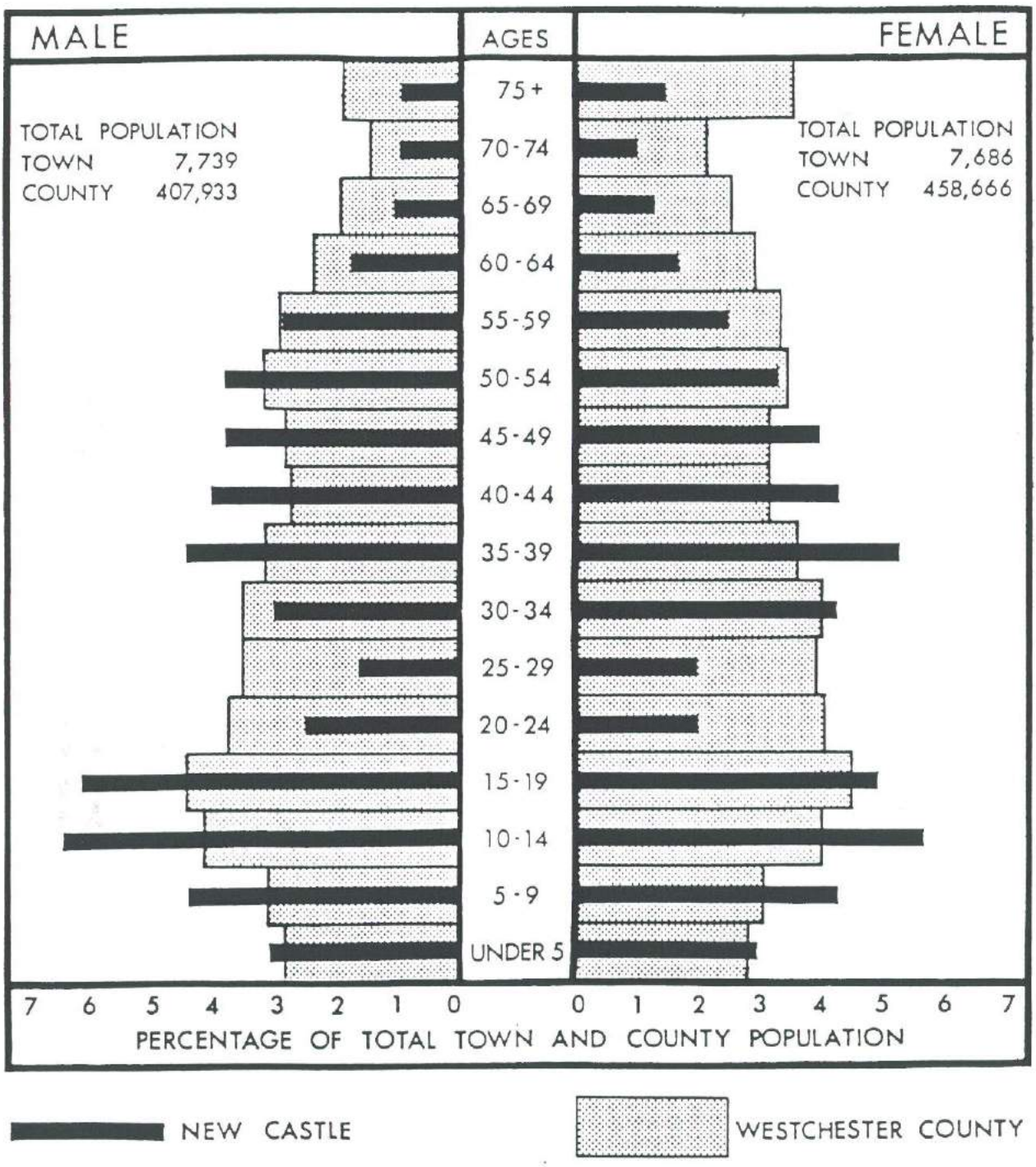
AGE DISTRIBUTION BY SEX - 1960 TO 1980
TOWN OF NEW CASTLE



Source: U. S. Census

Figure 18

AGE DISTRIBUTION BY SEX - 1980
NEW CASTLE AND WESTCHESTER COUNTY



Source: U.S. Census

The significant bulges in the Town's population under 20 and between 35 and 54 years of age stood out sharply against the County profile. Conversely, the disproportionately smaller number of persons in the 20-29 age group and over 55 age group for New Castle were equally pronounced.

Reasons offered in the past for the Town's distinctive age profile are generally still applicable. They include the strong attraction of the high quality Chappaqua school system to families with school-aged children; the relative lack of rental units or smaller moderately-priced dwellings sought by young families; the expense and responsibility of maintaining large homes on large lots that tend to skew the population profile toward families with several children and high income; and the out-migration of older retired couples who may no longer need a large home or who wish to reduce their housing costs but are unable to remain within the community because of a shortage of small, affordable residential units.

Educational Characteristics

New Castle residents are highly educated, with almost 62% of the Town's residents over the age of 24 having had four or more years of college as of 1980, compared to the Westchester County average of 28%. Among all Westchester County towns, only Scarsdale had a higher percentage in this category (64%). Close to 94% of New Castle's residents over the age of 24 had a high school education compared to the County average of 75%. As of 1980, median years of school completed in New Castle and Westchester County were 16.4 and 12.8, respectively.

Residential Mobility

Almost 12% of New Castle's households moved into new residences in the Town during the 15-month period preceding the taking of the 1980 U. S. Census; close to three out of five had moved into new residences since the 1970 U. S. Census was completed. As of 1980, almost 16% of the Town's households had resided in the same residences in New Castle for more than 20 years. The County figure of 28% indicated a somewhat higher degree of residential stability among all the County's households taken as a whole.

As of 1980, approximately one-third of the Town's residents had moved in during the preceding five-year period. This is virtually identical to the Countywide average. However, almost 9% of these new Town residents had lived outside New York State compared to 4% for Westchester County. New Castle also contained a proportionately larger share of residents who had been living abroad in 1975. These figures reflect both the high rate of in-migration within the Town and the level of mobility that characterizes much of the population of the United States.

Marital Status

The marital status of persons in New Castle is presented in Table 19. Although the share of the Town's population consisting of married couples declined slightly between

1970 and 1980 to approximately 77%, it was still substantially above the County average of 60%. As of 1980, separated and divorced persons collectively accounted for 4.2% of New Castle's adult population and 7.5% of the County's. This is a larger share than in 1970, reflecting a national trend toward increasing divorce rates. In New Castle, over the 10-year period the number of separated and divorced persons more than doubled. There was also a 12% increase in the number of persons classified as single. By contrast, Westchester County as a whole experienced a 38% increase in the number of single persons.

Table 19

MARITAL STATUS OF PERSONS 18 YEARS AND OLDER - 1970 AND 1980
TOWN OF NEW CASTLE

	1970		1980		
	Number	Percentage Of Total	Number	Percentage Of Total	Percentage Change 1970-1980
Now Married	6,910	78.1%	7,711	76.7%	11.6%
Separated	61	0.7%	129	1.3%	111.5%
Divorced	124	1.4%	290	2.9%	133.9%
Widowed	439	5.0%	453	4.5%	3.2%
Single*	1,308	14.8%	1,469	14.6%	12.3%
Total	8,842	100.0%	10,051	100.0%	

*The U. S. Census included the marital status of persons 14 years of age and older in 1970 and 15 years of age and older in 1980. For the purpose of this analysis, it was assumed that all persons under 18 years of age were single and appropriate adjustments were made to the figures in the "single" category.

Source: U. S. Census

Household Composition

The 1980 U. S. Census data confirmed that the national trend toward a diversification of household types from the traditional family composition had been occurring in New Castle as well. The Census distinguished between two different categories of households: family households (i.e., families) and nonfamily households. A family was defined as two or more persons living in the same household who were related by birth, marriage or adoption. A nonfamily household could include one person living alone or with other unrelated individuals.

Between 1970 and 1980, the number of households in New Castle increased by over 17% while the total population increased by only 5%. As shown in Table 20, despite an 11% increase in numerical terms, the percentage of households in New Castle that were composed of a married couple, with or without children or other relatives, declined from 87.1% to 82.6% of all households in the Town. At the same time, "nontraditional" households became more prevalent, with the number of other family households and nonfamily households each increasing by approximately 58%.

Among family households, the percentage share held by other family (e.g., single parent) households increased from 5.6% to 7.5%. Of the 341 households of this type, 80% were headed by a female. The number of one-person households increased by over 46% to a total of 8.2% of the Town's households. One-person households were synonymous with female households in three out of five cases. The number of unrelated persons living together as a household increased by the largest percentage (168%) and also represented a larger share of the Town's total households.

Table 20

TYPE OF HOUSEHOLD - 1970 AND 1980
TOWN OF NEW CASTLE

Type of Household	1970		1980	
	Number Of Households	Percentage Of Total	Number Of Households	Percentage Of Total
Married Couple	3,385	87.1%	3,757	82.6%
Other Family	216	5.6%	341	7.5%
Total Family Households	3,601	92.7%	4,098	90.1%
One Person	256	6.6%	374	8.2%
More Than One Person	28	0.7%	75	1.6%
Total Nonfamily Households	284	7.3%	449	9.8%
Total Households	3,885	100.0%	4,547	100.0%

Source: U. S. Census

Despite these changes in household living arrangements, New Castle remained far more family-oriented in 1980 than Westchester County as a whole. On a Countywide basis, almost 40% of the households could be considered "nontraditional," compared

to a figure of 17% for the Town. One-person households accounted for the largest share within this category. Although female-headed households represented a slightly larger proportion of the County's nonfamily households (64% versus 57% for New Castle), they were no more dominant among other family households.

Table 21 describes the composition of the Town's households by number of persons and relationship. While approximately 10% of New Castle's households were of a nonfamily type, persons residing in these households represented only 3.5% of the Town's population. Within New Castle, a total of 189 persons or slightly more than 1% of the Town's population resided in group quarters. These included facilities such as Maryknoll, boarding houses and group homes.

Table 21

POPULATION BY HOUSEHOLD RELATIONSHIP - 1980
TOWN OF NEW CASTLE

Relationship	Number Of Persons	Percentage Of Total
Householder	4,098	26.6%
Spouse of Householder	3,757	24.4%
Child of Householder	6,294	40.8%
Other Relatives of Householder	380	2.5%
Nonrelatives	162	1.0%
Total Family Household Population	14,691	95.3%
Male Householder	194	1.3%
Female Householder	255	1.6%
Nonrelatives	96	0.6%
Total Nonfamily Household Population	545	3.5%
Total Household Population	15,236	98.8%
Residents of Institutions	31	0.2%
Others	158	1.0%
Total Group Quarters Residents	189	1.2%
Total Population	15,425	100.0%

Source: U. S. Census

The 1980 U. S. Census also detailed the household characteristics of persons over 64 years of age. It revealed that during the 10-year period from 1970 to 1980, the percentage of persons 65 years of age and older living alone in New Castle increased. However, in 1980 they represented a significantly smaller proportion (15.7%) of all senior citizen households as compared to Westchester County (24.9%). By contrast, a much larger percentage of the Town's senior citizens lived with other relatives.

Household Size

Between 1950 and 1970 the average household size in New Castle increased from 3.55 to 3.67 persons per occupied housing unit. In 1965, when a Special Census was undertaken for Westchester County, the average number of persons per "occupied living quarter" had peaked at 3.76. Since then, it has declined rapidly as presented in Table 22. This is consistent with a long-term trend toward smaller households that has prevailed throughout the country. Within New Castle, one- and two-person households accounted for one-third of the Town's households in 1980, up 32% from 1970.

Table 22

HOUSEHOLD SIZE - 1950 TO 1980
TOWN OF NEW CASTLE

Year	Total Housing Units	Total Occupied Housing Units	Population in Households*	Average Household Size
1950	1,603	1,467	5,212	3.55
1960	3,039	2,808	10,001	3.56
1970	4,017	3,885	14,277	3.67
1980	4,742	4,547	15,236	3.35

*Households exclude population in institutions and other group quarters.

Source: U. S. Census

Average household size should not be confused with average family size, which was 3.58 persons in New Castle in 1980, compared to a Countywide average of 3.29 persons. Average family size also declined between 1970 and 1980, but the drop in average household size was much more dramatic.

The average household size for all Westchester County has been dropping continuously since 1950, when the figure was 3.40. It was 2.74 in 1980 and is believed to be still dropping. Since the County figure represents an average of all its 43 cities, towns and villages, it is apparent that this reduction in average household size was even more pronounced in other municipalities within Westchester County than it was in New Castle.

A number of reasons have been cited for this important nationwide demographic trend:

- More women have entered the work force during this period and the average birth rate has declined.
- A higher divorce rate and growing acceptance of the single lifestyle have resulted in more one-person households.
- Increased longevity has resulted in more people living past retirement age.
- The population is composed of a higher proportion of adults.
- Growing financial resources and a generally improved state of health have enabled many senior citizens to maintain their own households.

In spite of an 8.7% reduction in average household size between 1970 and 1980, New Castle still had the largest of any northern Westchester town, as shown in Table 23. However, Yorktown had the largest average household size for owner-occupied units. With an average household size of 3.14 persons for renter-occupied units, New Castle far exceeded the average for any other northern Westchester town in that category. It also exceeded the Countywide average for all types of housing units.

Table 23

HOUSEHOLD SIZE - 1980
NEW CASTLE AND OTHER NORTHERN WESTCHESTER TOWNS

	Average Household Size*		
	Total	Owner-Occupied	Renter-Occupied
NEW CASTLE	3.35	3.37	3.14
Bedford	3.01	3.29	2.24
Cortlandt	2.94	3.28	2.00
Lewisboro	3.20	3.33	2.35
Mount Pleasant	3.13	3.27	2.32
North Castle	3.18	3.31	2.57
North Salem	3.10	3.20	2.56
Ossining	3.00	3.12	2.44
Pound Ridge	3.10	3.17	2.51
Somers	3.15	3.21	2.44
Yorktown	3.30	3.46	2.31
WESTCHESTER COUNTY	2.74	3.17	2.26

*Households exclude population in institutions and other group quarters.

Source: U. S. Census

The projection of future household size is an important planning consideration. One consequence of a decrease in household size is a relative increase in the amount of housing and of land required to accommodate each person. For example, while 272 dwelling units could house 1,000 people in New Castle in 1970, 298 dwelling units were required to house that same number by 1980. If these units were all assumed to be single-family dwellings in the R-2A District, this would translate into approximately 60-65 acres of land that might not have been needed to house these residents had the average household size remained the same.

A limited amount of information is available at the local level to estimate current average household size in New Castle. One means by which an updated figure could be derived is to estimate the number of persons residing in the Town's newly constructed residential units based on the 1980 average household size for each of the two tenure types. By assuming that newly constructed single-family detached residences are owner-occupied units and all other categories of new residential construction (i.e., single-family attached units, multifamily units and accessory apartments) have household characteristics similar to rental units, an average figure of 3.26 persons per household would result for only the units constructed between April 1980 and October 1984. When the Town's 1980 occupancy and tenure characteristics are considered, the result is a slight decrease from the 1980 average figure of 3.35 persons for all occupied housing units.

Projections of average household size for New Castle must obviously be prepared in light of national and regional demographic trends as well. Although a detailed census is undertaken by the U. S. Department of Commerce only once every 10 years, regional population estimates are prepared annually. This updated information reveals that average household size in the metropolitan areas of the northeastern United States was approximately 1.8% lower in March 1984 than it was four years earlier. If this trend prevailed in New Castle, the average household size as of January 1, 1985 would have been 3.27 persons. Carrying this estimate forward would yield projections of 3.19 in 1990, 3.11 in 1995 and 3.04 by the year 2000.

Clearly, there is a danger in merely assuming a continuation of the historical trend. Although birth rates have declined over the past several decades, in recent years a reversal of that trend has been detected. In New Castle itself, the birth rate among women in the prime childbearing years of 25 to 44 increased by approximately 28% between the first and second halves of the 1970-1980 decade. Only part of this increase was attributable to the fact that the number of women in the childbearing years also increased during the decade. If the number of women in this age group continues to increase, this factor alone could slow the decline in average household size that has been occurring both locally and on a regional level, thus underscoring the uncertainty surrounding simple linear projections based on historical trends. In fact, the Westchester County Department of Planning estimates that average household size in New Castle remained stable at about 3.27 between January 1, 1984 and January 1, 1987.

The future size of New Castle's households will also be influenced by local factors such as the size and type of housing constructed in the Town. Because multifamily housing is generally smaller in size than single-family dwellings and is occupied by families with fewer children and/or single individuals, the addition of new multifamily units (including single-family attached units and accessory apartments) will tend to result in a lowering of the Town's average household size. The price and size of single-family homes could also influence household size. Generally, as prices go up, the average household size goes down because many of the purchasers are likely to be either childless professional couples or middle-aged families in their peak earning years.

Population Projections

In 1979, the Westchester County Department of Planning issued a report entitled ***Westchester's Population: Toward the Year 2000***, in which population projections for each of the County's municipalities were developed for 1980 through the year 2000 by five-year increments. The forecasts prepared at that time were based on a series of assumptions, including those related to fertility rates, household size, residential construction activity and the County's economy in general. The results of that analysis are shown in Table 24.

Table 24

POPULATION PROJECTIONS - 1980 TO 2000
NEW CASTLE AND WESTCHESTER COUNTY

Year	New Castle	Westchester County	Town as Percentage Of County
1980	16,300	860,000	1.9%
1985	17,200	840,000	2.0%
1990	18,600	845,000	2.2%
1995	19,800	850,000	2.3%
2000	20,400	850,000	2.4%

Source: ***Westchester's Population: Toward the Year 2000***, Westchester County Department of Planning, September 1979

As can be seen, the 1980 population forecast for the County fell within 1% of the actual 1980 figure recorded by the U.S. Census. The projection for New Castle, however, was almost 6% higher than actual. All these forecasts were based on trend projections, which are subject to decreasing accuracy as the size of the study area is reduced. These projections also illustrate the central problem with any trend analysis: short-term changes tend to create a distortion that is magnified by the term or length of the

projection. As an example, the County's 1985 projection for New Castle was close to 8% higher than the Town's estimated 1985 population of 15,954.

In spite of their obvious shortcomings, population projections are nonetheless useful in charting the course of a community in future years. Since more current Census data is now available and detailed information on the recent rate of residential construction in New Castle has been compiled, revised population projections for the Town were prepared as part of this study. For purposes of comparison, three alternative scenarios are presented in Table 25. All are based on a constant rate of residential construction akin to that which has occurred since 1980, although an accelerated rate of new residential construction may actually result in response to the demands generated by new office development in the Town and in nearby communities. In addition, all analyses assume a vacancy rate and group quarters population comparable to that which existed in 1980. The distinguishing feature of these analyses is the assumption about household size.

Table 25

POPULATION PROJECTIONS - 1985 TO 2000
TOWN OF NEW CASTLE

Year	Scenario #1*	Scenario #2*	Scenario #3*
1985	16,339	15,954	15,954
1990	17,304	16,895	16,487
1995	18,272	17,840	16,977
2000	19,237	18,782	17,474

*Assumptions common to all scenarios include a future residential construction rate of 60 units per year, a vacancy rate of 3.8% and a group quarters population of 189 persons. Scenario #1 assumes that average household size will remain at its 1980 figure of 3.35 persons per occupied housing unit. Scenario #2 assumes that average household size will remain at its estimated 1987 level of 3.27. Scenario #3 assumes that average household size will continue to decline at a rate comparable to the regional trend of 1.8% between 1980 and 1984.

Source: Frederick P. Clark Associates

As mentioned previously, it is difficult to determine with any degree of certainty what the average household size of New Castle will be at a given point in time, particularly since local patterns rarely follow regional trends precisely. However, a continuing downward trend would not be surprising, given the Town's changing age profile and the fact that multifamily units account for an increasing proportion of the Town's housing stock. It is the rate of that decline, however, that is subject to the most

speculation. Historically, if a comparison to Countywide trends is made, it reveals considerable variation between Westchester County and New Castle since 1950. Consequently, reliance on regional trends —particularly if they are based on large geographic areas—can be somewhat misleading if they are applied to a comparatively small area such as New Castle. Notwithstanding these uncertainties, it is estimated for planning purposes that the Town's year 2000 population will be approximately 18,000 persons.

As noted in the "Existing Land Use" section, as of 1984 it was estimated that approximately 3,543 additional dwelling units could be built in New Castle under prevailing zoning and land development regulations, bringing the maximum number of dwelling units in the Town to about 8,560. Based on the assumption that average household size for single-family units, multifamily units and accessory apartments would be 3.27, 2.50 and 1.85, respectively, and that the Town's group quarters population would remain at 189, it was projected that New Castle's ultimate population potential could reach 27,500 persons. The Town's 1988 population represented approximately 58% of this figure.

Employment Trends

Of the 10,889 persons 16 years of age and older who lived in New Castle in 1980, 6,977 or approximately 64% were considered to be part of the labor force. This is virtually identical to the Westchester County average of 63.5%. Only 3% of the Town's labor force (213 persons) was unemployed at the time of the 1980 U. S. Census compared to a Countywide unemployment rate of 4.3%.

Between 1970 and 1980, the number of persons over 15 years of age in New Castle increased by 13%, yet the Town's labor force grew by almost twice that amount. The number of women entering or reentering the job market was undoubtedly responsible for a large part of this increase. By 1980, women represented approximately 7% more of the Town's population 16 years of age and older than they did in 1970, yet the number of women in the labor force increased by almost 40% during this same period. By contrast, the increase in the male labor force was approximately comparable to their population increase. In 1980, women accounted for 37% of the Town's labor force and 45% of the County's.

Stemming largely from the increase among women in the labor force, two-worker families accounted for more than half (58%) of the Town's families in 1980. Countywide, the average was nearly the same (57%). While the County had a larger percentage of families with no workers (11% versus 3% for New Castle), one-worker families were more prevalent in the Town (39% compared to 33% for all Westchester County).

The 1980 U. S. Census also compiled data on the employment characteristics of women with children. Approximately 20% of the women in New Castle with children under the age of 6 were part of the labor force. By contrast, 57% of the women whose children were between the ages of 6 and 17 considered themselves to be part of the

labor force. Within the County as a whole, the presence of children appeared to be less of a deterrent to women working. More than 38% of the County's women with preschool or kindergarten age children were part of the labor force, while 63% of the women with older children were in this category.

Of the Town's 6,754 employed residents, 766 or approximately 11% worked for the government, with local government workers representing the largest segment of this group. An additional 686 persons described themselves as being self-employed and another 6 persons were considered unpaid family workers. The majority, or 78%, of the Town's employed labor force was composed of private wage and salary workers.

Tables 26 and 27 present additional information on the occupations of New Castle's employed workers and on the types of industries that employ them. As of 1980, over 60% of the Town's workers were employed in managerial and professional occupations, compared to a Countywide average of 33%. The industry profiles for the Town and the County exhibited greater similarity.

Table 26

EMPLOYMENT DISTRIBUTION BY TYPE OF OCCUPATION - 1980
TOWN OF NEW CASTLE

Occupation	Number of Persons	Percentage Of Total
Managerial/Professional	4,077	60.4%
Technicians	187	2.8%
Sales	778	11.5%
Administrative Support/Clerical	823	12.2%
Private Household	84	1.2%
Protective Service	48	0.7%
Other Service	307	4.6%
Farming/Forestry/Fishing	23	0.3%
Precision Production/Craft/Repair	232	3.4%
Operators/Fabricators/Laborers	195	2.9%
Total Employed Persons 16 Years and Over	6,754	100.0%

Source: U. S. Census

Table 27

EMPLOYMENT DISTRIBUTION BY TYPE OF INDUSTRY - 1980
TOWN OF NEW CASTLE

Industry	Number of Persons	Percentage of Total
Agriculture	41	0.6%
Forestry/Fisheries	—	—
Mining	16	0.2%
Construction	174	2.6%
Manufacturing	1,517	22.5%
Transportation/Communications/Other Public Utilities	317	4.7%
Wholesale Trade	380	5.6%
Retail Trade	728	10.8%
Banking/Credit Agencies/Insurance/Real Estate/ Other Finance	501	7.4%
Business and Repair Services	494	7.3%
Private Households	84	1.2%
Other Personal Services	67	1.0%
Entertainment/Recreation Services	125	1.9%
Professional and Related Services	1,925	28.5%
Public Administration	133	2.0%
Total Employed Persons 16 Years and Over	6,754	100.0%

Source: U. S. Census

Place of Work and Work Travel

According to the 1980 U. S. Census, the majority of New Castle's resident labor force was employed within Westchester County. This figure declined slightly from approximately 56% of the Town's labor force in 1970 to 53.5% in 1980. Of the total Westchester County labor force, approximately 60% was employed within the County.

As shown in Table 28 on the following page, a similar percentage decline over the 10-year period occurred among workers traveling to Manhattan, although this group had a numerical increase of 170 persons. As of 1980, almost 24% of those reporting their job location were employed in Manhattan. While a smaller percentage of the Town's workers were employed in Westchester and Manhattan than in 1970, a significant percentage gain occurred within the other boroughs of New York City. Between 1970 and 1980, this group more than doubled in size. By 1980, almost 9% of the Town's

labor force traveled to jobs in New York City outside of Manhattan — the majority in Brooklyn and the Bronx.

In 1980, approximately 15% of New Castle's resident workers (995 persons) were employed within the Town. A total of 496 resident workers were employed in White Plains. The U. S. Census did not provide job destination information for any other major employment center in Westchester County.

Table 28

PLACE OF WORK OF RESIDENT LABOR FORCE - 1970 AND 1980
TOWN OF NEW CASTLE

Place of Work	1970		1980	
	Number of Persons	Percentage Of Total	Number of Persons	Percentage Of Total
Westchester County	3,094	56.1%	3,557	53.5%
Manhattan	1,408	25.5%	1,578	23.7%
Other New York City Boroughs	243	4.4%	587	8.8%
Long Island	30	0.5%	8	0.1%
Rockland County	19	0.3%	13	0.2%
Putnam County	357	6.5%	42	0.6%
Northeastern New Jersey			69	1.0%
Stamford, Connecticut SMSA			98	1.5%
Worked elsewhere			129	1.9%
Place of work not reported	361	6.5%	569	8.6%
Total	5,512	100.0%	6,650	100.0%

Note: Data for 1970 is based on "All Workers"; data for 1980 is based on "Workers 16 Years and Over."

Source: U. S. Census

As shown in Table 29, the mean one-way travel time between home and work for the New Castle labor force not working at home was 38.6 minutes. This is approximately 10 minutes longer than the average for all Westchester County workers and is largely attributable to the high percentage of workers commuting to New York City.

Table 29

TRAVEL TIME TO WORK - 1980
TOWN OF NEW CASTLE

Travel Time	Number of Persons*	Percentage Of Total
Under 5 minutes	175	2.7%
5 to 9 minutes	618	9.6%
10 to 14 minutes	845	13.1%
15 to 19 minutes	621	9.6%
20 to 29 minutes	870	13.5%
30 to 44 minutes	870	13.5%
45 to 59 minutes	333	5.2%
60 minutes or longer	2,111	32.8%
Total	6,443	100.0%
Mean Travel Time (minutes)		38.6

*Based on workers 16 years and over who did not work at home.

Source: U. S. Census

As shown in Table 30 on the following page, New Castle's labor force was considerably more dependent on public transportation as a primary means of travel to work than the Westchester County labor force as a whole. Almost 26% of the Town's workers used public transportation in 1980; nearly all were train commuters. Although the number of persons traveling from New Castle to their jobs by public transportation increased by approximately 300 between 1970 and 1980, the percentage of commuters remained virtually identical over the 10-year period. By contrast, the County experienced a numerical as well as a percentage decline in the use of public transportation over this same period.

Although a significant share of the Town's labor force commuted to work via public transportation, New Castle's workers were still largely automobile-oriented, with approximately 68% of the labor force traveling the longest segment of the work trip by car, truck or van, up from 62% in 1970. On a Countywide basis, the 1980 figure was very similar (70%). Although the majority of these workers traveled alone, an increase in carpooling was evident over the 10-year period. In New Castle, persons traveling in a carpool increased from 6.3% to 10.1% of the Town's workers. Over the same period, the Countywide average increased from 9.1% to 15.8%.

Table 30

MODE OF TRAVEL TO WORK - 1970 AND 1980
TOWN OF NEW CASTLE

Mode	1970		1980	
	Number of Persons	Percentage Of Total	Number of Persons	Percentage Of Total
Drive Alone in Car	3,079	55.9%	3,752	56.5%
Drive Alone in Truck or Van			118	1.8%
Carpool in Car	345	6.3%	659	9.9%
Carpool in Truck or Van			11	0.2%
Public Transportation	1,411	25.6%	1,713	25.8%
Walked Only	340	6.2%	147	2.2%
Other Means	71	1.3%	34	0.5%
Worked at Home	266	4.8%	207	3.1%
Total	5,512	100.0%	6,641	100.0%

Note: Date for 1970 is based on "All Workers"; data for 1980 is based on "Workers 16 Years and Over."

Source: U. S. Census

As might be expected in a suburban community that is largely residential in character, a smaller percentage of the Town's workers walked to work compared to the Countywide average. Interestingly, however, a larger percentage of the Town's work force (representing 207 persons) indicated that they worked at home.

Not surprisingly, accompanying the increase in private vehicle usage for the primary segment of the work trip between 1970 and 1980 was a similar trend in vehicle ownership patterns. Over the 10-year period, the number of households having two or more vehicles available increased by about 25%, to a total of almost 77% of all households, as shown in Table 31. For all Westchester County, only 43% of its households had two or more vehicles available. It is interesting to note, however, that the number of New Castle households having no vehicles available also increased in numerical and percentage terms during the 10-year period.

Table 31

VEHICLES AVAILABLE - 1970 AND 1980
TOWN OF NEW CASTLE

Vehicles Available	1970		1980	
	Occupied Housing Units	Percentage Of Total	Occupied Housing Units	Percentage Of Total
None	93	2.4%	152	3.3%
1	989	25.5%	901	19.8%
2	2,342	60.3%	2,619	57.6%
3 or more	461	11.9%	875	19.2%
Total	3,885	100.0%	4,547	100.0%

Source: U. S. Census

Income

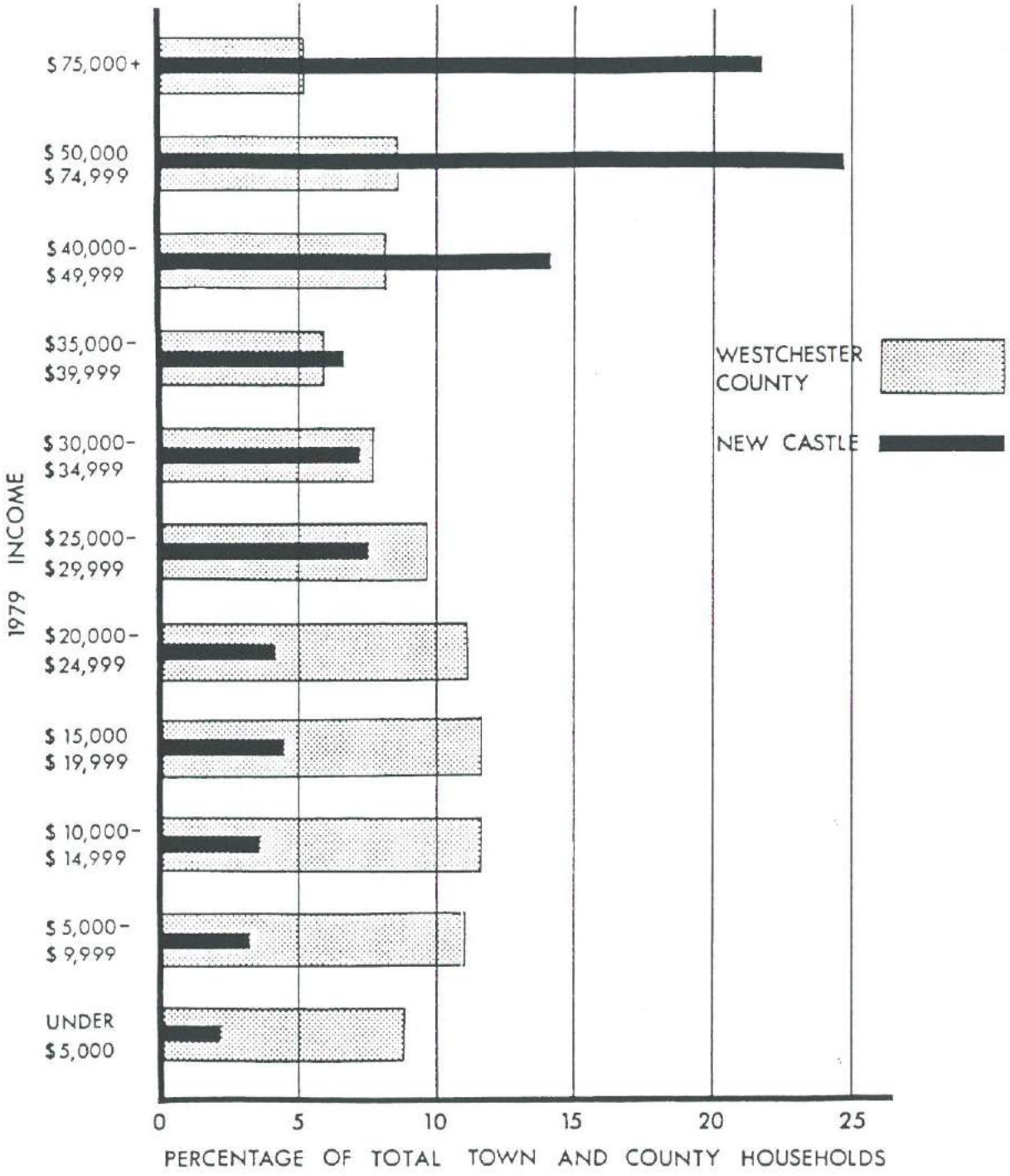
The most recent decennial U. S. Census found that median family income in New Castle was $49,322 in 1979, or 117% higher than the median family income of $22,725 for all Westchester County. The Town's 1969 median family income of $26,745 was approximately 94% higher than the County median at that time. Between 1969 and 1979, the increases in median family income were attributable to the effect of inflation. In fact, when this factor is taken into consideration, it appears that median family income in constant (1967) dollars for both the Town and County actually declined over the 10-year period. In 1979, New Castle had the highest median family income of any northern Westchester town and, on a Countywide basis, was only exceeded by the Town/Village of Scarsdale and the Village of Bronxville.

The 1980 U. S. Census compiled income data for households as well as families. Although the difference between the Countywide average and the Town figure was less pronounced, median household income in New Castle ($46,979) was still more than twice the comparable figure for all Westchester County. The contrast between the household income profile of the Town and County is presented graphically in Figure 32 on the following page. As illustrated, nearly half of New Castle's households earned an income of $50,000 a year or more compared to a figure of 14% for Westchester County as a whole. Approximately 20% of all Westchester County households had an annual income of less than $10,000. In New Castle, a total of 250 households were part of this category, representing less than 6% of the Town's total households.

In spite of the Town's affluence, the 1980 U. S. Census identified 93 families and a total of 420 persons whose annual incomes placed them below the poverty level threshold,

Figure 32

HOUSEHOLD INCOME - 1980
NEW CASTLE AND WESTCHESTER COUNTY



Source: U.S. Census

a measure that is adjusted for family size, number of children, age of the head of household and the inflation rate. This group represented approximately 2% of all the Town's families and almost 3% of its population. The comparable Countywide averages were 5.6% and 7.0%, respectively. None of the Town's senior citizen households had incomes that placed them below the poverty level. All the families in this category had children under 18 years of age and approximately one-third of these families were headed by a female.

In 1979, considerable differences existed between the income characteristics of households residing in an owner-occupied unit and those in rental units. The median household income for owner households was $48,838, while the figure for renter households was $19,356.

The 1980 U. S. Census also tabulated per capita income statistics. Again, with a figure of $16,544, New Castle had the highest per capita income of any northern Westchester town in 1979. On a Countywide basis, only Scarsdale and Bronxville had higher per capita incomes. The Westchester County average was $10,606.

HOUSING

Housing Growth

The U. S. Census reports that there were a total of 4,742 housing units in New Castle as of 1980, representing an increase of 725 units, or 18%, over the 1970 figure. This was the smallest 10-year increase to occur since 1950, in both numerical and percentage terms. Although New Castle's rate of residential construction during the recent decade was considerably higher than the Countywide average of 8.6% growth, it was exceeded in percentage terms by seven other northern Westchester towns, with the largest increases experienced by Somers (53%) and Lewisboro (37%). In numerical terms, Yorktown and Cortlandt added the largest numbers of units to their housing inventories, as shown in Table 33 on the following page.

Based on a review of residential construction activity within the Town since 1980, the Westchester County Department of Planning estimates that New Castle had a total of 5,216 year-round housing units as of January 1, 1988. This represents an increase of 10.1% over the comparable figure for 1980. If this rate of residential construction continues through the remainder of this decade, by 1990 the Town's housing inventory will have increased by approximately 600 units, or about 13% more than the 1980 figure.

Housing Growth Within the Town

Within New Castle itself, new residential construction was underway throughout the Town between 1970 and 1980, yet the largest part of the increase was experienced in the central portion of the Town, followed by the western and eastern portions, respectively. While residential development activity was not evenly distributed during

the 10-year period, the Town's three census tracts each contained approximately the same share of the Town's housing stock in 1980 as they did in 1970, as shown in Figure 34 on the next page. When related to geographic area, these figures indicate that the western part of the Town is the least densely settled and the central part the most densely settled.

Table 33

TOTAL HOUSING UNITS - 1950 TO 1980
NEW CASTLE AND OTHER NORTHERN WESTCHESTER TOWNS

	1950	1960	1970	1980	Percentage Change 1970-1980
NEW CASTLE	1,603	3,039	4,017	4,742	18.0%
Bedford	2,297	3,529	4,485	4,957	10.5%
Cortlandt	3,757	6,236	7,484	9,103	21.6%
Lewisboro	1,240	1,729	2,198	3,006	36.8%
Mount Pleasant	2,927	5,091	5,869	6,858	16.9%
North Castle	1,193	2,012	2,782	3,043	9.4%
North Salem	864	1,114	1,372	1,662	21.1%
Ossining	421	666	1,026	1,199	16.9%
Pound Ridge	535	908	1,186	1,447	22.0%
Somers	1,434	2,243	2,947	4,517	53.3%
Yorktown	2,722	5,779	7,824	9,915	26.7%
WESTCHESTER COUNTY	187,257	254,766	291,459	316,658	8.6%

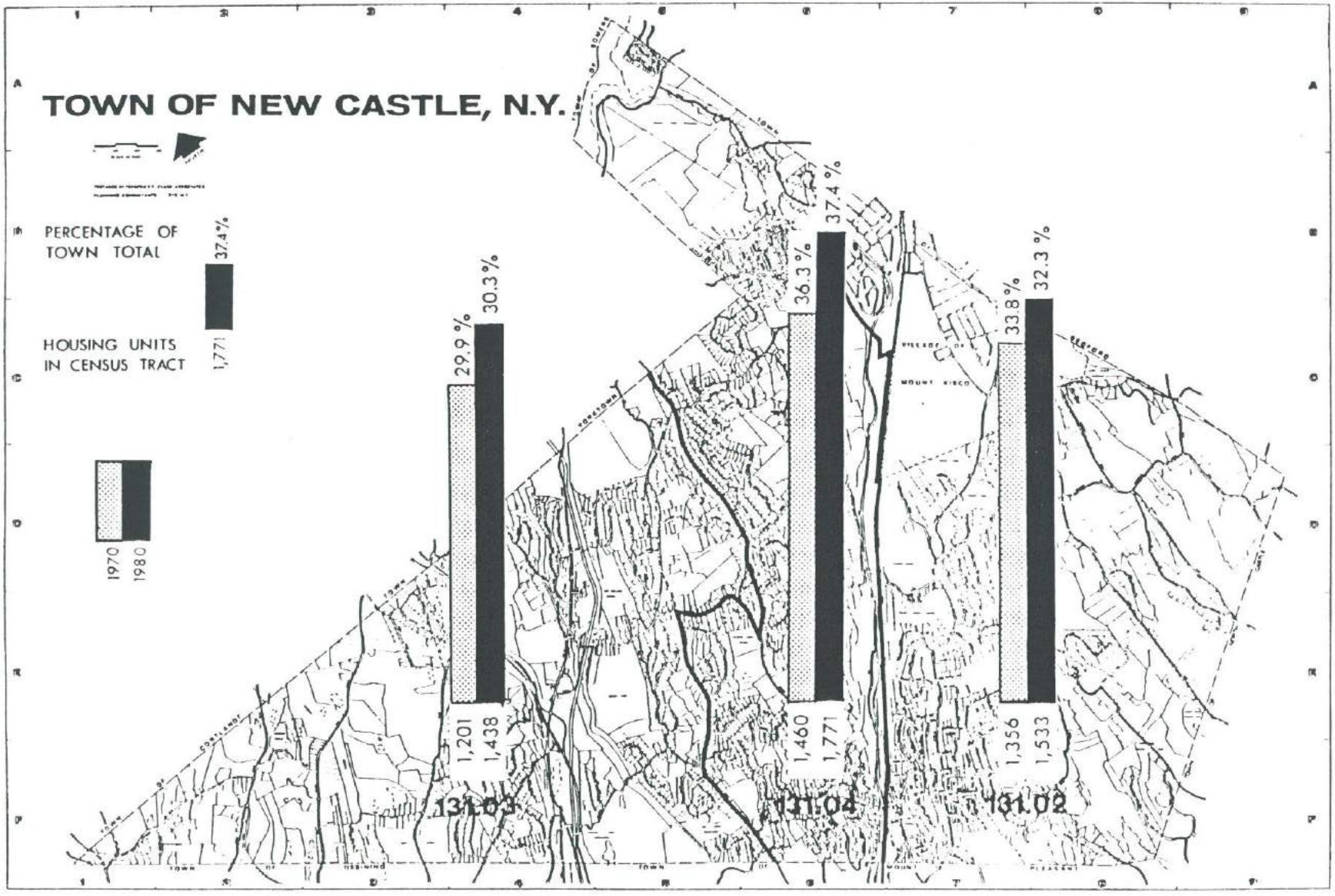
Source: U. S. Census

Housing Type and Tenure

New Castle has always been a predominantly single-family residential community. As of 1980, the Town had 4,438 single-family dwellings, representing 94% of the year-round housing stock, compared to an average of 45% for all Westchester County. While the number of single-family dwellings has continued to increase since 1960, this type of housing accounted for a slightly smaller percentage in 1980 compared to prior years. As shown in Table 35 on page 62, the number of units in residential structures containing two or more units increased by nearly 70% between 1970 and 1980. Approximately 6.4% of the Town's housing stock was in this category, compared to a Countywide average of 55%.

Figure 34

HOUSING UNITS BY CENSUS TRACT - 1970 AND 1980
TOWN OF NEW CASTLE



Source: U.S. Census

Table 35

YEAR-ROUND HOUSING STOCK BY UNITS IN STRUCTURE - 1970 AND 1980
TOWN OF NEW CASTLE

Units In Structure	1970		1980		Percentage Change 1970-1980
	Number	Percentage Of Total	Number	Percentage Of Total	
One	3,817	95.6%	4,438	93.7%	16.3%
Detached*			4,429	93.5%	
Attached			9	0.2%	
Two	111	2.8%	180	3.8%	62.2%
Three and Four	41	1.0%	12	0.3%	-70.7%
Five to Nine	25	0.6%	108	2.3%	332.0%
Total Year-Round Housing Units	3,994	100.0%	4,738	100.0%	

*Includes mobile homes and trailers.

Source: U. S. Census

Between 1980 and the end of 1984, approximately 54% of the new units constructed in New Castle were single-family homes, as shown in Table 36 on the next page. Multifamily housing completed by November 1, 1984 included 108 units in three developments: Ledgewood Commons, Chappaqua Commons and Chappaqua Mews (now called Chestnut Oaks). A total of 19 new accessory apartments were also added to the Town's housing inventory.

Given New Castle's large percentage of single-family homes, it is not surprising that most (88%) of the Town's housing stock was owner-occupied in 1980, as shown in Table 37, compared to a Countywide average of 51%. Since 1960, the percentage of renter-occupied units has shown a continuous decline. With the exception of accessory apartments, virtually all the units constructed since 1980 have been "for sale" units, rather than units for rent, although some of the "for sale" units have been purchased for subsequent rental. It is interesting to note that more than half the rental units in New Castle in 1980 were single-family detached residences. On a Countywide basis, single-family homes accounted for only 5% of the renter-occupied units. As of 1980, the Town had a residential vacancy rate of 3.8%, compared to a Countywide average of 2.5%. Both figures are indicative of a tight housing market.

Table 36

RECENT RESIDENTIAL CONSTRUCTION - 1980 TO 1984
TOWN OF NEW CASTLE

Year of Construction	Type of Unit			Total Units
	One-Family	Multifamily	Accessory Apartment	
April - December 1980	15	0	1	16
1981	29	5	4	38
1982	20	20	6	46
1983	37	43	2	82
January - October 1984	46	40	6	92
Total Units	147	108	19	274

Source: Town of New Castle Building Department

Table 37

OCCUPANCY AND TENURE CHARACTERISTICS - 1970 AND 1980
TOWN OF NEW CASTLE

	1970		1980		Percentage Change 1970-1980
	Number	Percentage Of Total	Number	Percentage Of Total	
Occupied Housing Units	3,885	96.7%	4,547	95.9%	17.0%
Owner-Occupied	3,499	87.1%	4,150	87.5%	18.6%
Renter-Occupied	386	9.6%	397	8.4%	2.8%
Vacant	111	2.8%	180	3.8%	62.2%
Total Year-Round Units	3,996	99.5%	4,727	99.7%	18.3%
Seasonal Units	21	0.5%	15	0.3%	-28.5
Total Housing Units	4,017	100.0%	4,742	100.0%	

Source: U. S. Census

Housing Age

The Town's housing stock in 1980 was generally newer than the County's. More than half the County's units were built prior to 1950. In New Castle, units built prior to this date accounted for 39% of the total, as shown in Table 38. The eastern part of the Town (Census Tract 131.02) had the largest number and percentage of old units; the western part (Census Tract 131.03) had the largest number and proportion of units built since 1970.

Table 38

AGE OF YEAR-ROUND HOUSING STOCK - 1980
TOWN OF NEW CASTLE

Year of Construction	Number	Percentage of Total
1975 - March 1980	331	7.0%
1970 - 1974	354	7.4%
1960 - 1969	1,169	24.7%
1950 - 1959	1,038	21.9%
1940 - 1949	520	11.0%
1939 or Earlier	1,326	28.0%
Total Year-Round Housing Units	4,738	100.0%

Source: U. S. Census

Housing Cost

Housing values in New Castle are high. In 1980, according to the U. S. Census, the median value of an owner-occupied unit was $122,700, compared to $83,500 for all Westchester County. The median price asked for vacant units was even higher: $148,600 for New Castle and $97,100 for the County. Within New Castle, the median value of an owner-occupied unit varied only slightly by location, with the central part of the Town (Census Tract 131.04) having a somewhat higher median value ($126,000). The average (mean) value of an owner-occupied unit was even higher than these figures and has continued to appreciate steadily since 1980.

Rental costs exhibited a similar trend, although the disparity between the Town and the County was less pronounced. In 1980, half of all renter-occupied units in New Castle rented for over $325 per month, with the median rent asked for vacant units slightly higher at $344 per month. For all Westchester County, these figures were $267 and $251, respectively. Within New Castle, rental costs showed more variation by geographic area than did house values. The median monthly contract rent for units

in the eastern part of the Town (Census Tract 131.02) was the highest ($381), with the central part (Census Tract 131.04) having the lowest median rent ($268).

Housing Size

In spite of a decrease in average household size in New Castle since 1960, the average size of housing units has been increasing. Almost three-fourths of all year-round units had seven or more rooms in 1980, compared to 68% 10 years earlier. By contrast, on a Countywide basis only 31% of all year-round units had seven or more rooms in 1980. Units with four or fewer rooms declined between 1970 and 1980 in numerical terms and also represented a smaller share of the Town's housing stock (7.8% in 1970 versus 6.0% in 1980). For the County as a whole, these smaller units accounted for almost 42% of all year-round housing units. In 1980, the average number of rooms per housing unit was 7.8 in New Castle and 5.1 for all Westchester County.

Housing Condition

Substandard and overcrowded housing are not significant problems in New Castle. Virtually all the Town's housing stock was apparently in satisfactory condition in 1980. Only 2 occupied units lacked some plumbing facilities, although another 12 units had complete plumbing that was shared by another household. Overcrowding occurred more frequently, although it too affected only a small proportion of the Town's housing. This problem was identified in less than 1% (21) of the Town's owner-occupied units, but in approximately 7% (28) of the renter-occupied units. The proportion of overcrowded units was far greater Countywide. The incidence of overcrowding appeared to be more frequent in the central part of the Town. None of the overcrowded units in New Castle also exhibited plumbing deficiencies.

FISCAL CONDITIONS

To understand how planning decisions in New Castle affect and are affected by fiscal conditions, it is important to be familiar with the current fiscal climate of the Town and how that climate has changed. Among the many factors to be considered, it is important to understand the relationship between the decision to allow a particular type of development and the revenue, expenditures and need for services that will be generated as a result. Such an analysis can provide valuable insight into how individual planning decisions may affect the fiscal health of the community.

This section presents a summary analysis of the trends in the New Castle Town Budget and the Chappaqua School District Budget as well as the changes in the property tax base from 1983 to 1987. Its purpose is to provide a generalized overview of the fiscal conditions under which policy decisions in the Town are made.

New Castle is served by several school districts, including parts of the Chappaqua, Ossining, Yorktown, Byram Hills and Bedford school districts. The Chappaqua School District was chosen for this analysis because the District serves the major portion of the land area in New Castle and approximately 77% of the school age population (based on the 1980 U. S. Census and local enrollment figures). The District also serves a small portion of the neighboring Town of Mount Pleasant. The analysis of trends in the Chappaqua School District revenues and expenditures is intended to provide an indication of the kinds of trends that are being experienced by the other school districts that serve the Town.

SOURCES OF REVENUE

Town of New Castle

The Town Budget is divided into several types of funds, some of which apply to specific districts that encompass only portions of the Town. For the purpose of this analysis, the two primary Townwide funds were examined: the General Fund which covers the operating costs of all Town departments, programs and services excluding road maintenance, and the Highway Fund which covers all road maintenance. Table 39 presents the results of a review of revenue sources for local budgets between 1983 and 1987.

The amount and distribution of revenue from different sources can vary from year to year. Although the budgetary process is a fluid one, in the final analysis the amount to be raised by property taxes is determined after the amount to be generated by other

Table 39

AMOUNT OF REVENUE BY SOURCE - 1983 TO 1987
TOWN OF NEW CASTLE AND CHAPPAQUA SCHOOL DISTRICT

Revenue	1983*		1984*		1985		1986		1987	
	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total
General Fund										
Departmental Income	$ 359,416	8.9%	$ 389,832	9.0%	$ 400,221	8.3%	$ 594,309	10.8%	$ 582,830	9.7%
State Revenue	479,583	11.9%	638,401	14.8%	730,750	15.1%	1,071,952	19.5%	1,630,275	27.2%
Other Sources	641,274	16.0%	748,351	17.4%	943,774	19.5%	1,113,219	20.3%	888,903	14.8%
Property Tax Revenue	2,540,624	63.2%	2,536,098	58.8%	2,763,640	57.1%	2,712,634	49.4%	2,898,912	48.3%
Total	$4,020,897	100.0%	$4,312,682	100.0%	$4,838,385	100.0%	$5,492,114	100.0%	$6,000,920	100.0%
Highway Fund										
State Revenue	$ 54,724	4.1%	$ 54,825	3.6%	$ 55,375	3.4%	$ 54,937	3.3%	$ 79,635	4.2%
Other Sources	131,817	9.8%	204,175	13.6%	115,998	7.1%	91,603	5.5%	102,729	5.4%
Property Tax Revenue	1,155,899	86.1%	1,246,789	82.8%	1,460,594	89.5%	1,507,435	91.2%	1,721,638	90.4%
Total	$1,342,440	100.0%	$1,505,789	100.0%	$1,631,967	100.0%	$1,653,975	100.0%	$1,904,002	100.0%
Composite: General and Highway Funds										
State Revenue	$ 534,307	10.0%	$ 693,226	11.9%	$ 786,125	12.1%	$1,126,889	15.8%	$1,709,910	21.6%
Other Sources	1,132,507	21.1%	1,342,358	23.1%	1,459,993	22.6%	1,799,131	25.2%	1,574,462	19.9%
Property Tax Revenue	3,696,523	68.9%	3,782,887	65.0%	4,224,234	65.3%	4,220,069	59.0%	4,620,550	58.5%
Total	$5,363,337	100.0%	$5,818,471	100.0%	$6,470,352	100.0%	$7,146,089	100.0%	$7,904,992	100.0%
School District										
State Revenue	$ 3,458,554	15.1%	$ 3,661,184	14.9%	$ 3,439,063	13.3%	$ 3,363,940	12.2%	$ 3,383,054	11.4%
Other Sources	1,388,775	6.1%	1,563,575	6.4%	1,288,950	5.0%	1,089,960	4.0%	796,446	2.7%
Property Tax Revenue	$18,050,171	78.8%	$19,360,541	78.8%	$21,056,787	81.7%	$23,095,100	83.8%	$25,490,500	85.9%
Total	$22,897,500	100.0%	$24,585,300	100.0%	$25,784,800	100.0%	$27,549,000	100.0%	$29,670,000	100.0%

*Note: New York State requires that Generally Accepted Accounting Principles (GAAP) be adhered to in preparing municipal financial reports. For 1983 and 1984, a distinction was made between the property tax levy and revenue from property taxes; the difference between the two represents adjustment for uncollected taxes outstanding at year-end. In 1983 the property tax levy was $2,490,621; the comparable figure for 1984 was $2,571,098.

Sources: New Castle Annual Financial Reports, 1983-1987
Chappaqua Schools Budget Summaries, 1983-84 through 1987-88

sources is estimated and the total budget is determined. Each fund is generally financed by a combination of revenue sources.

For the General Fund, there are four major sources of revenue as follows:

- **DEPARTMENTAL INCOME** - This includes primarily the fees of the various departments for specific services (e.g., Police Department fees, parking lot fees, park and recreation charges, Planning Board fees, etc.).

- **STATE REVENUE** - This includes funds for programs provided by the State as well as State revenue sharing funds and revenue from the mortgage tax (collected by the County pursuant to State law and distributed to the municipality in which the property transfer occurred).

- **PROPERTY TAX REVENUE** - This is the predominant revenue source from taxes levied against the assessed value of taxable property (land and buildings).

- **OTHER REVENUE** - This includes items such as interest income, franchises, dog license and building permit fees, fines, sales of property and compensation for loss and other miscellaneous revenue categories.

Comparatively speaking, the General Fund has consistently been the local budget least dependent on property tax revenue but even so, just under one-half of this fund's income is generated through property taxes. While the actual dollar amount of revenue from the property tax grew between 1983 and 1987, the percentage share exhibited a downward trend from 63% of the General Fund revenue total in 1983 to about 48% in 1987.

During this same period, revenue from the State increased by a substantial amount in actual dollars and represented a growing share of the General Fund budget, from nearly 12% in 1983 to over 27% in 1987. The majority of this increase was attributable to the mortgage tax, which suggests that the Town experienced an increasing number of sales of real estate and/or the transfer of increasingly valuable properties. Of all sources of funds, the Town has the least amount of control over revenue from the State.

Revenue from departmental income increased continuously between 1983 and 1986, with a small decrease registered in 1987. However, the overall five-year trend continued to be an upward one in actual dollars and on a percentage share basis —from 8.9% to 9.7%. Similarly, revenue from other sources steadily increased between 1983 and 1986, with a more substantial drop experienced in 1987. While the overall five-year trend in revenue from these miscellaneous sources continued to be an upward one in actual dollars, this category represented a slightly smaller share of the General Fund revenue total in 1987 than it did in 1983 (15% versus 16%, respectively).

Compared to the Town General Fund and Chappaqua School District Budget, the Town Highway Fund has historically been the most dependent on property tax revenue, with this dependency increasing over the five-year period from 86% in 1983 to 90% in 1987. Revenue from State sources held basically steady between 1983 and 1986, then jumped up in 1987. While there have been some year-to-year fluctuations, State revenue essentially retained its same percentage share of the total.

For the Highway Fund, departmental income is combined with other revenue sources for reporting purposes. Compared to other sources of revenue, this category showed the most noticeable variation between 1983 and 1987, in both actual dollars and on a percentage share basis. Past experience indicates that year-to-year fluctuations of more than 1% generally are attributable to weather-related conditions since the Town is reimbursed for the maintenance (primarily snow removal) of State and County roads. As of 1987, this aggregated category accounted for just over 5% of the Highway Fund revenue.

A composite revenue analysis for both Townwide funds is also presented in Table 39. It shows a steady increase in State revenue, with the proportion of revenue from property taxes declining over the five-year period. Revenue from other sources has shown some fluctuation, with a slight downward trend in percentage share evident from 1983 to 1987. The proportion of all revenue attributable to the property tax has averaged about 63% for the five-year period.

The amount of the Town's revenue that is raised through the property tax increased at an annual average rate of approximately 6.2% between 1983 and 1987. However, because of an increase in the taxable assessed valuation of the Town's tax base, the Town tax rate increased at an annual average rate of only 2.3% during this same time period. If the effect of inflation is removed from consideration by applying the Consumer Price Index and converting current dollars (actual amount) to constant (1967) dollars, it is evident that the Town tax rate actually registered a decline over the five-year period as shown in Table 40 on the following page.

Chappaqua School District

Compared to the Townwide funds combined, trends in Chappaqua School District revenue have been moving in the opposite direction, with the District becoming increasingly more dependent on property taxes as a source of revenue. Between 1983 and 1987, property tax revenue increased in actual amount and as a proportion of total revenue, from almost 79% to nearly 86%, averaging 82% for the five-year period. This trend is attributable to a decline in actual dollar revenue from the State as well as a drop in revenue from other sources.

Without any fundamental change in the method by which the Town and area school districts finance their operations, reliance on property taxes as the primary means of deriving revenue is expected to increase. As a result, the health of the Town's property tax base will continue to be of great importance in local decision-making.

Table 40

CHANGES IN THE TOWN TAX RATE - 1983 TO 1987
TOWN OF NEW CASTLE

Tax Rate (Dollars Per $1,000 Assessed Valuation)				
Year	Current Dollars	Percentage Change	Constant (1967) Dollars	Percentage Change
1983	$4.41	—	$1.53	—
1984	4.52	2.5%	1.49	-2.6%
1985	4.81	6.4%	1.53	2.7%
1986	4.58	-4.8%	1.41	-7.8%
1987	4.81	5.0%	1.41	0.0%

Sources: New Castle Receiver of Taxes records
U.S. Department of Labor - Bureau of Labor Statistics, Consumer Price Index, All Urban Consumers, N.Y., N.Y. - Northeastern N.J.

EXPENDITURES

Costs of Government

As New Castle has grown, so has the level of government services provided by the Town and the cost of providing those services. The General Fund showed an average annual increase of 16.2% between 1983 and 1987. During this same time period, the Highway Fund experienced an average annual increase of 10.4%. Discounting for the effect of inflation, these funds showed average annual increases of 9.9% and 5.0%, respectively, over the five-year period. The trends in total expenditures for these two funds are presented in Table 41.

The Town budget for the General Fund allocates funds in the following categories: general government support, public safety, health, transportation, economic assistance and opportunity, culture and recreation, home and community services, employee benefits, debt service and interfund transfers. The predominant categories of expenditures as of 1987 were general government support and public safety (primarily police services), which accounted for 30% and 27%, respectively, of the total. Employee benefits and culture and recreation were the next largest categories of expenditures. Historically, this trend in expenditures was basically steady between 1983 and 1987, revealing that the relative distribution of services (among the various budget categories) provided by Town government was reasonably stable over this five-year period. Trends in the General Fund expenditures are presented in Table 42 preceding page 73.

Table 41

GENERAL AND HIGHWAY FUND EXPENDITURES - 1983 TO 1987
TOWN OF NEW CASTLE

Year	General Fund				Highway Fund			
	Current Dollars	Percentage Change	Constant (1967) Dollars	Percentage Change	Current Dollars	Percentage Change	Constant (1967) Dollars	Percentage Change
1983	$3,718,245	–	$1,288,373	–	$1,299,724	–	$450,355	–
1984	4,188,140	12.6%	1,381,768	7.2%	1,543,436	18.8%	509,217	13.1%
1985	4,769,141	13.9%	1,517,385	9.8%	1,636,332	6.0%	520,627	2.2%
1986	5,196,440	9.0%	1,600,875	5.5%	1,715,753	4.9%	528,575	1.5%
1987	6,123,111	17.8%	1,796,161	12.2%	1,840,040	7.2%	539,759	2.1%

Sources: New Castle Annual Financial Reports, 1983-1987
U. S. Department of Labor - Bureau of Labor Statistics, Consumer Price Index, All Urban Consumers, N.Y., N.Y. - Northeastern N.J.

Table 42

GENERAL FUND EXPENDITURES - 1983 TO 1987
TOWN OF NEW CASTLE

Expenditures	1983		1984		1985		1986		1987	
	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total	Dollar Amount	Percentage of Total
General Government Support	$1,142,449	30.7%	$1,262,948	30.2%	$1,429,495	30.0%	$1,593,408	30.7%	$1,834,183	29.9%
Public Safety	1,113,057	29.9%	1,292,674	30.9%	1,463,690	30.7%	1,558,997	30.0%	1,673,076	27.3%
Health	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Transportation	84,366	2.3%	78,432	1.9%	77,775	1.6%	118,765	2.3%	114,624	1.9%
Economic Assistance & Opportunity	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Culture & Recreation	400,796	10.8%	440,150	10.5%	440,051	9.2%	483,184	9.3%	599,716	9.8%
Home & Community Services	93,249	2.5%	138,160	3.3%	170,607	3.6%	299,202	5.7%	292,248	4.8%
Employee Benefits	656,552	17.7%	751,095	17.9%	889,679	18.6%	985,675	19.0%	956,082	15.6%
Debt Service	197,670	5.3%	151,662	3.6%	156,808	3.3%	157,209	3.0%	212,146	3.5%
Interfund Transfers	30,517	0.8%	73,019	1.7%	141,036	3.0%	0	0.0%	441,036	7.2%
Total	$3,718,245	100.0%	$4,188,140	100.0%	$4,769,141	100.0%	$5,196,440	100.0%	$6,123,111	100.0%

Source: New Castle Annual Financial Reports, 1983-1987

While operated as a separate fund, the Highway Fund can be viewed as one of the types of services provided by the Town. If the total Highway Fund expenditures and the total General Fund expenditures are added together, the Highway Fund for the years 1983-1987 generally represented approximately 23%-27% of this total. Thus, the Highway Fund also generally exhibited a consistent trend in terms of the relative distribution of services. It is interesting to note that while the distribution of services provided by the Town during this five-year period remained relatively stable, total expenditures for the General Fund and Highway Fund in the aggregate increased by nearly 59% in current dollars and 34% in constant (1967) dollars. This occurred during a period when it is estimated that the Town's population and number of housing units increased by approximately 0.2% and 4.8%, respectively, suggesting that there was a substantial increase in the services provided, or at least their cost, relative to population and housing growth in the Town during this five-year period.

Table 43 on the following page identifies Town government cost trends on a per capita and a per housing unit basis for the 1983-1987 period. The average cost of operating the Town government on a per capita basis and per housing unit basis increased by 58% and 51%, respectively, between 1983 and 1987. However, the actual share of the cost paid for by property owners in New Castle through property tax revenues exhibited a lower percentage increase—approximately 25% per resident and 19% per housing unit.

When Town government costs are examined in constant (1967) dollars, a different pattern emerges. The average cost of Town government on a per capita basis increased by 34%, or $37 per resident, over the five-year period. On a per housing unit basis, an increase of 28% was experienced, or $99 per unit. For that portion of the Town budget raised through property tax revenues, there was a negligible increase of only 5% on a per capita basis ($4 per resident) and 1% on a per housing unit basis ($3 per unit).

Costs of Education

Different trends are identified in an analysis of the Chappaqua School District budgets. In analyzing these budgets, three factors were reviewed: (1) changes in the total budget; (2) changes in the appropriations per student; and (3) changes in the property tax revenue per student. The last factor portrays the cost per student, funded as a function of revenue from property taxes.

On a percentage basis, the School District budgets have not increased as rapidly as the Town budgets. The average annual increase in District appropriations was approximately 7% over the five-year period between the 1983-84 and 1987-88 academic years, as shown in Table 44 preceding page 76. In constant (1967) dollars, that represented an average annual increase of just over 2%. The amount of the District budget funded by New Castle property owners through the property tax increased at a greater rate than the budget itself—approximately 10% annually in actual amount or 5% annually in constant (1967) dollars.

Table 43

TOWN GOVERNMENT COST TRENDS/GENERAL FUND AND HIGHWAY FUND - 1983 TO 1987
TOWN OF NEW CASTLE

	1983	1984	1985	1986	1987
Population*	15,839	16,185	16,227	16,291	15,875
Housing Units*	4,975	5,054	5,091	5,145	5,216
Current Dollars:					
Total Town Expenditures	$5,017,969	$5,731,576	$6,405,473	$6,912,193	$7,963,151
Average Cost Per Resident	317	354	395	424	502
Average Cost Per Housing Unit	1,009	1,134	1,258	1,343	1,527
Total Property Tax Revenue	3,696,523	3,782,887	4,224,234	4,220,069	4,620,550
Average Property Tax Revenue Per Resident	233	234	260	259	291
Average Property Tax Revenue Per Housing Unit	743	748	830	820	886
Constant (1967) Dollars:					
Total Town Expenditures	$1,738,728	$1,890,985	$2,038,012	$2,129,450	$2,335,920
Average Cost Per Resident	110	117	126	131	147
Average Cost Per Housing Unit	349	374	400	414	448
Total Property Tax Revenue	1,280,847	1,248,066	1,344,013	1,300,083	1,355,398
Average Property Tax Revenue Per Resident	81	77	83	80	85
Average Property Tax Revenue Per Housing Unit	257	247	264	253	260

*Figures are taken from population estimate research information reports prepared annually by the Westchester County Department of Planning; since each fiscal year ends on December 31 of the year indicated, population and housing figures for January 1 of the succeeding year were used in this analysis as base figures most representative of the comparable time period.

Sources: New Castle Annual Financial Reports, 1983-1987
Westchester County Department of Planning Research Information Report on Population Estimates for January 1, 1984-1988
U. S. Census
U. S. Department of Labor - Bureau of Labor Statistics, Consumer Price Index, All Urban Consumers, N.Y., N.Y. - Northeastern N.J.

Table 44

SCHOOL DISTRICT APPROPRIATIONS AND PROPERTY TAX REVENUE - 1983 TO 1987
CHAPPAQUA SCHOOL DISTRICT

Year	Total District Appropriations				Property Tax Revenue From New Castle			
	Current Dollars	Percentage Change	Constant (1967) Dollars	Percentage Change	Current Dollars	Percentage Change	Constant (1967) Dollars	Percentage Change
1983-1984	$22,897,500	–	$7,933,992	–	$16,983,406	–	$5,884,756	–
1984-1985	24,585,300	7.4%	8,111,283	2.2%	18,142,763	6.8%	5,985,735	1.7%
1985-1986	25,784,800	4.9%	8,203,882	1.1%	19,721,787	8.7%	6,274,829	4.8%
1986-1987	27,549,000	6.8%	8,487,061	3.5%	21,545,419	9.2%	6,637,529	5.8%
1987-1988	29,670,000	7.7%	8,703,432	2.5%	23,803,029	10.5%	6,982,408	5.2%

Note: The Consumer Price Index for the first calendar year of each school year was used.

Source: Chappaqua Schools Budget Summaries, 1983-84 through 1987-88
U. S. Department of Labor - Bureau of Labor Statistics, Consumer Price Index, All Urban Consumers, N.Y., N.Y. - Northeastern N.J.

Table 45 on the next page presents school costs in terms of appropriations per student. The fact that the School District has experienced a steady decline in enrollment since 1974 only compounds the impact of the above-mentioned increase in the District's operating budget. Between the 1983-84 and 1987-88 academic years, the average gross appropriations per student in the District increased at an average annual rate of 12.6%, to a cost of nearly $10,400 per student. In terms of constant (1967) dollars, the cost increased at an average annual rate of 6.7%. The property tax revenue per student attributable to the New Castle portion of the District showed an even greater increase—an average of 15.7% per year. In constant (1967) dollars, the average annual increase was 9.5% between 1983-84 and 1987-88.

TAX BASE TRENDS

The property tax is the most important source of revenue to the Town. Consequently, it is important to understand the various changes in the makeup of the Town's tax base. The tax base is determined through the annual assessment roll which contains an inventory of every property, or tax lot, in the Town and any improvements, such as buildings located on the property. The assessed valuation is that value attached to land and improvements by the Town Tax Assessor. The tax rate, which is usually expressed as a ratio of dollars of tax to be paid per $1,000 of assessed value, is then applied to the assessed valuation to determine the amount of tax due. The tax rate is determined by dividing the amount of tax revenue needed by the total taxable assessed valuation.

The equalization rate is a ratio of assessed value to equalized value based on statistical computation methods. The State equalization rate is a value established by the State. The County equalization rate is a value established by the County based on the State value but adjusted for local conditions. The equalized value is used to equate the property value of one municipality to another where these municipalities pay a common tax, for instance, the County portion of the property tax. The equalized value is not necessarily the market value.

In June 1978, New Castle underwent a full value assessment, which was updated again in 1979 and 1980. During each of these updates, the total assessment roll was estimated to have increased in value by approximately 22%-23%. Since 1980, the Tax Assessor's office has continued to update the tax roll to match market conditions to the extent that time and budget have allowed. However, it can be assumed that the further from 1980 one gets, the greater the difference between market values and assessed values. Nonetheless, since the full value assessment was completed in 1980 and because updating continues to be undertaken, on a Townwide basis assessed values are considered to be fairly close approximations of market values.

Table 46, which precedes page 79, shows trends in the composition of the tax base between 1983 and 1987. The tax base is broken into the following major property type classifications: agriculture; residential; vacant land; commercial; recreation; community service; industrial; public service; and park/forest land. Included in these categories

Table 45

SCHOOL DISTRICT APPROPRIATIONS AND PROPERTY TAX REVENUE PER STUDENT - 1983 TO 1987
CHAPPAQUA SCHOOL DISTRICT

Year	Enrollment*	Average Gross Appropriations Per Student In School District				Property Tax Revenue Per Student From New Castle			
		Current Dollars	Percentage Change	Constant (1967) Dollars	Percentage Change	Current Dollars	Percentage Change	Constant (1967) Dollars	Percentage Change
1983-1984	3,319	$ 6,899	–	$2,390	–	$5,117	–	$1,773	–
1984-1985	3,138	7,835	13.6%	2,585	8.2%	5,782	13.0%	1,908	7.6%
1985-1986	3,028	8,515	8.7%	2,709	4.8%	6,513	12.6%	2,072	8.6%
1986-1987	2,956	9,320	9.5%	2,871	6.0%	7,289	11.9%	2,246	8.4%
1987-1988	2,857	10,385	11.4%	3,046	6.1%	8,311	14.3%	2,444	8.8%

*Enrollment as of October of each school year.

Note: The Consumer Price Index for the first calendar year of each school year was used.

Sources: Chappaqua Schools Budget Summaries, 1983-84 through 1987-88
U. S. Department of Labor - Bureau of Labor Statistics, Consumer Price Index, All Urban Consumers, N.Y., N.Y. - Northeastern, N.J.

Table 46

TRENDS IN THE COMPOSITION OF THE GROSS ASSESSMENT ROLL - 1983 TO 1987
TOWN OF NEW CASTLE

Property Type	1983		1984		1985		1986		1987	
	Assessed Value	Percentage of Total	Assessed Value	Percentage of Total	Assessed Value	Percentage of Total	Assessed Value	Percentage of Total	Assessed Value	Percentage of Total
Agriculture	$ 137,500	.0%	$ 356,300	.0%	$ 356,300	.0%	$ 356,300	.0%	$ 356,300	.0%
Residential	637,456,050	67.6%	649,203,150	66.5%	673,241,750	66.0%	695,427,950	66.1%	725,141,050	65.3%
Vacant	24,466,700	2.6%	27,676,300	2.8%	30,364,400	3.0%	29,868,800	2.8%	29,778,400	2.7%
Condominium/Apartment	3,563,500	0.4%	13,419,500	1.4%	21,980,100	2.2%	54,850,100	3.0%	54,850,100	4.9%
Commercial*	68,316,100	7.2%	68,157,000	7.0%	77,284,700	7.6%	75,151,500	7.1%	80,796,400	7.3%
Recreation	11,162,300	1.2%	15,347,300	1.6%	8,952,300	0.9%	8,997,300	0.9%	9,054,300	0.8%
Community Service	81,330,000	8.6%	80,943,500	8.3%	80,943,500	7.9%	81,332,000	7.7%	81,182,000	7.4%
Industrial	5,060,500	0.5%	5,060,500	0.5%	5,165,500	0.5%	4,965,500	0.5%	5,315,500	0.5%
Public Service	103,056,408	10.9%	108,500,354	11.1%	113,614,134	11.1%	116,834,975	11.1%	115,334,545	10.4%
Park/Forest	8,139,000	0.9%	8,259,700	0.8%	8,259,700	0.8%	8,259,800	0.8%	8,259,800	0.7%
Total Roll	$942,688,058	100.0%	$976,923,604	100.0%	$1,020,162,384	100.0%	$1,052,216,925	100.0%	$1,111,068,395	100.0%

*For the purpose of this analysis only, the commercial category excludes condominiums and apartments; however, condominiums and apartments are actually classified as part of the commercial portion of the assessment roll. They have been separated here so that they can be related to other types of residential uses. The actual total commercial assessed value figures for the specified years are:

1983		1984		1985		1986		1987	
$71,879,600	7.6%	$81,576,500	8.4%	$99,264,800	9.8%	$106,174,300	10.1%	$135,646,500	12.2%

Source: New Castle Tax Assessor's Office Annual Reports, 1983-1987

are lots that are either wholly exempt, such as public land, or partially exempt, such as land and buildings with some exemptions for the elderly, clergy, veterans or others. Utilities and special franchises, and land used for utility rights-of-way and the like, are usually covered under the public service category.

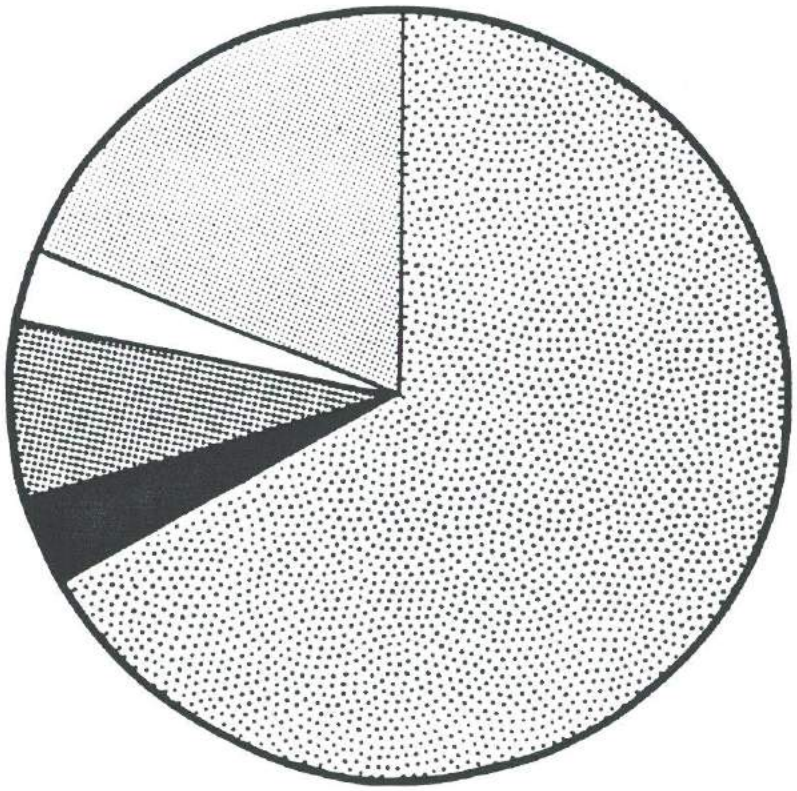
While the assessed valuation of New Castle's total tax base increased by nearly 18% between 1983 and 1987, the composition remained relatively stable, with one distinctive change. The residential category was the predominant portion of the assessment roll, consistently representing about two-thirds of the Town's tax base. However, there was a pronounced increase in the portion of the assessment roll attributable to condominiums and apartments. In 1980, less than one year after the Town amended its zoning law to permit an expanded range of multifamily housing types, this category accounted for only 0.1% of the total assessment roll. By 1987, that figure had increased to 4.9% of the total roll, reflecting growth of over 1,400% between 1983 and 1987.

Condominiums and apartments, shown separately in Table 46, are technically classified as commercial properties and are assessed as though they were considered rental units based on the capitalized value of project income. If condominiums and apartments are added to the residential category, residential uses in the aggregate represented 70% of the total tax base in 1987, up from 68% in 1983. Commercial (excluding condominiums and apartments) and industrial proportions, when totaled, increased from 7.7% in 1983 to 7.8% in 1987. These kinds of changes, while appearing small, are actually substantial when viewed in terms of real dollars. Figure 47 on the following page shows in graphic form the breakdown of the various components of the Town's tax base for 1987.

Table 48, which precedes page 82, shows the portion of the assessment roll consisting of wholly exempt properties and partially exempt properties, neither of which are part of the taxable assessment roll. While the total value of these exemptions increased between 1983 and 1987, these nontaxable properties represented a declining share of the Town's total tax base, from 10.4% in 1983 to 8.9% in 1987. As a result, the portion of the Town's assessment roll that is taxable increased by almost 20% over the five-year period. Had the Town not experienced this increase, the tax rate would have undoubtedly increased at a faster rate. Clearly, an expanding tax base provides a significant hedge against rising governmental and educational costs.

Figure 47

COMPOSITION OF THE 1987 TAX ROLL
TOWN OF NEW CASTLE



Residential - 65.3%

Condominiums and Apartments* - 4.9%

Commercial and Industrial - 7.5%

Vacant - 2.7%

Agriculture, Recreation, Community Service, Public Service, Park/Forest - 19.3%

*Condominiums and apartments are actually classified as part of the commercial portion of the assessment roll, but have been separated here for purposes of analysis.

Source: New Castle Tax Assessor's Office Annual Report for 1987

Table 48

PROPORTION OF GROSS ASSESSMENT ROLL CONSISTING OF NONTAXABLE PROPERTIES - 1983 TO 1987
TOWN OF NEW CASTLE

Nontaxable Property	1983		1984		1985		1986		1987	
	Assessed Value	Percentage of Total Roll	Assessed Value	Percentage of Total Roll	Assessed Value	Percentage of Total Roll	Assessed Value	Percentage of Total Roll	Assessed Value	Percentage of Total Roll
Wholly Exempt	$94,738,200	10.1%	$95,406,200	9.8%	$95,406,200	9.4%	$95,979,200	9.1%	$96,829,200	8.7%
Partially Exempt	2,920,100	0.3%	3,276,795	0.3%	3,180,395	0.3%	2,867,675	0.3%	2,548,070	0.2%
Total	$97,658,300	10.4%	$98,682,995	10.1%	$98,586,595	9.7%	$98,846,875	9.4%	$99,377,270	8.9%

Source: New Castle Tax Assessor's Office Annual Reports, 1983-1987

REGIONAL PLANNING FRAMEWORK

The future of New Castle is, to a greater extent than ever before, influenced by decisions made and actions taken well beyond the geographic limits of the Town. The character of development and the quality of life within New Castle can be greatly affected by the plans, programs and policies of agencies outside the Town. Conversely, decisions made in New Castle can also have an impact that is felt beyond its own municipal borders.

The boundaries of the Town define a governmental entity but in many respects have little relationship to the physical features and market forces that drive the economy and direct the development of the region. Not only the extent and pace, but also the form of the Town's future growth can, to a significant degree, be shaped by regional development pressures and by other local, County, State and Federal development policies and plans. The policies of various governmental agencies concerning housing, economic development, transportation, utility systems, environmental protection and open space preservation will, in many instances, have a direct impact on New Castle.

The purpose of this section is to describe the current state of planning for the New York Metropolitan Region and how it affects the Town of New Castle. The agencies involved in this planning include, to varying degrees, the Federal government, New York State, the Regional Plan Association, the Tri-State Regional Planning Commission, Westchester County and New Castle's municipal neighbors. To the extent that the Town remains aware of regional development pressures and the planning policies of these other governments and organizations, it will be better equipped to respond more effectively to these external forces through informed decision-making and sound comprehensive planning policies.

FEDERAL GOVERNMENT

Most Federal policies and plans are perceived to be removed from the day-to-day decisions and activities of the Town and its residents. However, two notable exceptions include policies related to development in flood plains and the installation of amateur (ham) radio and satellite dish antennas.

As to the first of these, a Flood Insurance Study was completed for New Castle in 1979. It resulted in a series of maps that identify the 100-year frequency flood as well as the "floodway" and "floodway fringe" for the streams investigated. Although the 100-year flood was selected as the base flood for the purpose of flood plain management measures, the 500-year flood was also mapped to indicate additional areas of flood risk in the community. This information was used to establish premium rates for the National Flood Insurance Program based on the specific potential for flooding in

different areas of New Castle. The data generated by this study was also incorporated into the Town's zoning law, subdivision regulations and building permit regulations, which establish locational and construction-related requirements for development in flood plains. As a result of several revisions to the National Flood Insurance Program that became effective between 1984 and 1986, the Town's various development regulations were revised in 1988 to comply with the Federal amendments.

A second area of direct Federal involvement in local planning and development activities pertains to amateur radio and satellite dish antenna communications. In 1985, the Federal Communications Commission (FCC) adopted a ruling that could result in the preemption of local regulations on placement, screening or height that have the effect of precluding amateur radio communications. In 1986, the FCC adopted another ruling stipulating that local regulations that appear to discriminate against satellite dish antennas in favor of other types of antenna facilities would be similarly preempted if such regulations were found to be without reasonable basis. Neither ruling applied to restrictive covenants in private contractual agreements since it was felt that such agreements are entered into voluntarily. As a result of these FCC rulings, New Castle's zoning law is being revised to comply with the Federal mandate.

NEW YORK STATE

Until it was disbanded in 1975, the New York State Office of Planning Coordination had the primary responsibility for long-range planning and the coordination of planning programs for the different levels of government within the State. This office also provided planning assistance to regions, counties and municipalities. Prior to that time, several Statewide planning studies were undertaken on the subjects of land use, transportation, parks and recreation, and the environment. Most of these plans were based on an assumption of continuous population growth and urban expansion through the year 2000. Since most of these plans have not been updated recently, many of the recommendations and text discussions are inconsistent with present conditions and trends.

Comprehensive Planning

In 1964, a report entitled ***Change, Challenge, Response: A Development Policy for New York State*** was released. It promoted the establishment of self-contained communities in the suburban fringes of the New York Metropolitan Area as a planned method of accommodating the expected population growth. A more detailed development policy statement was produced in 1971 under the title ***New York State Development Plan***. It included a preliminary plan map which reflected then current land use patterns and trends and assumed that future growth would be guided to avoid the disorganized sprawl that had occurred in the past.

On this map, New Castle was shown within the band of "Medium Density Urban" land uses that encompassed all of southern and central Westchester as well as the northern part of the County west of the Towns of Bedford and Somers, and which was projected

to reach a population density of 2,000-9,999 persons per square mile by 1990. In 1980, the population density of New Castle was 659 persons per square mile; by January 1, 1988 it had increased to an estimated 679 persons per square mile. Even at its full theoretical development potential of 27,500 persons projected under 1984 zoning policies and prevailing demographic trends related to household size, the Town's population density is not expected to exceed 1,200 persons per square mile.

Transportation Planning

In 1968, a State transportation plan was released by the Department of Transportation entitled ***Policies and Plans for Transportation in New York State***. This plan, prepared at a time when population growth was expected to continue rapidly and the availability of funding was not viewed as a major obstacle, recommended that priority be given to the completion of Interstate 684 and the Sprain Brook Parkway as well as to the modernization and electrification of the Harlem Division of the (former) New York Central Railroad north of White Plains, all of which could be expected to affect New Castle either directly or indirectly. The plan also recommended that abandoned railroad rights-of-way, such as the Putnam Division of the (former) New York Central Railroad that crosses through New Castle in Millwood, be retained for future uses needing an exclusive right-of-way. In a section discussing additional facilities that might be needed by the year 2018, the plan identified a potential highway connecting northern Bergen County, New Jersey with the Danbury, Connecticut area along a theoretical routing that passed through northern Westchester very close to the western end of New Castle.

Recreation Planning

In 1983, the New York State Office of Parks, Recreation and Historic Preservation (formerly the New York State Office of Parks and Recreation) prepared a study entitled ***People, Resources, Recreation: New York Statewide Comprehensive Recreation Plan***, which superseded three earlier comprehensive recreation plans prepared in 1968, 1972 and 1978. It emphasized the establishment of an integrated Statewide recreation system composed of parks, parkways, trails, waterways, historic sites and open space preserves, using transportation and utility corridors and abandoned railroad rights-of-way to create linkages between facilities. The plan focused on maintaining the State's existing recreation system, increasing accessibility of those facilities for underserved groups (such as the aged, the handicapped, the young and the economically disadvantaged), developing new facilities in urban areas and preserving outstanding natural areas (such as flood plains, watercourses, areas of steep topography and shallow soils, watersheds and unique vistas) through the use of imaginative planning, design and implementation tools. The plan also recommended better coordination between the public, private and semipublic sectors and endorsed the joint planning and development of school and community facilities. Unlike its predecessor plan, the 1983 plan placed greater emphasis on the establishment of an effective, ongoing planning process to enhance the State's recreation and open space system, rather than on traditional land designation and acquisition actions.

Environmental Planning

In 1973, the Department of Environmental Conservation published a preliminary ***Environmental Plan for New York State***, which called attention to the problems and costs of land use decisions made without regard for environmental consequences. Focusing on the natural resources of land, water, air, fish and wildlife, and energy, the plan recommended that land use guidelines be developed on a Statewide basis to identify compatible and incompatible uses and intensities of development, to integrate environmental considerations and to incorporate public service needs such as transportation, water supply, solid waste management and recreation space. Critical areas of environmental concern that should be reflected in these guidelines included wetlands, shorelines, flood plains, prime agricultural lands, unique scenic areas, archaeological sites, selected lakes and rivers, aquifer recharge areas, special fish and wildlife habitats, and mineral deposits. Although the State environmental plan did not propose to transfer local land use controls to the State government, it clearly stated that the piecemeal efforts by hundreds of local governments throughout the State had not proved satisfactory in dealing with the increasingly severe environmental effects of unwise development.

Recent Statewide Planning Efforts

In recent years, the involvement of the State of New York in areawide planning has been limited principally to the Coastal Zone Management Program and several environmental regulatory programs, such as the Tidal Wetlands Act and the Freshwater Wetlands Act, which are administered by the New York State Department of Environmental Conservation. In addition, with the passage of the State Environmental Quality Review Act (SEQRA) in 1975 and the subsequent adoption of implementing rules and regulations in 1976 and their comprehensive revision in 1987, the influence of the State has been directly felt at the local level by requiring that consideration of environmental factors be an integral part of the planning, review and decision-making process of governmental agencies. Amendments to the State enabling legislation pertaining to the zoning authority of cities, towns and villages were also passed by the State Legislature in recent years, allowing local municipalities to mandate the use of "clustering" in subdivision design and also requiring them to include provisions in their zoning regulations for the accommodation of solar energy systems.

As part of its ongoing long-term planning, the New York State Department of Transportation in cooperation with the Federal Highway Administration prepared a report for New Castle in 1978, citing 37 roadway segments and/or intersections within the Town that were generally operating below acceptable levels of capacity and safety. This report was followed by a second one in 1979 that outlined specific recommendations for traffic improvement at the previously identified locations as well as two new ones. In 1987, at the request of the Town, the State Department of Transportation conducted a more detailed investigation of the Route 117 corridor and a portion of the Route 120 corridor, identifying specific improvements that could be made to improve the safety of these roads.

Long-term planning activities have also been underway at the New York State Office of Parks, Recreation and Historic Preservation. An update of the 1983 Statewide comprehensive recreation plan is currently being finalized and is scheduled for publication in 1989.

REGIONAL PLAN ASSOCIATION

The Regional Plan Association (RPA) is a privately-funded citizens' planning advisory body that has worked for the orderly development of the New York Metropolitan Region since the 1920s. A major effort of the organization was the development of ***The Second Regional Plan*** which was released in 1968 as a successor to the 1929 ***Regional Plan of New York and Its Environs***. This new plan was subsequently supplemented with individual reports focusing on application of the Plan's concepts to each of the Region's counties.

The Westchester County report, entitled ***The Future of Westchester County***, was released in 1971. It promoted the concentration of development in existing activity centers, particularly White Plains and to a lesser degree Mount Kisco and Peekskill, and the preservation of outlying areas as open space. To reinforce this concept, it identified the need for a Mount Kisco connector to Interstate 684, better east-west access between Ossining and Mount Kisco, and an improved highway connection between Peekskill and I-684 along the Route 35 corridor. Governmental action was urged to prevent strip commercial development, segregation of jobs and housing, and a pattern of scattered development that could not be efficiently provided with public services. It recommended that housing be located at higher densities near centers of jobs and facilities and at lower densities farther away. The RPA was particularly critical of campus-type office developments isolated from the major activity centers, even if they were related to transportation arteries. The plan suggested a variety of public and private techniques to achieve these goals.

The Regional Plan Association offered no specific recommendation for New Castle. However, the Town was part of a band surrounding midtown Manhattan that was projected to experience the greatest development pressure over the forthcoming decades. It is noted, however, that the RPA plan projected a Westchester County population of 1.5 million by the year 2000, a figure which far exceeded the estimates of other regional planning agencies and which is unlikely to be reached since the County's 1988 population was estimated at only about 879,000. The RPA concept for the Town generally consisted of a low density single-family residential area with relatively higher housing densities (1,000-10,000 persons per square mile) found within the Saw Mill River valley corridor and concentrations of open space located in the eastern and western portions and north-central section of the Town. All nonlocal commercial and employment needs of New Castle residents were seen to be adequately met by existing or new facilities developing in Mount Kisco, White Plains or other existing activity centers.

TRI-STATE REGIONAL PLANNING COMMISSION

Until it was disbanded in 1981, the Tri-State Regional Planning Commission was the official planning agency designated by the Federal government for the New York City Metropolitan Region, which was composed of 27 counties and planning regions in New York, New Jersey and Connecticut. In its role as a planning agency, Tri-State conducted numerous planning studies involving regional issues and concepts, focusing on the development and use of land, housing, transportation and public facilities. Although Tri-State no longer functions in a review and advisory capacity, its plans and reports are still considered a valid regional basis for local planning and provide a framework for coordinating the plans of each of the subareas within the Region.

Comprehensive Planning

The most recent regional land use plan and program, entitled ***Regional Development Guide 1980-2000***, was published by Tri-State in 1981. This plan superseded the first ***Regional Development Guide***, issued in 1968 and later revised in 1972, which had forecast a 32% increase in population as well as continued industrial, commercial and financial prosperity. Recognizing that its projections were far too optimistic, the Commission in its 1981 version of the ***Guide*** set a target, not a forecast, of 11% population growth in the Region by the year 2000.

The three broad objectives the plan was designed to meet were: (1) conservation of environmentally sensitive lands; (2) concentration of development to revitalize older cities and to stabilize existing populations; and (3) the balancing of dwellings, jobs and services. The plan included maps that showed recommended densities for the development of land and identified recommended activity centers of different sizes in the Region. The Region was broadly separated into "Open-Land Areas" and "Urban Areas," with the latter containing four ranges of recommended residential densities. The areas designated as open-lands were intended to remain in a natural state as conservation areas or recreational open space, or to be used for agriculture or residential uses only at very low densities, although the plan acknowledged that "in-fill" construction at existing densities in the small clusters of development which already existed within the open-land areas might be appropriate and necessary.

Because the smallest area for which the land use recommendations were made was one square mile, the plan contained the cautionary advice that areas designated as urban may contain lands where development should not occur just as areas designated as open-lands may contain small clusters of development. Even where open-lands existed, the plan stressed that appropriate locations for a cross-section of housing opportunities should be provided by all municipalities commensurate with the scale of local employment.

The plan specifically recommended against development at densities of between 0.5 and 2.0 dwelling units per net acre because such construction would require improvements such as streets, curbs, sidewalks, and central water and sanitary sewerage systems at significantly higher costs per dwelling unit on an initial and

long-term basis than construction at higher density levels. In addition, energy costs would be dramatically increased and environmental conservation was likely to be sacrificed. At densities of less than 0.5 units per net acre, it was felt that many of these facilities would not be needed.

Figure 49 shows the Town of New Castle in relation to the ***Regional Development Guide*** plan map. The highest residential density level recommended for the Town was 7-14.9 units per net acre —shown in the area of the Chappaqua hamlet —with a density of 15 units per net acre to be encouraged near suburban railroad stations. The lowest density level within the "Urban Area" category (2-6.9 units per net acre) was recommended for the central part of the Town, roughly corresponding to a three-mile wide band centered on the Saw Mill River Parkway corridor. The areas west of the Taconic State Parkway, immediately southwest of the Town/Village of Mount Kisco, and approximately east of the area defined by Armonk Road, Whippoorwill Park and Haights Cross Road were designated as "Open-Land Areas," within which residential development should take place at densities not exceeding 0.5 units per net acre.

The plan map of the ***Regional Development Guide*** identified three activity centers within New Castle. A "local center," viewed as a traditional central business district providing retailing, offices and other services on a localized scale, was shown in the vicinity of the Chappaqua hamlet. The plan suggested that its size and growth reflect only the needs of the population it served. The plan map also showed two other nonresidential centers within New Castle, identified as "unifunctional and institutional centers." These generally corresponded to the locations of the Reader's Digest complex in the central part of the Town and of Maryknoll in the western part of the Town near Ossining. A "unifunctional and institutional center" was defined as a place with its own individual development characteristics and its own dynamics of growth, stability or decline. The plan specifically recommended against the creation of new centers of this type in isolated decentralized locations.

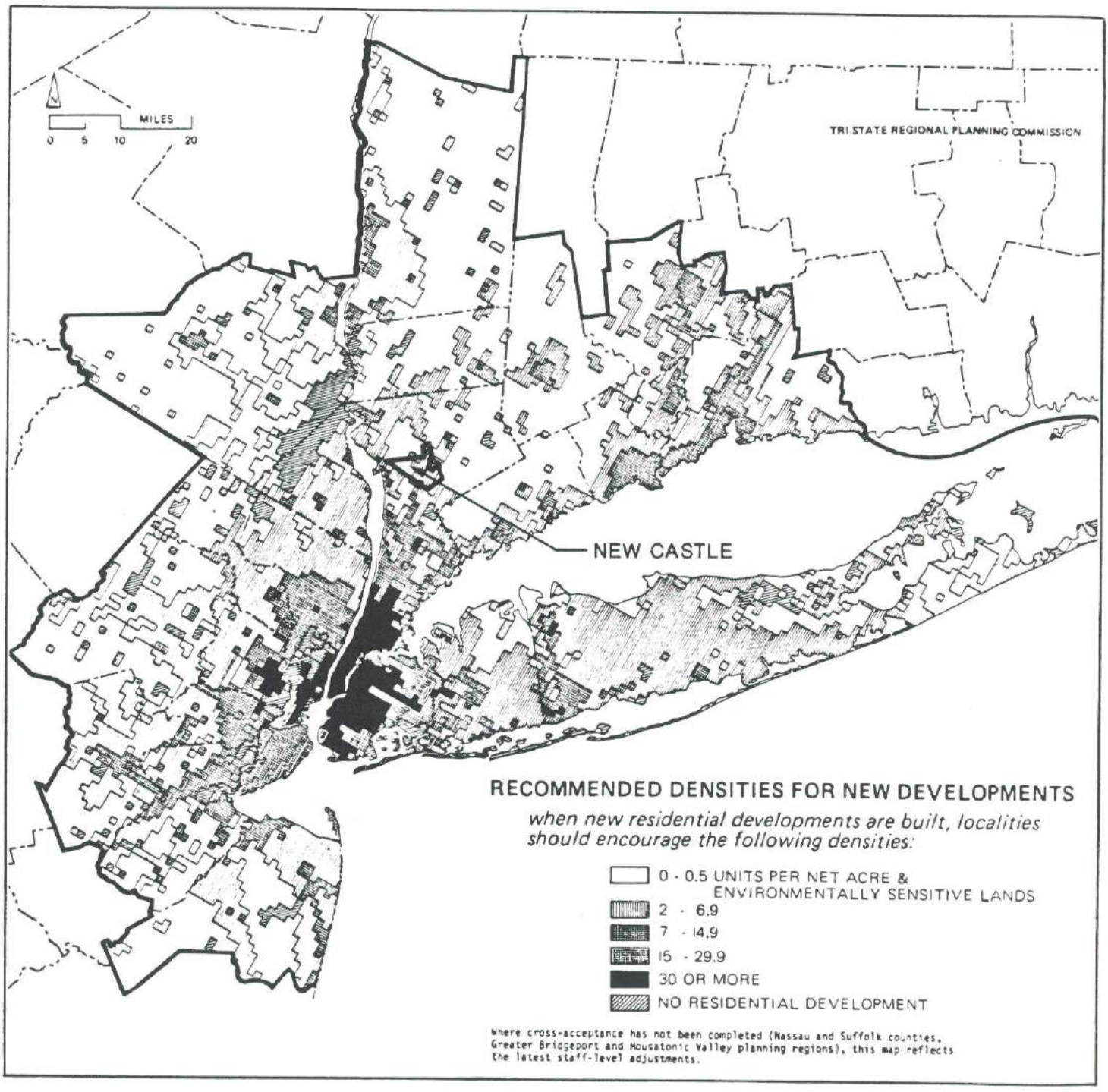
In terms of a relative hierarchy of residential densities, the present zoning policies of New Castle and the development pattern that has evolved therefrom are generally consistent with the recommendations of the Tri-State plan. The Chappaqua hamlet contains the highest concentrations of residential development within the Town, with those densities tapering off as the distance from this center increases. However, while the residential densities within the Chappaqua hamlet and outlying eastern, western and north-central portions of the Town are compatible with the recommendations of the Tri-State plan, much of the central portion of the Town is zoned for residential development at a lower density than recommended by the Tri-State plan. However, much of this area is already fully developed.

Transportation Planning

In 1976, a plan and program for regional transportation through the year 2000 entitled ***Maintaining Mobility*** was prepared by Tri-State. In light of the slowdown in population and economic growth which became evident in the 1970s along with heightened environmental awareness, the transportation plan concluded that the future mobility of

Figure 49

NEW CASTLE IN RELATION TO THE TRI-STATE PLANNING COMMISSION PLAN



Source: Tri-State Regional Planning Commission ***Regional Development Guide 1980 - 2000***

the Region would depend more on preserving and correcting the existing system than on expanding it, i.e., more efficient and intensive use of existing facilities, preservation and repair rather than abandonment, and operating solutions rather than building solutions, whenever possible.

The plan produced a list of recommended short-term and long-term capital projects and systems management strategies. As they relate to the Town of New Castle, either directly or indirectly, this group of improvements included the completion of the Sprain Brook Parkway north of Interstate 287, the comprehensive rehabilitation of the Hudson and Harlem Lines of the (former) New York Central Railroad and the modernization of the older sections of the Taconic State Parkway within Westchester County. The plan also identified the need for improved parking at commuter rail stations and for greater consideration of the elderly, the handicapped, pedestrians and bicyclists in transportation planning.

Housing Policy

In 1978, Tri-State adopted the housing element of its overall regional planning effort. This report, entitled ***People, Dwellings and Neighborhoods***, attempted to define the main housing problems of the Region, set goals for housing and proposed a sharing of responsibility in the Region for attaining these goals. The basic factors contributing to the Region's housing needs were identified as population growth, household formation and the goal of maintaining a minimum Regionwide vacancy rate of 4%. To meet the overall housing need, Tri-State stressed that the focus should be on the special conditions of lower-income households and minority households. Based on this perspective, the three major problem areas in housing were identified as rent-income imbalance, substandard housing stock and jobs-housing imbalance. The four goals established to deal with this situation were: (1) construct new houses and apartments; (2) upgrade run-down housing; (3) improve the distribution of housing; and (4) remove the barriers that result from discrimination. All four goals were viewed as integral components of a program designed to increase housing choice.

To improve the housing situation, Tri-State recommended that each subregion and local government formulate housing programs to meet its needs and assume its fair share of responsibility. Allocations were established in ***People, Dwellings and Neighborhoods*** for distributing the identified lower-income housing needs to each subregion. It was estimated based on 1970 data that Westchester County's share of this responsibility would translate into a total of approximately 1,960 units per year through the year 2000. Having completed the allocation plan for the overall Region, Tri-State urged each subregion to prepare its own housing allocation plan, working with each of its respective local governments such as the Town of New Castle.

WESTCHESTER COUNTY

The Westchester County Charter charges the County Planning Board with a comprehensive planning function relating to the formulation and recommendation of

major development policies. In addition, the County Administrative Code further amplifies the County Planning Board's role and responsibilities to include aid in coordinating actions among the various municipalities in the County by bringing pertinent intercommunity and Countywide considerations to the attention of such municipal agencies. One means by which the County Planning Board has fulfilled its responsibilities has been the development of a series of planning documents that collectively function as a comprehensive plan for Westchester County. These have covered such subjects as land use, parks and open space, water quality and housing.

Comprehensive Planning

The principal County planning document is entitled ***Assumptions, Goals and Urban Form***. It consists of a written statement of assumptions about Westchester County in the year 1990 and the development goals resulting therefrom, as well as an "Urban Form Concepts" plan map. Originally prepared in 1971, the present official version was adopted by the County Planning Board in 1975. This document was also "cross-accepted" by the Tri-State Regional Planning Commission as the official portion of its regional plan for Westchester County.

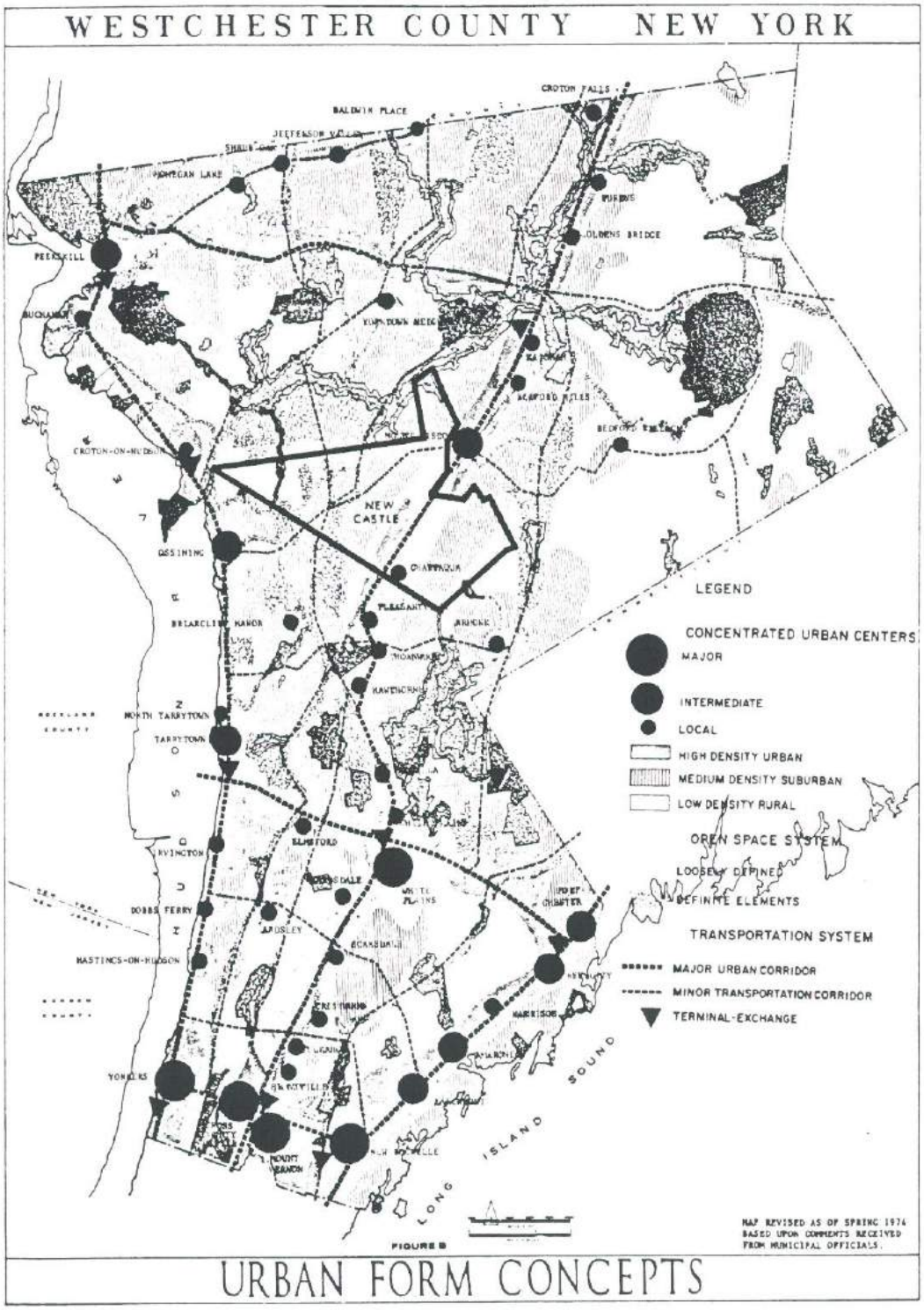
The development policies advanced by ***Urban Form*** are intended to serve as a guide for coordinated activity by all levels of government in Westchester County as they relate to the planning and implementation of land use patterns, transportation facilities, public utilities, parks and open space, and governmental services. The focus is on overall development patterns and densities, as expressed by a land use intensity (LUI) system, and not on specific land uses. It is for this reason that the concept "urban form" is used rather than "land use."

For the purpose of analyzing urban form in Westchester County, five distinctive forms were delineated on the basis of these criteria: Concentrated Urban Center, High Density Urban Area, Medium Density Suburban Area, Low Density Rural Area and Open Space. All land in the County was classified into one of these five categories to designate its recommended level of development density. The classification procedure was based partially on existing development, but was principally determined by the policies of expanding existing urban centers, reinforcing development in the natural valley corridors, and using open space to define, shape and provide relief and contrast to the urban environment.

The resulting Urban Form Concepts plan map is reproduced on the following page as Figure 50 with the Town boundary of New Castle superimposed. As can be seen from this map, one of the major north-south development corridors within the County—the Bronx River-North Saw Mill River corridor—passes directly through New Castle. The ***Urban Form*** map recommended that development in and around the Chappaqua hamlet along both sides of the Saw Mill River Parkway as well as in the area immediately south of Mount Kisco between Bedford Road and Armonk Road be compatible with the "High Density Urban" classification. Further reinforcing this concept was the identification of the Chappaqua hamlet as a "Local Concentrated Urban Center."

Figure 50

NEW CASTLE IN RELATION TO WESTCHESTER COUNTY URBAN FORM CONCEPTS



Source: Westchester County ***Assumptions, Goals and Urban Form*** (1975)

Much of New Castle was recommended for development in the "Medium Density Suburban" classification. This category was adopted for most of the area between the Taconic State Parkway and the Saw Mill River Parkway as well as for a large area in the southeastern portion of the Town. This urban form designation also encompassed the Millwood hamlet. Areas with this designation were expected to have public water and sewerage systems available either at present or in the near future. "Low Density Rural" development was recommended for three separate areas of the Town, roughly corresponding to the portion generally west of the Taconic State Parkway, a corridor along both sides of the Saw Mill River Parkway generally southwest of Mount Kisco, and the eastern portion bordering the Towns of Bedford and North Castle. These areas were described as "predominantly undeveloped and natural in character, yet not permanently so."

The County's Urban Form Concepts plan map also recommended areas for open space treatment in New Castle. Among these were the Briarcliff-Peekskill Parkway and the Taconic State Parkway rights-of-way, the (former) Hudson Hills Country Club, the Campfire Club and the Catskill Aqueduct. Maryknoll was also included for its perceived open space character. The identification of these particular features reflected the County's objective of creating a Countywide system of connecting rather than isolated open spaces.

Since the adoption of ***Assumptions, Goals and Urban Form***, the County Department of Planning has been working on a series of refinements to the Urban Form Concepts plan map. These refinements are intended to reflect increased consideration of environmental factors, conformance with the more recently adopted County policy on ***Parks and Open Space*** and a breakdown of the five urban form categories into nine subcategories. However, no revisions are being made to the underlying goals and policies on which it is based. It is also not the intent of the refinement process to redo the plan map to make it precisely conform to the master plans or desires of individual local governments. According to the County, parcel by parcel application has never been intended. It is important to note, however, that while the density categories shown on the plan map are highly conceptual and have no direct legislative impact on local municipalities' land use and zoning policies, the plan map represents the basis and framework for County planning decisions on such matters as utility services and zoning referrals as well as for County recommendations related to projects planned by higher governmental agencies, such as highways and mass transit. Consequently, it is important that the County's plans and New Castle's be as closely aligned as possible.

Compared to the currently adopted Urban Form Concepts plan map, the proposed map released in 1985 suggests a number of important modifications affecting New Castle. In general, a more refined delineation of the various urban form categories is shown, including the addition of "Hamlets" to the hierarchy of "Concentrated Urban Centers" and the identification of Millwood as one such hamlet center. Other proposed revisions include modifying the "Open Space" delineation in a few locations; changing the designation of several other areas of the Town to both more and less dense urban

form categories; and further refining each of the "Medium Density Suburban" and "High Density Urban" designations to reflect a narrower range of recommended densities.

Although a cursory review of the proposed Urban Form Refinement plan map shows that the overall development pattern being advanced by the County generally resembles that of the Town as expressed through its existing Town Plan, zoning law and prevailing land use pattern, on closer examination a number of important deviations are evident. In several locations, the levels of density proposed by the County are considerably higher than those proposed by the Town. Some of the recently incorporated changes remain inconsistent with recommendations previously forwarded to the County by the Town. New Castle should continue to work with the County in an effort to conform the proposed Urban Form Refinement recommendations to the Town's own development policies.

It is intended that the 1985 Urban Form Concepts plan map be formally adopted by the County Planning Board as a revised policy document following official public review and comment. Although public hearings were originally scheduled to begin in 1986, this process has been delayed, in part, because of the County's desire to first review the findings of separate water supply and sewerage studies, which were authorized to be undertaken for the northern part of the County and which were expected to be completed by the end of 1988. It is not yet known to what extent the proposed Urban Form Concepts plan map for New Castle may be affected, if at all, by the findings of these reports.

Parks and Open Space Planning

In 1976, the Westchester County Planning Board and the Westchester County Parks, Recreation and Conservation Board adopted the second element of the evolving comprehensive plan for Westchester County, consisting of a development policies report and plan map under the title ***Parks and Open Space***. While earlier County planning documents focused almost exclusively on the acquisition of parkland by the County for recreational use, the adopted 1976 policy document broadened its scope to encompass two new significant open space concepts.

First, it reflected the County's interest in open space preservation through techniques other than acquisition, and outlined a broad range of strategies, controls, inducements and policies that could be used by all levels of government to achieve their goals for recreation and open space planning. Secondly, it described the development of "a system of open space areas in both public and private ownership, not unlike a greenbelt system, which was designed to separate and buffer built-up areas to preserve their viability as recognizable centers."

To implement these concepts, the report recommended several policies to guide County as well as municipal actions, including using open space buffers between communities to enhance community identity and to shape the pattern of development; creating linear open space linkages between major open spaces and recreation areas; preserving environmentally fragile lands of more than local significance as well as sites

of significant natural, historical or cultural value; and preserving reservoir and watershed lands in an open state while recognizing their potential for active recreational use.

The recommended open space system for the County was composed of "Definite Elements" and "Loosely Defined Elements." "Definite Elements" encompassed those properties that were permanently protected from development or were publicly-owned. "Loosely Defined Elements" were less permanent in nature, functioning primarily as visual open space and often including land uses not commonly thought of as open space uses, e.g., educational campuses, institutions, large estates and corporate land holdings. New Castle lands identified on the plan map were limited to those classified as "Definite Elements." They included major public recreation areas such as Echo Lake State Park, Wampus Pond County Park, Gedney Park, Whippoorwill Park, the New Castle Arts Center and several other smaller Town parks, some of which are not yet developed; private recreation areas such as the Campfire Club and the Girl Scouts Reservation; existing schools as well as the Hog Hill Environmental Center; the Marsh Wildlife Sanctuary; Fair Ridge Cemetery; the Con Edison substation in Millwood; and reservoirs and watershed lands.

A number of prominent linear elements of the open space system were also identified, including the rights-of-way of the Saw Mill River Parkway, the Taconic State Parkway and the unbuilt Briarcliff-Peekskill Parkway; the Con Edison right-of-way that crosses Millwood and the West End; the Catskill Aqueduct and the Old Croton Aqueduct near the Ossining border; and the right-of-way of the abandoned Putnam Division Railroad that runs through the Millwood hamlet. In addition, Croton Dam Road and portions of King Street and Armonk Road were designated as "Scenic Routes" which should receive protection and enhancement where appropriate.

Water Quality and Sewerage Planning

In 1975, Westchester County initiated work on a long-range planning effort designed to develop, adopt and implement a 20-year waste treatment and management system plan for the County. After nearly three years of study, a report entitled ***Areawide Waste Treatment Management Plan*** (208 Study) was released in March 1978. Since possible problems of pollution extend beyond municipal boundaries and local impacts to potential adverse impacts on the numerous water supply reservoirs in the County, the point of reference for this study was one of watersheds and drainage basins. New Castle was shown as being partially within each of the two study areas (North County and South County) and included land within four different drainage basins.

The "208" plan was structured around a discussion of the four major sources of water pollution: nonpoint sources, intermittent point sources (urban stormwater runoff), point sources (municipal and industrial) and residual waste (sludge, septage, solid waste and industrial waste). In dealing with nonpoint sources of pollution, the emphasis was on prevention, while most point sources could be remedied only by treatment. The plan emphasized that the relationship between ground water quality and quantity plays a crucial role in future land use decisions in areas that are dependent on ground water

for drinking water supplies, particularly where on-site subsurface disposal systems are also used.

While municipal and industrial point source pollution has traditionally received the greatest attention in water quality management, the plan included a detailed discussion of nonpoint source pollution, which was considered to be even more pervasive in its magnitude than point sources. On a Countywide basis, surface runoff was identified as the overwhelming nonpoint source problem. In one section of the plan that reviewed various local efforts to control nonpoint source pollution, New Castle was cited as providing some indirect pollution abatement through its local controls on flood plain development, wetlands, drainage, "dry" land area requirements and its policies supporting clustered housing and lot-size averaging.

In discussing nonpoint source problem areas which existed in 1978, the plan identified the Town salt storage site on Hunts Lane as having inadequate cover and causing potential water and/or air pollution, a condition since corrected with the construction of an enclosed dome. In addition, reported incidents of septic problems in the Kisco Park area were identified. In addressing the issue of point source pollution, the plan identified the two major problem areas in northern Westchester County as the proliferation of small sewage treatment facilities and continued reliance on individual subsurface treatment facilities.

As part of this plan, three proposed sewer service areas were identified within New Castle. One area, referred to as the "Kisco River" service area, included a large portion of the Town surrounding the Town/Village of Mount Kisco. This service area was designed to accommodate the more heavily populated areas developing along the Interstate 684 corridor between Mount Kisco and Croton Falls. To implement this proposal, the construction of pumping stations, force mains, and gravity sewers as well as the acquisition of easements would be required.

A smaller portion of New Castle at the western end of the Town was proposed for sewering as part of the "Croton Gorge" system. This proposal would require the construction of a new pumping station in Croton-on-Hudson and a new treatment plant in Ossining.

The third proposed service area included the southwestern third of New Castle. Under earlier County sewerage studies completed in 1968, the majority of this area was proposed for future sewer service as part of the Yonkers Joint Sewer District. A specific proposal under study at the time was the extension of the Saw Mill-Briarcliff trunk sewer northward toward the New Castle/Mount Pleasant Town line. Since then the initial phase of this proposal has been implemented, with the extension of the sewer trunk line to Chappaqua Road (approximately 5,000 feet south of the New Castle Town line) now completed. It is intended that this trunk sewer eventually be extended to the Town line, but no schedule for its construction has been established.

Housing Policy

In 1979, the County Board of Legislators adopted an official ***Westchester County Housing Policy*** consisting of a report dated October 23, 1978 prepared by a special advisory committee appointed by the Board of Legislators, along with additional recommendations of the Board's Committee on Community Affairs, Health and Hospitals. The basic thrust of this policy was that increased housing production must be encouraged to improve the quality of the housing stock, to provide for the additional housing units needed as a result of the continuing decrease in average household size, and to allow for population growth. A target population growth of 0.5% annually was presented as a goal to help ensure the continued economic vitality of Westchester. According to the County, these factors combined, along with a number of assumptions related to vacancy rates and the number of dwelling units lost through fire, demolition, conversions and abandonment, would require the provision of approximately 5,000 new dwelling units each year, or a total of 50,000 units by 1990.

To meet the County's needs, the ***Housing Policy*** recommended that the County review the housing plans of each community and "negotiate" with each regarding its contribution to the need for housing. It was specifically pointed out that the County's involvement in the provision of roads, sanitation, water, recreation, transportation and financial assistance should be used as a means of encouraging and stimulating housing production and preservation.

The County ***Housing Policy*** also included a discussion of obstacles to the provision of housing and of strategies intended to promote new and better housing. The Policy stated that many obstacles are created by the actions of the County and the municipalities themselves through the adoption of "uncoordinated permit processing, multifaceted licensing requirements, disparate code requirements and restrictive land use and structural requirements." Recommendations included the establishment of a housing office in the County Department of Social Services, a strong County role in housing code enforcement and an increase in neighborhood preservation programs.

Notwithstanding the submission of two minority reports that questioned some of the fundamental assumptions and recommendations of the ***Housing Policy***, the County Board of Legislators took steps to put this policy into effect by requesting each local government to prepare a "master plan for housing to encompass a period of 10 years" and to submit this plan to the County Department of Planning and the County Planning Board. Further, the Board indicated that priority should be given to the provision of multifamily housing and that every effort should be made to provide housing for all income groups.

As of September 1981, all the County's 43 municipalities had submitted local housing plans for the period 1980 to 1990. These plans in total resulted in a projected production of nearly 44,000 units Countywide over the 10-year period, which —while less than the established goal —was considered reasonably close to that target. It was projected that 15% of these units would be developed through rehabilitation, 4% through conversions and the balance, or 81%, through new construction.

New Castle submitted its ***Housing Implementation Plan*** in October 1980. It projected the production of 2,200 new housing units through 1990: 605 single-family units, 1,445 multifamily units and 150 conversions (accessory apartments). With the exception of accessory apartments and approximately 10 rehabilitated units, it was forecast that the majority of the units would result from new construction.

WESTCHESTER 2000

In 1985, a group sponsored by Westchester County government, business and civic organizations participated in a look at Westchester's future to the year 2000. Eight task forces produced reports suggesting goals for the County in the following areas: health and human services; education and the arts; economy, ecology and demography; open space and recreation; transportation and other infrastructure; housing; urban centers; and intergovernmental relations. Further work is still underway in individual areas. Because the product of the "Westchester 2000" effort was a series of recommendations presented from a Countywide perspective, it is difficult to assess the role of New Castle in many of these areas. If the Town were to embrace the findings of this study, some changes in development policy could be accomplished at the local level. However, implementation of many of the recommendations of the "Westchester 2000" effort would require a regional consensus on the desired course of the County's future and would necessitate a fundamental change in the decision-making process associated with land use and development issues.

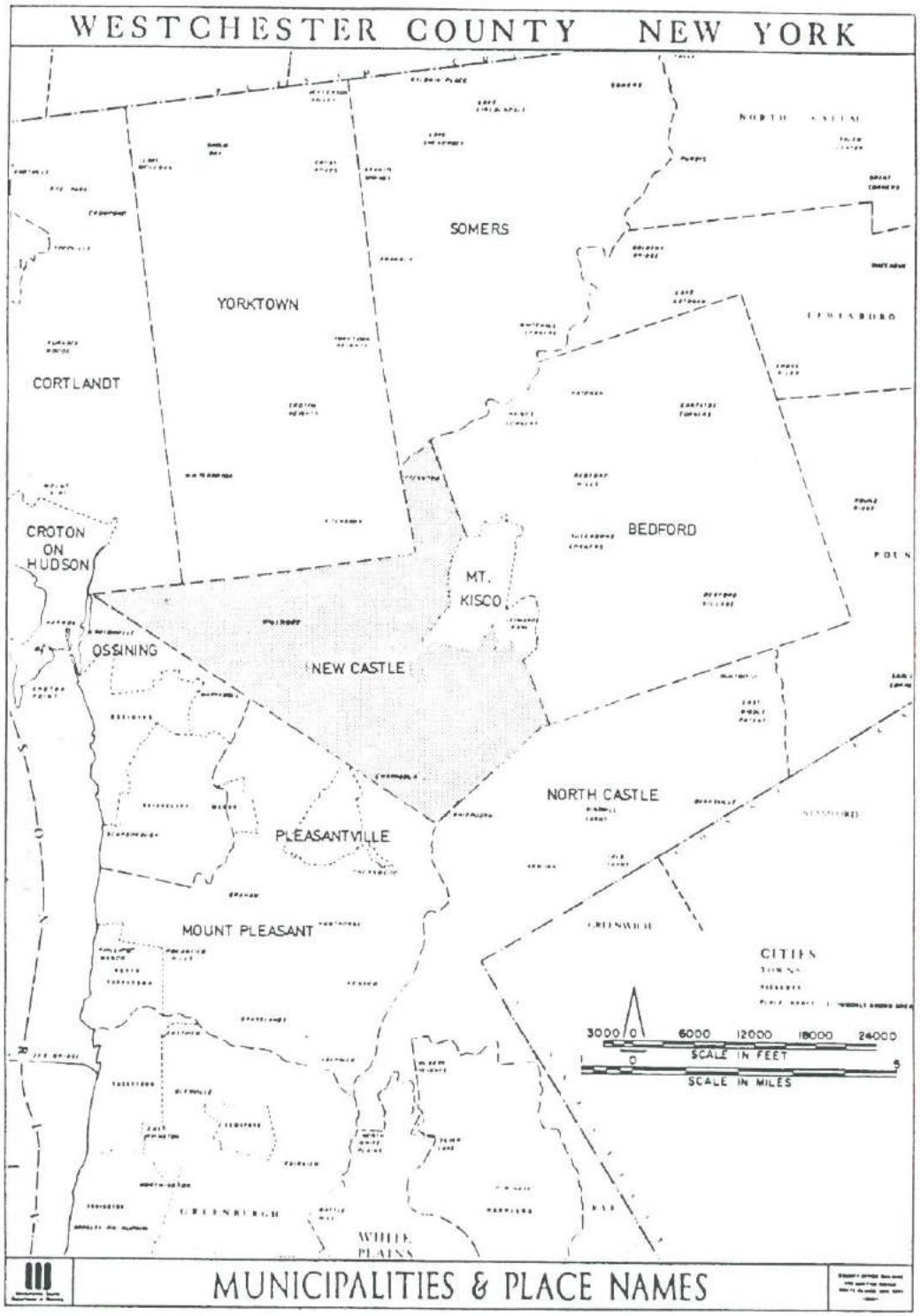
ADJACENT MUNICIPALITIES

New Castle abuts portions of 10 other northern Westchester communities, as shown in Figure 51. These include the Towns of Yorktown and Somers to the north; the Town/Village of Mount Kisco and Town of Bedford to the east; the Town of North Castle to the southeast; the Town of Mount Pleasant, Village of Pleasantville and Town of Ossining to the south and southwest; and the Village of Croton-on-Hudson and Town of Cortlandt to the northwest. The large number of decision-makers involved in influencing future development in the vicinity of New Castle makes the challenge of trying to reconcile the Town's plans and policies with those of its many neighbors especially difficult. For this reason, it is important to be familiar with the thinking of these other towns and villages as expressed through their own master plans and zoning laws as well as to be aware of the many development proposals under consideration in these other communities.

While all these municipalities are part of northern Westchester, which in the aggregate is distinctly different from southern Westchester, in many respects even these communities differ in size and character from New Castle. There are also several unique factors in the other towns and villages that have an influence on land use and activity patterns in New Castle. Of prime importance are the commercial centers located in Mount Kisco, Bedford Hills, Katonah, Armonk, Pleasantville, Thornwood, Briarcliff Manor, Ossining, Croton-on-Hudson and Yorktown Heights. Because of their

Figure 51

NEW CASTLE IN RELATION TO THE MUNICIPALITIES OF NORTHERN WESTCHESTER COUNTY



Source: Westchester County Department of Planning (1980)

size, most of these centers have market and service areas that also extend into New Castle.

Two other features of neighboring communities that could have an influence on New Castle are the development of campus-type office/research centers and multifamily housing projects. As to the first of these factors, developers of these types of projects, as well as major corporations, are finding that few prime building sites remain in and around White Plains and along Interstate 287. As a result, new sites are being sought farther north along the highways, parkways and other major roads such as Interstate 684, the Taconic State Parkway and Routes 9, 9A and 100. In several of the communities surrounding New Castle, fairly sizable office developments are either under consideration, approved or under construction. It can be expected that these facilities will generate not only traffic impacts but also the need for housing to accommodate the new or relocated employees working in these locations.

New York State courts have ruled that local municipalities must consider and provide opportunities for local and regional housing needs. These needs have been defined by the courts as including multifamily housing. The provision of multifamily housing has been addressed in a variety of ways by each of the municipalities surrounding New Castle. Several of these communities have mapped multifamily zoning districts, while others provide for multifamily housing through the use of floating zones. Still others allow multifamily development by special permit in single-family zoning districts or by application of Section 281 of the New York State Town Law (or its equivalent in Village Law) which permits the clustering of residential units in detached, semidetached, attached or multistoried structures. Another multifamily housing alternative provided for in most of these communities is accessory apartments.

All the communities surrounding New Castle have undertaken long-range planning studies that have led to the adoption of master plans. Several of these plans have also been amended since their original adoption. A review of these plans reveals that nearly all the land adjacent or reasonably proximate to New Castle in the adjoining municipalities has been recommended for residential development. The principal exceptions to this general policy are found in the plans for Ossining and Mount Kisco. Although the Town of Ossining amended its master plan in 1985 to reflect a number of significant changes from nonresidential to residential land use classifications, a number of large tracts abutting the New Castle Town line west of Croton Dam Road are still labeled as areas for "Residential-Office" development on the Plan map. In Mount Kisco, while the land abutting New Castle has been designated for residential or open space uses, large areas of office and industrial development are shown in the Radio Circle area and near the junction of Routes 117 and 172.

The character and form of a community is shaped by its zoning policies to an even greater extent than by its master plan. In terms of current zoning, most areas that are residentially-zoned in New Castle abut similarly zoned areas in the neighboring communities. However, considerable variation in the density of development permitted is evident. In addition, in a few locations residential and nonresidential zoning districts abut each other, separated only by the invisible boundary line of a political subdivision.

Some of the major areas of contrast are found along the boundaries of Mount Kisco, Mount Pleasant and Ossining. In portions of these areas, the contiguous communities permit residential development at densities two to ten times greater than those permitted in New Castle.

While the zoning designation and prospective use of land adjoining New Castle could have a pronounced effect on the character of the Town, the potential impact of development in neighboring municipalities is obviously not limited to just those parcels that share a common boundary line. Significant zoning patterns that exist or are emerging in these neighboring communities include several areas zoned for office/research development within the towns of Yorktown, Somers, Mount Kisco, North Castle and Mount Pleasant in the areas generally designated for such uses on those towns' master plans.

Another important evolving trend is the action recently taken by a number of municipalities surrounding New Castle to reduce the development potential of specific areas within their jurisdictions because of concerns about traffic congestion and infrastructure limitations in particular and community character in general. Within the past few years, Bedford, Mount Kisco, North Castle, Pleasantville and Ossining have each adopted amendments to their respective zoning laws designed to limit the intensity of development possible within their communities.

Despite these recent changes in zoning policy, growth and development in the northern part of Westchester County continues today in nearly all the communities surrounding New Castle as well as in the Town itself. Major new developments that can be expected to influence the Town to some extent include the IBM and Pepsico facilities in Somers, the office and industrial developments planned in Mount Kisco, the mixed use Thornwood Quarry project in Mount Pleasant and the multifamily developments in Ossining. In addition, the dispositions of the former Hudson Institute property in Cortlandt and the Shadow Lake parcel in Yorktown remain undetermined, raising speculation about their future uses. Finally, a major office rezoning affecting property between Routes 22 and 120 in North Castle was recently approved. Because New Castle has no direct authority over the actions of other municipalities, it should pursue an open dialogue with its neighbors on these issues and should focus on striving for a regional understanding of the impacts of major land use decisions.

Town Development Plan

PLANNING GOALS AND POLICIES

As a derivative of the Basic Studies phase, a statement of planning goals and policies has been formulated which is intended to convey the values and preferences of the community concerning the future of New Castle. These goals and policies are viewed as the ultimate ends toward which all future decisions and activities concerning Town development should be directed and have served as a guide in the preparation of the *Town Development Plan*.

RESIDENTIAL DEVELOPMENT

1. The Town of New Castle should remain a predominantly residential community and its attractive, low density character should be maintained. Future residential development should preserve both the stability of existing neighborhoods and the rural atmosphere of the Town's more outlying areas.

2. The rural residential character of the Town's outlying areas should be preserved and enhanced by maintaining rural and low density residential development standards and by requiring the preservation of natural open spaces and the establishment of uses that will substantially protect the natural character of the land. Conservation-type development should be used as one technique for implementing this policy.

3. Higher density residential development should be permitted in the Chappaqua and Millwood hamlets on sites that are conveniently located near shopping, community facilities and suitable transportation services, that are adequately served by utilities, and that can be supported by the natural limitations of the land.

4. Opportunities should continue to be provided for the development of a range of housing alternatives that are varied in density, residential type, living environment, ownership arrangement and cost. Multifamily development should continue to be permitted at a scale that is compatible with the prevailing character of each of the Town's residential environments so that, on balance, the impact of multifamily development is essentially comparable to that of single-family development located in the same area. The system of multifamily density bonuses should be designed principally to provide incentives for the inclusion of features that demonstrate exceptional sensitivity to environmental and neighborhood preservation, and that provide benefits of communitywide value. The development of multifamily housing in combination with retail and office establishments should be permitted in the Town's hamlet centers of Chappaqua and Millwood as an additional method of encouraging

the provision of less costly housing in the Town. Accessory apartments should continue to be permitted within the single-family residential areas of the Town in accordance with standards designed to protect the neighborhoods in which such units might be located. Additional opportunities should be created for the provision of housing designed to meet the special needs of senior citizens.

5. Every effort should be made to maintain the high standards of residential development that are characteristic of the Town. To preserve and enhance the present character of residential areas, the Planning Board should continue to explore and, where appropriate, adopt new techniques to guide subdivision design and construction, as well as other forms of residential development.

6. Business uses, other than agricultural and livestock operations, should not be permitted in residential areas. Activities that are incidental to residential use, such as home occupations or home professional offices, should be permitted as accessory uses, subject to compliance with appropriate locational and design standards.

COMMERCIAL DEVELOPMENT

7. The existing business districts in the hamlets of Chappaqua and Millwood should continue to be centers for locally-oriented convenience retail and service businesses. New commercial shopping facilities that have market areas extending substantially beyond the Town's boundaries should not be permitted.

8. Since all parts of the Town are within easy reach of existing business centers, either in the Town or in adjoining communities, and since these areas offer additional opportunities for future commercial development commensurate with anticipated population growth, no new business centers need be established in any other section of New Castle, nor should existing centers be expanded.

9. The overall purpose of the policies guiding development in business districts should be to reduce the scale and intensity of commercial use so as to better balance traffic generation, road capacity and parking demands, as well as to maintain visual compatibility with the residential character of the Town. Toward that end, a mix of residential and nonresidential uses should be permitted in some of the Town's business areas, subject to appropriate site planning standards.

10. For all business districts, maintaining a scale of development and a character of use compatible with the predominantly residential character of the Town should be emphasized. Older structures within business districts that enhance the residential quality and scale of business development should be preserved and rehabilitated.

11. Service business uses, such as garages, repair shops, etc., that are not primarily dependent on pedestrian accessibility or are not compatible with retail uses, should be restricted to locations within the industrial areas and not be permitted within the two hamlet centers.

12. Because of the lack of adequate infrastructure, particularly roads, and the desire to maintain the residential character of New Castle, the Town should discourage the development of new research/office facilities on sites not already zoned to permit these uses until it has evaluated the impacts of the IBM Hudson Hills facility at the West End of Town. The intensity of office development use on existing sites should be restricted as necessary to minimize traffic congestion.

13. All business areas should be developed to modern standards with adequate provision for vehicular and pedestrian circulation, off-street parking and loading space, setbacks, landscaping and buffer areas adjoining residential development. Where necessary to meet such standards, major improvements or redevelopment should be encouraged. The appearance of the Town's business areas should be improved by official encouragement and regulation. The Town should also pursue the creation of expanded retail parking areas in the business areas of the hamlets.

OPEN SPACE AND RECREATION

14. The permanent preservation of natural and cultural resources should receive a high priority in the overall planning for the future development of New Castle. These resources include rivers and streams, lakes and ponds, wetlands, flood plains, aquifers and aquifer recharge areas, wildlife habitats, forested areas, steep slopes, stone walls, and other historic structures and sites.

15. Lands that serve an important aesthetic function as a result of their natural qualities and location should be protected from alteration. Such lands include areas immediately adjacent to major roads, natural buffer areas between different types of land use or development density, stream corridor greenbelts, and prominent hillsides and ridge lines.

16. The existing committed open space system includes land set aside for various purposes that is owned by the Town, Westchester County, other public agencies and private conservation groups. This system provides a wide range of benefits to New Castle residents and should be maintained as permanent open space. In addition, considerable open space is provided by private recreation clubs and as an incidental benefit of institutional development. The Town should take action, as necessary, to protect these open space lands since they contribute significantly to preserving the attractive, low density character of New Castle.

17. Public access to open space lands via foot trails contributes to the community's appreciation of these lands. The Town should pursue the establishment of a trail network through and between committed open space parcels. A system of bikeways, separated from vehicular roadways, should also be developed.

18. Public recreational facilities should be expanded to ensure that they are adequate in number, type and location to serve the increased needs of the Town's population at full development. Areas should be provided for both active play (e.g., baseball, soccer, swimming, tennis, etc.) and for passive recreation (e.g., walking, picnicking and simply enjoying the natural environment).

19. The Town should continue to encourage the imaginative planning of all new development so as to preserve open space and the natural environment as integral parts of such development.

TRANSPORTATION

20. The system of major and collector roads in New Castle should be carefully maintained to protect the Town's residential character. Conversely, the type of development permitted along such roads should be designed to protect the intended circulation functions of those roads. The State road network in New Castle has limited capacity and east-west circulation through the Town is expected to remain inefficient because of topographical restrictions and resulting circuitous road alignments. Major reconstruction or widening of roads is not consistent with the level of development recommended by this Plan. However, safety and intersection improvements at specified locations are needed and should be implemented.

21. The creation of a bypass route alternative to Route 100 around the Millwood hamlet should continue to be explored as a means of protecting the character of residential areas and of the locally-oriented business center from the impacts of increased traffic that will accompany the continued growth of New Castle and of major through traffic flows generated by surrounding communities.

22. Road planning efforts should continually be coordinated with State and County highway authorities and with adjoining municipalities to ensure that the Town's needs and policies concerning both through and local traffic routes are followed. The Town should actively seek to limit State and County road improvements that are designed to increase the capacity of existing roads for the purpose of carrying additional through traffic outside the Town's two hamlets. The Town should also closely review all State and County road improvement proposals to ensure that such activities minimize disturbance to existing development and preserve the existing character of an area.

23. Local roads, which are intended to primarily serve abutting residential development, should be coordinated with the major and collector road system in such a manner as to provide both for the convenient and safe circulation of local traffic and discourage their use by through traffic. Maintenance and improvement programs should be consistent with this intended function and be based on the intensity of development recommended by this Plan.

24. Dead-end roads, where permitted, should be limited in length to provide greater safety, to prevent inconvenience in traffic circulation and to avoid unnecessary expense in road maintenance.

25. Road connections needed to provide adequate traffic circulation and access for emergency service vehicles should be identified and mapped, and measures should be taken to preserve these routes.

26. Development sites with frontage on major or collector roads should be designed and laid out so as to minimize intersections with such roads. Residential lots should front on and have access to existing or new local roads wherever possible to minimize driveway entrances onto major and collector roads. Nonresidential parcels with frontage on major or collector roads should also be designed and laid out so as to minimize driveway entrances onto such roads and to facilitate the interconnection of adjacent on-site circulation systems.

27. Pedestrian walkways should be established along major roads in the hamlet centers and near major public facilities and, where existing, should be improved to provide for enhanced pedestrian circulation.

COMMUNITY FACILITIES AND SERVICES

28. School sites, recreation areas, and sites for Town administration, highway and public works functions, and fire and police protection that will be needed to serve the Town's growing population should be acquired at the earliest possible opportunity to minimize acquisition costs and to ensure the selection of the best available sites for the purposes to be served. Such sites should be of a character suitable for the intended purposes, of adequate size to accommodate the prospective service area population, and located so as to provide safe and convenient access and to be compatible with neighboring land uses. The Town should also closely coordinate its efforts with those of other public agencies that are planning the location of public facilities in New Castle. In planning these facilities, the Town and other public agencies should set an example and require superior quality in the architectural design of structures and in the layout and landscaping of such sites.

29. New residential development at a density higher than one dwelling unit per acre should be limited to areas where central water supply or sewerage

systems are available or will be provided. The extension of existing sewerage systems and the establishment of new systems should be encouraged only where they are needed to correct existing environmental problems and to prevent new ones, or where such facilities are needed to accommodate the density and type of development recommended by this Plan. However, the availability of central water and/or sewerage systems shall not, in and of itself, be considered a basis for rezoning to permit a higher residential density.

30. The Town, through the New Castle Water District, should continue to take all measures necessary to provide a reliable supply of good quality potable water distributed at adequate pressure for general consumption and firefighting purposes. New development proposals should be evaluated with a view toward ensuring that degradation of water quality and supply will not result and that improvements to the existing system, if needed, can be simultaneously accomplished. In areas that remain dependent on private wells for water supply, particular care should be taken to ensure that water quality is preserved and, where possible, enhanced.

31. Planning for improved solid waste collection and disposal systems designed to solve current problems and meet the needs of the Town's existing and future population should receive priority attention. The Town should continue to explore regional solutions to this problem with appropriate municipalities and agencies.

32. The heart of the Chappaqua hamlet should continue to serve as the main focal point for the Town of New Castle since its location can most conveniently serve the largest proportion of the Town's population. Continued institutional, semipublic and public development in this hamlet center should be encouraged and coordinated to enhance and define this area as the primary center of civic activity. In planning for the development of future public facilities that need not be geographically related to the activity center that has been created in the Chappaqua hamlet, the establishment of a secondary focal point in the Millwood hamlet should be encouraged.

RESIDENTIAL DEVELOPMENT

New Castle enjoys a position as one of the most attractive suburban communities in the region. More than any other single feature of the landscape, the Town's character is principally defined by the quality of its residential environments. Its attractive residential areas are among its greatest assets, maintained and enhanced largely as a matter of deliberate community policy. Particularly in light of the Town's relative lack of substantial business development and consequent reliance on residential development to finance needed public expenditures, preservation and enhancement of New Castle's residential character remains a prime objective of this Plan.

Between September 1966 (when the land use survey used to formulate the 1968 ***Town Plan of Development*** was completed) and October 1984 (when the most recent land use survey was completed), land used for residential purposes in New Castle increased by more than 50%, to a total of 5,210 acres or 35% of the Town's total area, resulting in a Townwide average of slightly less than one residence per developed acre. Between November 1984 and January 1988, more than 30 additional residential developments on 1,205 acres of previously undeveloped land had either received Planning Board approval or were under review. Thus, as of early 1988, approximately 6,415 acres, or 43% of the Town's total land, were considered committed to residential use.

The potential for continued residential growth in New Castle is high, since more than 3,700 acres, or close to one-fourth of the Town's total area, remained uncommitted to any particular use as of January 1988, with all but 73 acres of this total zoned to permit residential development. Not all this land is considered buildable, as one-third consists of wetlands, flood plains and slopes of 25% and greater. However, with several thousand acres of uncommitted land remaining, continuing pressure for further residential development can be expected.

Moderating the potential impact of this prospective development are the 2,000 acres of land that have already been set aside for recreation and open space uses as well as for watershed protection. It is the maintenance of these committed open space lands, combined with the application of sound standards concerning zoning, site planning and subdivision design to the review of future residential development proposals, that will be responsible for preserving New Castle as an attractive low density residential community.

A statistical overview of trends in land development does not, however, adequately describe the Town's residential character. That character is defined by the various kinds of housing being constructed as well as by the density of the Town's residential areas. While New Castle has historically been a single-family residential community, amendments to the previously adopted ***Town Plan of Development*** and the Town's

zoning law in 1979 paved the way for the construction of multifamily residences. During the subsequent five-year period, nearly half the building permits issued were for multifamily dwellings (including accessory apartments).

Although the Town has generally retained its low density residential character, the completion, construction or approval of 13 multifamily projects since 1979 demonstrates that New Castle can no longer be considered an exclusively single-family community. Recently completed residential developments as well as projects now underway or in the approval or planning stages include traditional single-family homes on one-acre or two-acre lots as well as attached townhouses and multifamily units at densities of close to 20 dwelling units per acre; units for rent and for sale; and units sold as condominiums or under a fee simple form of ownership. As a result, the Town now exhibits far greater diversity in its residential environments than at the time of adoption of the previous Town Plan, offering a variety of housing options that is broad in density, residential type, living environment, ownership arrangement and cost.

RESIDENTIAL LAND USE POLICY

Though some of New Castle's land is not yet committed to an active use, the dispersed nature of existing development is such that a residential character has clearly been established in most sections of the Town. This Plan recommends that residential development continue to be the predominant land use in New Castle and supports the continued provision of opportunities for the development of a range of housing alternatives that is consistent with the Town's historical provision for such housing and that reflects the Town's reasonable development capabilities as well as its place in the region.

It is the intent of this Plan to provide opportunities for the development of both single-family and multifamily dwellings. Townhouses, accessory apartments in single-family residences, small low-rise garden apartment developments and apartments in mixed use business district buildings are considered to be the most appropriate types of multifamily housing for communities where a predominantly single-family residential character is to be maintained. Such multifamily units are designed to help serve the present and future housing needs of the following population groups:

- Volunteer emergency services workers and other persons who are employed in New Castle, particularly those who hold jobs that are essential to the operation of the Town as a community, but whose incomes are not adequate to finance the purchase of single-family detached homes at prices prevailing in northern Westchester.

- Town residents who have raised their families and no longer wish to maintain their own single-family homes, but who would like to continue living in the community.

- Retired persons and other individuals wishing to remain in the community but who, because of reduced incomes, can no longer afford to maintain a single-family residence.

- Young couples, childless couples and single people who have grown up or come to work in the New Castle area, but who cannot yet afford or do not desire to reside in a single-family home.

- Residents and potential residents of the region.

New Castle's rugged topography, extensive wetland areas, extent of public water supply and sewerage service areas, and its location in the region all suggest that the present pattern of low density development in areas outside the Chappaqua and Millwood hamlets be generally maintained, with densities decreasing as the distance from these centers increases. Higher density development should be limited to locations in or near the hamlet centers where environmental restrictions are fewer and the existence of utilities, public facilities and shopping areas make a greater concentration of people more appropriate, convenient and efficient.

To implement the goal of providing opportunities for the development of a broad array of housing types, this Plan continues to recommend that multifamily housing not be concentrated in any one area of the Town, but that such housing instead be dispersed in various locations, with its characteristics tailored to be compatible with the particular residential environment in which it is located. The location of multifamily development should be guided by the following site selection criteria:

- **ACCESSIBILITY**: Higher density multifamily sites should have convenient access to shopping, jobs, community facilities (schools, parks, libraries, community centers, fire and police stations, places of worship, etc.) and mass transportation services.

- **UTILITY SERVICES**: Multifamily sites should be served by the major existing public water supply and sewer service districts, except where on-site facilities can be designed that are adequate to accommodate, both from an economic and an environmental viewpoint, the water supply and/or sewage disposal requirements that will be placed upon them, and, preferably, where future connections to the larger public service systems can be made.

- **ADJOINING LAND USES**: Multifamily sites should be appropriately and harmoniously related to the adjoining land use pattern, e.g., where they can serve as transitional uses between more and less intensive development and where there is adequate separation from single-family residences.

- **TRAFFIC ACCESS**: Multifamily sites should have safe and adequate traffic access.

- **TOPOGRAPHY**: The topography of multifamily sites should be suitable for development with housing of the type and density planned without the necessity for extensive earth-moving, landfilling or other similar incursions that would create excessive disturbance of the natural environment, particularly affecting sensitive areas such as wetlands and steep slopes.

- **SITE SIZE**: The size of multifamily sites should be sufficient to allow for proper setbacks, adequate screening and a density of dwelling units consistent with the nature of the land.

The specific densities proposed for multifamily housing in this Plan vary according to the site's location. Higher densities are proposed within the hamlets of Chappaqua and Millwood, which presently have the highest densities of development and the greatest availability of public and private services. As accessibility to these services diminishes and as the predominant character of development changes to single-family residential, proposed multifamily densities are correspondingly lower. In each case, a sliding scale of site area requirements is recommended to measure densities in terms of actual environmental impact rather than dwelling unit count. This Plan, therefore, attempts to maintain, insofar as possible, the existing density pattern in the Town, which is one of decreasing densities radiating from its two centers, Chappaqua and Millwood.

Recommendations as to the most suitable residential density for various sections of New Castle are shown on the Town Development Plan Map (located in a pocket at the back of this report) and are based on consideration of the following factors:

- The character of existing residential development in the area, with particular reference to the prevailing density.

- The physical character of the area, both in terms of the limitations it would impose on development and the desirability of preserving natural features and ecological balances.

- The existing local and regional road system and its capacity to serve additional development without extensive improvement.

- The present and likely future availability of community facilities and utilities (water and sewer services).

- The need to provide opportunities for the development of a variety of housing types, including less costly alternatives to the traditional single-family detached residence.

- The desirability of maintaining residential property values.

The pattern of residential land use recommended in this Plan represents a long-term policy for guiding the development of the Town, based on a comprehensive

examination of the existing factors just enumerated. While the overall plan should not be readily modified in response to isolated pressures for change, the Plan is intended to be used as a flexible guide that may periodically need adjustment to better incorporate the evolving needs of the future.

The residential density pattern is not intended to fix precisely the details of residential zoning, either as to the exact boundaries of districts or exact densities, nor is it intended to foreclose the possibility of detail modifications within the overall density pattern, when such modifications are consistent with the Town's basic residential development policies.

RECOMMENDED DEVELOPMENT PATTERN

In 1968, when the last comprehensive update of the Town's development plan was adopted, only two categories of residential density were recommended and shown on the Town Plan Map: Low Density Residence and Medium Density Residence. The highest residential density recommended at that time was four dwelling units per acre. It was further recommended that the Town remain a community of single-family homes.

During the 1970s, several in-depth studies of alternative forms of housing, including multifamily housing, were conducted by the Town. These studies supported the need for multifamily housing because of high single-family housing costs, smaller average household size, population mobility and personal preference. As a result of these studies, in 1977 the Town's zoning policies were amended to permit a limited amount of multifamily development, but only in specified business districts. Thereafter, in direct response to a decision by the Supreme Court of the State of New York, Appellate Division, Second Department, in the matter of ***Berenson v. Town of New Castle***, in 1979 the Town adopted a major amendment to the 1968 Town Plan to permit a variety of types and densities of multifamily housing in New Castle. In so doing, it created a third density classification that incorporated a broad array of residential densities in excess of those that had previously been recommended. The new higher density classification encompassed densities ranging from 5-20 dwelling units per acre, with narrower ranges established for specified areas of the Town.

This Town Plan recommends that the present overall residential density pattern expressed in the 1968 Plan as amended in 1979 generally be maintained. Accordingly, the Plan Map sets forth the following three density classifications for residential development in New Castle:

- **Low Density: 1 dwelling unit or fewer per acre**

  Lands designated for low density development encompass the majority of the areas recommended for residential development in New Castle. This category provides for development at a density of no more than one dwelling unit per acre and generally corresponds to the parts of the Town now located in the R-2A and R-1A Districts. The specific density recommended for a given area

should be determined principally by the policy of providing for decreased densities as distance from the hamlet centers increases, combined with an evaluation of the land's ability to support development in light of environmental restrictions, particularly the absence of central water and sewerage facilities.

- **Medium Density: 2 to 4 dwelling units per acre**

Lands designated for medium density development generally embrace those portions of the Town already developed at densities of two to four dwelling units per acre and typically coincide with areas now located in the R-1/2A and R-1/4A Districts. These include lands proximate to the Chappaqua and Millwood hamlet centers, Kisco Park and Stanwood (in the northern part of the Town between Mount Kisco, Yorktown and Bedford) and the southern outskirts of Mount Kisco. In general, it is unlikely that any substantial amount of new development at this density could take place without the provision of central utility systems.

- **High Density: 5 to 20 dwelling units per acre**

Lands designated for high density development include eight sites that were specifically selected for potential multifamily development when the 1968 Town Plan was amended in 1979 as well as one additional site. While single-family development is also permitted in most of these areas, many of these sites have since been developed with multifamily uses in accordance with the zoning amendments that were adopted subsequent to the 1979 residential development policy amendment. While the high density category encompasses a broad range of possible densities, this Plan recommends that the specific densities permitted be related to the previously described multifamily site selection criteria as explained below.

Within and adjacent to the commercial areas of Chappaqua, this Plan recommends that multifamily housing at densities of 10 to 20 two-bedroom dwelling units per acre be permitted. This is the maximum density range that the Planning Board has determined could be appropriately designed and located in the Town's existing major center of development and on its most highly suitable sites. Sites for such development should be located either within the business districts or adjacent to them where they can serve as transitional uses between commercial and single-family areas. They should also meet the other locational criteria listed previously. All sites should be connected to public water and sewerage systems.

Within the hamlet of Millwood, which lacks commuter rail facilities and sewer service, which offers a less extensive array of consumer goods and services and whose existing character of development is different from that in the Chappaqua hamlet, a density of 7 to 14 two-bedroom dwelling units per acre is recommended.

Outside these two hamlet areas, this Plan recommends a density of 5 to 10 two-bedroom dwelling units per acre for sites that have been determined to be generally suitable for increased density multifamily housing, but which are not located within or immediately adjacent to one of the hamlet business centers. Because of the location of these sites amidst existing single-family development and because of their relatively greater separation from shopping and other services, a lower density is proposed for them than for those sites in or adjacent to the hamlets.

Under this planned distribution of residential densities, it is projected that the Town could accommodate approximately 2,293 additional dwelling units on land that was still considered undeveloped and uncommitted as of January 1988. This computation is based on the assumption that the future zoning of such land will be the same as its 1984 classification except where the residential development pattern recommended in this Plan is expected to result in corresponding changes in zoning. In the latter case, appropriate adjustments were made to account for the probable future zoning classifications of such lands.

Together with development that existed as of October 1984 and was approved or proposed between November 1984 and January 1988, the residential development policy recommended in this Plan could result in an ultimate total residential development potential in New Castle of about 8,553 dwelling units. Based on the assumption that average household size for single-family units, multifamily units and accessory apartments will be 3.27, 2.50 and 1.85, respectively, and that the Town's group quarters population will remain at 189, this would translate into a population potential of approximately 26,700 persons.

The latest Town Development Plan Map does not deviate substantially from the 1983 version it replaces. However, in recognition of changes in land use and ownership that have occurred over the past two decades, modification of the recommended land use in a number of locations was necessary. In several instances, the most recent revisions have resulted merely from a change in land use nomenclature, but do not represent a substantive change in land use policy. Since the Plan Map has not been reprinted since 1968, the latest Plan Map also reflects the incorporation of a considerable number of amendments adopted since that time. Collectively, these revisions include, but are not limited to, the following changes affecting residential development:

- Identification of all parcels of land committed to open space and recreational use since 1968. In most cases, residential development had previously been recommended for these lands.

- IBM property on north side of Pines Bridge Road west of Hoag Cross Road - changed from a combination of "Low Density Residence" and "Semipublic Recreation" (1968) and "Office Building" (1983) to "Research/Office Business" [nomenclature change only since 1983].

- Con Edison property south of Pines Bridge Road - changed from "Public Utility" (1968) and "Utility" (1977) to "Public Recreation/Open Space."

- West side of Shingle House Road north of Granite House - changed from "Shopping, Service" (1968) and "Single-Family Residential" (1977) to "Low Density Residential" [refinement of land use category only since 1977].

- Pheasant Run site on west side of Saw Mill River Road opposite Station Road - changed from "Light Industry" (1968), "Multifamily Residential/Industrial" (1977) and "High Density Residence" (1979) to "High Density Residential" [nomenclature change only since 1979].

- Echo Lake State Park - changed from "Public Park, Reservation" (1968) and "State Park/Parkway Land" (1977) to "Parkway" [nomenclature change only since 1977].

- Stone Creek site and adjacent property to north on west side of Saw Mill River Road abutting Ossining and Mount Pleasant town lines - changed from "Low Density Residence" (1968), "Office Building" (1970), "Office" (1977) and "High Density Residence" (1979) to "High Density Residential" [nomenclature change only since 1979].

- Kraus property south of Station Road - changed from "Light Industry" (1968), "Multifamily Residential/Industrial" (1977), and "High Density Residence" (1979) to a combination of "High Density Residential" and "Public and Semipublic."

- East side of southern end of Schuman Road - changed from "Shopping, Service" (1968) and "Industrial" (1977) to "High Density Residential."

- Millwood Road properties between Schuman Road and Gedney Park entrance - changed from "Low Density Residence" (1968) and "Single-Family Residential" (1977) to "Medium Density Residential" [refinement of land use category only since 1977].

- North side of Millwood Road east of abandoned Putnam Division Railroad right-of-way - changed from "Shopping, Service" (1968) and "Industrial" (1977) to "Light Industry" [nomenclature change only since 1977].

- North of Millwood Road between abandoned Putnam Division Railroad right-of-way and Allen Avenue - changed from "Low Density Residence" (1968) and "Industrial" (1977) to "Light Industry" [nomenclature change only since 1977].

- North and south sides of Henry Place - changed from "Low Density Residence" (1968), "Light Industry" (1970), "Multifamily Residential/Industrial" (1977) and "High Density Residence" (1979) to "High Density Residential" [nomenclature change only since 1979].

- Ledgewood Commons site on east side of Saw Mill River Road north of Sand Street - changed from "Medium Density Residence" (1968), "Light Industry" (1970), "Single-Family Residential/Industrial" (1977) and "High Density Residence" (1979) to "High Density Residential" [nomenclature change only since 1979].

- East side of Millwood Road south of Woodmill Road - changed from "Low Density Residence" (1969) to "Semipublic and Private Recreation/Open Space."

- Marshall property west of Quaker Street - changed from "Low Density Residence" (1968) to "Public and Semipublic."

- West of Meadow Lane between Pond Hill Road and Marcourt Drive - changed from "Medium Density Residence" (1968) to "Low Density Residential."

- Kisco Park area generally west of Crow Hill Road and Woodland Road - changed from "Medium Density Residence" (1968) to "Low Density Residential."

- Corner of Washington Avenue and Old Pines Bridge Road opposite Town Hall - changed from "Medium Density Residence" (1968) and "Public/Semipublic/Office" (1971) to "Medium Density Residential."

- East side of South Greeley Avenue north of Smith Street - changed from "Medium Density Residence" (1968) and "Public/Semipublic/Office" (1971) to "Public and Semipublic."

- King Street generally between Maple Avenue and Highland Avenue - changed from "Medium Density Residence" (1968) to "Retail/Service Business."

- North side of western end of Bischoff Avenue - changed from "Light Industry" (1968) to "Medium Density Residential."

- Chestnut Oaks (formerly Chappaqua Mews) site on east side of Metro-North Commuter Railroad right-of-way north of North Greeley Avenue - changed from "Light Industry" (1968) and "High Density Residence" (1979) to "High Density Residential" [nomenclature change only since 1979].

- West side of Bedford Road opposite Brevoort Road - changed from "Medium Density Residence" (1968) and "High Density Residence" (1979) to "High Density Residential" [nomenclature change only since 1979].

- East side of Bedford Road north of Old Farm Road - changed from "Low Density Residence" (1968) and "High Density Residence" (1979) to "High Density Residential" [nomenclature change only since 1979].

- West side of Armonk Road opposite Unification Church property - changed from "Institutional Properties" (1968) to "Low Density Residential."

- Portion of Rolling Fields neighborhood between Horseshoe Road and Daly Cross Road - changed from "Medium Density Residence" (1968) to "Low Density Residential."

- East side of Armonk Road south of Mount Kisco boundary - changed from "Medium Density Residence" (1968) to "Low Density Residential."

- East side of Sheather Road - changed from "Institutional Properties" (1968) to "Low Density Residential."

HOUSING ISSUES

New Castle is a reasonably mature community whose residential character is substantially established. Fully three-quarters of its land area is already committed to a developed use or to a designated open space function. Accordingly, if attention is focused on an examination of the Town's various development regulations rather than just on a discussion of recommended land use patterns, a greater number of opportunities for influencing the shape of future residential development present themselves.

In numerous reviews of development proposals that have been completed by the New Castle Planning Board over the past several years, certain trends have emerged. To the extent that these trends have produced results that were thought to be contrary to sound planning principles in the judgment of the Planning Board, the need for modification of the Town's development regulations has been identified. In several instances, amendments of the Town's zoning law, subdivision regulations and wetlands law have already been enacted to correct these perceived deficiencies. For example, in recent years the Town's policies concerning lot line labeling, house siting on a single-family lot, the definition of an attached dwelling, multifamily density incentives, accessory apartments, the definition of wetlands, and blasting procedures have all undergone clarification and/or modification. Yet many other issues remain to be examined more closely. The following section highlights those aspects of residential development that should be studied in greater detail, with a view toward formulating new policies and strengthening earlier ones.

Subdivision Design

With ever increasing proportions of New Castle's environmentally sensitive landscape undergoing transition from an undeveloped state to that of a single-family subdivision, and with the majority of the Town's land occupied by this form of development, the need for refinement of the Town's development regulations and adoption of more sophisticated techniques of subdivision design and construction has become more acute. While most of the Town's undeveloped and uncommitted land is concentrated in three general areas — principally at its eastern and western ends and in the north central part of the Town — opportunities nonetheless exist for further subdivision of parcels within areas that are already predominantly developed and have a well-

established residential character. Each of these possibilities presents unique challenges and demands careful scrutiny if the Town is to maintain its low density residential character and preserve the integrity of existing neighborhoods. Moreover, since the more easily developed land has mostly already been subdivided, future development pressures will be focused on land that exhibits the greatest number of environmental restrictions, such as steep slopes and wetlands. So that future development can be accommodated in an attractive, safe, environmentally sound and efficient manner, this Plan recommends that the Town's policies reflect the following objectives:

- The subdivision of a large parcel should result in the creation of a well-defined, self-contained neighborhood. To maximize traffic safety and promote neighborhood cohesiveness, building lots should have an internal orientation, and driveway access onto the existing peripheral road system —particularly if such roads function as major or collector roads —should be avoided. If such connections are necessary, common vehicular access points should be established.

- Common vehicular access points for building lots should be established on any road if it is determined that individual lot driveways would create a safety hazard because of the existing or anticipated high volume of traffic on the road, the number of driveways intersecting the road in close proximity to each other, or the existence of poor sight distance along the frontage of one or more lots.

- The provision of common driveways is warranted if an environmental analysis indicates that the terrain or natural features of the property to be subdivided would be adversely affected by the construction of numerous individual driveways or a new road built to Town standards.

- The number of individual building lots served by a common driveway should generally be limited to three, with four permitted only if the distance between the street and residences is short. Design and construction standards should be established for common driveways based on consideration of emergency service vehicle access requirements, environmental protection objectives, ease of maintenance, aesthetics, and privacy for abutting property owners. As the number of lots served by a common driveway increases or as such driveways become longer, the pertinent standards should begin to approach those applicable to Town roads. At the same time, existing design standards for Town roads should be reexamined in light of the above factors as well as overall vehicular circulation needs, traffic safety considerations, and the number of lots to be served, with a view toward incorporating appropriate modifications as needed.

- Multiple driveways for a single building lot should be avoided. If provision for an on-site vehicular turnaround area is desired by a homeowner or required by the Planning Board, such turnaround feature should be accommodated entirely

on the lot without creating a second vehicular access point along the road frontage. On lots containing permitted accessory uses, access to the principal and accessory uses should be provided from the same driveway.

- Provision for road connections to adjoining parcels should be made where necessary to improve emergency access to existing as well as to proposed subdivisions, or where desirable to provide future access to adjoining undeveloped land and to enhance the Town's overall circulation system, but should not be made where such connection would serve only to provide a convenient short-cut between existing roads.

- The subdivision of oversized lots in substantially developed residential areas should be allowed only where a plan can be laid out in strict conformance with applicable zoning requirements and where the resulting density would be compatible with the prevailing development character of an area. In addition, where the creation of an adverse environmental impact is unavoidable, the burden of such negative consequences should be borne to the maximum extent by the land to be subdivided rather than by existing development on adjacent lots. To preserve the character of existing neighborhoods and protect property values, deviation from these standards should not be permitted.

- As part of subdivision design, reserved open space should be strategically located to permit augmentation of existing open space and recreation lands, to set one residential neighborhood off from another, and to create buffers between different forms of residential development. Particularly adjacent to major and collector roads, greenbelts should be created along road frontages to preserve the low density character of the Town.

- Natural and historical features of the landscape should be used to guide the layout of a subdivision and should be protected to the maximum extent possible. In particular, stone walls should be preserved because of their significant aesthetic value to community character and Town heritage.

- Dimensional requirements of the Town's zoning law should be applied to promote the establishment of regularly shaped lots with adequate spacing between residences. The siting of homes should be undertaken so as to preserve important environmental features, maximize privacy for residents on adjoining parcels and encourage the establishment of an interesting streetscape. In particular, lot layouts that result in the stacking of one home behind another with a similar orientation (e.g., flag lots) should be avoided, as should layouts that result in the identical house siting on adjacent lots or the crowding of site development up against common property lines. Furthermore, house siting should reflect provision of minimum separation distances between residences on adjoining lots in addition to compliance with minimum property line setback requirements. On lots containing circular driveways in the front yard, consideration should also be given to increasing the minimum front setback requirements. The Town's existing bulk regulations should be closely

examined and modified as necessary to ensure consistency with these general site planning objectives.

- Regulations requiring a minimum amount of "dry" land on a development site should be modified so that a certain specified percentage of that dry land be contained in a single area. Currently, this requirement can be met by aggregating —for purposes of calculation —smaller, separate areas of dry land.

- Land disturbance involved in the development of home sites should be kept to the minimum necessary and should be carefully supervised. The establishment of "clearing and grading limit lines" to define the maximum limits of land disturbance on a lot should be required as part of the subdivision review process. In the alternative, an applicant could be given the option of delaying the delineation of clearing and grading limit lines until after specific plans for a given lot were better known, provided that site plan approval is secured from the Planning Board prior to the issuance of a building permit.

- For considerations of visual impact, privacy, erosion control and drainage, the clearing of trees on a lot should be limited to selective removal; clear-cutting of a site should be prohibited. It is further recommended that natural buffers be preserved along all property lines of a lot, except to the extent necessary to provide driveway access.

Conservation Development

Conservation development is defined as the clustering of housing units on portions of a given tract of land for the primary purpose of open space preservation. Application of this concept to a subdivision usually involves the setting aside of one or more standard zoning dimensional requirements to permit reduced lot areas and shorter building setbacks. Conservation development, however, does not permit any increase in the permitted residential density established by conventional zoning regulations. The criteria for applying this procedure are set forth in Section 281 of the New York State Town Law.

Advantages of conservation development normally include environmental protection (of wetlands, flood plains, steep slopes, hilltops, ridge lines, major stands of trees, significant geological features and other areas of ecological value), scenic preservation, recreational enhancement, and reduced construction and maintenance costs (because of shorter road lengths and utility networks). Disadvantages may be reduced spacing between residences on the developed portions of a site and diminished lot area available for accessory uses such as swimming pools and tennis courts.

Between 1975 and 1988, six subdivisions with a total of 222 building lots were approved as conservation developments in New Castle. These include Section 3 of Chappaqua Park, Breckenridge, Whippoorwill Lake, Random Farms, Cornell Woods and Fireside Homes. Including 7 acres restricted by conservation easement only, these six

developments contain 127 acres of permanent open space, representing approximately one-third of the total land area included within these subdivisions.

This Plan recommends that conservation development continue to be used as a subdivision technique in New Castle where its application would be in the public interest and to the benefit of the Town. Its use may be particularly suitable in the outlying areas of the Town where preservation of a rural character is desired. The current policy of securing authorization from the Town Board to apply the provisions of Section 281 on a case-by-case basis appears to be working satisfactorily and should be maintained. Nonetheless, this approach to residential development could be made even more effective if it were based on the following considerations:

- While the construction of detached units should continue to be favored in built-up areas and generally encouraged elsewhere, attachment of units should be permitted on larger sites where desirable for reasons of environmental protection — particularly steep slope preservation — and where adequate visual separation can be maintained between such development and surrounding detached units on adjacent properties.

- Lands to be set aside as open space in conservation developments should be directly related to land shown on the Town Development Plan Map as warranting preservation in accordance with the Town Plan policies and recommendations. This includes land identified for hilltop and steep slope preservation and for stream and wetland preservation.

- To achieve the full benefits of the conservation development process and, in particular, to enable the Planning Board to implement the second guideline listed above, this Plan recommends that the Town Board authorize the Planning Board to require the use of conservation subdivision design when its use would facilitate the achievement of Town Plan policies.

Building Bulk

As land values in northern Westchester continue to increase rapidly, personal desire and economic need to develop residential sites to their maximum potential become more pronounced. Over the past several years, New Castle has begun to experience a noticeable increase in the development of large, single-family detached homes, complete with numerous on-site amenities. With increasing frequency, disharmonious relationships are being created by disproportionately large homes being constructed on standard one-acre and two-acre lots, many with private swimming pools, tennis courts, large wrap-around decks and circular driveways.

While most of these uses are appropriate in a residential area, concern has increasingly been expressed over the evolving character of the Town's residential neighborhoods, particularly its visual character which is largely defined by the "bulk" of these residential and accessory structures and their siting in relation to a street and neighboring properties.

At the present time, the Town's zoning law contains a fairly standard assortment of bulk regulations. Few of these, however, are intended to directly regulate the "bulk" or "mass" of buildings, nor do any of them control the relationship between impervious and pervious land area on a lot. Indirectly, application of the minimum yard requirements in conjunction with the maximum height requirement limits the maximum bulk of a building. Other factors, such as sewerage requirements and the Town's wetlands law, can also limit the practical development potential of a residential lot. Notwithstanding these requirements, a considerable amount of building bulk and impervious surface area can still be created on a typical residential lot.

A variety of techniques for addressing these concerns already exist. To preserve the Town's longstanding residential character, this Plan recommends that several new types of residential development standards be established, with a view toward distinguishing between conventional and conservation development design as necessary and appropriate. These include the following concepts:

- **BUILDING VOLUME REQUIREMENTS** - This standard would control the bulk of buildings most directly, unlike building coverage requirements which relate only to the two-dimensional footprint of a building. The measurement of volume can be tied to lot area and setback requirements so that virtually any style and size of home can be constructed, provided that an appropriate relationship exists between such a residence, its building site and the abutting properties.

- **HEIGHT/SETBACK REQUIREMENTS** - This standard would be used to influence house siting on a given lot in relation to those on surrounding properties. A sliding scale of setbacks above some minimum requirement could be established so that permissible building height becomes a function of house siting and topographical considerations, subject also to a maximum height limitation.

- **DEVELOPMENT COVERAGE REQUIREMENTS** - This standard would regulate the total amount of development permitted on a given lot and, in essence, would also limit the amount of land disturbance permitted in construction of principal and accessory uses.

Multifamily Development

New Castle has made significant progress in implementing the multifamily housing recommendations of the 1979 Town Plan amendments and by so doing has contributed to an expanded range of housing choice in northern Westchester. With the benefit of more than nine years' experience, the Town has had an opportunity to evaluate the impacts of multifamily housing and the suitability of applicable development regulations. As a result of this experience, the need to modify specific provisions of these regulations has been identified. This Plan recommends that a reevaluation of the following aspects of multifamily development be undertaken:

- **MULTIFAMILY DESIGNED RESIDENTIAL DEVELOPMENT (MFDRD)** - Reserved for the Town's remaining very large properties that are distant from most public and private services and facilities, these areas were recommended for development at housing densities of two to three times that which could be achieved under existing single-family zoning on the assumption that the resulting population density would be only slightly higher than that reached under single-family development. In reality, the Town's experience with two such developments has shown that while many potential impacts were reduced under multifamily development, the bedroom mix offered by the sponsors of these developments has produced potential population densities higher than anticipated.

  So that the real impact of this form of multifamily development is essentially comparable to that of single-family development located in the same area, this Plan recommends that the method used to determine permitted residential density be modified. Instead of applying the mathematical formula now specified by the zoning law, consideration should be given to determining residential density on the basis of a conventional subdivision layout (which would normally have to be prepared anyway as part of the "Alternatives" section of a Draft Environmental Impact Statement). To account for the variable impacts of different dwelling unit sizes, bedroom factors should be applied to the basic lot count to arrive at the permitted number of multifamily units. This alternative technique would further the Town's goal of equivalent impacts, while still permitting a wide range of housing choice for the builder and for the prospective multifamily occupant.

- **WETLANDS CREDIT IN DENSITY COMPUTATION** - The current formula for computing permitted residential density on a multifamily site allows for one-third of the wetland area to be considered developable area. On sites with extensive wetland areas, this has had the effect of giving a developer more density credit for these areas than would have been possible if the site were developed as a single-family subdivision. Accordingly, it is recommended that the method of computing deductions for wetland acreage as part of multifamily density calculations be reevaluated, with a view toward establishing a procedure that is more consistent with that used in subdivision design.

- **DENSITY INCENTIVES** - The system of multifamily density bonuses should be used to encourage the further fulfillment of Town planning and housing objectives, but not to reward developers for the provision of amenities that have become commonplace in today's housing market, nor for the implementation of public improvements, the need for which is largely generated by the development itself. Proposals that include one or more of the following features should be considered eligible for density incentives: low/moderate income housing; senior citizen housing; rental housing; housing for the handicapped; underground parking; adaptive reuse of noteworthy buildings and structures; active recreational facilities sufficient in variety and quantity to

minimize impacts on public facilities; off-site improvements, such as road improvements designed to overcome preexisting capacity or safety deficiencies; increased buffer areas; and other special design features as determined by the Planning Board on a case-by-case basis.

Senior Citizen Housing

While the number of persons over 60 years of age in New Castle continues to grow, this segment of the population would represent an even larger proportion were it not for the substantial amount of out-migration that has occurred among this age group. While personal preference is no doubt a factor in the decision to leave New Castle, many retired persons might remain in the community if a greater number of smaller, less costly residential units were available.

Since 1979, the Town has attempted to provide opportunities for the creation of such units. For the segment of the senior citizen housing market that finds the lack of smaller dwellings a primary deterrent to remaining in New Castle, the construction of townhouse developments has represented an alternative to the single-family detached home with its generally larger size and attendant maintenance burdens.

The Town has also attempted to encourage senior citizen housing by offering a density bonus in exchange for the provision of senior citizen units in multifamily developments. To date, only one developer has applied for and secured approval of this density incentive and its use in that particular case has raised fundamental questions about the value of such zoning provisions. In the 54-unit Chappaqua Commons project, 12 units were designated for senior citizens. The majority of those units were initially purchased by persons not residing in New Castle, and not all were occupied by the purchaser, even if he or she was a Town resident. None of the units were offered for sale at a lower price than their nonsenior citizen counterparts. To ensure that these units better meet the needs of the population group they were intended to serve, the senior citizen density incentive provision could be modified to require owner-occupancy. However, while this policy clarification would prevent the purchase of units solely for investment, it would also eliminate a potential source of rental housing for senior citizens. More important, this Plan recommends that consideration be given to offering a density incentive only for the provision of units designated for occupancy by senior citizens with limited incomes, so that such housing is primarily less costly for the occupant, not just more profitable for the developer. Units selected for senior citizen occupancy within a larger residential development should be those that are the most accessible because of their design and location within the development.

To a greater extent than other forms of housing, the creation of accessory apartments has addressed the need for less costly units for senior citizens, among others, in two ways: first, by permitting a homeowner, who might be a senior citizen, to use his or her home more efficiently, thereby reducing housing costs for the homeowner, and second, by creating new dwelling units available for rent and prospective occupancy by a senior citizen, generally at lower cost than any other housing alternative. However, despite the potential for creation of accessory apartments Townwide, since

1979 site plan approval has been sought for no more than approximately 70. Furthermore, not all these have subsequently been established. Including those that may have already existed prior to the adoption of the multifamily zoning amendments in October 1979, it is estimated that about 110 accessory apartments now exist in the Town. This Plan continues to recommend that accessory apartments be permitted in the Town, subject to appropriate size, density and site planning standards.

In addition to accessory apartments, the creation of apartments in combination with business uses in the Chappaqua hamlet represents another avenue for encouraging the development of units that might be especially attractive to senior citizens. Such apartments are particularly appealing because of their probable lower cost and their proximity to virtually all needed community facilities and services, including convenience stores, the Post Office, library, Senior Center and public transportation. The development of multifamily units in the Chappaqua hamlet has been permitted for several years, but this development was greatly encouraged in 1987 when the Town amended its Town Plan and zoning law to effectively require residential use of all new second story floor space in the central portion of the business district. Although no new applications have as yet been submitted for the development of properties affected by the amended zoning regulations, this Plan recommends that the new policy be retained in Chappaqua and that it be extended to the Millwood hamlet center as a means of encouraging the construction of less costly housing units in locations that offer many advantages to senior citizens.

In addition to pursuing the techniques for promoting senior citizen housing already discussed, this Plan recommends that the Town explore a number of new options designed to further expand opportunities for the creation of such housing units. These include the following:

- **SHARED LIVING RESIDENCES** - This form of housing is designed to meet the needs of people who would enjoy and benefit from the financial assistance and companionship that sharing a home offers. In a shared living residence, a group of unrelated senior citizens live together as a single housekeeping unit. A house manager usually resides there as well and is responsible for general household organization and management. All meals are served there and laundry facilities are available, but medical care is not provided. A community group, such as a senior center, church organization or local housing or social service agency, could obtain facilities and help a group of older people establish a shared living residence. The primary benefits of shared living residences are that they allow healthy senior citizens to remain in the mainstream of community life in a family-like living environment, while simultaneously allowing for more efficient use of the Town's existing housing stock, particularly of very large residences. This type of housing could be permitted throughout the Town, subject to either site plan approval or special permit approval, and compliance with specific locational and site design criteria.

- **CONVERSION OF INSTITUTIONAL FACILITIES** - New Castle is home to a number of large institutional organizations that, for reasons of economics or other concerns, may someday choose to relocate elsewhere. Many of these organizations own properties containing buildings that should be evaluated for potential conversion to senior citizen housing. These facilities could be developed into shared living residences or more conventional multifamily apartments limited in occupancy to senior citizens.

- **SENIOR CITIZEN ZONING** - Another technique for encouraging the construction of senior citizen housing would be to create a new zoning district tailored to the development of multifamily units solely for the elderly. Rather than pinpointing the precise location of sites that might be considered for rezoning, this Plan recommends that general planning standards be established and that sites be selected on the basis of individual review by the Town as proposals are submitted for approval. This procedure is considered more effective because it permits greater Town control, provides needed flexibility in site selection and recognizes realities inherent in the development process that may influence a developer's evaluation of a given site's suitability for senior citizen housing.

Housing Cost

This Plan, as did the 1979 and 1987 amendments to the 1968 Plan, advocates a policy of creating opportunities for the provision of housing across a spectrum of price ranges. Since the adoption of the 1979 amendments, the Town has taken many steps to implement this policy.

As a result of the 1979 adoption of zoning amendments designed to permit the development of housing other than single-family detached homes, a variety of less costly alternatives have been produced, including townhouse developments, accessory apartments in single-family homes and apartments in business districts, either alone or in combination with nonresidential uses. With the adoption of additional zoning amendments in 1987 that restricted commercial uses in the Chappaqua hamlet to first floor occupancy and permitted residential development on any floor, the Town effectively created another avenue for the development of less costly housing —a policy that should also be encouraged in the Millwood hamlet as previously recommended in this Plan. As a further inducement to the construction of less costly dwelling units, the Town offers a density incentive to developers of rental housing and units designated for low- and moderate-income families and senior citizens.

To date, the greatest cost reduction benefits have been achieved through the development of accessory apartments in single-family homes and business district apartments in existing buildings. It is expected that this result will continue since, in the first case, such units are by definition limited to the rental variety and, in both cases, savings accrue through conversion of existing premises rather than new construction. In all the multifamily categories described above, however, opportunities

exist for the development of less costly, and therefore comparatively more affordable, housing alternatives to the traditional single-family detached home.

A new option for creating less costly housing that is not currently reflected in the Town's regulations would be to permit the conversion of single-family residences to two-family homes in specific, well-defined areas within or contiguous to the Chappaqua and Millwood hamlets where such uses could serve a transitional function between commercial uses and single-family homes, or where an area is not suitable for the creation or maintenance of a cohesive single-family neighborhood. One such area might be the upper King Street portion of the Chappaqua hamlet between the two existing business districts. Another technique that could be used to reduce housing costs would be to establish maximum floor area requirements for multifamily dwellings.

Short of direct Town involvement in its provision, there are few other options available for addressing the cost of housing. Consequently, this Plan recommends that all the previously discussed existing and proposed techniques that provide opportunities for the creation of less costly housing be included in the Town's development regulations. Furthermore, this Plan recommends that the Town consider taking a more active role in formulating creative strategies that result in the development of less costly housing for those members of the New Castle community who perform services that are essential to the proper functioning of the Town, particularly those such as volunteer emergency services workers, and municipal and school district employees.

Nonresidential Uses in Residential Areas

Certain types of nonresidential uses are customarily permitted in residential areas. These include community facilities, such as places of worship, schools and libraries, as well as agricultural operations and country clubs. New Castle's development regulations currently permit these and related types of principal uses to be established after demonstrating compliance with specific locational and site design criteria and after the issuance of a special permit. This Plan supports the continued application of these standards and treatment of these uses under the zoning law.

Of potentially greater concern, however, are the nonresidential uses that could be established in virtually every residence in the Town: professional offices and customary home occupations. At present, these uses can be established only as accessory uses after securing site plan approval. As a practical matter, they are not numerous despite the potential for their creation. However, those that have been proposed in recent years have generated considerable controversy, particularly over concerns such as traffic impacts and neighborhood character. So that the Town can extend greater control over professional offices and customary home occupations and continue to maintain the integrity of New Castle's residential areas, this Plan recommends that the development regulations applicable to these uses be reevaluated. Among the policy modifications that should be considered are requiring special permit approval instead of only site plan approval prior to their establishment, and restricting certain types of uses with high traffic generating characteristics to sites having direct access onto major or collector roads.

COMMERCIAL DEVELOPMENT

The Town of New Castle has historically been a residential community, with most of its commercial development composed of businesses serving the convenience shopping needs of local residents. These commercial enterprises are, for the most part, located within the Town's two hamlet centers — Chappaqua and Millwood. In a suburban area, with many communities close to one another and with reasonably good roads to connect them, people rarely choose to fill all their needs locally. In fact, many needs cannot be met locally. In the case of New Castle, other nearby convenience commercial centers in Pleasantville, Thornwood, Briarcliff Manor, Croton-on-Hudson and Ossining are also patronized by the Town's residents, with primary shopping needs provided for in Mount Kisco and White Plains. The 1968 ***Town Plan of Development*** recommended that all future local business development be confined to the Town's existing two hamlet centers, since it was determined that these areas would be able to adequately meet the needs of the Town's growing population, and any expansion outside the hamlets would be contrary to the objective of maintaining the Town's predominantly residential character. This Plan reaffirms that policy.

The 1968 Plan also discussed the potential for development of office business, research and industrial facilities in the Town. These types of facilities were then, and still should be, considered separately from hamlet business development because of their potential size and particularly because of their regional rather than local significance. In 1968, based on the Town's desire to expand its tax base to assist residential property owners in the financing of needed public facilities and services, and as a result of its favorable experience over many years with the Reader's Digest headquarters, the Town Plan incorporated a policy of encouraging a limited amount of office business, research and industrial development in carefully selected locations and with high standards of design. Although that policy has resulted in the construction or planning of several facilities of this type, its continued desirability has increasingly been questioned. While some light industrial facilities should continue to be provided in the areas previously designated for this category of development, this Plan does not support the establishment of any new campus-type office developments.

A little more than 1% of New Castle's total area of 14,975 acres was occupied by commercial land uses in 1984. This development covered 176 acres and consisted of — in order of declining land areas — office development, nurseries and related agricultural enterprises, numerous retail/service businesses, general commercial uses, automotive businesses and industrial establishments. Compared to the years of prior land use surveys, land in commercial use — while consistently representing about 2% of all the land in use in New Castle — actually declined in acreage between 1966 and 1984, principally as a result of the discontinuation of a spring water extraction operation off Crystal Spring Road.

With the recent approval of site plans for the development of a major IBM research/office facility in the West End of Town, along with several additional retail, office and industrial developments in the Chappaqua and Millwood hamlets, land committed to commercial use in New Castle as of January 1988 was more than double the 1984 figure, or a total of approximately 363 acres. Once these developments have been completed, land in commercial use will increase from about 1% to almost 2.5% of the Town's total land area.

In 1984, New Castle's zoning law provided for nine types of commercial zoning districts, which together encompassed 544 acres of land, or 3.6% of the Town's total area. These districts, two of which (B-RO-4 and B-PO) are not currently mapped, provided for different categories of commercial uses, from the traditional mix of retail/service uses found in the B-R District to the broader list of uses permitted in the I-G District. All but two of these mapped districts (B-RO-150 and B-RO-20) were located in or adjacent to the two hamlet business centers.

Close to 25% of the commercially-zoned land was occupied by business and industrial establishments in 1984. With the addition of the recently constructed and approved projects previously mentioned, this figure would increase to nearly 58%. Another 30% was occupied by road rights-of-way, utility and railroad uses, public and semipublic facilities, and residential uses. In 1984, about 46% of the commercially-zoned land was considered undeveloped. However, excluding the land on which new developments have recently been constructed or approved, only about 12%, or 65 acres, of the Town's commercially-zoned land was still uncommitted as of January 1988. Of this total, about 10% is composed of wetlands or land encumbered by the 100-year flood plain and another 26% consists of slopes of 25% and greater, thereby further reducing the practical development potential of some of this remaining undeveloped land.

The above figures conceal the fact that some commercial properties that were considered fully developed for purposes of the land use survey in 1984 and prior years may actually have additional development potential resulting from the prospective addition of a second floor or the redevelopment of the parcel. In addition, when sufficient business demand develops, it is anticipated that the residentially developed properties in nonresidential zoning districts will be converted to commercial use. Taken together, these parcels represent at least 90 acres of land that could be available for future commercial use in the Town, exclusive of the additional floor space that might be created from the expansion of uses on already developed parcels. While not all this land may be suitable for all types of commercial use, there is sufficient land zoned to provide for the expansion of commercial uses to serve the anticipated full development of the Town under the above-stated policy of serving only part of the Town's residents' shopping and business needs, with the balance served by nearby business centers in other communities.

While the majority of the Town's commercial establishments are located within either the Chappaqua or Millwood hamlets, much of the acreage committed to commercial development is actually located outside these hamlets. The existing Reader's Digest and planned IBM facilities alone encompass 255 acres of land; another 49 acres

outside the two hamlet centers are occupied by nurseries, agricultural or livestock operations, a kennel and a restaurant/inn. While the two major office uses are located within nonresidential zoning districts, the remaining commercial uses outside the two hamlet centers are located in residential zoning districts. Because of their open space characteristics, most of these commercial uses have traditionally been permitted in residential areas; however, a few of these uses are presently nonconforming.

COMMERCIAL DEVELOPMENT POLICY

The commercial development policy expressed in this Plan is consistent with many of the policies previously adopted as part of the 1968 ***Town Plan of Development***, but in a number of important respects it also modifies and clarifies those earlier policies to reflect changed conditions and priorities. Since the last comprehensive update of the Town Plan was prepared in 1968, fundamental land use (as contrasted with zoning) policies concerning business development have been amended on only two occasions, both occurring in 1987. Prior to that time, amendments related to business development focused entirely on revisions to specific land use designations shown on the Town Plan Map, as will be described later in this section.

Retail and Service Business Development

The importance of a regional perspective in an analysis of business development must be recognized. Most retail uses require a large population base from which to draw customers, as each business can reasonably expect to capture only a small share of the total dollars spent in the marketplace. As a result, trade areas—the geographical area from which a business is likely to draw customers—often have little relationship to municipal boundaries. Factors such as convenience of access, proximity of other businesses for comparison shopping, and traditional shopping patterns are of significantly greater importance than municipal location, assuming no major difference in local tax structures.

The commercial development policy on which this part of the ***Town Development Plan*** is based contemplates that the residents of New Castle will continue to patronize nearby business centers in adjacent communities as well as the larger shopping centers located in the surrounding regional area, principally in Mount Kisco and White Plains, and that local retail/service business development will be limited to serving the same proportion of the Town's residents' shopping and other business needs in the future as it has until now.

At the time of the 1968 Plan preparation, it was contemplated that New Castle's population would more than double at full development. Since then, the Town's population has continued to grow—albeit at a slower rate—but average household size has declined. As of 1988, it was estimated that the Town's population had reached about 58% of its maximum population potential of 27,500 people under 1984 zoning policies. Based on the residential development policies of this Plan, it is estimated that New Castle's 1988 population was approximately 60% of the Town's

currently projected maximum population potential of 26,700 people. Although additional retail and service business development will eventually be necessary to continue to meet the convenience shopping needs of the Town's future residents, not all this additional population growth is expected to occur within the trade areas of the Chappaqua and Millwood business centers. To the extent that some of it does, however, added business development is possible in both hamlets without expanding existing business districts. While this remaining development potential has been reduced since 1968 as a direct result of changes in land use policy related to both multifamily development and commercial development, it is expected that most of the Chappaqua and Millwood trade area populations will continue to be adequately served by the amount of development possible in these existing business centers.

This Plan further assumes that those areas of the Town that fall outside the trade areas of the Chappaqua and Millwood business centers will continue to be adequately served by similar convenience shopping facilities in adjacent communities and that the Town as a whole will continue to be served by the more extensive shopping facilities that have been developed in Ossining, Mount Kisco and White Plains. Population projections for the Town and for the northern Westchester area do not justify the development of any new business centers in New Castle, nor would the addition of any such center be considered appropriate or desirable from an overall land use perspective.

This Plan recommends that planning for the demands generated by local population growth be concerned not only with how best to provide the additional shopping facilities, but also with improving the quality of the existing business areas, particularly in terms of their appearance and convenience to shoppers using them. It is for this primary reason that the 1968 Town Plan was amended in 1987 to provide for reduced commercial development potential in the Chappaqua business center, which was then projected to be nearly 265,000 square feet in the B-RP District alone, yielding a potential future need for 1,100-1,400 parking spaces. By that time, the preexisting need for additional parking in this area (estimated at over 500 spaces based on a lot-by-lot analysis) had so far outpaced the Town's existing supply (approximately 485 spaces) and likely ability to provide additional space that it became necessary to adopt a policy restricting new commercial development to the first floor of buildings and requiring that new second floor space be used for residential purposes. This modified Plan policy was accompanied by an amendment to the B-RP District regulations of the Town's zoning law, which effectively reduced the commercial development potential of this district to about 165,000 square feet of space, with a corresponding reduction in the total number of parking spaces likely to be required in the future to a range of about 850 to 1,200, depending on the methodology selected to calculate parking need.

Office Business, Research and Industrial Development

There are many small business and professional offices, as well as retail and personal service establishments, in the Town's two hamlet business centers. Such offices are generally an appropriate complement to these centers, since they are well suited to occupying existing second floor space above many retail stores and are conveniently

located for their patrons. Their continued presence in the Town's hamlet business centers should be permitted, provided that they have a local service orientation and do not generate exceptionally high parking demands in comparison to other similar uses that have traditionally located in these centers.

By contrast, office business, research and industrial development as discussed in this Plan is considered to be a specific type of commercial development that features a sizable building in which corporate office, research and/or light industrial activities take place, along with necessary parking facilities, usually in a self-contained campus-like setting. For at least the past 30 years, the Town has pursued a policy of encouraging this kind of development, a result of its positive experience with a major corporate office of this type —Reader's Digest —and its desire to expand the Town's tax base, particularly its nonresidential tax base. For the most part, this policy has served the Town well, with the establishment of several small and medium-sized office and industrial facilities, particularly along Hunts Lane in the Chappaqua hamlet and along Station Road and Schuman Road in the Millwood hamlet. Not since the development of the Reader's Digest headquarters, however, had the Town been considered a suitable location by a large corporation for the establishment of a major office or industrial facility. Then, in the early 1980s, IBM acquired the former Hudson Hills Country Club property and several contiguous parcels in the West End of Town near its Thomas J. Watson facility in Yorktown, intending to develop an 800,000 square foot research/office laboratory at that location to consolidate several of its offices located elsewhere in Westchester County.

The 1968 Town Plan recognized that New Castle might not be a suitable location for the establishment of large office, research or industrial development facilities and also concluded that the Town's road system could not support the total number of such facilities that might potentially be developed in the Town. However, it nonetheless wanted to provide for the opportunity to develop such uses. As a result, the Plan outlined a series of general locational and site design criteria for the establishment of these uses rather than identifying specific sites where such uses would be appropriate. While these general guidelines remain valid today, it has been recognized that, in spite of traffic engineering studies that document the existence of adequate roadway capacity to serve these facilities, the impact of traffic generated by these developments can have far-reaching cumulative and secondary impacts. Some of these are easily quantifiable, while others relate more to community character as it is perceived by residents and passersby alike. Moreover, in many instances these developments could not be accommodated without improving the Town's road system which, in turn, could have concomitant impacts on adjacent properties and potentially induce growth.

Since the preparation of the 1968 Town Plan, development in the region has continued, accompanied by substantial increases in traffic volumes carried by area roads. Furthermore, some of the sites that were previously identified as potentially suitable locations for the development of major office, research or industrial facilities have since become unavailable for that purpose. The Town is served by only two limited access highways (neither of which permits truck traffic), no plans exist to construct new roads

suited to heavy commercial traffic, and east-west travel through the Town is circuitous and time-consuming. Accordingly, the traffic impacts associated with major new office, research and industrial facilities will inevitably be felt on the Town's existing local road network. Even though several of these roads carry a County or State highway designation, nearly all of them pass through established residential neighborhoods. To accommodate new development of this type, it may become necessary to make improvements to this road system, but in most cases these "improvements" could not be made without adversely affecting the character of the Town's residential areas.

To date, the Town has approved the development of two major office facilities within its boundaries: the Reader's Digest headquarters located in the eastern part of the Town near the Saw Mill River Parkway and the IBM Hudson Hills research/office facility planned in the western part of the Town near the Taconic State Parkway. These two facilities are comparable in the size of their buildings and employee population, and both are near limited access highways, which helps to mitigate the impact of the traffic they generate.

Given the Town's limited infrastructure, particularly roads, and its desire to preserve the ambience and integrity of its residential neighborhoods, this Plan recommends —consistent with a 1987 amendment to the 1968 Plan —that no more development of major new office, research or industrial facilities be permitted on sites not already zoned for these purposes until there has been an opportunity to evaluate the actual operation of the IBM Hudson Hills facility. At this time it is felt that the property tax benefits provided by the development of such facilities do not sufficiently offset the perceived negative cumulative and secondary impacts engendered by such development. To support that policy, this Plan further recommends that the B-RO-4 District be eliminated from the Town's zoning law. This district is not currently mapped and its continued existence in the Town's development regulations erroneously suggests a policy of encouraging the establishment of facilities of this type and scale of development.

RECOMMENDED DEVELOPMENT PATTERN

The Town Plan Map translates the foregoing policies into spatial land use recommendations. The factors used to guide the future development of commercial uses in the Town include the following:

- The relationship of the hamlet business centers to existing regional and community commercial centers.
- The relationship of the hamlet business centers to roads, residential densities and utility systems.
- The business and service needs of the present and future residents of New Castle.

- The existing pattern and characteristics of land use in the Town.
- Site capacities and characteristics in terms of physical features, traffic circulation, parking and loading space, setbacks, landscaping and buffer areas.

In 1968, when the last comprehensive update of the Town's development plan was adopted, four categories of commercial development were recognized on the Town Plan Map: Shopping/Service, Office Building, Light Industry and Public Utility. When a separate plan was prepared for the Millwood hamlet in 1977 and adopted as an amendment to the 1968 Town Plan, the corresponding names given to these same categories on the Millwood Plan Map were Retail/Service Business, Office, Industrial and Utility.

This Town Plan recommends that these four categories of land use be retained, but includes only the first three categories under the heading of commercial development. Utility uses have unique characteristics unlike other types of commercial development and are considered a part of the "Community Facilities and Services" section, along with other kinds of public and semipublic uses. The nomenclature of the three commercial categories has also been changed in this Plan to more accurately describe the type of land use recommended as well as to reflect more modern terminology. As shown on the Town Plan Map, these categories include the following: Retail/Service Business, Research/Office Business and Light Industry.

While the commercial land use policies expressed on the Town Plan Map are generally consistent with the pattern of development recommended by the 1968 Town Plan and the 1977 ***Millwood Plan*** amendment, a number of important changes have also been incorporated. The Plan Map continues to recognize the Town's two business centers in Chappaqua and Millwood as unique places serving special functions. This Plan recommends that these characteristics be identified and enhanced or protected as appropriate. Most of the land in these centers is designated for "Retail/Service Business" use, reflecting their local convenience shopping orientation. Adjacent to both centers are limited areas designated for "Light Industry" use.

The Town Plan Map recommends that business development in the Chappaqua hamlet be restricted to two well-defined locations, a primary area generally centered on the intersection of King Street with Greeley Avenue and a secondary area at the intersection of King Street with Bedford Road. Within the primary area, this Plan recommends that commercial development be limited to the "Retail/Service Business" category and that this type of development be permitted along both sides of Greeley Avenue from approximately the south side of Bischoff Avenue on the north to (but not including) the Robert E. Bell Middle School site on the south, as well as along both sides of King Street and Hunts Place (also known as lower King Street) from the Metro-North Commuter Railroad right-of-way on the west to Castle Road and Highland Avenue on the east. Adjacent to this primary area of "Retail/Service Business" development but separated from it by the railroad right-of-way, this Plan recommends that an area of "Light Industry" use be developed along Hunts Lane. Compared to the 1968 Plan Map, this latest Plan Map recommends the following changes:

- At the northern end of North Greeley Avenue, an area previously designated for "Light Industry" use in 1968 has been placed within the "High Density Residential" category, reflecting conformance with the 1979 residential development policy amendments and subsequent construction of the Chappaqua Mews (now called Chestnut Oaks) multifamily project. In this same general location, the residential lots on the north side of Bischoff Avenue and contiguous Ambulance Corps property that had also been shown for "Light Industry" use are now recommended for "Medium Density Residential" development and "Public and Semipublic" use, respectively.

- On the west side of North Greeley Avenue, approximately between Gristede's and Bischoff Avenue, an area previously shown for "Light Industry" use in 1968 is now recommended for "Retail/Service Business" use. With the elimination of most of the area previously designated for light industrial development east of the railroad as a result of the construction of the above-mentioned multifamily development, it is no longer considered appropriate to encourage light industrial development on this remaining narrow parcel of land. In addition, the recent use of this property has been for retail/service purposes and continued development of this type is expected to be more compatible with the land use pattern evolving on the opposite side of North Greeley Avenue in this same general location.

- Along both sides of the upper King Street Hill, approximately between Maple Avenue and Highland Avenue, an area previously shown for "Medium Density Residence" use in 1968 is now designated for "Retail/Service Business" use. This area has been zoned for business development for many years and has been completely developed with a mix of retail, office and multifamily uses. This area of "Retail/Service Business" use should not be extended farther to the east along King Street.

- The recommended land use designation of the area south of Quaker Street between the railroad right-of-way and South Greeley Avenue/Washington Avenue was previously not graphically identified, other than by reference to labels indicating the present and prospective uses of this area. In this Plan, most of this area is now placed within the "Public and Semipublic" or "Public Recreation/Open Space" categories, reflecting its use for municipal parking, Town Hall site and recreation fields.

- Throughout the Chappaqua hamlet center, properties used for public and/or semipublic purposes are now identified for "Public and Semipublic" use instead of "Shopping/Service" use as previously shown.

In the secondary area of commercial development shown within the Chappaqua business center, this Plan recommends that only "Retail/Service Business" uses be established. This area includes both sides of Bedford Road approximately between the Grand Union Shopping Center on the north and Prospect Drive on the south, as well as both sides of King Street approximately between Poillon Road on the west and the

animal hospital generally opposite Elm Street on the east. Compared to the 1968 Plan, no changes are recommended for this area.

Within the Millwood hamlet, this Plan continues to recommend that a single, well-defined business center be developed within the area generally bounded by (but including both sides of the street in most locations) Saw Mill River Road on the west, Millwood Road on the north and Station Road on the east and south. Within this area, this Plan recommends that commercial development be limited to the "Retail/Service Business" category. Adjacent to this concentrated area of business development, this Plan recommends that two areas of "Light Industry" use be developed, one focusing on Schuman Road and the opposite side of Millwood Road and the other encompassing the existing site of Millwood Business Center (formerly Kraus Periodicals). Compared to the 1968 Plan Map, this latest Plan Map incorporates several changes, all but four of which have resulted from plan amendments previously adopted in 1970, 1977 and 1979. These include the following:

- On the west side of Saw Mill River Road, south of Old Inningwood Road, an area previously designated for "Parkway" use in 1968 has been shown for "Retail/Service Business" development, reflecting conformance to the 1977 ***Millwood Plan*** amendment as well as its actual land use.

- On the west side of Saw Mill River Road, north of Old Inningwood Road, an area previously identified for "Light Industry" use in 1968 and "Multifamily Residential/Industrial" use in 1977 has been placed within the "High Density Residential" category, reflecting conformance with the 1979 residential development policy amendments and subsequent construction of the Pheasant Run multifamily project on this site.

- On the west side of Saw Mill River Road, north of Millwood Park, an area previously shown for "Shopping, Service" use in 1968 has been designated for "Utility" use, reflecting conformance to the 1977 ***Millwood Plan*** amendment as well as its actual function as part of the larger Con Edison substation facility existing in that location.

- On the east side of Saw Mill River Road, approximately north of Millwood Park, areas previously designated for either "Shopping, Service" use or "Public Utility" use in 1968 have been identified for a combination of "Retail/Service Business" use and "Public Utility" use, reflecting ownership by Con Edison as well as a reaffirmation of the 1977 ***Millwood Plan*** determination that future retail/service business uses would be appropriate at that location.

- On the west side of Shingle House Road, north of the Granite House, an area previously designated for "Shopping, Service" use in 1968 and "Single-Family Residential" use in 1977 has been placed within the "Low Density Residential" category, reflecting a continuing desire to contain business development in the Millwood hamlet center and not permit it to spill over into residential areas.

- On the north side of Millwood Road, east of the abandoned Putnam Division Railroad right-of-way, an area previously designated for "Shopping, Service" use in 1968 has been reduced and identified as area for "Light Industry" use, consistent with the 1977 ***Millwood Plan*** amendment. The area remaining is now shown for "Medium Density Residential" development, reflecting its existing land use and the desire to contain commercial development along this portion of Millwood Road. In addition, between the railroad right-of-way and Allen Avenue, an area previously designated for "Low Density Residence" use in 1968 has been identified as an area for "Light Industry" use, consistent with the 1977 ***Millwood Plan*** amendment.

- Along the north and south sides of Henry Place, areas shown for "Low Density Residence" use in 1968 and "Multifamily Residential/Industrial" use in 1977, have been designated areas for "High Density Residential" development, consistent with the 1979 residential development policy amendments.

- Along both sides of Schuman Road, most of the areas previously designated for "Shopping, Service" use in 1968 have been identified as areas for "Light Industry" use, reflecting conformance to the 1977 ***Millwood Plan*** amendment. Additionally, on the east side of the southern end of Schuman Road, two lots are now recommended for "High Density Residential" development.

- On the east side of Saw Mill River Road, south of Station Road, an area previously shown for "Light Industry" use in 1968 has been eliminated. To the west of the abandoned Putnam Division Railroad right-of-way, this area has been designated for "Retail/Service Business" use, consistent with the 1977 ***Millwood Plan*** amendment; to the east of this right-of-way, areas of "High Density Residential" development and "Public and Semipublic" use are now shown instead of the alternatives of "Multifamily Residential" use and "Industrial" use recommended by the 1977 ***Millwood Plan*** amendment.

- Throughout the Millwood hamlet center, properties used for public and/or semipublic purposes are now identified for "Public and Semipublic" use instead of "Shopping, Service" use as previously shown.

Consistent with the commercial development policy previously outlined, the Plan Map shows no new areas for the establishment of office, research and light industrial uses. The areas identified for "Light Industry" use as described above have all been previously recommended for that type of commercial development and are being developed in accordance with that policy today. Similarly, the Plan Map shows only two areas designated for "Research/Office Business" use: the sites of the existing Reader's Digest complex and the planned IBM Hudson Hills facility. The area between North State Road and Saw Mill River Road south of the Millwood hamlet that had previously been recommended for office use in the 1977 ***Millwood Plan*** is now shown as a site for "High Density Residential" development, consistent with the 1979 residential development policy amendments and subsequent approval of plans for the Stone Creek multifamily project at that location.

In addition to concerning itself with the appropriate location and extent of different types of commercial development in the Town, this Plan stresses that major emphasis must be placed on appearance, quality of design, efficiency of use and the incorporation of up-to-date site development standards. Toward that end, this Plan also includes specific recommendations for the use and development of the business centers in Chappaqua and Millwood. These recommendations focus on land use and development standards, vehicular and pedestrian circulation, parking, and site planning and design. Many of these recommendations are applicable to both business centers. These include the following:

- **PERMITTED USES** - The list of permitted uses allowed in each business district should be reviewed for consistency with this Plan's policies as well as for the purpose of general updating as needed. Uses that do not reinforce the local convenience shopping and service orientation of these business areas or otherwise create conflicts with the Plan's other objectives should not be permitted.

- **BUILDING HEIGHT** - The maximum building height regulations should be reevaluated to ensure their consistency with the Plan's objective of maintaining a scale of development that is compatible with the Town's predominantly residential character.

- **AREA SITE PLANS** - As a means of providing for future building expansion and the provision of safe access and adequate parking, this Plan recommends that the Town continue to take the lead in developing schematic site plans for groups of individual properties that should be planned and developed in a coordinated manner. The purpose of such areawide plans is to provide property owners and the Planning Board with a meaningful guide for determining how individual sites should be planned in order to achieve an orderly and attractive overall development of each business area. The formulation of area site plans is recommended for the purpose of achieving the following main objectives:

    - Reduction in the number of vehicular access points along roads, in order to improve traffic flow and safety and to lessen potential congestion.

    - Assembly of existing small properties, in order to provide opportunities for development to their maximum potential in an efficient, attractive and orderly fashion.

    - Interconnection of parking areas on adjoining properties, in order to provide for expanded and more efficiently designed off-street parking facilities, to provide greater convenience for shoppers patronizing nearby stores, and to reduce the amount of traffic on local streets.

- **AREA DESIGN PLANS** - As a means of creating a distinctive unified image in each of the Town's business centers, of ensuring continuity of style and the harmonious appearance of sites in these centers, and of supporting the efforts of the Town's newly formed Beautification Advisory Board, this Plan recommends that area design plans be developed for the Chappaqua and Millwood business centers. These design plans could establish guidelines for the layout and design of sites in these centers, including standards for landscaping, lighting, signage, utility installation, paving materials, pedestrian amenities, trash receptacles, building materials, colors and architectural style. As plans are submitted for the development of sites in each of these business centers, they should be reviewed for their conformance to these standards. The creation of area design plans could be used as a means of formally articulating a recommended design treatment for each of these hamlet centers and, if determined necessary, could also be used as the basis for creation of one or more hamlet design overlay districts, in which properties so situated would be required to comply with specific design criteria as well as zoning standards. As a complementary undertaking, this Plan also recommends that the Town's current sign regulations be reexamined, with a view toward incorporating appropriate modifications designed to ensure the compatibility of those regulations with the policies of the adopted area design plans.

Chappaqua Business Center

To ensure the proper functioning and future development of the Chappaqua business center, this Plan recommends that consideration be given to the following actions:

LAND USE AND ZONING

- To distinguish between areas that are appropriate for more intensive retail commercial development and those areas that would be best suited to the establishment of small business and professional offices, two areas shown for "Retail/Service Business" use on the Plan Map should be placed within the B-PO District. These include an area encompassing both the west and east sides of North Greeley Avenue between Maple Avenue and Bischoff Avenue (currently in the I-G and B-R Districts, respectively), as well as an area incorporating the north side of King Street between Maple Avenue and Castle Road and the south side of King Street between Prospect Drive and Highland Avenue (currently in the B-R District). Both these areas are composed primarily of residential and office uses at present. The continuation of this pattern of development is considered more appropriate than one composed of retail establishments, since the former will provide a more effective transition between major shopping facilities and residential areas, and will prevent a pattern of strip commercial development from evolving along the Town's major thoroughfares.

- To better conform the Town's development regulations to the land use policies of this Plan, the area generally bounded by the existing Chappaqua Post Office site on the south, the railroad right-of-way on the west, an "extension" of Maple Avenue on the north and North Greeley Avenue on the east should be placed within the B-R District instead of the I-G District. Much of this area has already been developed with retail commercial uses and areas remaining would be better suited to that category of development instead of to industrial uses.

- To ensure consistency between the Town's zoning and the land use policies of this Plan, the north side of the western end of Bischoff Avenue should be placed within the R-1/4A District instead of the I-G District. This land has already been developed for residential use and also includes the site of the Chappaqua Volunteer Ambulance Corps headquarters. Because the surrounding area is also largely residential, industrial development would be considered inappropriate in this location.

- Zoning district boundary lines should be adjusted where necessary and appropriate to avoid splitting lots between two (or more) zoning districts.

- To better balance parking needs with the prospective availability of expanded parking facilities, a review of the uses permitted in the B-RP District should be undertaken for the purpose of eliminating those parking-intensive uses that do not have a local convenience orientation or need not be located in a primary retail and service area. Uses that are typically found in this business district, but which can generate undesirable secondary and cumulative impacts (when such uses are excessive in number, for example) should also be closely examined, with the intention of adopting appropriate modifications to the Town's regulations designed to mitigate these adverse impacts.

- To add round-the-clock vitality to the business center, provide the opportunity for creation of less costly housing, and encourage the preservation and rehabilitation of existing buildings, dwelling units over commercial establishments in existing buildings should be permitted in the B-R District.

VEHICULAR CIRCULATION

- To improve the circulation pattern through the Town and ease congestion on Bedford Road and King Street in the Chappaqua business center, this Plan recommends that the Town continue to reserve the option of extending North Greeley Avenue to Roaring Brook Road so that if it is determined that an additional means of access to

and from the business center is needed, adequate land for this purpose will have been set aside.

- To improve the functioning of the Chappaqua Train Station area and associated commuter parking facilities, consideration should be given to eventually converting Hunts Place (also known as lower King Street) to a two-way road or to reversing the existing westbound one-way flow, so as to provide northbound and eastbound exiting traffic with another means of egress from the Train Station area without having to travel through the already congested intersections of South Greeley Avenue with Woodburn Avenue and with Quaker Street. The implementation of the first alternative would require the removal of on-street parking along the north side of Hunts Place, while under the second alternative the orientation of existing on-street parking spaces would need to be reversed. In either case, the installation of a traffic signal at the King Street/Greeley Avenue intersection would be necessary before these changes in circulation could be made.

- In general, where on-street parking impedes safe and efficient travel through the Chappaqua business center, it should be removed. Any loss of parking spaces that may occur as a result should be factored into the analysis of additional off-street parking needs and planned for accordingly.

PEDESTRIAN CIRCULATION

- To provide for the safe travel of pedestrians to and from as well as within the Chappaqua business center, a sidewalk system should be established with a view toward connecting major traffic generators such as shopping areas, community facilities, public recreation sites and parks, the Train Station and areas of high density residential development. In addition, pedestrian crossing zones should be designated at major intersections (such as the intersections of King Street with Greeley Avenue, King Street with Bedford Road, and King Street with Douglas Road and Saw Mill River Road) and elsewhere as needed to link disconnected elements of the pedestrian circulation system.

PARKING

- Existing parking lots should be redesigned to increase their capacity by utilizing smaller parking stalls, consistent with the downsizing of automobiles that has been achieved over the past decade, and by seeking to eliminate building obstructions that impede the efficient layout of these lots.

- The feasibility of elevating the existing Robert E. Bell Middle School playing fields and constructing expanded parking facilities underneath should be carefully examined. Alternatively, if any portion of those playing fields should become available for other use in the future, the Town should acquire a portion of that area for off-street parking purposes.

- One of the lots on the east side of North Greeley Avenue south of the former Landscape Foresters property should be acquired to provide access to the north end of the Parking District's planned off-street facilities at that location.

- Additional land for the creation of merchant parking areas should be acquired along North Greeley Avenue.

- Consideration should be given to constructing one or more parking decks over existing surface lots. Possible locations include the Allen Place parking lot, the parking lot adjoining the Bell School playing fields, and the lot opposite the existing Post Office on North Greeley Avenue.

- The long-term metered parking spaces located to the north of Woodburn Avenue near the Train Station should be relocated to the main commuter lot behind the Town Hall and those formerly metered spaces should be allocated to merchant parking.

- Differentiated time restrictions should be used to ensure frequent turnover of parking spaces closest to the heart of the business center and to better regulate who is occupying the most conveniently located spaces. The use of on-street spaces should be limited to a maximum of one-half hour to one hour duration. Off-street parking lots closest to the intersection of King Street with Greeley Avenue should allow parking for no more than two to three hours. Parking lots designated for merchant use should permit parking for eight to ten hours.

- Parking permit fees for merchants should be related to the location of parking spaces. The farther one has to travel from the intersection of King Street with Greeley Avenue, the less the cost of a merchant parking permit should be. A premium should be charged for merchant parking permits for spaces located near primary retail blocks.

- Parking regulations should be strictly enforced.

- The boundaries of the Parking District should be adjusted to coincide with the boundaries of the B-RP District.

SITE PLANNING AND DESIGN

- To improve the appearance of the Town's business districts and to provide guidance to the Planning Board, Board of Architectural Review, other Town boards and departments, and developers of commercial sites, the Town should proceed with the preparation and adoption of an area design plan for the Chappaqua business center at the earliest possible time.

Millwood Business Center

To ensure the proper functioning and future development of the Millwood business center, this Plan recommends that consideration be given to the following actions:

LAND USE AND ZONING

- To prevent business development from creeping into residential areas, the land on the west side of Shingle House Road north of the Granite House that is recommended for "Low Density Residential" use in this Plan should be placed within the R-1A District instead of the B-R District.

- To better conform the Town's development regulations to the land use policies of this Plan, the lots designated for "High Density Residential" use on the east side of Schuman Road should be placed within a multifamily residential zoning district instead of the I-G District.

- Zoning district boundary lines should be adjusted where necessary and appropriate to avoid splitting lots between two (or more) zoning districts.

- To add round-the-clock vitality to the business center and provide the opportunity for creation of less costly housing, dwelling units over commercial establishments should be permitted and encouraged in the B-R District in this center. This may require the creation of a separate version of the B-R District from that now applicable to the Chappaqua business center.

VEHICULAR CIRCULATION

- The realignment of Saw Mill River Road along the abandoned Putnam Division Railroad right-of-way should continue to be explored as a means of diverting through traffic around the Millwood hamlet center and of facilitating the creation of a locally-oriented shopping center with a distinctive image.

- To reduce the speed of vehicles traveling on Saw Mill River Road through the built-up hamlet area, a speed zone should be established

between Station Road and Shingle House Road at a minimum, with its possible extension to Hidden Hollow Road on the north.

- To improve circulation and traffic safety and make sites designated for industrial use and high density residential use more attractive for development, Schuman Road should be extended to Station Road. This may require the acquisition of additional right-of-way for purposes of proper road design, as well as the cooperation of New York City, New York State and possibly Con Edison over whose property such a road extension is likely to cross.

PEDESTRIAN CIRCULATION

- To provide for the safe travel of pedestrians to and from as well as within the Millwood business center, a sidewalk system should be established with a view toward connecting major traffic generators such as shopping areas, community facilities, public recreation sites and parks (including Gedney Park) and areas of high density residential development. In addition, pedestrian crossing zones should be designated at major intersections (such as the intersections of Saw Mill River Road with Station Road and Millwood Road with Station Road) and elsewhere as needed to link disconnected elements of the pedestrian circulation system.

SITE PLANNING AND DESIGN

- To improve the appearance of the Town's business districts and to provide guidance to the Planning Board, Board of Architectural Review, other Town boards and departments, and developers of commercial sites, the Town should proceed with the prompt completion and adoption of the area design plan for the Millwood Business Center that is currently under preparation.

OPEN SPACE AND RECREATION

New Castle is very fortunate to enjoy a great deal of open space as well as the natural beauty northern Westchester has to offer. Much of the Town's open space character is, in part, derived from its naturally rugged terrain which limits the amount, type and direction of development. It is also a result of New Castle's predominantly residential land use and relatively large lot zoning policies, the numerous semipublic and private interests that have maintained large parcels of land in a natural state or in low intensity land use, and the conscious efforts of the Town to reserve land suitable for both active and passive recreation as well as land worthy of environmental protection. Traditionally, the more difficult areas to develop in New Castle —the steep slopes, wetlands and rocky soil —have not been developed as a result of higher costs of design and construction. However, increasing land values and strong development pressures have made such development more likely. These market forces combined with innovative construction techniques have caused more intense use of the land. Nonetheless, through sound planning policies and administration, New Castle has generally achieved a pattern of land use compatible with the land's ability to support development, resulting in an extensive open space system.

OPEN SPACE CHARACTER OF NEW CASTLE

For obvious reasons, open space is often confused with undeveloped land. Although approximately 35% of New Castle's 14,975 acres, or more than 5,000 acres, of land remained undeveloped and in a natural state as of 1984, none of this land was formally committed to open space or recreational use. Only about 14% of the 14,975 acres, or 2,052 acres, were actually set aside for open space preservation, recreational use, watershed protection or public schools, the latter two categories of which are also treated as components of the Town's open space and recreation system. Therefore, while undeveloped land presently contributes to the feeling of open space, it will not necessarily remain in its natural state forever or eventually be put to some recreational use. Thus, open space is defined only as land permanently set aside for these specific low intensity uses. There are many features of the landscape, in addition to the areas formally committed to open space, however, that contribute to the open space character of New Castle.

The character of a town is generally based on the predominant land use and natural terrain. As of 1984, over 43% of the total land in use in New Castle was attributed to single-family residences on relatively large lots (one and two acres), thereby preserving much of the Town's natural landscape. Also contributing to open space were undeveloped public land and parks, cemeteries and utility line rights-of-way, the Town's two major limited access highways—the Taconic State Parkway and the Saw Mill River Parkway—and the undeveloped Briarcliff-Peekskill Parkway right-of-way. In addition,

low density semipublic and private land uses on large sites provided an equally important contribution to open space. Such uses included various country clubs, swim clubs, the Center for Asthmatic Children, Maryknoll, Campfire Club, Girl Scouts Reservation, Wagon Wheel Camp, Yeshiva Farm Settlement, Reader's Digest, Christian Herald and the Unification Church. While all these semipublic and private uses leave substantial areas of their sites in a natural state, there is no guarantee that these lands will remain so indefinitely. As in the case of the former Hudson Hills Country Club, which is expected to be developed with a major research/office facility, several of these areas have considerable development potential and could ultimately yield to increasing development pressures.

Because these semipublic and private areas totaled more than 1,300 acres (13.6% of the land in use in 1984 and 8.9% of the total Town acreage), it is very important that these uses be continued and not be developed for higher intensity uses that would impair the open space character of the Town.

EXISTING CONDITIONS

Land used for public open space and recreation more than doubled during the 18-year period between the Townwide land use surveys in 1966 and 1984, with an increase of 438 acres or 126%. Most of the new public land was set aside as part of the subdivision review and approval process, resulting in new parcels of parkland ranging in size from 2.7 to 47.9 acres, or an average size of 11 acres. These areas are intended, where possible, to expand existing parklands, to provide natural buffers between neighboring land uses, or to create small informal play areas or areas for hiking, walking and the exploration of local wildlife.

Land used for semipublic or private open space and recreation also increased during the same 18-year period, as did the amount of land committed to watershed protection and public school facilities. There was an overall net increase of 60% (772 acres) achieved in the amount of land committed to all types of open space and recreational use during the 18-year period, resulting in a total of 2,052 acres as of October 1984, as shown in Table 52 on the following page.

Excluding those portions of the school sites that were not used strictly for open space and outdoor recreational purposes, the adjusted 1984 total of land set aside for open space and recreational use would be approximately 1,968 acres. Between 1984 and 1988, an additional 63 acres were added to the Town's inventory of open space and recreation land, resulting from approval of the Cornell Woods Subdivision, the Random Farms Subdivision and the Whippoorwill Woods Subdivision. All but 3 acres of this total was added to the semipublic category; the remainder was added to the public category.

Open space and recreation land can be separated into two basic recreational categories: active and passive. Active recreational uses include activities such as soccer, baseball, softball, golf, tennis and swimming. Most of these require special

facilities or ball fields and organized groups of people or teams. Passive recreational activities are generally those which are undertaken by individuals, are not necessarily organized and do not require specific rules, facilities or supervision. These activities include walking, hiking, hunting, fishing, boating and nature study. A further distinction between active and passive recreational activities is the intensity of the land use. Active recreation involves far more intensive use of the land than passive recreation. New Castle's open space and recreation system is composed primarily of passive areas.

Table 52

OPEN SPACE AND RECREATION LAND - 1966 AND 1984
TOWN OF NEW CASTLE

	1966		1984		1966-1984 Change	
	Acres	Percentage Of Total	Acres	Percentage Of Total	Acres	Percentage Increase
Public Open Space and Recreation	349	27.3%	787	38.4%	438	125.5%
Semipublic/Private Open Space and Recreation	606	47.3%	743	36.2%	137	22.6%
Watershed	192	15.0%	355	17.3%	163	84.9%
Schools*	133	10.4%	167	8.1%	34	25.6%
Total	1,280	100.0%	2,052	100.0%	772	60.3%

*Includes total acreage of school sites; portion actually used for outdoor recreational purposes in 1984 was approximately 83 acres.

Source: Land Use Surveys conducted by Frederick P. Clark Associates

Passive Open Space and Recreation Areas

Of the 2,029 acres of open space and recreation land in the Town as of 1988 approximately 1,537 acres or 76% were set aside for passive recreational activities. The remaining 491 acres or 24% were designated for active recreational use. The active and passive components of New Castle's open space and recreation system can be further broken down into the following ownership categories: public, semipublic and private. These categories affect the access accorded the Town's residents. Figure 53 graphically portrays the Town's open space and recreation system as of 1988 and highlights the active/passive status of each site as well as its form of ownership.

Figure 53

TOWN OF NEW CASTLE, N.Y.

OPEN SPACE AND RECREATION AREAS - 1988
TOWN OF NEW CASTLE

- PUBLIC ACTIVE
- PRIVATE ACTIVE
- PUBLIC PASSIVE
- PRIVATE PASSIVE

As shown in Table 54 on the following page, there were a total of 1,182 acres of passive open space and recreation land in New Castle, excluding land set aside for watershed protection. The total acreage was fairly evenly divided between public ownership and semipublic and private ownership combined, with the former accounting for 614 acres (52%) of the total passive open space and recreation land. The remaining 568 acres (48%) were split between semipublic ownership (242 acres) and private ownership (326 acres).

Most of the semipublic passive open space and recreation land was owned by preservation organizations such as Teatown Lake Reservation, the Saw Mill River Audubon Society, the Marsh Wildlife Sanctuary and the Nature Conservancy. The Lutheran Retreat and the Girl Scouts Reservation are two other semipublic facilities that were included in the category of passive open space and recreation.

Most of the privately-owned passive open space and recreation land (195 acres or 73%) was owned by the Campfire Club Reservation. The balance (131 acres) was owned by six neighborhood associations.

As discussed earlier, the passive open space and recreation areas are not intensively used and have been preserved with the intention of maintaining them in a natural state in perpetuity. Most of these lands are accessible by foot and are used by Town residents, by private owners, and occasionally by special groups as in the case of the various nature preserves and sanctuaries that periodically offer educational programs and special seasonal events.

Although only some of the semipublic and none of the privately-owned passive open space and recreation areas are available to the general public, they contribute a great deal to the natural open space character of New Castle that is enjoyed by all Town residents. In fact, these areas accounted for approximately one-third of all the open space and recreation land within New Castle in 1988, exclusive of watershed land. Because of their importance, measures should be taken to ensure their continued preservation as open space.

Similarly, Town-owned passive recreation land also contributes a great deal to the open space character of New Castle, as well as opportunities for exploring these natural areas. However, many of the Town-owned parcels are not readily usable because of difficult or limited access. Three of the larger Town-owned parcels—Warburg Park, Ellen Terrace Park and the park near the Croton Reservoir—are completely landlocked. Including these parcels, approximately 109 acres (nearly 18%) of the Town-owned passive open space and recreation land were not considered usable as of 1988 and remain so because of these restrictions. Providing public access to these Town-owned properties should be actively pursued.

Active Open Space and Recreation Areas

In terms of total acreage, the active recreation areas in the Town were fairly evenly divided between parcels in public and private ownership in 1988. There were

Table 54

PASSIVE OPEN SPACE AND RECREATION AREAS - 1988
PUBLIC, SEMIPUBLIC AND PRIVATE
TOWN OF NEW CASTLE

No.[a]	Name of Park/Facility	Street Access	Acreage[b]
Town			
1	Warburg Park	(Landlocked)	37.2
2	Turner Swamp Sanctuary	Hardscrabble Road	35.6
3	Ellen Terrace	(Landlocked)	17.3
4	Douglas Park	Douglas Road	0.6
5	Duck Pond	Quaker Street	2.3
6	Whippoorwill Park	Whippoorwill Road	189.0
7	Glazier Arboretum	Whippoorwill Road	47.8
	Miscellaneous Open Space	Multiple Sites	261.8
			591.6
County			
8	Wampus Pond County Park	Armonk Road	22.7
9	North County Trailway		N/A
			22.7
Nature Preserves/Other Semipublic			
10	Teatown Lake Reservation	Croton Dam Road	21.3
11	Saw Mill River Audubon Society	Multiple Sites	125.8
12	Marsh Wildlife Sanctuary	Byram Lake Road	34.7
13	Nature Conservancy	Oregon Road	12.9
14	Lutheran Retreat	Allapartus Road	14.8
15	Girl Scouts Reservation	Hardscrabble Road	32.6
			242.1
Neighborhood Associations/Other Private			
16	Stillwater Lake Association	Lakeway Court	27.4
17	Hidden Hollow Association	Hidden Hollow Road	3.9
18	Cornell Woods Homeowners Association	Saw Mill River Road	20.9
19	Random Farms Homeowners Association	Random Farms Drive	38.5
20	Chappaqua Park Owners Association	Old Lyme Road	11.6
21	Whippoorwill Lake Property Owners	Whippoorwill Road	28.4
22	Campfire Club Reservation	Campfire Road	195.3
			326.0
Totals			
Public			614.3
Semipublic			242.1
Private			326.0
Combined[c]			1,182.4

[a] For location of these sites, see Figure 53.

[b] Small differences between total acreages appearing in this table and those in the "Existing land Use" section may be attributed to a variety of factors, including different measurement equipment or techniques and the rounding off of numbers prior to summation.

[c] Total does not include 355 acres of watershed land.

approximately 223 acres of public land and 268 acres of privately-owned land devoted to active recreational use, 45% and 55% of the total, respectively. The privately-owned land included the facilities of nine sports clubs and country clubs. It is clear from studying the number and types of facilities provided that there was very little overlap between the kinds of facilities provided by the public and private sectors. The private clubs had a much larger number of tennis and paddleball courts than the public recreation areas, and all the pools and golf courses in New Castle, while the Town parks and public schools provided Town residents with all the ball fields, 10 tennis courts and 8 playgrounds. Table 55 on the following page summarizes the characteristics of the active recreation areas in the Town as of 1988.

Not included in Table 55, but worth mentioning, are the active recreational facilities that have been provided by several of the larger private residential developments (principally multifamily), as shown in Table 56 preceding page 154. Like those facilities provided by the private clubs, these facilities meet some of the recreational demands of New Castle residents. While these private residential developments offer a portion of the Town's population some of the same activities and facilities as the private clubs, they are not available to the general public and do not serve the entire New Castle population.

New Castle has been fortunate to have such an extensive array of private recreational facilities within the Town. For many years the public recreation system has been supplemented by the private clubs, and vice versa. The Town has historically provided the ball fields and the clubs have provided all the swimming pools and most of the tennis courts. However, because of the cost differential and the lack of overlap between the types of facilities provided by the public and private sectors, there is effectively a lack of choice and opportunity for the majority of New Castle residents.

With a combined ***family*** membership total of approximately 2,500, the private clubs could theoretically serve about half of New Castle's existing households. It is unlikely, however, that such a percentage reflects existing conditions since many New Castle residents may not choose to join a club or may not be able to afford the cost of private club membership. Additionally, these clubs attract much of their membership from outside the Town, thereby further limiting the number of memberships available to New Castle residents. Those who do not join the private clubs because of personal preference, cost and limited membership may find similar facilities severely lacking or totally unavailable.

As the Town continues to grow and the private clubs continue to have long waiting lists for new members and become more expensive, New Castle will need to reevaluate its role in providing the public with the types of facilities that have traditionally been provided, to a large extent, by the private clubs. While these clubs are a very important part of the recreation system in New Castle, it is expected that they will begin to serve a smaller proportion of the Town's population as it continues to grow, resulting in increased pressure on the public recreation system.

Table 55

ACTIVE RECREATION AREAS - 1988
PUBLIC AND PRIVATE
TOWN OF NEW CASTLE

No.[a]	Name of Park/Club - Street Access	Acreage [b]	MULTI-USE BALL FIELD	BASEBALL FIELD	SOCCER FIELD	FOOTBALL FIELD	BASKETBALL COURTS	TENNIS COURTS	PADDLEBALL	1/4-MILE TRACK	FITNESS TRAILS	GOLF COURSE (# OF HOLES)	SWIMMING POOL	PLAYGROUND	PICNIC AREA
Town-owned Public															
23	Milwood Park - Saw Mill River Road	7.0	1					3						1	1
24	Gedney Park - Millwood Road	126.2	2		1			3			1			1	2
25	Art Center - Hardscrabble Road	1.5													
26	Smith Park - Elm Street	2.0	1				1								
27	Recreation Field - South Greeley Avenue	2.7	1												
28	Community Center - Senter Street	0.5													
	Subtotal	139.9													
Public Schools[c]															
29	Westorchard Elementary - Granite Road	28.0	1											1	
30	Roaring Brook Elementary - Quaker Street	13.0		1										2	
31	R. E. Bell Jr. High - South Greeley Avenue	6.0	2											1	
32	Horace Greeley High School - Roaring Brook Road	30.0	2	3	2	1		4		1					
33	Graflin Elementary - King Street	6.0	2											2	
	Subtotal	83.0													
Private Clubs															
34	52 Association of New York - Spring Valley Road	14.7													
35	Millwood Sports Club - Sand Street	1.3											1		1
36	Chappaqua Swim & Tennis Club - Hardscrabble Road	11.3					1	8	4				1		
37	Birchwood Swim & Tennis Club - Quaker Street	30.1						8					1		
38	Seven Bridges Field Club - Seven Bridges Road	5.1						3	2				1		
39	Willowbrook Swim Club - Millwood Road	15.5					1	8					1	1	1
40	Mount Kisco Country Club - Taylor Road	62.0						5	2			18	1		
41	Whippoorwill Country Club - Whippoorwill Road	93.4						6	4			18	1		
42	Twin Oaks Swim & Tennis Club - Whippoorwill Road	34.8						6					1		
	Subtotal	268.2													
Totals															
Public		222.9	12	4	3	1	1	10	0	1	1	0	0	8	3
Private		268.2	0	0	0	0	2	44	12	0	0	36	8	1	2
Combined		491.1	12	4	3	1	3	54	12	1	1	36	8	9	5

[a] For location of these sites, see Figure 53.
[b] Small differences between total acreages appearing in this table and those in the "Existing Land Use" section may be attributed to a variety of factors, including different measurement equipment or techniques and the rounding off of numbers prior to summation.
[c] Includes only approximate areas of school sites in recreational use.

Table 56

ACTIVE RECREATIONAL FACILITIES IN PRIVATE RESIDENTIAL DEVELOPMENTS - 1988
TOWN OF NEW CASTLE

Name of Development - Street Access	No. of Units[a]	Type of Facility			
		Pool	Tennis	Platform Tennis	Other
Existing/Under Construction					
Old Farm Lake - Old Farm Road	177 SFA	1	2	1	Clubhouse
Chestnut Oaks - North Greeley Avenue	88 MF	1	1	–	–
Ledgewood Commons - Saw Mill River Road	40 SFA	1	1	–	–
Pheasant Run - Saw Mill River Road	84 SFA	1	1	–	Planned pedestrian access to Warburg Park via Con Edison easement
Riverwoods - Croton Avenue	148 SFA	2	2	–	Clubhouse Walking trails Planned pedestrian access to adjacent Town-owned parkland
Random Farms - Saw Mill River Road/ Millwood Road	105 SF	1	3	–	Clubhouse Walking trails
Proposed					
Dellwood - Sheather Road	152 SFA (109 in New Castle)	2[b]	2	–	Clubhouse Playground
Total	794 (751 in New Castle)	9	12	1	

(a) SF - single-family detached dwelling unit(s)
SFA - single-family attached dwelling units
MF - multifamily dwelling units

(b) Includes one children's pool

Under this Plan, the Town's ultimate population has been estimated to be approximately 26,700. If none of these private clubs or organizations were ever sold and developed for more intensive uses, their total membership could serve about 31% of the Town's future households (if all members were New Castle residents). It is very possible, however, that one or more of these clubs may eventually be developed more intensively as a result of increasing development pressure. The result would be a significant loss of open space and recreational resources for New Castle, further adding to the growing pressure on the public system. Because the private clubs are likely to be accessible to proportionately fewer residents in the future, it can be assumed that the recreational needs resulting from additional population growth in the Town will, to a large extent, have to be met by the public recreation system.

FUTURE NEEDS

To better project the need for future recreational services to Town residents, the New Castle Recreation and Parks Commission completed a Townwide community interest survey in December 1987. The survey was mailed to every household in the Town and boasted a 17.6% rate of response (considered to be above average for mailings of this type). It questioned residents on their favorite activities, familiarity with parks and knowledge of Town facilities, program participation, and preferences for future facilities. The most popular activity (chosen by 68% of all children and 89% of all adults responding) was swimming. Approximately 70% of the respondents felt serious consideration should be given to a public swimming facility. The next most popular preferences were for fitness facilities and an ice skating rink; a much desired amenity was bathrooms in the parks. Gedney Park was the most frequently used park. The most popular activities in the park were walking by adults and use of the fields for sports by children. The completion of the community interest survey represents the initial step toward the development of a comprehensive plan specifically for New Castle's parks and recreation system, and will be addressed further in the recommendations section of this Plan.

Not included in the survey were questions about public school facilities, which also provide a significant portion of the active playing fields within the Town. These facilities are used extensively by the Town Recreation and Parks Commission and are a good example of the dual use of school facilities. Limitations to their use in this capacity exist, however, since there may be times when a conflict occurs between school activities and Town events. Nonetheless, this problem can generally be resolved with efficient scheduling. The additional wear and tear on the fields as a result of dual use is another limitation. Demand for field use is heaviest in the late spring and summer months when softball and soccer leagues are especially active. Poor weather conditions can exacerbate the problem of limited field space in the summer months by preventing timely maintenance and by removing fields from active play.

One measure of the adequacy of Town facilities is provided by a comparison to the standards of the National Recreation and Park Association (NRPA). Table 57 presents

Table 57

COMPARISON OF EXISTING OPEN SPACE AND RECREATIONAL RESOURCES TO NATIONAL RECREATION AND PARK ASSOCIATION STANDARDS TOWN OF NEW CASTLE

	Acreage [a]			MULTI-USE BALL FIELD	BASEBALL FIELD	SOCCER FIELD	FOOTBALL FIELD	BASKETBALL COURTS	TENNIS COURTS	PADDLEBALL	1/4-MILE TRACK	FITNESS TRAILS	GOLF COURSE (# OF HOLES)	SWIMMING POOL	PLAYGROUND	PICNIC AREA
	Total	Active	Passive													
PUBLIC	837	223	614	12	4	3	1	1	10	0	1	1	0	0	8	3
SEMIPUBLIC	242	0	242	–	–	–	–	–	–	–	–	–	–	–	–	–
PRIVATE	594	268	326	0	0	0	0	2	44	12	0	0	36	8	1	2
COMBINED[b]	1,673	491	1,182	12	4	3	1	3	54	12	1	1	36	8	9	5
National Recreation & Park Association Standards - Needs per 1,000 population[c]	75	10	65	–	1/5	1/10	1/20	1/5	1/2	0	1/20	1/ Region	9/20 18/50	1/20	0	0
Additional Needs:[c]																
Year 2000 (Projected Population - 18,000)	–	–	–	–	–	–	–	3	–	–	–	–	9	1	–	–
Ultimate Capacity (Projected Population - 26,700)	330	–	554	–	2	–	1	5	4	–	1	–	18	2	–	–

[a] Small differences between total acreages appearing in this table and those in the "Existing Land Use" section may be attributed to a variety of factors, including different measurement equipment or techniques and the rounding off of numbers prior to summation.

[b] Total does not include 355 acres of watershed land or approximately 84 acres of school sites not in recreational use.

[c] Calculations of future needs for additional recreational acreage are based on combined totals of public, semipublic and private land areas. Calculations of future needs for additional active recreational facilities are based on the number of facilities available in the public category only.

a comparison of Town conditions to these standards for a projected year 2000 population of 18,000 and a maximum projected Town population of 26,700 persons. Only the public recreational facilities in New Castle were considered for the analysis of active facilities since the NRPA standards are based solely on the availability of these facilities to the public. The standards pertaining to total land requirements, however, were applied to all categories of open space and recreation land regardless of ownership.

As one can see, New Castle meets or exceeds most of the national recreational facility standards for the short-term projection, but falls short of the recommended standards in several areas for the maximum projected population. If the Town chooses to adopt these standards, it would need to provide the following additional public recreational facilities: two baseball fields, a football field, five full-sized basketball courts, four tennis courts, a 1/4-mile track, an 18-hole golf course and two swimming pools. The NRPA also recommends a total of 75 acres of park and open space per 1,000 people, which would mean that New Castle would eventually need an additional 330 acres of land committed to open space and recreational use. Not all this land would need to be provided by the Town itself.

It should be noted that the NRPA standards serve as a general guide to measure the adequacy of a community's recreation system. These standards are, of course, not absolute and must be tailored to the specific needs, desires and preferences of each community. Overall, New Castle has a large amount of open space and additional room for expansion of its active recreational facilities to meet the needs of its residents for the foreseeable future. In addition, it can be expected that a portion of the Town's residents will continue to be served by private facilities such as those provided by recreation clubs and large residential developments. However, more study and consideration must be given to the ultimate or long-term needs, as discussed in the following section.

OPEN SPACE AND RECREATION POLICY

Several important goals and objectives have guided the analysis of New Castle's existing open space and recreation system as well as the Town's future needs. These include:

- Preservation of important ecological resources, such as the Kisco River, the Croton Reservoir and municipal water supply watershed areas; surface waters (creeks, streams and wetlands) shown for Stream/Wetland Preservation on the Town Plan Map; and land forms of particular environmental or aesthetic importance (hilltops and steep slopes) shown for Hilltop/Slope Preservation on the Town Plan Map.

- Provision of a variety of accessible open space and recreational opportunities for all Town residents.

- Preservation and maintenance of open space for the continued enjoyment of natural features of the land and of wildlife, and the protection of scenic and visual features that contribute to the Town's open space character.

As the Town grows and matures toward its ultimate population and complete development, there will be fewer opportunities for the acquisition of open space lands and the development of recreational facilities. The time to ensure the success of an open space and recreation system is now. Other than the residential development pattern, the open space and recreation system is probably the most important single factor shaping the quality of life and character of a community. Thus, it is important to have a clear vision of the Town's open space and recreation system as one would like to see it when the Town reaches its maximum population.

It is for that reason that this Plan recommends that the Town promptly embark on a more detailed examination of open space in New Castle, focusing in particular on existing open space parcels or low density uses that may be in a transitional state (e.g., country clubs, other private clubs and preserves, and institutional uses) as well as on other desirable properties that would make valuable additions to the Town's open space network. This undertaking—which will require the cooperative efforts of the Town Board, the Planning Board, and the Recreation and Parks Commission—should be directed toward the formulation of an open space preservation plan for New Castle, including the identification of specific properties to be set aside for open space use, recommended implementation strategies and available funding sources.

Among the many benefits of such a plan, it would enable the Town to more systematically and actively expand its open space network, either directly as a result of land acquisition by the Town or indirectly as a result of open space preservation by others. In particular, it would provide additional guidance to the Planning Board as such Board reviews subdivision proposals and assesses the need for and desirability of on-site parkland reservations.

To preserve New Castle's open space character in the face of increasing development pressures and to continue to meet the long-term recreational needs of the Town's population, it is recommended that the development of an open space preservation plan be guided by the following three goals: preserve and enhance the existing open space system; augment the open space system as needed; and provide public access to as much of the open space as possible.

As one strategy, the Town should direct its efforts toward providing vehicular and/or pedestrian access to currently landlocked parklands as well as securing public access to privately-held open space lands and institutional sites where desirable. In addition, the Town should examine the potential for expanded use of existing parklands through the redesign of such sites and by providing for improved parking facilities and other amenities as well as increased maintenance. An effort to improve the accessibility of such areas and to make them more inviting could effectively enhance the Town's existing open space and recreation system without any major land acquisition.

Because New Castle's open space system is greatly enhanced by the existence of numerous semipublic and private land uses on large substantially undeveloped sites (e.g. the Mount Kisco Country Club and other similar private clubs, Campfire Club, Girl Scouts Reservation, Wagon Wheel Camp and Maryknoll, etc.), special attention should be focused on preservation of the open space currently available on these sites and the mechanisms by which this could be accomplished. In addition, the continued use of the Briarcliff-Peekskill Parkway right-of-way for a trail system rather than the construction of a new road should be strongly encouraged. The Town should also continue with its present policy of setting aside additional open space in appropriate locations as more land is subdivided and developed. To the extent possible, an effort should also be made to secure public access to that open space.

As a companion element of this plan, it is recommended that a comprehensive recreation master plan be formulated after further study of New Castle residents' needs, desires and willingness to pay for expanded Town-provided facilities and services. This plan should contain well-developed and specific goals and policies, detailed designs and layouts for existing and future parklands and facilities (including bikeways, walkways and trail systems), and an action plan for achieving the stated goals.

In order to evaluate the adequacy of existing Town recreation sites and facilities, four considerations should be addressed: land characteristics (including gross acreage, parcel configuration, environmental features, and vehicular and pedestrian access); types of facilities provided; condition of facilities; and operational and administrative practices (such as maintenance, scheduling and shared use of community facilities). Although the installation of lighting systems could greatly increase the availability and use of existing facilities, this Plan recommends against the lighting of recreation fields because of the potential for disturbance to surrounding residential areas. This Plan also supports the continued joint use of school-owned recreation fields and further recommends that the use of other community facility buildings (e.g., meeting rooms in churches) for recreational purposes be explored.

Along with the preparation of an open space preservation plan, it is recommended that the Town create an "open space ombudsman" and assign some individual or group to this position, with the primary responsibility for overseeing the Town's open space preservation efforts, identifying open space preservation opportunities, forming tactical plans and generally coordinating the Town's implementation activities. Such an individual could be particularly effective in initiating a dialogue on behalf of the Town with potentially affected property owners and in exploring options for the preservation and/or maintenance of open space on their lands in advance of the submission of plans for the development or redevelopment of such properties.

As mentioned earlier, much of New Castle's open space character is attributable to its predominantly residential land use and the construction of homes on large lots, most of which are heavily wooded. In fact, based solely on the land area likely to be involved, it is the form of the Town's residential development that is likely to be responsible for maintaining New Castle's open space character to an even greater extent than the parcels of land formally committed to open space use. For this reason,

it is recommended that the Town establish tree preservation regulations that would be applicable to all land in New Castle — regardless of its ownership or use. In particular, it is essential that regulations prohibiting the clear-cutting of trees be adopted. It is also recommended that the preservation of natural landscaped buffers along all property lines of a lot be required, particularly along its frontage where the preservation of existing vegetation and other natural features will go far toward maintaining the Town's low density image as viewed by the traveling public.

RECOMMENDED DEVELOPMENT PATTERN

The overall pattern of the Town's open space and recreation system generally follows the natural characteristics of the land. If New Castle were divided into two halves, east and west, it could be seen that almost all the public and private land committed to open space and recreational use in the eastern half follows tributaries of the Kisco River from the southeast corner of the Town to the Kisco River itself and eventually to the Croton Reservoir. Because of this evolving pattern, there is a great opportunity for completing a natural open space corridor running from the Croton Reservoir to the Whippoorwill Country Club. This type of open space corridor already exists along the Saw Mill River Parkway from the Kisco River to the Chappaqua hamlet.

In the western half of New Castle, the Town's open space and recreation system appears to radiate from the Millwood hamlet. Again, several linear corridors exist throughout this area including the Taconic State Parkway, the Con Edison rights-of-way, the Catskill Aqueduct, the abandoned Putnam Division Railroad right-of-way and Briarcliff-Peekskill Parkway right-of-way, the latter two of which are components of a planned regional network of trailways.

The Town Plan Map reflects the addition of many new parkland parcels since 1968, most of which have been established as part of the subdivision review and approval process. All the Town-owned parks north of Roaring Brook Road between Seven Bridges Road and the Saw Mill River Parkway, with the exception of the two-acre Smith Park, have been added since the 1968 Town Plan was adopted. Most of the public and semipublic parks near Whippoorwill Park have also been added since that time. Reflecting the Town's plan to purchase the 48-acre Con Edison property north of Warburg Park, this parcel has been designated for "Public Recreation/Open Space" use on the Plan Map.

In addition to preserving the above features, the Plan Map also identifies areas of the Town where consideration should be given to reserving additional sites for future public recreational use. When the 1968 Town Plan was prepared, the Plan Map showed 27 locations where land was already reserved for public park use or should be designated for that purpose. Subsequently, many of those sites formally became part of the Town's open space and recreation system. This Plan continues to recommend that, where possible, areas bordered by either a major or a collector road have available some land designated for public recreational purposes which would be accessible without having to cross a heavily traveled street. Consistent with this guideline, the

Plan Map identifies 15 locations, principally in the western and eastern ends of New Castle, where future parklands should be created. It is recommended that these areas contain approximately three to five acres.

Two large open space components were lost since the 1968 Plan was published —Echo Lake State Park and the Hudson Hills Country Club —although their current and planned uses, respectively, involve the preservation of considerable amounts of open space. Two new categories that can be considered components of the open space system have been added to the Town Plan Map as overlays superimposed over the principal land use recommendations. These are "Hilltop/Slope Preservation" and "Stream/Wetland Preservation." Although not currently part of the formal open space system, it is recommended that these areas be preserved as part of it. It is important to note, however, that the Town Plan Map reflects only the general location of these areas and therefore represents a conceptual guide to their preservation. Because the Plan Map has been prepared at a scale of one inch to eight hundred feet, more detailed site-specific maps may reveal additional areas containing the natural features recommended for preservation in this Plan.

Hilltop/Slope Preservation

The Town should continue to pursue the preservation of visible hilltops and steep slopes as discussed in the "Environmental Factors" section of this Plan. The development of these areas can cause serious environmental damage and should be closely monitored. These areas also contribute significantly to the visual impression one forms while traveling through New Castle. Areas that are highly visible from the roadways are particularly important in maintaining the Town's semirural character. Preservation of these lands will contribute to maintaining the continued beauty and visual appreciation of the countryside as experienced from several scenic corridors throughout New Castle.

Areas designated for "Hilltop/Slope Preservation" on the Town Plan Map generally include all areas with slopes of 25% and greater. This category is also meant to include highly visible hilltops and ridge lines, only the most prominent examples of which are shown on the Plan Map. By recommending these areas for preservation in this Plan, it is intended that proposed developments will be reviewed with an aim toward protecting these areas and seeking compatible design treatment on sites containing these features. The Town could favor conservation development to avoid the development of such areas, encourage the establishment of scenic or conservation easements over the designated lands or, where related to an overall open space system, set these lands aside for passive recreational purposes.

As later discussed, outright acquisition of such areas by the Town is not required. Preservation of such sensitive areas is also possible through the application of many other techniques, including various ownership options and regulatory mechanisms. In many cases, such actions will result in logical extensions of the existing open space system, thus enhancing the benefits to Town residents.

Stream/Wetland Preservation

Likewise, stream corridor and wetland preservation will have similar environmental and recreational benefits. The preservation of land along the Kisco River and other streams tributary to the Croton Reservoir, the Hudson River and Long Island Sound as well as of wetlands will serve several important purposes.

As discussed in the "Environmental Factors" section, streams and wetlands serve the extremely important function of absorbing excess water during floods and releasing water during periods of low water flow. Furthermore, most of New Castle's streams and wetlands are tributary to New York City water supply reservoirs and are therefore critical in the provision of safe and adequate drinking water for over eight million people, including most of New Castle's residents. Similarly, some wetlands also recharge underground aquifers, from which well water is drawn for human consumption, particularly in the eastern and western portions of the Town. Wetlands also provide an important source of food and habitat for much of the area's wildlife.

Preservation of these lands can also fulfill several open space and recreational planning objectives. In and of themselves, streams and wetlands offer a variety of recreational opportunities, including bird watching, fishing, walking and hiking, environmental education and general observation of the abundant wildlife associated with these resources. Creating a "greenbelt" or open space corridor along river banks could help to link together several recreation areas as part of a comprehensive system.

Areas designated for "Stream/Wetland Preservation" on the Town Plan Map include all water bodies, watercourses, and wetlands as defined by vegetation and soil characteristics. Although the use and development of these areas is currently controlled by the Town's wetlands law, this Plan recommends that those regulations be thoroughly reexamined, with a view toward adopting modifications needed to reinforce the environmental protection and open space preservation objectives of this Plan.

This Plan also recommends that aquifers be protected as part of the "Stream/Wetland Preservation" category. In many instances, the areas currently shown on the Town Plan Map coincidentally encompass some areas favorable for ground water development, but the identification and delineation of all major aquifers will need to await the completion of a detailed hydrogeological study.

Historic Resource Preservation

New Castle as a settled community has a proud history dating back to the early 1700s, which —in addition to the heritage it represents —has left the Town with physical assets such as the Quaker Meeting House and several other 18th century buildings along Quaker Street, a number of sites associated with Horace Greeley in the Chappaqua hamlet, the Granite House on Saw Mill River Road in Millwood, and numerous vestiges of earlier land ownership patterns and the agrarian economy that

once characterized the Town's life. Together, these features play an important role in enhancing the Town's visual appeal and influencing its overall character.

In recognition of the value of these features, the Town has sought to preserve some of them through official designation. The Old Chappaqua Historic District, with the Quaker Meeting House as its focal point, was listed on the National Register of Historic Places in 1974. A number of Horace Greeley-affiliated sites and the Granite House were similarly listed in 1979. At the local level, the Planning Board has also reinforced these efforts by carefully reviewing development proposals, with a view toward preserving stone walls and other historic features and protecting the setting of existing historic structures. In addition, the New Castle Historical Society sponsors exhibits and offers educational programs, workshops and research opportunities that are designed to increase the community's awareness of its rich history and the particular features that contribute to its special character.

New Castle has many notable individual buildings — many of historic interest — that are not located within an historic district or have not received official recognition. Their individual and collective importance to the community is fully recognized by this Plan. The efforts of private individuals and community groups to identify these structures and their history as well as to preserve these buildings should receive the encouragement of the Town.

As a complementary element of New Castle's open space system, this Plan recognizes that the loss of these historical assets would have a negative impact on the Town. Although not specifically identified on the Town Plan Map, it is recommended that buildings, sites and other special features of historical significance in New Castle — whether officially recognized or not — continue to be preserved and maintained, not only for historical reasons, but also because they are aesthetically important to the Town's character. Toward that end, it is specifically recommended that the Town's zoning law and subdivision regulations be reexamined to ensure that the policies they embody are not inconsistent with that objective and to incorporate new techniques that could be used to more actively promote the preservation of historic structures and sites.

Specific Recreation Planning Recommendations

GEDNEY PARK - This park should continue to be developed as the Town's major active recreational facility in accordance with a comprehensive, long-range plan. Planned improvements currently include the addition of year-round comfort stations (bathrooms), completion of the children's play area and the installation of a covered picnic area near Gedney Pond.

A comprehensive plan should include the redesign and layout of existing ball fields. There is potential for the creation of a third softball field on the east side of the access road and also for enlargement of at least one of the fields for men's league play. Parking is severely restricted and should also be redesigned and expanded to keep the main roadway clear during scheduled games and events. An access road and parking

area should be constructed for the upper soccer field to improve its accessibility, especially to those who find it difficult to walk up the hill, and to reduce the pressure on parking for the lower fields. A lateral bike path extension should be provided to Gedney Park and the Westorchard Elementary School when and if the North County Trailway, now partially constructed along Saw Mill River Road and the abandoned Putnam Division Railroad right-of-way, is improved through New Castle.

MILLWOOD PARK - This park should continue to be maintained as an active recreation area. Since inadequate parking remains a problem, the feasibility of constructing additional off-street parking facilities on the Con Edison land across Saw Mill River Road should be further studied.

TOWN HALL RECREATION FIELD - This is a well-used field which could benefit from increased maintenance. An irrigation system may also be needed if this field is used extensively. The installation of a gazebo near the eastern corner of this field is planned for public use and events.

WHIPPOORWILL PARK - This park should continue to be maintained in its natural state as a passive recreation area, limited to hiking and nature study. Pedestrian access off Whippoorwill Road should be improved by creating a series of steps down the steepest parts of the trail into the park. If vehicular access is provided into this site, active recreational facilities could also be located there. However, if such vehicular access eventually connects Whippoorwill Road with Armonk Road, its alignment through the park should be specifically designed to discourage its routine use by through traffic.

WARBURG PARK - This park should continue to be maintained in its natural state as a passive recreation area. Pedestrian access is largely nonexistent because of rugged terrain and the lack of street frontage. However, with the acquisition by the Town of the Con Edison property to the north nearly completed, vehicular access to the park could be provided from Pines Bridge Road. The effective expansion of the Warburg Park site as the result of this land acquisition would enable the Town to provide some additional active recreational facilities at this location if they are needed or desired in the future.

GLAZIER ARBORETUM - Portions of this property are well suited for small picnic areas if seating and paths through the tall grass can be provided. Several groups have expressed interest in using part of this site for the activities of small gardening clubs, a function that would be well-suited for the area and may make use of this facility more appealing. However, given its location near two sharp turns along Whippoorwill Road, safe access to the area and adequate off-street parking would need to be provided.

MILLWOOD COMMUNITY CENTER AND PARK - It was recommended in the 1977 *Millwood Plan* that a new community center and park be considered for the vicinity of the Saw Mill River Road/Millwood Road/Shingle House Road intersection, including the Granite House. The use of that structure for community activities will require further study of the specific needs and programs that such a building could accommodate, as will the attendant operational costs. Regardless of the specific use of that building,

however, the area surrounding this important intersection should be landscaped and beautified to create an attractive entryway at the northern end of the Millwood business area and to provide a clear separation between the residential and commercial land uses.

LARGE PARK NEAR CROTON RESERVOIR - This Town-owned property offers mature woods and excellent views of the Croton Reservoir. Providing access to the site should be part of a long-range plan for the property, including the possible provision of parking at the bottom of the hillside and of trails leading to a scenic overlook and picnic area near the top of the park.

PARKWAYS AND RIGHTS-OF-WAY - It is recommended that the Town explore the use of the various parkways, the abandoned Putnam Division Railroad right-of-way, utility line rights-of-way and aqueduct rights-of-way for the development of bikeways, walkways and trail systems. These areas represent important linear elements that have the potential to link many of the Town's parklands, schools and commercial centers in an interlocking system of parks, bike paths and trails. One of the most attractive features of these lands is that, if properly designed, they can be used by bicyclists, joggers, walkers and hikers to travel through many parts of the Town and to parklands without crossing or riding along heavily traveled streets and highways—an objective this Plan supports and encourages.

Plans for such trailways currently exist for the abandoned Putnam Division Railroad and Briarcliff-Peekskill Parkway rights-of-way through Millwood, but will need local support from the towns and villages through which these rights-of-way cross to ensure their implementation.

IMPLEMENTATION TECHNIQUES FOR OPEN SPACE PRESERVATION

Traditionally, in many communities open space preservation has been achieved most frequently through the outright purchase of desirable tracts of land by local governments. However, as previously discussed, open space in New Castle takes many forms and has been created as the result of a variety of public and private actions. To ensure that the Town's open space and recreation system is protected and expanded as necessary to accommodate future population growth, the use of a variety of land preservation tools should be considered, including both land acquisition techniques and regulatory techniques.

Land Acquisition Techniques

A number of techniques are available for acquiring or designating land for open space preservation. The majority of these can be used by municipalities such as New Castle as well as by nonprofit agencies, acting on their own as well as cooperatively, to secure an interest in land for permanent open space use. Examples of these include: fee simple purchase, fee simple purchase/leaseback arrangements, establishment of conservation easements, donations and bargain sale transactions.

Some methods, however, are available either only to governments or to nonprofit organizations. For example, a government can use its power of eminent domain to acquire land or can initiate tax foreclosure proceedings against a property owner for nonpayment of property taxes. A government also has a variety of unique financing options available to it, including the issuance of bonds and the requirement for payment of a fee in lieu of parkland reservation as part of subdivision design.

A nonprofit organization can acquire land with the intent of subsequently conveying ownership interest or management responsibilities to a public agency or a land trust. A number of financing options, not generally available to or used by governments, can also be pursued by a nonprofit organization, including an installment sale, fund-raising and the use of revolving fund grants. Summaries of open space acquisition techniques for governments and for nonprofit organizations, listing advantages and disadvantages of each and examples of their use, are presented in Tables 58 and 59, respectively, which follow this page.

Regulatory and Planning Techniques

In addition to the direct action that the Town or other agencies can take to achieve open space preservation, there are other techniques available that can help guide and control land development so as to preserve and reinforce a community's open space character. These include subdivision dedication, cluster zoning (conservation development), performance zoning, environmental protection ordinances and the establishment of special districts, to name a few. A summary of these regulatory techniques and others, citing advantages, disadvantages and examples of each, is presented in Table 60 preceding page 167.

Table 75

TOWN PLAN IMPLEMENTATION PROGRAM
TOWN OF NEW CASTLE

Policy Recommendation	Implementation Timeframe[a]			Action Needed[b]
	Near-Term	Short-Term	Long-Term	
A. Residential Development				
1. Rezone some properties in selected areas of Town	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning)[c] by TB.
2. Establish design and construction specifications for common driveways.	X			Drafting of specific recommendation by TE and PB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
3. Modify existing street design and construction specifications to address number of lots to be served, extension of private roads, etc.	X			Drafting of specific recommendation by TE and PB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 109 (Street and Road Specifications) and 113 (Subdivision of Land) by TB.
4. Modify existing regulations concerning resubdivision.	X			Drafting of specific recommendation by PB; adoption of amendment to subdivision regulations by PB; amendment of Chapter 113 (Subdivision of Land) by TB.
5. Modify existing regulations to prohibit the creation of "flag lots."	X			Drafting of specific recommendation by PB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
6. Modify existing regulations applicable to lot dimensions and yard requirements.	X			Drafting of specific recommendations by PB; amendment of Chapter 60 (Zoning) by TB.
7. Modify existing "dry land area" regulations applicable to minimum lot size requirements.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
8. Establish regulations concerning the delineation of "clearing and grading limit lines" on all building lots.	X			Drafting of specific recommendation by TE and PB with advice from CB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
9. Establish regulations concerning preservation of perimeter buffers.	X			Drafting of specific recommendation by PB with advice from CB; amendment of pertinent sections of Town Code by TB.
10. Establish regulations authorizing PB to require the use of conservation subdivision design.	X			Drafting of specific recommendation by PB and TB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
11. Establish regulations concerning residential building bulk, house siting and maximum development coverage.	X			Drafting of specific recommendation by PB and TB; amendment of Chapter 60 (Zoning) by TB.
12. Modify existing methodology applicable to computation of permitted residential density in multifamily developments.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
13. Modify existing density incentive provisions applicable to multifamily development.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
14. Establish regulations limiting commercial development to first floor locations in Millwood business center and requiring residential use of second floor space.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
15. Establish regulations permitting the creation of shared living residences for senior citizens.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
16. Establish regulations for senior citizen housing zoning district.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
17. Establish regulations permitting the conversion of single-family residences to two-family residences in selected areas within or contiguous to Chappaqua and Millwood business centers.	X			Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
18. Establish regulations concerning maximum floor area requirements for multifamily dwellings.	X			Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment to Chapter 60 (Zoning) by TB.
19. Modify existing regulations concerning the establishment of customary home occupations and professional offices in residences.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
20. Modify existing regulations concerning amateur radio and satellite dish antennas.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
B. Commercial Development				
1. Eliminate B-RO-4 District.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
2. Rezone some properties in selected areas of Chappaqua and Millwood hamlets.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
3. Reevaluate types of land use permitted in hamlet business centers.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
4. Reevaluate building height regulations applicable to hamlet business centers.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
5. Develop area site plans for selected areas of hamlet business centers.	*	*	*	Preparation and adoption of area site plans by PB.
6. Develop individual area design plans for Chappaqua and Millwood business centers.	X			Preparation of area design plans by PB with advice from ARB; adoption of area design plans by PB.
7. Establish hamlet design overlay districts for Chappaqua and Millwood business centers.		X		Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
8. Reevaluate sign regulations applicable to hamlet business centers.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
C. Open Space and Recreation				
1. Develop specific open space preservation plan and recreation master plan.	X			Preparation by PB, TB and RPC; future amendment of 1989 ***Town Development Plan*** by PB to incorporate open space and recreation master plan by reference.
2. Identify and preserve important open space and recreation parcels.	X	*	*	Study by PB, TB and RPC; use of preservation techniques outlined in Tables 58, 59 and 60 of Town Plan as appropriate by PB, TB, nonprofit organizations and private landowners.

Note: For explanation of footnotes, see last page of this table.

	Policy Recommendation	Implementation Timeframe[a]			Action Needed[b]
		Near-Term	Short-Term	Long-Term	
3.	Secure access to landlocked public open space and recreation sites and to private open space and institutional lands for recreational purposes.	*	*	*	Acquisition of land and/or access easements by TNC.
4.	Provide additional public active recreational facilities.	*	*	*	Study of needs by RPC; approval by TB; construction by TNC.
5.	Establish system of bikeways, walkways and trails.	*	*	*	Study by PB, TB, and RPC; approval by PB as part of development proposal review; acquisition of land and/or access easements by TNC; construction by TNC and/or private landowners.
6.	Establish "open space ombudsman" position.	X			Creation of position by TB; hiring and/or appointment by TB.
7.	Establish regulations concerning tree preservation.	X			Drafting of specific recommendation by PB with advice from CB; amendment of pertinent sections of Town Code by TB.
8.	Establish regulations concerning disturbance of steep slopes.	X			Drafting of specific recommendation by PB with advice from CB; amendment of pertinent sections of Town Code by TB.
9.	Reevaluate provisions of Town wetlands law.	X			Study of existing regulations by PB and CB; drafting of specific recommendation by PB; amendment of Chapter 137 (Wetlands) by TB.
10.	Reevaluate provisions of Town zoning law concerning historic preservation.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
D.	**Transportation**				
1.	Realign Taconic State Parkway (TSP) northbound exit ramp to Route 100; realign Campfire Road and close existing TSP grade crossing.		X		Construction by NYSDOT.
2.	Create grade-separated interchange at Saw Mill River Parkway/Roaring Brook Road intersection.			X	Study by NYSDOT and TNC; approval by NYSDOT and TNC; construction by NYSDOT with TNC endorsement.
3.	Extend North Greeley Avenue to Roaring Brook Road.			X	Study by PB and TB; approval by TB if determined to be necessary; construction by TNC.
4.	Extend Schuman Road to Station Road.		X		Approval by PB as part of development proposal review subject to approval by NYSDOT and TB with construction by private developer or approval by NYSDOT, private landowner and TB with construction by TNC.
5.	Realign selected segments of Town roads to improve safety.	*	*	*	Approval by PB as part of development proposal review with construction by private developer and/or approval by TB with construction by TNC.
6.	Realign Lake Road west of Croton Lake Road for safety reasons and to provide access to landlocked Town parkland.			X	Approval by NYC, private landowner and TB; construction by TNC.
7.	Revise Official Map to reflect desirable right-of-way reservations for proposed roads.	X			Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment by TB.
8.	Implement TOPICS and similar types of roadway/intersection improvements.	X	X	X	Construction by NYSDOT with TNC endorsement.
9.	Convert Hunts Place (also known as lower King Street) to two-way road or reverse existing westbound one-way flow to improve circulation around Chappaqua Train Station.	X			Study by TE, PB and TB; preparation of plan by TE; installation of traffic signal at Greeley Avenue/King Street intersection by NYSDOT; amendment of Chapter 123 (Vehicles and Traffic) by TB; elimination or restriping of parking spaces by DPW.
10.	Establish speed zone on Route 100 between Station Road and Shingle House Road with possible extension to Hidden Hollow Road.	X			Approval by NYSDOT; amendment of Chapter 123 (Vehicles and Traffic) by TB; installation of signage by NYSDOT.
11.	Develop sidewalk plans for Chappaqua and Millwood hamlet areas, including designation of appropriate pedestrian crossing zones.	X	X		Study by TE and PB; preparation of plans by TE; approval by TB and NYSDOT (if applicable); establishment of sidewalk district(s) by TB; construction by TNC and/or abutting property owners.
12.	Redesign layout of existing municipal parking lots to maximize capacity.	X			Study and preparation of plans by TE; approval by PD (or TB); restriping of lots by DPW.
13.	Provide northern secondary access to Parking District's planned off-street parking facilities on east side of North Greeley Avenue.		X		Study by TE, PB and TB; acquisition of land and/or access easement by PD (or TNC); construction by PD (or TNC).
14.	Provide additional merchant parking facilities on west side of North Greeley Avenue.		X		Study by TE, PB and TB; preparation of plan by TE; acquisition of land by PD (or TNC); construction by PD (or TNC).
15.	Construct one or more parking decks over existing surface lots.		X	X	Study by TE, PB and TB; preparation of plans by engineering consultant; approval by TB; construction by PD (or TNC).
16.	Relocate long-term metered parking spaces currently located north of Woodburn Avenue to main commuter lot behind Town Hall.		X		Study by TE, PB and TB; preparation of plan by TE; approval by PD (or TB); amendment of Chapter 123 (Vehicles and Traffic) by TB; relocation by DPW.
17.	Establish variable time restrictions for parking spaces, designed to ensure frequent turnover of spaces near core of business centers.		X		Study by TE, PB and TB; drafting of specific recommendation by TE and PB; approval by PD (or TB); amendment of Chapter 123 (Vehicles and Traffic) by TB; installation of signage by DPW.
18.	Reevaluate merchant parking permit policies.		X		Study by TE, PB and TB; drafting of specific recommendation by TE and PB; approval by PD (or TB); amendment of Chapter 123 (Vehicles and Traffic) by TB.
19.	Align boundaries of Parking District with B-RP District.	X			Study by TE, PB, and TB; drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB and/or adoption of special legislation by PD (or TB).
20.	Provide additional commuter parking facilities.			X	Study by TE, PB and TB; preparation of plan by TE; approval by TB; construction by TNC.
E.	**Community Facilities and Services**				
1.	Provide new water pumping station from Catskill Aqueduct.		X		Approval by NYCDEP, NYSDOH and WD (or TB); construction by WD (or TNC).
2.	Provide new above-ground water storage facility at West End of Town.		X		Approval by WCDOH and WD (or TB); construction by IBM as part of Hudson Hills site development or construction by WD (or TNC) on alternative site to be selected by WD (or TB) after study by TE, DPW and TB.
3.	Provide water filtration plant.		X		Study by TE, DPW and TB; acquisition of site by WD (or TNC); preparation of plan by engineering consultant; approval by NYSDOH and WD (or TB); construction by WD (or TNC).
4.	Complete implementation of concrete relining program for unlined water mains.		X	X	Approval by WCDOH and WD (or TB); construction by DPW.

Note: For explanation of footnotes, see last page of this table.

Policy Recommendation	Implementation Timeframe[a]			Action Needed[b]
	Near-Term	Short-Term	Long-Term	
5. Enlarge water mains in Stanwood area and elsewhere as needed to improve fire protection.		X	X	Approval by WCDOH and WD (or TB); construction by DPW.
6. Provide for looping of water mains.	*	*	*	Approval by PB as part of development proposal review subject to approval by WCDOH; construction by private developer and WD (or TNC).
7. Expand sewer service in selected areas.		X	X	Study and preparation of plans by TE and DPW; approval by WCDEF, WCDOH and TB; expansion of existing sewer district(s) and/or establishment of new sewer district(s); construction by relevant SD (or TNC).
8. Develop long-range plan for solid waste disposal.		X		Study by TE, DPW, TB and other cooperating municipalities; preparation of specific plan by consultant; approval by RRD or TB (and other cooperating municipalities if applicable).
9. Expand garbage recycling program.		X		Study by TE, DPW and TB; preparation of specific plan by consultant; approval by TB.
10. Install dry hydrants to improve fire protection in areas lacking a central water supply system.	*	*	*	Approval by PB as part of development proposal review; construction by private developer.
11. Explore options for expanding Town Hall and/or relocating some departments to "satellite" locations.		X	X	Study by SBG and TB; preparation of specific plans by architectural consultant; approval by TB; construction/renovation by TNC.
12. Expand Town Garage to provide for enclosed storage of all vehicles and equipment.			X	Study by DPW; preparation of specific plan by consultant; approval by TB; construction by TNC.
13. Provide additional enclosed facility for sand and salt storage.			X	Study by DPW; preparation of specific plan by consultant; approval by TB; construction by TNC.
14. Provide new facility for Chappaqua Post Office.		X		Approval and construction by U.S. Postal Service.
15. Provide new facility for Millwood Post Office.			X	Study and approval by U.S. Postal Service; lease of new space or construction of new building by U.S. Postal Service.
16. Monitor enrollment trends for purpose of projecting need for future school facilities and programs and for grade reorganization.		X	X	Study by CSD and other school districts serving New Castle; implementation of selected plans by pertinent school districts.
17. Relocate Chappaqua School District Administrative Offices to new building on Horace Greeley High School site.		X		Approval and construction by CSD.

[a] Timeframe indicated is proposed, except for Policy Recommendations D-1 and E-1 which have already been scheduled for completion as noted.
Near-Term - 6 months to 1 year
Short-Term - 1+ year to 5 years
Long-Term - 5+ years
* - Ongoing as needed

[b] PB - New Castle Planning Board
TB - New Castle Town Board
TE - New Castle Town Engineer
CB - New Castle Conservation Board
ARB - New Castle Board of Architectural Review
RPC - New Castle Recreation and Parks Commission
PD - New Castle Parking District No. 1
WD - New Castle Water District No. 1
SD - New Castle Sewer District
RRD - New Castle Residential Refuse District
DPW - New Castle Department of Public Works
SBG - New Castle Superintendent of Buildings and Grounds
TNC - Town of New Castle
WCDOH - Westchester County Department of Health
WCDEF - Westchester County Department of Environmental Facilities
NYCDEP - New York City Department of Environmental Protection
NYSDOT - New York State Department of Transportation
NYSDOH - New York State Department of Health

Reference to the above boards, individuals, commissions, districts, departments and jurisdictions, etc. is assumed to include agents of such entities as appropriate, e.g., TNC may include contractors hired by the Town of New Castle.

[c] Refers to ***Code of the Town of New Castle, New York***

TRANSPORTATION

An important element of the physical and fiscal well-being of New Castle concerns the ease and efficiency with which its residents and others can move about within the Town and between New Castle and other communities in the region. The plan for the "pathways" that are to meet these circulation needs is both a causative agent in achieving the desired development pattern in the community and an effect, derived from the circulation needs of the proposed pattern of land use.

Development has continued throughout New Castle since the last Town Plan was prepared. This development has generally relied on the same roadway system that has been in place for many years. With the exceptions of the reconstruction of Route 100 south of Echo Lake and the reconfiguration of the Washington Avenue/South Greeley Avenue intersection as part of the planning of the current Town Hall site, the only other new roads that have been built provide access to new residential developments and have been constructed by private developers.

The plan for transportation services in New Castle emphasizes improving the safety and flow of traffic on the existing circulation network, augmenting the existing roadway system as needed, addressing pedestrian needs, and improving the convenience and efficiency of mass transportation facilities.

VEHICULAR CIRCULATION

Existing Roadway System/Classification

New Castle is served by a network of two-lane roadways traversing the entire Town as well as by two parkway systems. Main roadways include N.Y. Route 134 (Croton Dam Road), C. R. 1323 (Pines Bridge Road), N.Y. Route 100 (Saw Mill River Road), N.Y. Route 133 (Somerstown Turnpike, Station Road and Millwood Road), N.Y. Route 120 (Quaker Street and King Street), C. R. 21 (Seven Bridges Road), Roaring Brook Road, N.Y. Route 117 (Bedford Road) and N.Y. Route 128 (Armonk Road).

The Town's roadways are divided into four functional classifications: Parkways, Major Roads, Collector Roads and Local Roads. A review of the 1968 ***Town Plan of Development*** shows that the roadway system is generally unchanged, including the function of each road. Route 100 has been rebuilt south of Millwood to the Mount Pleasant town line. The section through the Millwood hamlet center has not been relocated as originally planned and according to the New York State Department of Transportation (NYSDOT), this reconstruction is not on the Department's five-year improvement program schedule.

A brief description of each category of roadway is presented below:

PARKWAYS - Parkways are designed to carry high volumes of noncommercial traffic with no direct access permitted to adjacent properties along their rights-of-way. Two roadways in New Castle are classified as such, the Taconic State Parkway and the Saw Mill River Parkway.

MAJOR ROADS - Major roads are those that provide access throughout the Town and to neighboring communities and land uses that generate high traffic volumes. Major roads generally carry more traffic in the Town than other types of roads (other than the parkways). Roadways in this category include:

- N.Y. Route 134 (Croton Dam Road) - N.Y. Route 134 is a two-lane north-south roadway that connects Route 100 in Yorktown to the north with Route 133 in Ossining to the south.

- N.Y. Route 100 (Saw Mill River Road) - N.Y. Route 100 is a limited access, undivided two/four-lane roadway from the Mount Pleasant town line to the Taconic State Parkway interchange. From the Parkway north to the Yorktown town line, Route 100 is a two-lane roadway providing access to residential and commercial properties. It originates south of New Castle in Yonkers and terminates in the Town of North Salem at the junction of N.Y. Routes 22/202, bisecting New Castle in a north-south direction west of the Saw Mill River Parkway.

- N.Y. Route 133 (Somerstown Turnpike/Millwood Road) - N.Y. Route 133 is a two-lane east-west roadway that connects Mount Kisco to the east with Ossining to the west. It serves as one of the few major east-west roadways in the Town.

- N.Y. Route 120 (Quaker Street/King Street) - N.Y. Route 120 is a two-lane east-west roadway connecting North Castle to the east and communities farther south with Routes 100 and 133 to the west.

- C. R. 21 (Seven Bridges Road) - Seven Bridges Road is a Westchester County maintained, two-lane north-south roadway beginning at Route 120 in New Castle and continuing north to Route 100 in Yorktown.

- Roaring Brook Road - Roaring Brook Road is a two-lane east-west Town roadway that begins and ends in New Castle, connecting Routes 117 and 120 in the central part of the Town.

- N.Y. Route 117 (Bedford Road) - N.Y. Route 117 is a two-lane roadway that divides the Town in a north-south direction east of the Saw Mill River Parkway. It connects Mount Kisco/Bedford to the north with Pleasantville/Mount Pleasant to the south.

- N.Y. Route 128 (Armonk Road) - N.Y. Route 128 is a two-lane north-south roadway beginning in North Castle at Route 22 and intersecting with Route 117 in Mount Kisco.

COLLECTOR ROADS - Collector roads are found throughout the Town, linking major roads with local roads and the parkways. They usually carry less traffic than major roads and also provide access to adjacent properties. They are generally two lanes in width and are not designed to accommodate on-street parking (except along isolated sements in the Town's hamlet centers). Examples of this type of roadway are Pines Bridge Road, Hardscrabble Road, Crow Hill Road and Whippoorwill Road.

LOCAL ROADS - Local roads make up the remaining street system, are two lanes in width and carry the least amount of traffic. These roads serve adjacent properties —principally in residential areas —and usually connect with collector or major roads. On-street parking is often accommodated, especially in higher density areas.

Existing Traffic Volumes

Figures 61 and 62 on the following pages graphically illustrate two-way morning and afternoon peak hour traffic volumes for various roadways throughout the Town, based on volume data provided by the New York State Department of Transportation and environmental impact statements prepared for site-specific projects. Traffic surveys conducted before 1988 were adjusted to 1988 levels by applying a 2% per year growth factor.

Table 63, which precedes page 173, shows two-way peak hour traffic volumes for several roadways in the Town. The Taconic State Parkway between Pines Bridge Road and Route 133 has a two-way morning peak hour volume of 4,510 vehicles and an afternoon peak hour volume of 4,195 vehicles. During the morning peak hour, the Saw Mill River Parkway south of Roaring Brook Road has a two-way volume of 2,955 vehicles, with 3,305 vehicles recorded during the afternoon peak hour.

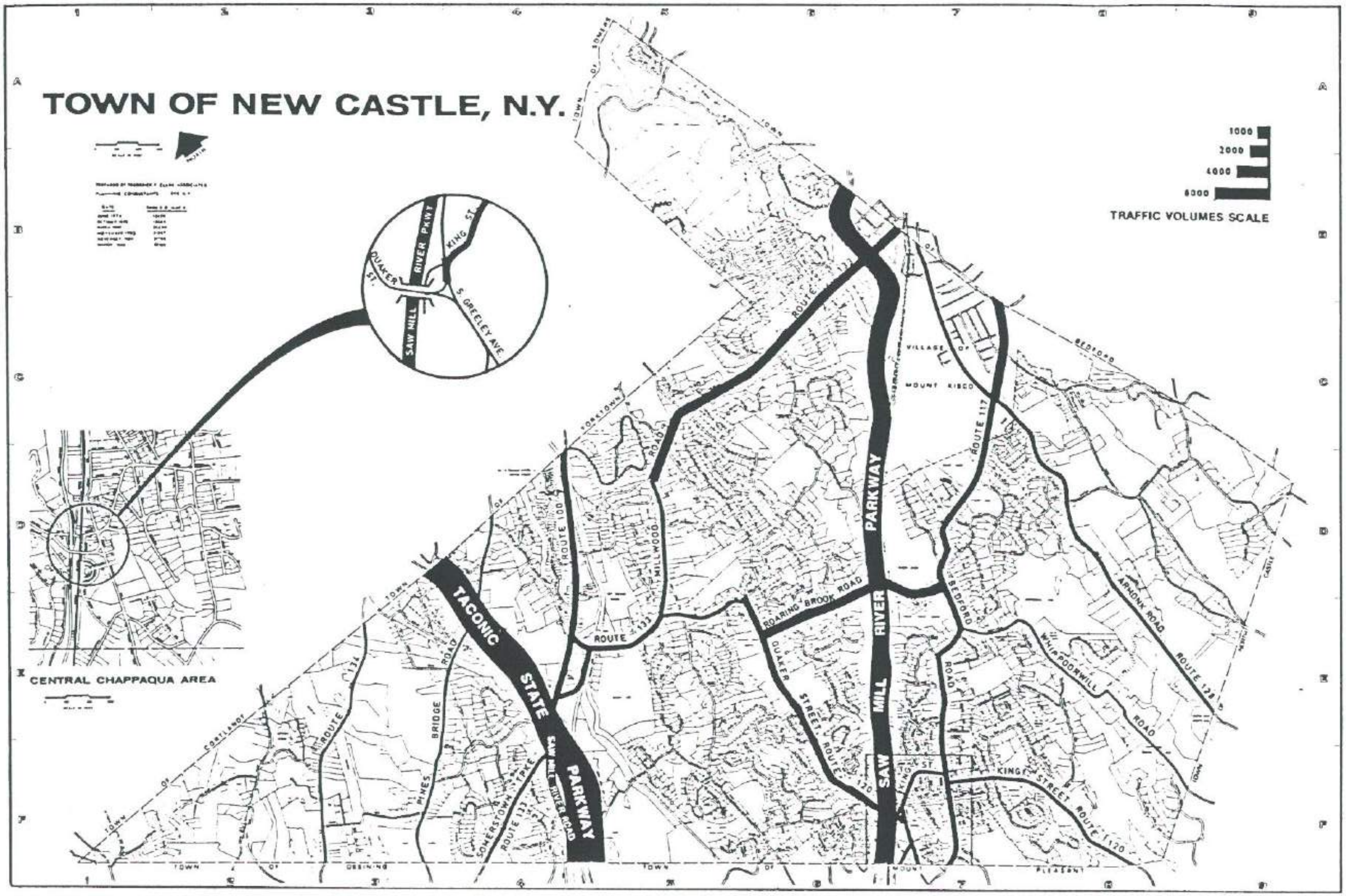
Aside from the high speed regional traffic on the two parkways, the roadways with the greatest volumes of traffic are Route 133 and Route 100 in the vicinity of the Taconic State Parkway. Volumes south of the Taconic State Parkway on the overlapping portion of these roadways reach 1,510 vehicles during the morning peak hour and 1,585 vehicles during the afternoon peak hour. Other high volume roadways (from a local perspective) include other sections of Route 133 as well as Route 120 and Roaring Brook Road.

Reserve Roadway Capacity

To provide an overview of existing traffic conditions on major roads and to determine future needs throughout the Town, reserve capacities have been calculated for critical mainline roadway sections where development is planned or where there is the

Figure 61

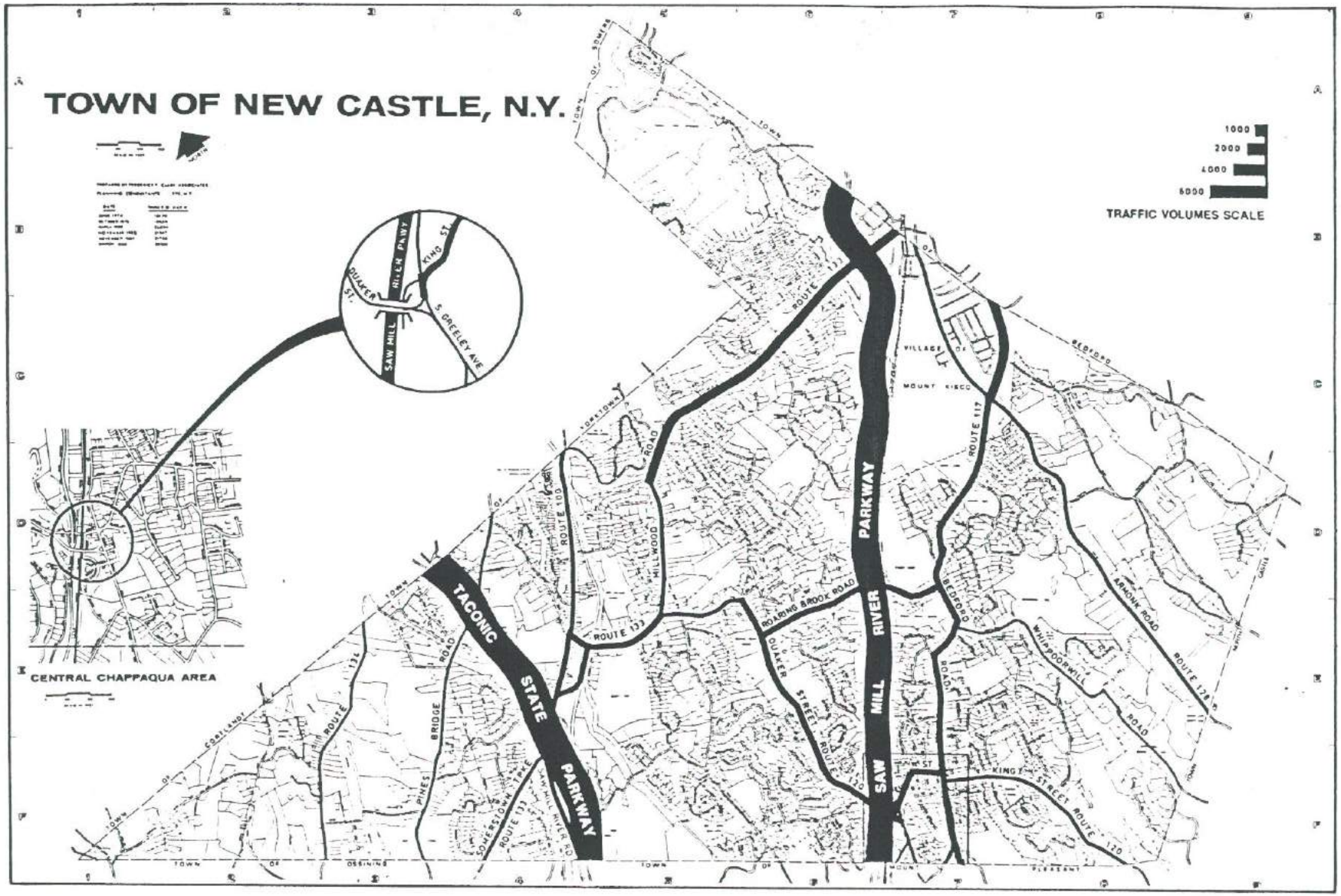
TWO-WAY TRAFFIC VOLUMES - AFTERNOON PEAK HOUR - 1988
TOWN OF NEW CASTLE



Source: New York State Department of Transportation

Figure 62

TWO-WAY TRAFFIC VOLUMES - AFTERNOON PEAK HOUR - 1988
TOWN OF NEW CASTLE



Source: New York State Department of Transportation

Table 63

TWO-WAY TRAFFIC VOLUMES/RESERVE CAPACITY - 1988
TOWN OF NEW CASTLE

Roadway Section	Morning Peak Hour				Afternoon Peak Hour			
	Volume	Adjusted Volume	Capacity	Reserve Capacity	Volume	Adjusted Volume	Capacity	Reserve Capacity
Route 134, south of the Taconic State Parkway	615	720	2,500	1,780	635	745	2,500	1,755
Route 133, east of Old Roaring Brook Road	1,075	1,195	1,780	585	1,145	1,270	1,780	510
Route 133, south of Vails Lane	505	560	2,000	1,440	520	575	2,000	1,425
Route 100, north of Route 133	785	870	2,000	1,130	760	845	2,000	1,155
Route 100, south of Campfire Road and North State Road	945	1,050	2,000	950	795	880	2,000	1,120
Route 133, south of Route 120	730	810	2,000	1,190	795	880	2,000	1,120
Route 133/Route 120 overlap, east of Granite Road	1,045	1,160	1,780	620	1,040	1,155	1,780	625
Route 120, north of Hardscrabble Road	365	405	2,000	1,595	510	565	2,000	1,435
Route 120, south of Rose Lane	845	940	2,000	1,060	745	830	2,000	1,170
Roaring Brook Road at Metro-North Commuter Railroad Crossing	1,205	1,340	1,780	440	955	1,060	2,000	940
Route 120 at Hunts Place	840	935	2,000	1,065	1,225	1,360	2,000	640
Route 117, south of Old Farm Road	580	645	2,000	1,355	630	700	2,000	1,300
Route 117, south of Overlook Drive	790	875	1,780	905	890	990	1,780	790
Route 120, south of Haights Cross Road	510	565	2,000	1,435	480	535	2,000	1,465
Route 128, south of Cottage Road	375	415	1,780	1,365	445	495	1,780	1,285
Taconic State Parkway, south of Campfire Road	4,370	4,855	6,400	1,545	3,950	4,390	6,400	2,010
Taconic State Parkway, north of Route 133	4,510	5,010	12,000	6,990	4,195	4,660	12,000	7,340
Taconic State Parkway, south of Roaring Brook Road	2,955	3,285	6,400	3,115	3,305	3,670	6,400	2,730

Sources: Traffic volume data for all roadways except Route 134 taken from New York State Department of Transportation files (1988)
Traffic volume data for Route 134 taken from IBM Hudson Hills Draft Environmental Impact Statement (1985)

potential for impacts from additional development. Table 63 shows reserve capacity levels for the morning and afternoon peak hours based on recent traffic counts.

The purpose of calculating reserve capacity is to generally evaluate operations on the Town's roadway system under current conditions. Such an analysis shows the actual number of vehicles that could be added to a particular roadway segment before its theoretical capacity is exceeded. Determining the level of reserve capacity on area roadways is a useful planning tool and was considered to be most appropriate for a Townwide analysis. It is also important, however, to determine the capacity of critical intersections as well as of isolated roadway sections.

The capacity, service volume and Level of Service of a two-way, two-lane roadway (i.e., mainline section) are based on several variables, such as flow rates in each direction, speed of travel, variation in speed in the traffic stream, availability of passing sight distance, percentage of truck traffic, roadway grades, lateral clearance, lane widths, frequency of intersections, turning movements and amount of pedestrian traffic. By comparison, the capacity of an intersection is controlled by either a traffic signal if one is installed, or by STOP or YIELD signs.

For planning purposes, the data presented in Table 63 can be used to calculate the Level of Service of the roadway segments studied, using the following table as a guide:

Level Of Service	Adjusted Volume To Capacity Ratio
A	0% - 50%
B	51% - 69%
C	70% - 84%
D	85% - 99%
E	100 % (capacity)

To most accurately measure the overall operation of a particular roadway, however, it is necessary to analyze intersection capacity. It is also important to note that while the Level of Service represents a convenient traffic engineering "shorthand" for describing the operational characteristics of a specific roadway or intersection based on a hierarchy of general travel conditions, the acceptability of a particular Level of Service for planning purposes is a judgment that can best be made at the local level. Such a decision will usually be influenced to a greater extent by the community's perception of service quality and the effect of travel conditions on neighborhood character than by an abstract engineering analysis.

Traffic Safety

Traffic accident history for a two-year period (December 1985 through November 1987) was obtained from the Traffic and Safety Division of the New York State Department of Transportation. All roadway segments and intersections with three or more reportable accidents are listed in Table 64 on the following page. A nonreportable accident is one with no personal injuries and property damage of less than $600.

Table 64

ACCIDENT HISTORY - DECEMBER 1985 THROUGH NOVEMBER 1987
TOWN OF NEW CASTLE

Location	Total	Property Damage Only	One Vehicle	Two Vehicles	Multi-Vehicle	Fatality	Injury	Pedestrian	Fixed Object
Taconic State Parkway ramps to/from Route 100/Route 133 overlap	11	5	6	3	2	0	6	0	5
Taconic State Parkway, vicinity of Campfire Road and North State Road	22	9	10	10	2	1	12	0	8
Saw Mill River Parkway, vicinity of Roaring Brook Road	56	26	19	31	6	0	30	0	19
Saw Mill River Parkway ramps to/from Hunts Place and Hunts Lane	28	10	15	10	3	1	17	1	14
Roaring Brook Road/Wolfs Hill Road/Round Hill Road	12	6	1	10	1	0	6	0	1
Roaring Brook Road between Kerry Lane and Round Hill Road	6	3	2	3	1	0	3	0	2
Roaring Brook Road from South View Road to South Farm Road	3	0	2	1	0	0	3	0	2
South Greeley Avenue from Quaker Street to King Street	12	6	1	10	1	0	6	0	1
Byram Lake Road from Harriman Road to Sarles Street	4	1	4	0	0	0	3	0	3
Croton Lake Road	6	2	4	2	0	0	4	0	4
Total - Above Locations	160	68	64	80	16	2	90	1	59
Total - New Castle	360	179	156	179	25	3	178	5	134

Note: Data shown are for reportable accidents only.

Source: New York State Department of Transportation

A review of the accident data shows that a total of 360 reportable accidents occurred in the Town during the two-year period studied. Of the reportable accidents, 156 were single vehicle accidents, 179 involved two vehicles and 25 involved three or more vehicles. There were 178 injuries reported during that time period. Three accidents resulted in single fatalities. One fatality occurred at the intersection of Campfire Road with the Taconic State Parkway, one at the Hunts Lane on/off ramps to the Saw Mill River Parkway and one on Lake Road at Stanwood Road. During the two-year period, five pedestrian accidents were reported in the Town. Approximately 19% of the reportable accidents occurred at night and 24% occurred under wet and slippery conditions. Approximately 37%, or 134 accidents, involved a vehicle striking a fixed object.

As shown in Table 64, the area that was the scene of the most accidents (56) was the Saw Mill River Parkway in the vicinity of Roaring Brook Road. This number represents all the accidents that occurred in that general area and includes both intersection and roadway segment accidents. The location with the next greatest number of accidents (28) was the Saw Mill River Parkway/Hunts Place/Hunts Lane vicinity.

Existing Problem Areas

A Northern Westchester TOPICS (Traffic Operations Program to Improve Capacity and Safety) Study was conducted in the late 1970s by C. E. Maguire in cooperation with the New York State Department of Transportation and the Federal Highway Administration. The primary purpose of this undertaking was "to identify those areas of the Study [road] Network that are now generally operating below acceptable levels of capacity and safety." In the resulting report, 39 roadway segments and intersections in New Castle were identified as problem locations. Since 1979 (the date of the TOPICS Study final report) approximately one-quarter of the identified problems have either been corrected or are currently under investigation. Table 65 and Figure 66 on the following pages list and identify those locations that have not yet been improved.

The New York State Department of Transportation schedules TOPICS type improvements and receives funding for these projects through the Mid-Hudson South Transportation Improvement Program (TIP). For the 1988-89 to 1992-93 period, completion of the projects listed at the top of page 178 is planned by the New York State Department of Transportation.

Table 65

NORTHERN WESTCHESTER TOPICS STUDY - PROBLEM LOCATIONS
TOWN OF NEW CASTLE

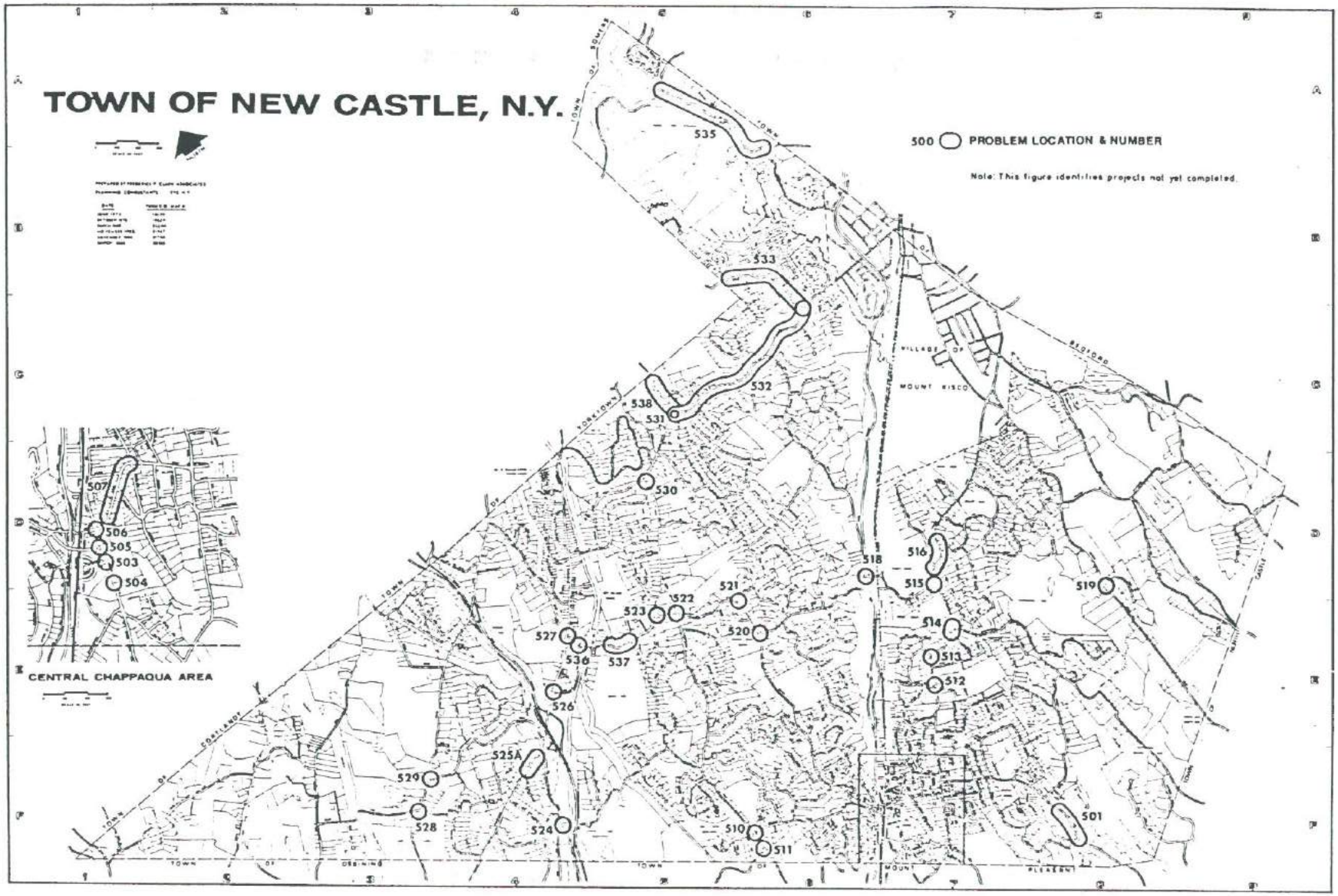
Problem Number	Location
501	Route 120 Curves south of Haights Cross Road*
503	CR 79 (South Greeley Avenue) at Woodburn Avenue
504	CR 79 (South Greeley Avenue) at Robert E. Bell Middle School
505	Route 120 (King Street) at CR 79 (South Greeley Avenue)
506	Route 120 (King Street) at CR 79 (South Greeley Avenue)
507	Route 120 (King Street) between Greeley Avenue and Castle Road
510	Hardscrabble Road at Douglas Road
511	Hardscrabble Road at Briarcliff Road
514	Route 117 (Bedford Road) at Whippoorwill Road*
515	Route 117 (Bedford Road) at Roaring Brook Road
516	Route 117 (Bedford Road) north of Roaring Brook Road*
518	Roaring Brook Road at Saw Mill River Parkway
519	Route 128 (Armonk Road) at Roseholm Place
520	Route 120 (Quaker Street) at Roaring Brook Road
521	Route 120 (Quaker Street) at CR 21 (Seven Bridges Road)
522	Route 120 (Quaker Street) at Hardscrabble Road
523	Route 120 (Quaker Street) at east junction of Route 133 (Millwood Road)*
524	Route 100 (Saw Mill River Road) at CR 154 (North State Road) and Campfire Road
525A	Route 133 (Somerstown Turnpike) between Route 100 and Surrey Lane*
527	Route 100 (Saw Mill River Road) at Shingle House Road and Route 120 (Quaker Street)
528	CR 1323 (Pines Bridge Road) at Grace Lane
529	CR 1323 (Pines Bridge Road) at Inningwood Road
530	Route 133 (Millwood Road) at West Orchard Road
531	Route 133 (Millwood Road) at CR 21 (Seven Bridges Road)
532	Route 133 (Millwood Road) between Crow Hill Road and CR 21 (Seven Bridges Road)
533/905	Crow Hill Road
535	Croton Lake Road
536	Route 120 (Millwood Road) at Millwood Fire Station
537	Route 133 (Millwood Road) from Gedney Park to Henry Place

*Improvements are proposed or planned at these locations.

Source: ***Northern Westchester TOPICS I Study*** (1979)

Figure 66

NORTHERN WESTCHESTER TOPICS STUDY - PROBLEM LOCATIONS
TOWN OF NEW CASTLE



Source: ***Northern Westchester TOPICS I Study*** (1979)

PROJECT	DATE
Route 133/Millwood Area - drainage improvements	1988-89
Saw Mill River Parkway - resurfacing; drainage improvements; improvements to Route 120 ramps and local road connection.	1988-89
Routes 117, 128, 133 - resurfacing where necessary.	1988-89
Routes 120/133 intersection improvements - elimination of "Y" intersection and provision of "T" intersection.	1991-92
Taconic State Parkway, south of Route 100 - major reconstruction to provide 6-lane roadway.	1992-93

Other projects planned by the New York State Department of Transportation are listed below:

PROJECT	DATE
Route 117 at Whippoorwill Road - possible widening to create southbound left-turn lane, etc.	1992-93
Routes 117 and 120 - improvement of guide rail	As soon as possible

Future Traffic

Based on existing land use trends and the recommended land use policies of this Town Plan, it is estimated that an additional 3,340 dwelling units over the January 1, 1988 figure could ultimately be constructed in New Castle, with about 635 additional units projected by the year 2000. It is also estimated that approximately 118,000 square feet of additional commercial space could be built in the Chappaqua business area along with another 214,000 square feet in the Millwood business area. Future traffic projections must also include the IBM Hudson Hills facility and a possible additional 150,000 square feet of development at Reader's Digest (as theoretically permitted under current zoning regulations).

The additional residential development would add 3,340 vehicle trips to the Town's roadway system during peak hours. This traffic is expected to be dispersed throughout the Town. Additional development in the Chappaqua business area would contribute 460 vehicles during the afternoon peak period while the Millwood business area would contribute 835 vehicles from new development. It is assumed that the commercial

development would include retail, office and light industrial uses. Expansion of Reader's Digest would add approximately 300 vehicles to area roads.

RECOMMENDED ROAD PLAN

Two limited-access parkways provide access through the Town. These parkways are limited to passenger vehicle traffic only. State and County roadways provide the major north-south and east-west routes for all types of vehicles. All these roads, except for sections of Route 100, are two lanes in width. With only one exception, there are currently no plans to construct any new roads in New Castle, other than roadways for subdivisions and other development. Plans for the realignment of Campfire Road and the related closing of the Taconic State Parkway grade crossing, to be undertaken by the State, are expected to be implemented by 1992-93. In addition, there has been some discussion at the Town level about the possible realignment of Route 100 east of the Taconic State Parkway in Millwood along the corridor of the abandoned Putnam Division Railroad right-of-way; however, such improvements are currently not planned by the State and are unlikely to occur in the next several years, if at all.

The recommended roadway system for New Castle, illustrated on the Town Plan Map, provides for four basic categories of service as defined by traffic volumes and previously described circulation function within the community and region. These are Parkway, Major Road, Collector Road and Local Road. The roads shown on the Plan Map should be designed and improved to standards that will permit them to serve their intended function while still preserving the general character of development in the areas through which they pass.

It is recommended that whenever a new development is proposed, the Town make a study of the additional right-of-way and road improvements that are needed to bring roads abutting the development site up to desirable standards of width, grade, curvature and surface type, and that the Town seek to acquire any additional right-of-way required in connection with the development approval process. Based on the assumptions that major new road construction in New Castle is highly unlikely and that the Town will continue to be adequately served by a system of two-lane roadways in most locations, it is anticipated that a right-of-way width of 50 to 60 feet will be sufficient to accommodate the Town's circulation needs in the future without jeopardizing the character of established residential neighborhoods. The narrower width should be adequate for the "Local Road" category. Variables affecting the recommended right-of-way width in particular locations will include the permitted travel speed, the need for turning lanes and the desirability of allowing on-street parking, among other factors. Land reserved for right-of-way widenings should not be permitted to be counted as part of the required lot area for any of the abutting lots, nor should it be included for the purpose of measuring required setbacks. This latter policy should also be applied to the existing rights-of-way of private roads.

The road classification system reflected in this Plan is essentially the same as that recommended in the 1968 Town Plan, although the term "Minor Road" has now been

changed to "Local Road." Since 1968, several roadways that were shown as "Proposed" have since been constructed. Others are unlikely to be built because of more recent development activities and/or changes in property ownership that have precluded their future construction, or because of modified regional transportation planning policies that make their construction improbable. Finally, some roads proposed in 1968 are no longer considered necessary or appropriate, particularly in light of existing environmental constraints which are better documented today than in years past.

Parkways

The Town Plan Map continues to identify the Taconic State Parkway and the Saw Mill River Parkway as New Castle's only two "Parkways." A proposed element of this roadway category is the redesign of the Taconic State Parkway northbound exit ramp to Route 100, which is planned by the New York State Department of Transportation as part of the realignment of Campfire Road. Although not specifically delineated in detail on the Plan Map, the recommended redesign of the Saw Mill River Parkway/Roaring Brook Road intersection is also likely to result in the need for new parkway ramps to and from Roaring Brook Road.

Major Roads

The "Major Roads" identified on the Town Plan Map are virtually the same as those shown in 1968 or as part of later amendments to the Town Plan, with only one exception. Since the realignment of Route 100 along the right-of-way of the abandoned Putnam Division Railroad is unlikely to be pursued by the State and the desirability of such a relocation has increasingly been questioned by Millwood area residents, the Plan Map no longer shows a proposed "Major Road" designation along this abandoned railroad right-of-way. As a result, the segment of existing Route 100 north of Station Road has now been identified as a "Major Road" (reflecting its existing and likely future function), instead of a "Collector Road" as shown on the 1968 Town Plan Map. This Town Plan recommends that the following roads be classified as "Major Roads":

- N.Y. Route 134 (Croton Dam Road)
- N.Y. Route 133 (Somerstown Turnpike/Station Road/Millwood Road)
- N.Y. Route 100 (Saw Mill River Road)
- N.Y. Route 120 (Quaker Street/King Street)
- C.R. 21 (Seven Bridges Road)
- Roaring Brook Road
- N.Y. Route 117 (Bedford Road)
- N.Y. Route 128 (Armonk Road)

Collector Roads

The Town Plan Map shows a number of "Collector Roads," all but one of which are existing. The Plan Map also identifies several recommended realignments along these existing roads, principally to eliminate sharp turns or to improve intersection geometry, thereby enhancing the safety of these roads for motorists. Compared to the 1968 Town Plan, a few changes are reflected in this roadway category.

Since the connector between Main Street in Kisco Park and Croton Lake Road is no longer feasible and in light of roadway improvements that have been made to Croton Avenue as part of the Riverwoods multifamily development, Croton Avenue is now classified as a "Collector Road." From an areawide perspective, it already functions that way and has been similarly classified in the adjoining Town/Village of Mount Kisco. In addition, the Plan Map also shows the planned realignment of Campfire Road as a "Collector Road."

Principally because of the development pattern that has evolved since 1968 and in recognition of environmental restrictions in the area, the "Collector Road" designation proposed along the general alignment of Wildcat Road has been eliminated. Although a connection between Whippoorwill Road and Armonk Road within New Castle is still desirable for the purpose of improved circulation in the eastern part of Town, it is felt that the roadway system planned as part of the Whippoorwill Meadows and Whippoorwill Woods subdivisions will adequately serve this function for the foreseeable future.

This Town Plan recommends that the following roads be classified as "Collector Roads":

- Glendale Road
- Spring Valley Road
- Allapartus Road
- Grace Lane
- Hoag Cross Road
- Pines Bridge Road
- Inningwood Road
- Barnes Road
- Ryder Road (segment north of Barnes Road)
- North State Road
- Shingle House Road
- Campfire Road
- Hardscrabble Road
- Douglas Road
- Random Farms Drive
- Lawrence Farms Crossway
- Old Roaring Brook Road
- Crow Hill Road

- Croton Avenue
- Croton Lake Road
- Lake Road (segment west of Croton Lake Road)
- South Greeley Avenue
- Whippoorwill Road
- Haights Cross Road
- Sheather Road
- Harriman Road
- Westwood Road
- Byram Lake Road
- Sarles Street

Local Roads

"Local Roads" are essentially residential in nature, providing access to homes fronting on the road. The Town Plan Map does not show all the local roads that are likely to be built on undeveloped parcels in New Castle in the future. It identifies only those roads that have already been planned as part of approved subdivisions or site plans but are not yet constructed, as well as those where particular road layouts are recommended to permit appropriate circulation of traffic on a Townwide basis.

In the latter case, the routings shown are not intended to portray precise alignments which can only be achieved after more detailed site-specific study and engineering. In some locations, it may be desirable to provide only for emergency access between existing roads but not the construction of new roads designed to accommodate routine through traffic. Examples of this include the proposed road shown through Whippoorwill Park and the proposed road that has already been approved as part of the North Fork Subdivision. Proposed "Local Roads" have been identified on the Town Plan Map primarily to provide a guide in the development of the Town's road system in specific areas when subdivision plans and site plans are reviewed by the Planning Board in the future as part of the normal project approval process.

Specific Roadway Improvements

New Castle's roadway system should continue to be improved to facilitate traffic flow and promote safety through the Town. The Town should continue working with the State to implement TOPICS type improvements at key intersections and along roadway segments. Most of the locations that should be improved are along the State highway system. In addition to intersection improvements, horizontal and vertical alignments along sections such as Route 117 in the vicinity of Roaring Brook Road to the Mount Kisco town line should be improved. Similar types of improvements are needed along Routes 120 and 133. The NYSDOT has been working with the Town to determine the level of improvements needed. As part of any road improvement program in New Castle, however, it is important to maintain the low density residential character of the Town when incorporating added safety features and providing for improved traffic flow.

Along with plans for the improvement of existing roads, the Town should encourage the New York State Department of Transportation to undertake a study for the purpose of identifying alternatives for improving the intersection of the Saw Mill River Parkway with Roaring Brook Road, including the possible construction of a grade-separated interchange.

Traffic flow should also be enhanced in the hamlets of Chappaqua and Millwood. In the Chappaqua hamlet, the roadway system provides for through traffic as well as for local traffic in the commercial area and to the train station. Access (entering and exiting) to the train station and associated commuter parking areas should be improved to enhance traffic flow. Consideration should be given to converting Hunts Place (also known as lower King Street) to two-way traffic flow or to reversing the one-way flow to ease congestion on Woodburn Avenue. No changes should be made, however, until the Route 120/Greeley Avenue/Hunts Place intersection is signalized (when signal warrants are met). Parking will have to be expanded, where possible, to accommodate the expected demand from the increasing number of commuters. In addition, the Town should continue to reserve the option of extending North Greeley Avenue to Roaring Brook Road.

Although the State has no plans to improve and/or relocate Route 100 in Millwood, the Town should continue to investigate options that may permit through traffic to be diverted around the hamlet center, if determined to be necessary and/or desirable. In addition, as a means of improving circulation and traffic safety, and to make sites designated for industrial use and high density residential use more attractive for development, consideration should be given to extending Schuman Road to Station Road.

PEDESTRIAN CIRCULATION

In a suburban community such as New Castle, with its dispersed pattern of land use, it is expected that the principal mode of transportation for most of the Town's residents and workers will remain the automobile. For that reason, much of this Plan focuses on the automobile-oriented features of New Castle's transportation system. However, in a few selected locations of the Town, pedestrian travel is possible and has been accommodated to a limited extent through the provision of sidewalks. Principally, these areas are found in the Town's two hamlets — Chappaqua and Millwood — and, in particular, the business centers of these hamlets.

To provide for the safe and convenient travel of the Town's residents — its children in particular — and to reduce vehicular congestion in the hamlet business centers, this Plan recommends that additional attention be focused on expansion of the Town's sidewalk system. It is anticipated that such action would also have the incidental benefit of moderating the need for expanded parking facilities — for shoppers, merchants and commuters — particularly in the Chappaqua hamlet. Sidewalk systems should be established with a view toward connecting major traffic generators such as shopping areas, community facilities such as schools, public recreation sites and

parks, public transportation facilities and areas of higher density residential development.

Although the preparation of specific plans for the construction of additional sidewalks in New Castle will need to be preceded by a more detailed study of pedestrian travel patterns, roadway characteristics, existing right-of-way available, and physical features such as topographical conditions and vegetation, among other considerations, conceptual plans for pedestrian circulation in the Chappaqua and Millwood hamlets have been prepared as a guide and are reproduced in this Plan as Figures 67 and 68, respectively. On these plans, the pertinent land uses as described above have been identified, along with recommendations as to the relative priority to be given to various proposed segments of the pedestrian circulation network.

With regard to the plan for Chappaqua, it is recognized that the implementation of a portion of this plan may require the cooperation of the Town of Mount Pleasant if a connection between the Old Farm Lake multifamily development and the library area of the business center is to be made along the existing road system. As an alternative to constructing a sidewalk along the full length of Bedford Road to Smith Street, the feasibility of securing a pedestrian access easement across private property in New Castle could be explored. In both hamlets, since many of the proposed sidewalks are located along State roads, approval of the New York State Department of Transportation will also be required before these sidewalks could be constructed.

As more detailed construction plans are prepared, it is recommended that the specific location of sidewalks be guided by the desire to preserve as many trees as possible, in addition to the fundamental need to provide adequate separation between pedestrians and moving vehicles. Furthermore, pedestrian crossing zones should be established at major intersections and elsewhere as needed to connect discontinuous portions of the pedestrian circulation system. For the purpose of enhancing the overall functioning of the Town's pedestrian circulation network, sidewalks should also be linked to the system of trails and bikeways that may be established in New Castle as a recreational element, wherever appropriate and feasible.

PUBLIC TRANSPORTATION

Bus and Rail Service

The Town is served by two forms of public transportation. The bus system is operated by the Westchester County Department of Transportation in cooperation with private companies. As shown in Table 69 on page 185, four regular bus routes and two express bus routes serve the Town. Routes 6, 12, 15 and 19 provide full-time service on several roadways. One express route (Route 11) provides service to White Plains from Peekskill and the other provides express service to Manhattan.

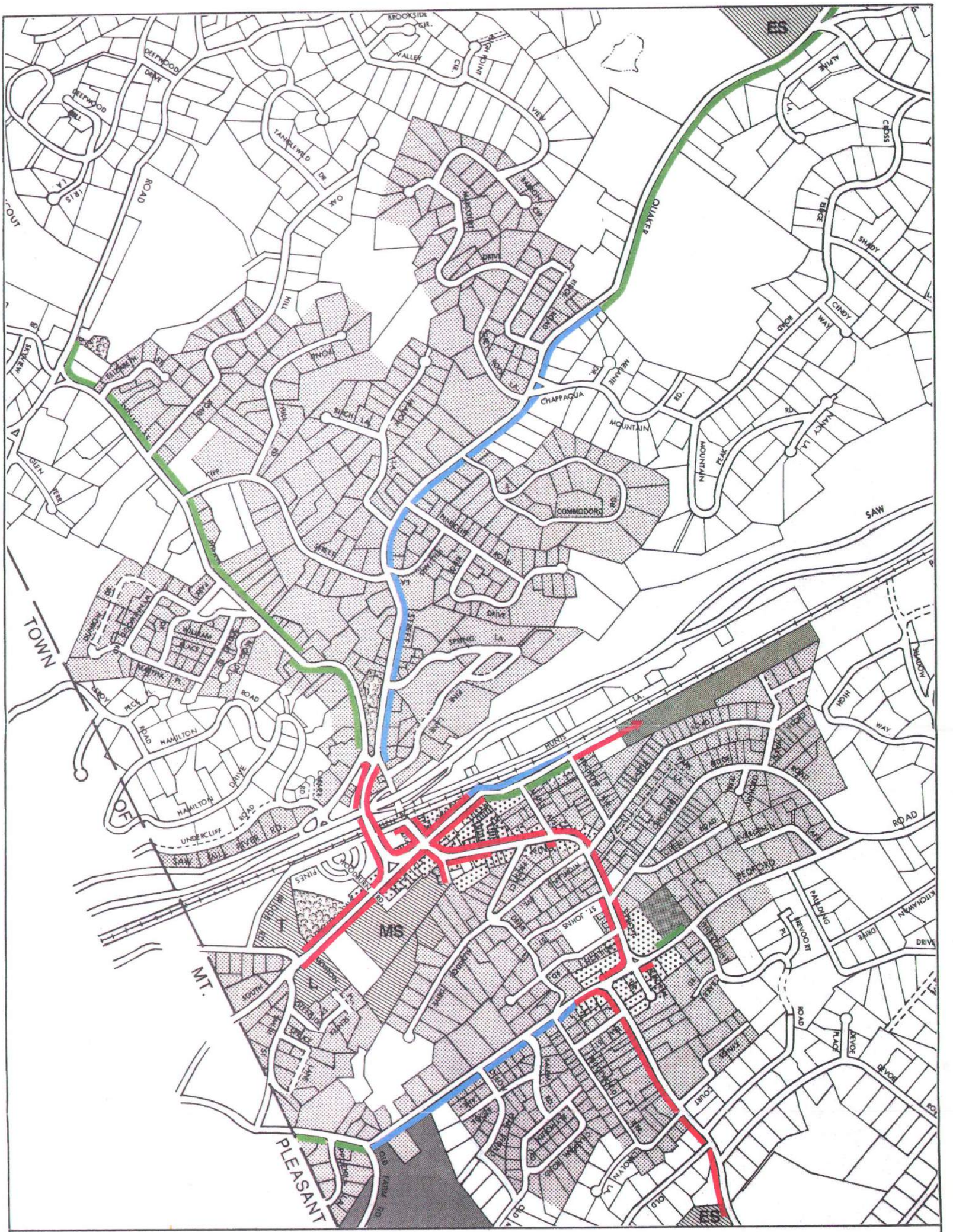


Figure 67 PEDESTRIAN CIRCULATION PLAN - CHAPPAQUA HAMLET

PROPOSED LAND USE

- Medium Density Residential
- High Density Residential
- Retail/Service Business
- Public Recreation/Open Space (Active)
- Public School (ES, MS); Library (L); Town Hall (T)

RECOMMENDED SIDEWALK PLAN

- Existing
- Proposed – Phase I
- Proposed – Phase II

N

Scale in Feet

800 0 800

Frederick P. Clark Associates

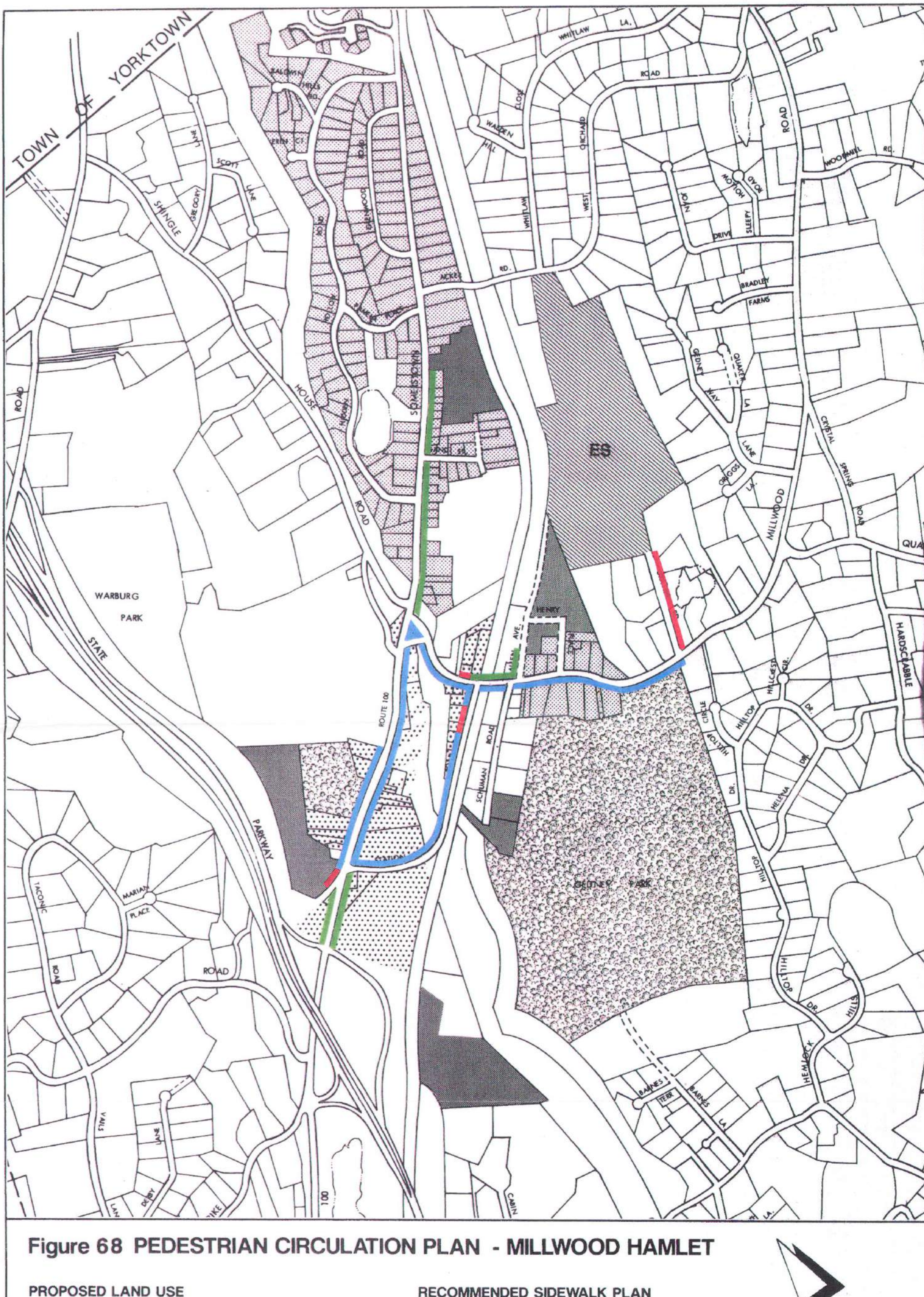


Figure 68 PEDESTRIAN CIRCULATION PLAN - MILLWOOD HAMLET

PROPOSED LAND USE

- Medium Density Residential
- High Density Residential
- Retail/Service Business
- Public Recreation/Open Space (Active)
- Public School (ES)

RECOMMENDED SIDEWALK PLAN

- Existing
- Proposed - Phase I
- Proposed - Phase II

N

Scale in Feet

800 0 800

Frederick P. Clark Associates

Table 69

PUBLIC BUS TRANSPORTATION
TOWN OF NEW CASTLE

Bus Route	Route Description
6	Begins at Yonkers Train Station, to White Plains, Hawthorne, Pleasantville and terminates at Chappaqua Train Station.
12	Begins at White Plains Train Station, to Westchester Avenue (I-287), Rye Brook, Westchester County Airport, Armonk, Mount Kisco, Millwood-Route 100, Yorktown Heights and terminates at Somers-Route 118.
15	Begins in Peekskill, to Yorktown Heights, Millwood-Route 100, Pleasantville, Westchester Medical Center, White Plains and terminates at Cross Westchester Corporate Park.
19	Begins in Peekskill, to Yorktown Heights, Route 133 to Mount Kisco, Route 172 to I-684 and terminates at White Plains Train Station.
11 (Express)	Begins in Peekskill, to Yorktown Heights, Route 133 to Mount Kisco, Route 172 to I-684 and terminates at White Plains Train Station.
M (Express)	Begins in Putnam County (Brewster), to Yorktown Heights, Route 100-Millwood, Route 9A and I-87 to Manhattan.

Source: Westchester County Department of Transportation

The other form of public transportation is train service from Chappaqua to Grand Central Terminal in Manhattan. The railroad is owned and operated by Metro-North Commuter Railroad. Regular commuter service on the Harlem Line begins to the north at the Brewster North Train Station (limited commuter service begins farther north). Metro-North provides 27 trains from the Chappaqua Train Station to Manhattan on a typical weekday. During the morning peak hours, there are 11 trains, including 3 express trains. There are also 29 trains from Manhattan to Chappaqua, including 11 during the afternoon peak hours. Of these, 3 are express trains.

Metro-North also provides a total of 83 weekday trains between the Ossining Train Station on the Hudson Line and Manhattan, including 17 to Manhattan during the morning peak hours, 5 of which are express trains. There are also 13 trains from Manhattan during the afternoon peak hours, including 3 express trains.

Commuter Parking

The Chappaqua Train Station is located east of the Saw Mill River Parkway south of Quaker Street. Ingress to the Station and all commuter parking facilities is provided from South Greeley Avenue via Hunts Place (also known as lower King Street) and Woodburn Avenue. Egress from the parking areas is provided at Woodburn Avenue and at Old Pines Bridge Road. Old Pines Bridge Road, a one-way roadway southbound through the commuter parking area, intersects with Washington Avenue. Including 125 spaces that were recently added, the Town provided 1,015 parking spaces at the Chappaqua Train Station for commuters as of October 1988. These include 547 spaces in the South Lot, along with 367 standard spaces, 12 handicapped spaces and 89 long-term metered spaces in the circular parking bays in front of the Station. A field inspection of the parking facilities at that time revealed that 890 spaces, or 88%, were currently being used. As of September 30, 1988, the Town had issued 1,320 resident commuter permits and 100 nonresident permits, or 56% more permits than the number of available permit (nonmetered) spaces.

In the ***Chappaqua Business Area Plan*** published in 1969, the potential demand for commuter parking at the Train Station at full Town development was estimated to be in the range of 840 to 1,280 spaces. For planning purposes, it was recommended that 1,100 spaces be used as a guideline. Several different methods were used to arrive at these figures, based on available data through 1968 and a potential maximum Town population of 27,000 people. These estimates of commuter parking needs have now been revised and updated to reflect 1980 U.S. Census data and 1986 commuter trends.

According to the U. S. Census, the population of New Castle in 1980 was 15,425 people. At that time, the labor force participation rate (labor force as a percentage of the total population) was 43.8% (6,756 people). In 1960, this rate was calculated at 36.5%. This increase in the labor force participation rate between 1960 and 1980 can be attributed to increases in the overall number of jobs in the region and in the number of women in the labor force. Because of the population and economic characteristics of the Town, it can be expected that the labor force participation rate will remain relatively stable at 43.8% in the future. According to the 1980 U. S. Census, 25.8% or 1,713 of the employed people in New Castle used public transportation as their mode of travel to work. In 1970, this figure was 25.6%.

Metro-North Commuter Railroad completed electrification of its Upper Harlem line in September 1984. Only a 2% increase in ticket sales was recorded after the completion of this project. Surveys conducted by Metro-North in 1986, however, showed that ridership at the Chappaqua Train Station increased by 22.2% between 1985 and 1986, to a total of approximately 1,415 people using public rail transportation. This increase represents 271 additional passengers. More recent data from Metro-North shows that ridership increased by approximately 8% per year between 1986 and 1988, to a total of about 1,650 commuters using the Chappaqua Train Station. Table 70 summarizes these ridership patterns at the Chappaqua, Mount Kisco and Pleasantville train stations.

Table 70

METRO-NORTH PASSENGER VOLUMES - 1985, 1986 AND 1988

Station	Daily Ridership Inbound to New York City			
	1985	1986	1985-1986 Change	1988*
Chappaqua	1,158	1,415	+ 22.2%	1,650
Mount Kisco	923	1,152	+ 24.8%	1,345
Pleasantville	583	701	+ 20.2%	820

*Figures for 1988 are based on application of 8% per year growth factor to 1986 data.

Source: Metro-North Commuter Railroad

A survey conducted in 1986 by Metro-North of its rail commuters showed that for the upper part of the Harlem Line, 55% of the riders drove alone to the train station and parked their cars, 16% were dropped off, 11% drove in a carpool, 16% walked to the station and 2% used other means of transportation to the train station. Assuming there are only two people per car, Metro-North projected that approximately 60% of all rail commuters will park a car at a train station.

The number of rail commuters and hence the number of parking spaces that could be needed can be calculated based on the Metro-North findings that 10.3% of the Town's 1988 population were rail commuters and that 60% of rail commuters are likely to require parking spaces. It is noted that Town residents might also use the Mount Kisco or Pleasantville train stations on the Harlem Line, or the Ossining or Croton-Harmon stations on the Hudson Line, which could possibly explain part of the difference between estimates of the number of commuters based on U.S. Census data and on actual Metro-North survey results.

Based on the U.S. Census data and surveys conducted by Metro-North, two methods have been used to calculate possible future parking demand. Based on U.S. Census data, it is estimated that 1,080 to 1,130 spaces are currently needed (1988-1990). By applying the same factors to the projected population figures for 1995, 2000 and ultimate development of the Town as projected under the residential development policies of this Plan, the total number of commuter spaces which might be needed in the future can be calculated. Based on these projections and the current number of spaces available, 215 additional spaces may be needed by the year 2000. It is further anticipated that 1,810 spaces might be needed at full development, representing an increase of 795 spaces.

The Metro-North surveys show that there were approximately 1,650 rail commuters using the Chappaqua Train Station on a daily basis in 1988. Application of the 60% parking demand assumption yields an estimate of 990 to 1,030 spaces currently needed (1988-1990). By the year 2000, a total of 1,120 spaces could be needed. At ultimate development, this figure could increase to 1,650 spaces, representing an additional 635 spaces.

A comparison between the two methods of determining parking demand shows a range of 1,650 to 1,810 spaces potentially needed at ultimate development of the Town, as summarized in Table 71. Therefore, it is possible that 635 to 795 additional spaces may be needed in the future to serve Townwide needs. However, it is important to recognize that while the majority of New Castle's commuters use the Chappaqua Train Station (the only station located within the Town), four other nearby rail stations are also available to and are used by Town residents. As a result, it is difficult to project commuter parking needs at the Chappaqua Station taken by itself. The actual need for additional commuter parking facilities will be based on a number of factors including demographic trends (population and labor force growth), the pace and location of the Town's development, ease of vehicular and pedestrian circulation in the Chappaqua business center, regional highway improvements and train service itself. For that reason, it is recommended that the Town closely monitor these trends, so that it is able to respond appropriately and in a timely way to the need for expanded commuter parking facilities.

Table 71

RAIL COMMUTER AND PARKING PROJECTIONS BASED ON U.S. CENSUS AND METRO-NORTH DATA TOWN OF NEW CASTLE

Year	Population[a]	U.S. Census Data			Metro-North Data[d]	
		Labor Force[b]	Rail Commuters[b]	Total Parking Spaces Needed[c]	Rail Commuters	Total Parking Spaces Needed[c]
1988	15,875	6,955	1,795	1,080	1,650	990
1990	16,691	7,310	1,885	1,130	1,720	1,030
1995	17,409	7,625	1,970	1,180	1,795	1,080
2000	18,128	7,940	2,050	1,230	1,870	1,120
Ultimate Development	26,700	11,695	3,020	1,810	2,750	1,650

Note: As of October 1988, a total of 1,015 commuter parking spaces were available in the vicinity of the Chappaqua Train Station.

[a] The 1988 population figure is based on information provided by the Westchester County Department of Planning. Population projections for 1990 through 2000 and for Ultimate Development are from the "Population and Housing" section (Table 25 - average of Scenarios #2 and #3) and "Residential Development" section of this Plan, respectively.

[b] Projections based on 1980 U.S. Census data.

[c] Parking space needs based on 1986 study conducted by Metro-North, which showed that approximately 60% of all commuters require a parking space.

[d] Based on Metro-North Study conducted in 1986 and updated to 1988. Future year projections based on 1988 rail commuter to population ratio.

COMMUNITY FACILITIES AND SERVICES

The availability of adequate public facilities and services is a key factor in the successful development of a community. Moreover, providing services of high quality is extremely important in attracting good ratables to a municipality. Often it is the extent and quality of facilities and services offered by a community that distinguish it from other communities and make it more attractive to prospective residents and investors.

As the Town continues to grow, services will have to be extended, and space and structures for their efficient operation will need to be provided. This section presents an analysis of existing and future space needs for these various community facilities and services, including water service, sanitary sewer service, solid waste disposal, fire protection, police protection, ambulance service, the Town Hall and Town Garage, postal service, library service and educational facilities.

WATER SERVICE

At the time of the 1968 Town Plan preparation, the water supply systems in New Castle included the New Castle Water District No. 1, the Stanwood Water District and the New Castle Water Company. The New Castle Water District No. 1 was established in 1928 to serve Chappaqua, but by 1968 was expanded to include Millwood, Lawrence Farms, Kisco Park and other settled areas of the Town. The District also serves a few homes in Pleasantville and Yorktown as well as the IBM Thomas J. Watson Research Center just north of the Town in Yorktown. At that time, the IBM Watson Research Center alone consumed 20% of the total amount of water metered in the District.

The major areas in New Castle not included in the Water District were and still are the section generally west of Pines Bridge Road, the area east of Harriman Road and Tripp Street, and the area between Kisco Park and Stanwood. Since these sections of the Town are largely dependent on wells for water supply and the cost of extending the public water system to serve these areas is likely to be high, it is especially important that existing water resources in these areas be protected to the maximum extent possible.

The New Castle Water District's source of water is the New York City water system. The District has two pumping stations: one located off Campfire Road and drawing water from the Catskill Aqueduct and the other located off Inningwood Road and drawing from the Croton Aqueduct. The Campfire Road installation has two regular pumps, each with a capacity of 1,500,000 gallons per day (GPD), and an emergency pump rated at 1,152,000 GPD. The Inningwood Road pumping station has two regular pumps with capacities of 1,000,000 and 2,000,000 GPD, respectively.

Since the last Town Plan was adopted in 1968, a number of important changes affecting the New Castle Water District have occurred, related to organizational/administrative aspects of the District's operation as well as to the system's physical facilities themselves.

In 1976, the New Castle Water District No. 1 purchased the New Castle Water Company's rights-of-way and infrastructure. The purchase did not include the two small reservoirs south of Haights Cross Road that were the source of water for the Whippoorwill area in both the Towns of North Castle and New Castle, the Hillholme area in New Castle and the Old Farm Hill area in the Town of Mount Pleasant. In 1987, the Stanwood Water District serving the Stanwood development in the northernmost portion of the Town was consolidated into the New Castle Water District.

In 1976, a booster pump located off Bedford Road was constructed to maintain pressure in the eastern portion of the District. This pump also maintains the water level in the 750,000 gallon Whippoorwill Road storage tank built in 1981 on the site of the Whippoorwill Country Club. Pumping for the tank is required because it is approximately 700 feet above sea level and has a flow level 75 feet higher than the main storage tank on Alpine Lane.

About four-fifths of the Town's land area is now served by the New Castle Water District No. 1, approximately 90% of which is gravity fed from the 2,000,000 gallon Alpine Lane tank, a 280,000 gallon auxiliary tank built in 1964 on the same site and the 750,000 gallon Whippoorwill Road tank. A reduced pressure zone, encompassing the former Stanwood Water District, exists in the Stanwood/Kisco Park area because of existing two-inch and four-inch water mains in this area which do not meet firemanic standards.

Supply

New Castle has long-term contracts with New York City to take untreated water from the Catskill and Croton Aqueducts using pumping stations built in 1931-32 and 1956-57, respectively. After passing through the pumping stations, the water is chlorinated and distributed to the above-ground storage tanks to provide pressure equalization and reserve storage.

The combined continuous pumping capacity of the four electrically powered pumps (two at each pumping station) is approximately 6.0 million gallons per day (MGPD) and the average daily consumption varies from 2.0 to 4.5 MGPD. According to a report prepared in October 1987, entitled ***New Castle Water District Status Report***, the pumps for the Catskill and Croton Aqueducts are 56 and 31 years old, respectively, and require considerable maintenance to keep them in full operating condition, particularly to meet peak demands on hot summer days. According to this report, construction of a new pumping station drawing water from the Catskill Aqueduct is expected to be commenced in 1989 on a site the Town recently acquired south of Station Road in Millwood. This new pumping station, which will replace the existing station on Campfire Road, will meet future water needs by providing 8.0 MGPD of capacity using

five pumps. The old Croton Aqueduct pumping station on Inningwood Road will then be used for emergency backup purposes.

Storage

The ***New Castle Water District Status Report*** also recommends that other improvements be made to the system to meet future needs arising out of increased demand. One of the recommendations for additional above-ground storage at the western end of the service area is expected to be implemented, following the outcome of final negotiations between the Town and IBM in connection with the latter's planned construction of a new research/office facility on the site of the former Hudson Hills Country Club. As an alternative or in addition to the construction of a new storage tank on that site, the Town's planned acquisition of a 48-acre site owned by Con Edison on Pines Bridge Road may present another opportunity for expanding storage capacity at the western end of the Water District.

The need for additional storage to meet increasing consumption is reinforced by the fact that many homes are now being built at elevations close to that of the storage tanks. This reduces the amount of water that can be drawn from the storage tanks before serious drops in water pressure are experienced by those higher elevation customers. The Town should take measures designed to ensure that adequate head (tank) storage is available to meet at least the average daily consumption needs of the District without any decrease in the quality of water supply service to any of its customers.

Quality

Of additional concern is the quality of the water available to New Castle residents. It is likely that the construction of a water filtration plant to protect the public against degradation of the water supply will be necessary in the near future since State and Federal regulations will soon mandate filtration of all water coming from open reservoirs. The Town expects to construct this filtration plant within the next few years on the parcel it recently acquired south of Station Road, provided that additional land can be obtained to enlarge the site.

Water quality is also proposed to be improved through cement relining of existing unlined iron water main transmission pipes installed prior to 1966 (when cement-lined pipes became the standard). According to the ***New Castle Water District Status Report***, there are a little more than 100 miles of water mains in the Town, approximately 40% of which are cement-lined. Many of the older, unlined water mains are corroded and have resulted in reported incidents of dirty water. It is reported, however, that a pilot project undertaken in 1984 to clean and apply a cement lining to in-place water mains in Kisco Park solved most of that area's dirty water problems. The Water District has recently programmed a three-year, three million dollar water main relining project that should eliminate approximately 15 additional problem areas. It has been estimated that approximately 8-12 million dollars over the next 10 years will need to be expended to bring the remaining water main system (approximately 60

miles of unlined distribution mains) up to modern standards. This will result in improved water quality and transmission, but no increased service capacity.

Other water service improvement recommendations include eliminating or at least limiting the future construction of cul-de-sacs wherever possible to discourage the construction of additional dead-end water mains. Wherever possible, looping or connecting dead-end mains together is strongly encouraged. The relining program will result in the looping of some (but not all) of the areas most in need of improvement. Looping will improve water quality, pressure and flow, and will aid in reducing pipe corrosion. Most of the mains installed in subdivisions built prior to the mid-1960s are unlined and highly susceptible to corrosion and water quality degradation, especially in dead-end branches. It is also recommended that, if at all possible, new subdivisions and developments be hooked up to the Town system. If it is not currently feasible (because of remoteness from the existing system), developers should be required to meet Town material and construction standards so eventual hook-ups will be uncomplicated and not jeopardize the operational aspects of any segment of the water system. Finally, it is recommended that the Town's policies be designed to promote the protection and conservation of water resources.

SANITARY SEWER SERVICE

The only sections of the Town served by sanitary sewers are located in the Chappaqua hamlet area. This area has five sewer districts: the Westchester County Saw Mill Valley Sanitary Sewer District, which encompasses nearly all of the Chappaqua hamlet area on either side of the Saw Mill River Parkway, and four Town districts that provide collector systems within the County District. The Town districts are all located on the eastern side of the Parkway. Effluent from these districts is conveyed to the County trunk sewer line and thence to the County treatment plant in Yonkers. Privately-owned central sewerage systems have been developed for several of the higher density residential developments including Random Farms, Riverwoods, Cornell Woods, Ledgewood Commons and Pheasant Run, the latter three of which involve discharge of effluent to common subsurface septic fields. For individual homes not serviced by the public sewerage system or private sewage treatment facilities, sewage is disposed of by private on-site septic systems.

The 1958 ***Town Development Plan*** assumed that eventually all land within the Saw Mill Valley Sanitary Sewer District would be served with sewers. In accordance with this assumption, two of the Town's districts (Districts No. 2 and No. 3) and one district extension (to District No. 2) were established between 1958 and the completion of the last Town Plan in 1968. The Town has since added an additional district, extending roughly from Greeley Avenue to Bedford Road and from the Mount Pleasant town line to the Congregational Church on the corner of Orchard Ridge Road, providing sanitary sewer service to the remaining more densely populated areas of Chappaqua east of the Saw Mill River Parkway. This 1972 addition is known as the King-Greeley Sewer District. There have been no additional extensions of any consequence constructed or districts established since then.

This Plan continues to recommend that residential areas with densities of greater than one dwelling unit per acre eventually be connected to sanitary sewerage systems. Under existing zoning and development patterns, there are five areas within the Town where the feasibility of establishing such systems should continue to be explored.

The largest area for potential future development of sewer service within the County Sewer District is in Chappaqua. There are several areas located within the Westchester County Saw Mill Valley Sanitary Sewer District which, according to the Superintendent of Public Works, are in need of public sewerage systems. Five areas have been identified within the greater Chappaqua area as repeatedly having septic problems. One such area is generally bounded by Ivy Hill Road and Bedford Road on the east and west and by Annandale Drive and Whippoorwill Road on the north and south, respectively.

A second area identified as needing hook-up to the public sewerage system is located immediately east of the Saw Mill River Parkway and directly north of the King-Greeley Sewer District in an area generally surrounding Shadow Brook Parkway. A third location encompasses the land generally between King Street and the Old Farm Lake multifamily development, in an area that is surrounded on three sides by existing Town sewer districts.

The remaining two areas in the Chappaqua hamlet identified as having repeated septic problems and likely to benefit from the extension of public sewer service are both located west of the Saw Mill River Parkway. The first of these two areas is generally bounded by the Parkway on the east, Douglas Road on the north, Dunbow Drive on the west and the New Castle/Mount Pleasant Town line on the south. The other area is generally located northeast of Quaker Street between Chappaqua Mountain Road and the Saw Mill River Parkway.

The Millwood hamlet is the next largest area that has been identified for future sanitary sewer service. One concept under study is the extension of the County trunk sewer line from Briarcliff Manor. As noted in the 1977 ***Millwood Plan***, a Countywide sewerage project involving the Millwood area has been planned by the Westchester County Department of Environmental Facilities. This project would serve the area that drains into the Pocantico River Basin. It involves extending the present County trunk line up the Saw Mill River Road corridor to approximately the Saw Mill River Road/Millwood Road intersection. Lateral lines from this new trunk sewer would serve the Millwood business area, the small residential area immediately to the east of the business center along Millwood Road, and several large residential areas along both sides of Somerstown Turnpike to the west of Saw Mill River Road (including Inningwood Road, Saddle Ridge Road, Ryder Road, Surrey Lane, Derby Lane and Edgewood Road).

The Westchester County Department of Environmental Facilities reports that the initial phase of the proposed extension of the Saw Mill-Briarcliff trunk sewer northward toward the New Castle/Mount Pleasant Town line is being implemented, with the extension of the trunk line to Chappaqua Road (approximately 5,000 feet south of the New Castle Town line) now completed. It is intended that this trunk sewer eventually

be further extended to the Town line, but no schedule for its construction has been established. Further development of the system should be contingent on whether it is determined that the Millwood area would benefit from and needs a public sewerage system to solve or avoid environmental problems or to service the types of land use and development planned for this area.

Other possible future sewer service areas smaller than either Chappaqua or Millwood are Kisco Park, the Byram Lake Road and Rolling Fields areas adjoining the southeastern portion of Mount Kisco and the Stanwood area adjoining the Croton Reservoir in the northernmost portion of the Town. For the first two—Kisco Park and the Byram Lake Road/Rolling Fields areas—the feasibility of connecting with the Mount Kisco system should be studied. The Stanwood area presents a more difficult problem because of its isolation from other higher density areas and other sewerage systems. Because of its proximity to the Reservoir and the subdivision's extension into the Town of Bedford, both New York City and Bedford should participate in any study for this area.

All these potential projects will be restricted to the planning stages, however, until the ban imposed in 1988 on future hook-ups to the County trunk line feeding the Yonkers Sewage Treatment Plant is lifted and it is determined how the future sanitary sewerage needs of the County will be met. It has been suggested that the reason the Yonkers Sewage Treatment Plant has reached or exceeded its maximum permitted level of effluent discharge is because storm water has infiltrated the sewerage system on a Countywide basis, causing tremendous increases in "sewage" flow and additional volume to be processed. New Castle should set an example of municipal responsibility by monitoring and correcting misguided and illegal hook-ups of storm water drains to the sanitary sewerage system.

SOLID WASTE DISPOSAL

Solid waste disposal is rapidly becoming a serious problem for all communities in the region as well as for the State and nation. Many of the areas traditionally used for solid waste disposal are no longer considered acceptable for that purpose because of their environmental sensitivity and ecological importance. Other areas are simply filling up at increasing rates as more land is developed, more waste is produced and less land is available to receive it. As a result, communities are being forced to ship their trash farther and farther away. This problem has resulted lately in well publicized stories in the New York metropolitan area. New Castle and other Westchester communities also face similar problems as they continue to grow.

The closure of the Croton Landfill in June 1986 prompted Westchester County to establish an intermunicipal garbage disposal system, which resulted in the construction of a resource recovery plant at Charles Point in Peekskill. New Castle and several other local municipalities concluded, however, that this arrangement would be too costly and eventually chose not to participate in the County system, thus requiring each of them to seek alternative means of meeting their solid waste disposal needs.

As a result, New Castle began working on an intermunicipal waste disposal plan with five other towns to address the long-term problem. In September 1986, the towns of New Castle, North Castle, Bedford, Somers, Lewisboro and North Salem contracted with APF Carting to dispose of all six towns' garbage as an immediate answer to the problem. In August 1988 the contract was renewed for another year. Accordingly, the Town established a residential refuse district and contracted with APF, beginning in January 1988, to collect and dispose of garbage from all residential properties except certain condominium developments that presently have their own solid waste disposal contracts. All residential properties (condominiums included), however, will be served under the refuse district contract by 1991. All the garbage that APF collects is now carted to its transfer station in Mount Kisco, where it is consolidated and trucked as far away as Buffalo.

In the meantime, the towns have been working on a Request for Proposal, bidding guidelines and a contract to meet their long-term solid waste disposal needs. Each Town will pay for the garbage collection and disposal service on a per ton basis. The intermunicipal agreement may result in the establishment of at least one and most likely several transfer stations to be used jointly by the towns. The agreement may also require each Town to mandate a recycling program to limit the amount of garbage to be trucked away. Should it be needed, New Castle has already selected a site on Hunts Lane as the potential location for a transfer station.

New Castle has already set an excellent example by initiating a mandatory recycling/separation program under which each household must separate all magazines and newspapers from its regular garbage. The bimonthly pickup of this selected refuse has already resulted in an 8%-10% reduction in the amount of garbage that must be trucked to out-of-County landfills since January 1, 1988. This is a significant step in the right direction, although there is a long way to go. It is estimated that as much as 30% of the garbage generated in New Castle on a daily basis is recyclable newspapers, magazines and mail, suggesting that considerable increases in the amount of material recycled can be achieved. Based on the average monthly tonnage of refuse carted from New Castle, it is estimated that each Town resident produces an average of more than 70 pounds of garbage a month.

Since January 1988 the Town has been reducing its garbage generation by approximately 50 tons per month through paper separation, all of which is sold to paper mills (at the rate of $5.00 to $10.00 per ton) for the manufacture of paper towels and other household paper products, etc. New Castle has also begun the separate collection of yard waste which is chipped and used for compost, and commencing in early 1990, the Town plans to begin voluntary recycling of glass. This Plan recommends that New Castle eventually institute a metal recycling program as well.

Future planning issues pertaining to solid waste disposal will largely depend on the direction the Town takes during the next several years. There are two basic options the Town has available to it for solid waste disposal: to continue the present arrangement of contracting for garbage collection or to collect garbage with Town-owned trucks and Town employees. If the latter alternative is chosen, then future

policy decisions will include the identification of appropriate sites for a refuse transfer station, a recycling depot, a composting facility and a garage for truck maintenance and storage.

FIRE PROTECTION

New Castle is divided into three fire districts: the New Castle Fire District No. 1 which serves the Chappaqua area, the Millwood Fire District which serves the Millwood area and the westerly section of New Castle, and the Northern Fire Protection District which covers the section of New Castle north and west of Mount Kisco and the section generally east of Armonk Road.

The New Castle Fire District has two fire stations which house three fire companies. The Patrol and Independent companies previously shared the Senter Street Station, but the Independent Company has since moved into the Bedford Road Station with the Bristol Company. The Senter Street Station has two bays and two patrol trucks used for rescue, salvage and lighting that also carry 250 and 500 gallons of water, respectively. These units are used primarily for brush and car fires. The Bedford Road Station, expanded in 1978, now has five bays and currently holds five trucks. The fire trucks consist of three engines or "pumpers" that carry between 500 and 600 gallons each and have respective pumping capacities of 1,500, 1,250 and 750 gallons per minute (gpm). The Bedford Road Station also houses one rescue truck with a 106-foot aerial ladder and a 500-gpm pumper that is used primarily if extra hose is needed. There are about 75 active volunteer members in the New Castle Fire District. Response times within the District to the scene of a fire are reported to be between three and four minutes. Based on the pattern of development evolving in the western portion of the District, it is projected that a new satellite firehouse with one or two bays will be needed in the future in order to provide adequate fire protection to the Hardscrabble Road area. It is anticipated, however, that any new station would be located outside of New Castle in the Town of Mount Pleasant portion of the District.

The Millwood Fire District now has two fire stations. Station No. 1, located on Millwood Road, has five bays and three trucks. The three trucks consist of one mini-attack unit that holds approximately 250 gallons of water and is used for brush or car fires, one pumper/tanker that carries approximately 1,000 gallons, and one ladder/pumper with a 55-foot ladder that holds approximately 500 gallons. Fire Station No. 2, located on Croton Dam Road near the New Castle/Yorktown Town border, has four bays and three trucks, including one that underwent major servicing recently and is now used principally as a backup vehicle. The other two trucks consist of one pumper that carries approximately 500-700 gallons and one tanker that carries approximately 1,500 gallons. A new mini-attack unit is also on order. The District is currently served by 53 active volunteer members. Response times within the District are reported to average between six and eight minutes and were considered to be very good.

The Northern Fire Protection District has no fire stations of its own in New Castle. Fire protection is provided from three fire stations within the Town/Village of Mount Kisco

on a contractual basis with the Mount Kisco Fire Department. The Mount Kisco Fire Department is served by three fire companies of approximately 60-65 volunteers each. They have four pumpers in total, each of which carries 500 gallons of water and has different pumping capacities: one pumps at a rate of 1,500 gpm, two pump at 1,250 gpm and the fourth at 1,000 gpm. The fourth truck is expected to be replaced by 1989 with a new truck that will hold 750 gallons and pump at a rate of 1,750 gpm. The Mount Kisco Fire Department also has an 85-foot aerial ladder, one rescue truck with special equipment, one truck equipped especially for lighting and one utility truck that carries extra equipment. Response times within the District are reported to be within four to seven minutes.

As noted in the 1968 Town Plan, replacement of 2-inch and 4-inch water mains in the Stanwood area with 8-inch mains was and still is needed to bring the area up to firemanic standards. A 10-inch main feeds the area, but depending on where the fire is located, firefighting efforts may be impeded by low water pressure caused by insufficient water main size. This Plan recommends that water mains continued to be enlarged where necessary to provide adequate fire protection service.

Although the eastern end of the Town appears to be the least well-served because of the lack of a local fire station, the Chairman of the Board of Fire Commissioners for the area feels there is no real need for expansion of the existing system. He did, however, express concern about access problems in and around construction sites because of roads blocked with materials and equipment. Additional concern was expressed about the lack of a central water system in the area from which to draw water for emergency use. This usually limits firefighting capabilities to the amount of water contained in available pumper/tanker trucks and mutual aid available from other Towns and companies, unless nearby ponds or swimming pools are available from which to draw water. When adequate water sources are not available, all the fire companies rely on mutual aid from other companies in the surrounding communities to bring water to the site via tankers. As a result, fires in New Castle may be responded to by companies from Bedford Village, Bedford Hills, Katonah and Armonk. Access to a fire hydrant in the southeastern portion of New Castle is expected to be available in the future, however, as a result of the planned Town tie-in to the private water system to be constructed as part of the Hammond Ridge (formerly known as Dellwood) multifamily development located off Sheather Road.

Another expressed concern is the need for additional daytime fire department personnel to ensure adequate response to emergencies during weekday business hours when resident volunteers are usually working elsewhere and are least likely to be available. Most of the fire companies have identified the need for additional volunteers, but do not feel that manpower shortages are presently so severe as to require the hiring of paid full-time professionals. If the number of volunteers continues to dwindle, however, that could become necessary.

To ensure that future development in New Castle continues to be provided with adequate fire protection, this Plan recommends that the early participation of the affected fire departments be sought when new development proposals are under

review. In addition, in areas that lack a central water supply, consideration should be given to the installation of dry hydrants in lakes and ponds located on the development site.

POLICE PROTECTION

The New Castle Police Department has its headquarters on the lower level of the Town Hall on South Greeley Avenue. The Police Department currently has 37 officers, including a police chief, 2 lieutenants and 3 detectives. The Town is divided into three main service sectors: east, west and the business center. A minimum of 4 officers (3 in patrol cars and another at headquarters) are on duty at any one time. If additional officers are available, the western service sector is divided into northern and southern sections with one patrol car assigned to each.

According to the Chief of Police, the Department has 11 well-maintained patrol cars and a new communications system that is used to dispatch all the emergency services —police, fire and ambulance. Response times for the Police Department are reported to be within a maximum of 20 minutes to the most remote portions of the Town.

The Chief of Police has indicated that the Department facilities are severely overcrowded despite its move to new quarters in the Town Hall. There is no office space for youth officers, the lieutenants do not have their own offices, there is inadequate work space for the officers, a report room is not available, and there is insufficient room for the storage of files and supplies. He has also indicated that police officers' time could be better employed if a civilian was trained to direct traffic at the intersection of Woodburn Avenue with Greeley Avenue during commuter rush hours.

AMBULANCE SERVICE

Ambulance service is provided to most of the Town by the Chappaqua Volunteer Ambulance Corps (CVAC), headquartered in the former American Legion Hall building on North Greeley Avenue. The Ambulance Corps owns the building and the adjacent lot and has room for expansion if needed. It has one four-year old ambulance in good condition and does not need any additional vehicles at the present time. There are currently 40 active volunteers in the Corps. Three people are always on call at any one time, one of whom is a State-certified emergency medical technician (EMT), and each has a designated backup in the event someone is unable to respond to the emergency. Ambulances are dispatched by the New Castle Police Department through the use of a beeper system. Response times are short since volunteers go directly to the emergency prior to the arrival of the ambulance. Equipment and materials are either donated or paid for through an annual fund-raiser. The Captain of the Ambulance Corps has indicated that additional volunteers and training equipment, such as resuscitation mannequins, would be desirable.

That portion of New Castle which is located within the Ossining School District falls within the jurisdiction of the Ossining Volunteer Ambulance Corps (OVAC), headquartered in a building on Clinton Avenue in the Village of Ossining. By agreement with the Chappaqua Volunteer Ambulance Corps, however, OVAC's coverage within the Town has been expanded to include all areas west of the Taconic State Parkway. Ambulance service is dispatched through the Ossining Police Department, although some calls for service are initially made directly to the New Castle Police Department. All members of OVAC carry two-way radios when on duty. OVAC has two ambulances—one that was acquired four years ago and another that was purchased less than two months ago. In addition to being capable of maintaining standard radio communication, these vehicles are also equipped to transmit electrocardiogram data about a patient in advance of the ambulance's arrival at an area hospital. They are garaged in the two-bay Ambulance Corps headquarters building, which appears to be adequate to serve the needs of OVAC for the foreseeable future and could be expanded if necessary. The Corps is composed of 40 active volunteers, the majority of whom are EMTs and several of whom are also paramedics. Unlike other ambulance corps in the area, OVAC provides Advanced Life Support service which requires that a paramedic be on every primary ambulance call. Because of OVAC's desire to staff each shift with four-person crews, the First Lieutenant of the Corps has indicated that additional volunteers are the principal need at this time.

TOWN HALL

Since the completion of the 1968 ***Town Plan of Development***, the "new" Town Hall was constructed and has been in operation for more than 15 years. Although this facility has served the Town well to date, there are signs that additional space is needed despite some recent reorganization and the relocation of some Town Hall equipment to the old Water Department building on Hunts Lane. According to representatives of the various departments located within the Town Hall, the facility is being used to its maximum capacity and there is no unused or surplus space available in the building, which was completed in 1972 and remodeled in 1984. According to the Superintendent of Buildings and Grounds as well as the Chief of Police, the Police Department is most in need of additional space.

Because of the lack of additional space in all of the Town Hall departments and the present overcrowding in the Police Department, the Town should explore the possibilities of expanding the Town Hall or of relocating one or several of the departments to alleviate the immediate problems and provide for future expansion. If it is determined through further study that one or more of the Town departments requiring expanded space need not be geographically located in the Chappaqua hamlet center, consideration should be given to relocating this function to the Millwood hamlet.

TOWN GARAGE

The new Town Garage located on the site of the old Highway Department building on Hunts Lane was completed in 1988 and is now occupied by the Water Department and the Highway Department. The new building houses all the administration and staff of the two departments as well as a mechanics' area. Maintenance of vehicles and equipment is expected to be much more efficient and will be undertaken under more comfortable conditions, as the most noticeable expansion accompanying the construction of the new building was in the mechanics' bay. The old Water Department building is now used strictly for storage of equipment from the Town Hall as well as for the recycling operation.

Although construction of the new building was intended to alleviate problems of inadequate space, the Superintendent of Public Works has indicated that there is need for an additional 10 bays or 5 double bays to house existing vehicles and equipment. As a long-term consideration, the Superintendent has also identified the eventual need for an additional sand and salt storage facility.

POSTAL SERVICE

Chappaqua

The Chappaqua Post Office, located in leased space on North Greeley Avenue, is severely overcrowded. The 1968 Town Plan identified the need for additional parking for Post Office employees and the general public who use the facility. The Plan strongly recommended that no future expansion of the facility be permitted without correcting this deficiency. Since then, the services of the facility have expanded, along with the number of personnel, and no additional parking or work space has been provided.

At the time of the 1968 Town Plan adoption, there were 27 employees assigned to this Post Office. According to the Postmaster, there are currently 40 full-time employees and the number of delivery vehicles has doubled from 7 to 14. Because of severe overcrowding, the Post Office now has a "split operation," whereby 9 of its 40 employees have been processing mail in the basement of the Pleasantville Post Office. Mail is then trucked back to Chappaqua and distributed from there.

In 1987 a ***Facilities Planning Concept Report*** was completed for the Chappaqua Post Office. According to this report, the U. S. Postal Service projected that the Chappaqua Post Office would need approximately 12,000 square feet of space to operate efficiently over the next 10 years. The existing facility has approximately 3,900 square feet, less than one-third the recommended amount of space to meet present and future postal service operation needs. There are plans for relocation and expansion of the Chappaqua Post Office to a larger site recently acquired by the Postal Service at the southeast corner of North Greeley Avenue and Maple Avenue, about one block north of its present location.

Millwood

Located on Saw Mill River Road, the Millwood Post Office occupies approximately 1,200 square feet of leased space in the Mill Plaza Shopping Center. According to the Postmaster, there is sufficient space now, but eventually more will be needed as the Millwood section of the Town continues to grow.

The Millwood Post Office now has more than 600 post office boxes and makes deliveries on a daily basis to approximately 400 addresses. All deliveries are presently made by a carrier on loan from the Chappaqua Post Office. However, a new carrier and jeep have been recently approved for the Post Office, raising the total employee count to six.

A ***Facilities Planning Concept Report*** completed for the Millwood Post Office in 1985 recommended additional space, but none has been added. Enlargement of the facility would require either expansion into adjacent space in the shopping center or else relocation. According to a recent communication with the U. S. Postal Service, the previously planned expansion of the Millwood Post Office has been canceled and it will be several years before the project is reconsidered because of budgetary constraints and the requirement for a reevaluation of facility needs.

LIBRARY SERVICE

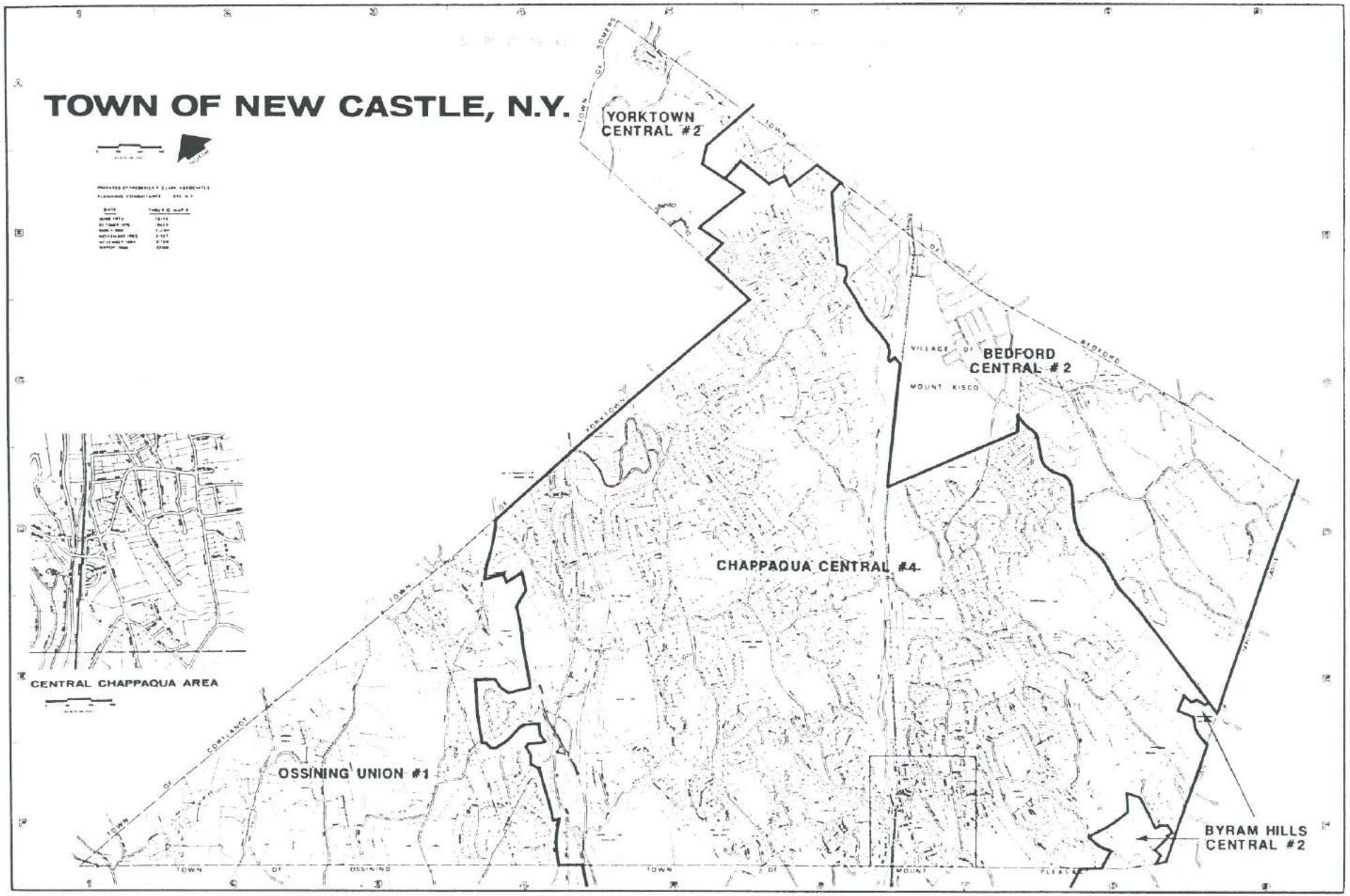
Since the 1968 ***Town Plan of Development*** was completed, the Chappaqua Library has moved to a new building on South Greeley Avenue across from the Town Hall. Formerly an association library which supported itself through charitable donations and fund-raising, the Chappaqua Library is now part of the Chappaqua School District and has since expanded its personnel to 22 full-time and an additional 21 part-time positions. As of December 1987, the Library had 82,000 volumes and an annual circulation of over 200,000. The Library is a member of the Westchester Library System, which by virtue of reciprocal agreements allows residents to use any of the libraries in the County system. According to the Library Board Director, all library facilities appear to be adequate for the foreseeable future.

EDUCATIONAL FACILITIES

The Town of New Castle includes portions of five school districts, as illustrated in Figure 72. Two of these, Byram Hills Central School District No. 2 and Yorktown Central School District No. 2, are largely in other towns and serve only very small sections of New Castle. Bedford Central School District No. 2 serves the area in New Castle that is generally east of Armonk Road, as well as parts of the Towns of Bedford and Pound Ridge. Ossining Union School District No. 1 serves the westerly section of New Castle as well as portions of the Towns of Ossining and Yorktown. Chappaqua Central School District No. 4 encompasses most of the land area of New Castle and

Figure 72

SCHOOL DISTRICT BOUNDARIES - 1988
TOWN OF NEW CASTLE



the majority of its present population. This school district also includes small parts of the northern section of the Town of Mount Pleasant.

Chappaqua School District Facilities

The only schools physically located in New Castle are those of the Chappaqua School District. The following schools and properties are owned by the District:

- **ROARING BROOK ELEMENTARY SCHOOL** - This facility occupies a site of about 27 acres on Quaker Street opposite the intersection of Roaring Brook Road. It was originally built in 1951, with a 4-classroom addition in 1954 that increased its total size to 28 classrooms. Another additional 4 classrooms have since been built for a total of 32. The maximum operational capacity as determined by the New York State Department of Education is 608 pupils, whereas the "functional" operational capacity as determined by the Chappaqua School District and local educational policies and standards has been set at 547 pupils. Enrollment for the 1988-89 school year was 510 students.

- **DOUGLAS G. GRAFFLIN ELEMENTARY SCHOOL** - Located on about 12 acres off King Street, this facility was originally completed in 1962 and was expanded in 1964. It now has a total of 32 classrooms with a maximum operational capacity of 756 pupils and a "functional" operational capacity of 680 pupils. Enrollment for the 1988-89 school year was 589 students. School District authorities report that no plans are contemplated for the further expansion of either the Grafflin or Roaring Brook Schools since their sites are considered fully developed.

- **WESTORCHARD ELEMENTARY SCHOOL** - This facility occupies a site of approximately 53 acres in the Millwood section of Town, with its primary access provided off Granite Road via Millwood Road. Constructed in 1971, it was expanded in 1977 to provide a total of 35 classrooms. The maximum operational capacity is 550 pupils, while the "functional" operational capacity has been set at 495 pupils. Enrollment for the 1988-89 school year was 423 students.

- **ROBERT E. BELL MIDDLE SCHOOL (GRADES 7 AND 8)** - This facility, located on a site now totaling about 12 acres in the southeastern part of the District off South Greeley Avenue in Chappaqua, was originally the Horace Greeley High School. Originally built in 1928, additions and/or alterations completed in 1939 and 1966 increased the capacity of this school to 38 classrooms (not including special purpose rooms, gyms and the auditorium). With further alterations, it was later expanded to its present size of 45 classrooms. The availability of recreation space at this facility, though relatively limited, is augmented by use of the Town Hall Recreation Field across the street. The Middle School's present maximum operational capacity is 1,023 pupils, while its "functional" operational capacity has been set at 818 pupils. Enrollment for the 1988-89 school year was 426 students.

- **HORACE GREELEY HIGH SCHOOL** - Originally built in 1957 on a 42-acre site in the eastern portion of the School District, this facility's capacity was increased in 1967 to 54 classrooms (not including large group instruction rooms, gyms and the auditorium). In 1971 it was expanded again to provide a total of 80 classrooms. The school plant consists of 14 separate structures connected by covered walks. Its maximum operational capacity is 1,906 pupils, while its "functional" operational capacity has been set at 1,525 pupils. Enrollment for the 1988-89 school year was 875 students.

  In addition to the high school site, the School District owns the contiguous 6-acre Barnum property which it purchased in 1957. Most of the Barnum property is being used as a baseball field to supplement the physical education space of the High School. Under a reciprocal agreement for the joint use of some School and Town recreational facilities, the Town's Recreation and Parks Commission uses the remaining portion of this site for general play purposes. Additional field construction on this property is also underway. With this property and other nearby additions, on an aggregate basis the Horace Greeley site is now considered to be close to 59 acres.

- **"SCOUT HUT"** - This is a two-room building, located on about one acre at the intersection of Roaring Brook Road and McKesson Hill Road. It is owned by the School District and used by the Boy Scouts.

- **HOG HILL ROAD PROPERTY** - This is an undeveloped, 43-acre District-owned portion of the former Lady Gabriel property off Hog Hill Road near the Yorktown border that has previously been used for environmental education purposes. In the 1968 ***Town Plan of Development*** this site was identified as a suitable location for a future high school.

- **ZAUDERER PROPERTY** - This is an undeveloped, 20-acre District-owned site off Garey Drive. It was purchased with the intention of developing it as a future school site for the District.

Enrollment Trends

Total school enrollment for the Chappaqua School District peaked at a total of 4,030 students in 1974, the last year in which an increase in total enrollment was recorded. Enrollment has rapidly declined at an average rate of nearly 90 students each year since then for a total decrease in enrollment of 1,207 students, or 30.0%, between 1974 and 1987, as shown in Table 73 on the following page.

Trends in school group enrollment during the 1974-1988 period reveal that the smallest percentage decrease occurred among the kindergarten group (22.0%). The next smallest percentage decrease was found in grades 1-6 (26.4%), followed by grades 9-12 (33.7%). The largest percentage decrease in school group enrollment occurred in grades 7 and 8 (35.3%).

Table 73

CHANGES IN SCHOOL GROUP ENROLLMENTS - 1974 TO 1988
CHAPPAQUA SCHOOL DISTRICT

Year*	Elementary			Secondary			Total Enrollment	Comparison To Previous Year
	K	1-6	Total	7-8	9-12	Total		
1974	255	1,798	2,053	658	1,319	1,977	4,030	+40
1975	239	1,751	1,990	685	1,319	2,004	3,994	-36
1976	205	1,712	1,917	669	1,317	1,986	3,903	-91
1977	196	1,648	1,844	662	1,345	2,007	3,851	-52
1978	178	1,680	1,858	644	1,326	1,980	3,828	-23
1979	186	1,611	1,997	623	1,319	1,942	3,739	-89
1980	173	1,532	1,705	640	1,265	1,905	3,610	-129
1981	164	1,458	1,622	654	1,238	1,892	3,514	-96
1982	167	1,334	1,501	630	1,224	1,854	3,355	-159
1983	201	1,314	1,515	599	1,205	1,904	3,319	-36
1984	184	1,258	1,442	525	1,171	1,696	3,138	-181
1985	169	1,280	1,449	452	1,126	1,578	3,027	-111
1986	209	1,270	1,479	429	1,048	1,477	2,956	-71
1987	194	1,275	1,469	430	958	1,388	2,857	-99
1988	199	1,323	1,522	426	875	1,301	2,823	-34
Total Change 1974-1988:								
Number	-56	-475	-531	-232	-444	-676	-1,207	
Percentage	-22.0%	-26.4%	-25.9%	-35.3%	-33.7%	-34.2%	-30.0%	

*The Chappaqua School District undertakes an annual census in October of each school year.

Source: Chappaqua Central School District No. 4

Although both the School District and Town populations increased during the 14-year period, New Castle experienced a steady decrease in the average number of children per household and in the total number of children 18 years old or younger. This trend resulted, in part, from the pronounced increase —beginning in 1980 —in the percentage of families without children. The percentage of families without children averaged 37.1% between 1966 and 1979. The percentage jumped to 39.9% in 1980, followed by 40.9% in 1981, 40.6% in 1982, 43.6% in 1983 and 45.8% in 1984, yielding an average of 42.2% for the five-year period.

It is noted that the 1968 ***Town Plan of Development*** included a detailed analysis of the Chappaqua school system, including an extensive study of enrollment projections and facility needs. The minimum needs identified by that analysis were for two additional elementary schools at a capacity of 700-750 pupils each, one additional middle school and a new high school, with probably less intensive use of the then existing school facilities resulting.

Based on enrollment trends since the 1968 Town Plan was prepared, it is not likely that the previously identified ambitious program of school construction will need to be implemented in the foreseeable future. However, according to the Superintendent of the Chappaqua School District, the three elementary schools are currently operating at close to their "functional" capacities as determined by local educational policies and student/teacher/classroom standards. These standards are described in a report, entitled ***A Demographic and Facilities Study for the Chappaqua School District***, that was released by the School District in October 1988.

This report projected school group enrollment from 1988 to 1997, as summarized in Table 74 on the following page. A variety of methodologies were used for the demographic analysis, all of which led to the conclusion that there will be growth in enrollment, beginning with the youngest ages and gradually working its way up through the higher grades. Based on the short-term trends, it was forecast that aggregate enrollment figures for the District will increase through the end of the 1990s when they peak and then begin to decline, followed by a second smaller peak around the year 2030 and then another decrease. Projected enrollment figures for 1992 range from a low of 2,650 (173 fewer pupils than the actual 1988 figure) to a high of nearly 3,200 students (377 more pupils than the actual 1988 figure). The peak in enrollment figures projected for 1997 is expected to range between a low of 3,045 students and a high of 3,370 students, still well below the 1974 peak of 4,030 students.

While the aggregate increase in projected enrollment is not expected to require the construction of new school buildings, the projected "bulge" in enrollment is likely to require reorganization of several school facilities and the possible redistribution of grades, particularly at the elementary level. The ***Demographic and Facilities Study for the Chappaqua School District*** presents a list of options to consider as enrollment increases in order to maintain the high standards of the School District.

Among these choices are various ways to maximize the efficient use of existing space within the schools. Several other alternatives include permitting class size to increase

Table 74

PROJECTED SCHOOL GROUP ENROLLMENTS - 1988 TO 1997
CHAPPAQUA SCHOOL DISTRICT

	1988[a]	1989[a]	1990[a]	1991[a]	1992[a]	1997[b]
LOW SERIES[c]						
K - 6	1,435	1,405	1,455	1,485	1,545	1,775
7 - 8	400	400	400	390	375	490
9 - 12	850	785	725	730	710	760
Ungraded	20	20	20	20	20	20
Total	2,710	2,610	2,605	2,620	2,650	3,045
MEDIUM SERIES[c]						
K - 6	1,475	1,475	1,555	1,610	1,695	N.A.
7 - 8	410	415	425	420	420	N.A.
9 - 12	865	810	760	775	767	N.A.
Ungraded	20	20	20	20	20	N.A.
Total	2,765	2,720	2,760	2,825	2,900	N.A.
HIGH SERIES[c]						
K - 6	1,510	1,540	1,650	1,730	1,840	1,970
7 - 8	415	435	455	455	465	540
9 - 12	880	840	805	840	850	845
Ungraded	20	20	20	20	20	20
Total	2,825	2,830	2,930	3,050	3,180	3,370

N.A. - Not Available

(a) Projections for 1988 through 1992 are based on the "Grade Retention Ratio" methodology.
(b) Projections for 1997 are based on the "Ratio of Enrollment to Nine-Year Birth Sums" methodology.
(c) Low, Medium and High Series projections are based on assumptions concerning expected birth rates and housing construction.

Note: Individual figures may not add up to total because they were first rounded off to end in a 0 or 5.

Source: ***Demographic and Facilities Study for the Chappaqua School District***, Focus Consulting Associates, Spring, 1988

or balancing average class size among elementary schools through adjustment of attendance boundary lines. Another option involves moving the sixth grade to the Bell Middle School and forming a grade 6-8 organization. Although this latter alternative appears viable based purely on raw capacity figures, the study also points out that the Bell Middle School is an inflexible building because of design inefficiencies and therefore has a lower functional capacity and ability to accommodate an additional grade than would appear at first glance. The study suggests that if the sixth grade were moved to the Bell Middle School, it would probably reach its functional capacity by 1997 or sooner. As an alternative, the study suggests that pressure on the elementary schools be relieved by moving the Chappaqua Childrens Workshop (CCW) and the kindergarten from the elementary schools to the high school campus. With careful planning, it is anticipated that the kindergarten can be treated as an independent unit and successfully relocated along with the CCW program.

In summary, based on the ***Demographic and Facilities Study for the Chappaqua School District***, there appears to be ample building capacity to meet the District's needs through the 1990s and probably well into the next century. However, the challenge facing the Chappaqua School District will be how to effectively relieve the anticipated pressure on the elementary and middle school facilities while still maintaining the District's high educational standards. This Plan recommends that the School District continue to monitor enrollment trends and prepare projections so that it is able to continually evaluate the potential need for additional school facilities and programs and for implementation of reorganization strategies.

Although no plans exist for the construction of new schools, it is noted that the Chappaqua School District plans to relocate its administrative offices from leased space in the Millwood Business Center (formerly Kraus Periodicals) building on Saw Mill River Road in Millwood to a proposed building on the Horace Greeley High School site. While construction plans have not yet been completed, the target occupancy date for this new facility has been set for July 1, 1990 when the District's current lease at the Millwood site expires.

Plan Implementation

PLAN IMPLEMENTATION

The ***Town Development Plan*** is only an advisory document—albeit a very significant one. Ultimate accomplishment of the Town Plan as presented herein, and as modified from time to time, will require the cooperative action of the many people and agencies involved in decision-making concerning the Town's future and will be influenced as well by the actions of neighboring municipalities. Accomplishing the Plan's goals will require active and broad community support. All interests, whether public or private, have a stake in the attractive, economical and orderly development of New Castle.

ADOPTION OF THE TOWN PLAN

A necessary first step toward putting the Town Plan into effect is to adopt it as a guide to Town development. Section 272-a of the New York State Town Law provides that the Town Plan, called the "master plan" in the Law, be adopted by the Planning Board. It is not required that public hearings be held before its adoption or revision, but it is recommended that such a procedure be followed.

It should be understood that the Town Plan does not in and of itself change any zoning or assure the carrying out of any of its proposals. It does, however, show the recommendations of the Planning Board for the development of the Town, and is designed to be a guide that will assist all public agencies and private individuals and groups in making appropriate decisions for the orderly and attractive development of New Castle.

To meaningfully affect future development, further action must be taken by the Town to ensure that the Plan's provisions are substantially implemented. The majority of these related decisions are made by the Town Board. Therefore, it is essential that the Planning Board and the Town Board be in basic agreement on the provisions of the Town Plan. The Planning Board may agree to "adopt" the Plan at a particular meeting, but unless it is used continuously as a reference for decisions on land use, zoning, construction and public facilities programming, it is not being implemented.

To provide the Town with a guide to the additional activities that will need to be undertaken to implement the recommendations of the Town Plan, a chart has been prepared that summarizes the specific policy recommendations of the Plan and identifies the types of actions required to implement these policies as well as the board(s) or other agencies responsible for taking such actions. This information is presented in Table 75 following page 215.

Some elements of the Town Plan can be undertaken only by County or State agencies. The majority, however, are within the province of the Town itself. There are many options for achieving implementation of the Town Plan on a local level, a number of

which have already been described in previous sections. Those that are more broadly based and have a general impact on future Town development are discussed below.

CONTINUING PLANNING

Ongoing study of the Town Plan, to ensure that it addresses any new conditions arising subsequent to its adoption, is one of the most important elements of the planning process. The Plan must continuously reflect the Town's current long-range planning goals and policies as development patterns take shape if it is to be respected and regularly used. In this active period of local and regional growth, the Plan should receive constant reexamination. Comprehensive revision should generally be undertaken no less frequently than every 10 years, and sooner if necessitated by major changes in development trends or in the basic assumptions underlying the Plan.

This Plan also recommends that open lines of communication between New Castle and its neighbors be maintained at all times, with a view toward establishing compatible planning policies and reaching a reasonable accommodation of each community's interests, particularly in the vicinity of municipal boundaries.

ZONING

One of the most effective means of assuring that New Castle is developed as planned is through zoning. The zoning power is one of the most significant tools available to the Town, whereby it can give direction to public and private uses of land throughout the community, both in the continuation of desirable land use patterns which exist today and in guiding future development in undeveloped or changing areas. While zoning cannot require that land be developed for uses proposed in the Town Plan, it can prevent land from being used in a way that is contrary to the Plan.

New Castle first adopted zoning regulations in 1928 when the Town's population was less than 3,600. The bulk of the Town's development has taken place since that time and its present attractive character owes much to these regulations, as well as to the many zoning amendments that have been adopted over the ensuing years so as to continually provide the Town with the most effective techniques for guiding the community's growth and development.

Together with the updating of the Town Plan, a comprehensive revision of New Castle's zoning law should be undertaken to ensure that its provisions are not only clarified and modernized as necessary but also are in accordance with the Town's development goals and policies, as expressed in the Plan. This revision will be necessary to reflect both the changes in potential land use embodied in the Town Plan and to accommodate desirable additional land use controls. By closely relating these two documents, both become more purposeful and effective. Zoning regulations then serve as a major instrument in carrying out the recommendations of the Plan, and the Plan acts as a firm overall foundation on which to base the specific provisions of the zoning

law. It is noted, moreover, that under the New York State enabling legislation that authorizes the adoption of zoning regulations, there is a requirement that the regulations be based on a "comprehensive plan."

The above should not suggest, however, that there is only a single course of action related to the Town's future zoning. On the contrary, zoning can be expected to change, as it has in the past, to meet changing objectives of the Town and its residents. Nonetheless, such changes should never be made unless they are in accordance with the Town Plan. If policy changes or other situations arise that create the need to amend the Town's zoning, the related portions of the Plan should be restudied in the same careful and thorough way as they were in the preparation of this Plan.

If zoning is to be a valuable tool for maintaining New Castle as a highly desirable community, the Planning Board, the Zoning Board of Appeals, the Conservation Board, the Board of Architectural Review and Building Department officials must all work cooperatively with one another so that the integrity of the Town Plan is maintained. The Town's regulations should be followed fully. From time to time, some unreasonable hardship on a property owner which is unique to his or her land may justify the granting of a variance by the Zoning Board of Appeals, but even this should be done sparingly. The ability of the Town's zoning regulations to control land use will only be as good as the level of enforcement it receives. Because zoning enforcement is a difficult and time-consuming task, every effort should be made to give proper staff support to this activity.

SUBDIVISION REGULATIONS

Subdivision regulations are another important tool for controlling the proper development of New Castle. They were first enacted by the Town in 1931 and amended periodically thereafter. While zoning principally regulates the use of land, subdivision regulations guide the layout and design of new roads and lots, and ensure that all common improvements required are properly accomplished. Since, for the most part, the Town develops on a parcel by parcel basis, each subdivision should be designed in such a manner that it will fit into the planned overall pattern of roads and related facilities. If not, the Town could soon become an unattractive hodgepodge of growth, unrelated to the land or to the roads that serve it, and resulting in a wide assortment of traffic and drainage problems.

Subdivision review by the Planning Board makes it possible to avoid these problems. Many of the future road recommendations shown on the Town Plan map can be achieved through the subdivision approval procedure. When a subdivision is proposed on land where the Plan Map shows a new road or a realignment, the subdivision layout should be required to conform to the indicated pattern. In this manner, much of the new road system can eventually be constructed at no expense to the Town. When proposed subdivisions with frontage on existing roads are reviewed, provision should also be made for road widening reservations designed to provide the Town with

adequate right-of-way should improvement to these roads be desired or become necessary in the future.

The subdivision process also offers the opportunity to implement some of the Town's open space and recreation objectives as development takes place. As part of the subdivision approval procedure authorized pursuant to Section 277 of the New York State Town Law, the Planning Board may require a developer to set aside a certain portion of land within the subdivision for park and recreational purposes. In lieu of such reservation, the Town Law permits the Planning Board to accept payment of a fee (to be determined by the Town Board) which is to be used exclusively for neighborhood park, playground or recreational purposes, including the acquisition of land. Where the Planning Board determines that suitable recreation land cannot be properly located within a particular subdivision or is otherwise not practical, the trust fund established as a depository for these fees can be used to acquire land in more suitable locations.

OFFICIAL MAP

The establishment of an official map is another means by which recommendations of the Town Plan can be implemented. New Castle first adopted an official map in 1954 and has amended it on many occasions since that time. The official map, which is adopted by the Town Board pursuant to Sections 270 and 273 of the New York State Town Law, is a definitive document with respect to the location and width of streets and drainage systems and the location of parks. As a complement to Planning Board action on subdivisions, the official map can be used to establish the rights-of-way for roads needed in the future. Once the official map has been formally adopted, no building permit may be issued for a building located in the right-of-way of a mapped street, except in accordance with prescribed procedures established pursuant to the Town Law. The existence of a formally adopted official map is also beneficial to the Town because it can limit the expenditure of public funds for right-of-way acquisition needed to implement important future road connections.

PUBLIC IMPROVEMENTS

The ways and places in which the community spends money for public improvements —parks, recreational facilities, open space, roads, schools, municipal buildings, etc. —and the standards to which they are built have a major effect on the development of the Town. Since the authority to initiate and undertake these improvements is widely distributed among the many agencies of government, it is of great importance that the various recommendations for action by these agencies be referred to the Planning Board so that it may actively participate in coordinating the proposals of one agency with those of others, and with the overall plan for Town development. The Planning Board has no authority to require others to conform to the Town Plan, but it can perform a particularly useful role in coordinating these efforts and in assisting these other agencies so that detrimental conflict of plans is avoided.

The Town Board has for many years followed a policy of referring matters concerning planning and zoning to the Planning Board for study and recommendation before action by the Town. This policy is to be commended and should be followed at all times. All matters related to Town development, no matter how seemingly inconsequential, should be checked for conformance with the Town Plan. Although New Castle has no control over the school boards, the County or the State, cooperation by these units of government should be requested and encouraged. Such coordination will be mutually beneficial.

Finally, the Town Board, when it adopts the yearly budget, can put into effect important parts of the adopted ***Town Development Plan*** by authorizing and appropriating money for the implementation of specific projects. This is an important responsibility, and carrying it out is greatly assisted by the establishment of a capital improvement program. This is a systematic scheduling and projecting of various public works and public land acquisitions that will be needed over a period of years as the Town continues to develop. Each year the program is restudied and revised in light of new priorities required by changing conditions, and extended another year into the future. Such a program provides a continuously up-to-date picture of estimated future improvement needs and costs facing the Town. It helps to give greater stability to the property tax rate by spreading improvement costs over a period of years in accordance with the Town's financial ability, and thus usually avoids the need to expend funds for the implementation of several expensive projects in a single year, with a consequent jump in the tax rate.

To the extent permitted by law, this Plan also recommends that the Town explore the feasibility of establishing an impact fee system to help defray the costs of providing public improvements, services and facilities, the need for which is generated by private development projects. It is further recommended that the Town support the adoption of State legislation authorizing muncipalities to impose such fees.

PRIVATE DEVELOPMENT

The great bulk of development in New Castle has been and will continue to be undertaken by private individuals and organizations. Therefore, it is private development that has the most direct influence on the character of the community, guided and regulated by the Town as described above.

Neither the Town Plan, zoning or subdivision regulations, nor the Town agencies that administer these regulations, can force any private individual or organization to develop a particular piece of property for a particular use. However, the Plan provides an orderly framework for private development and related municipal service facilities and, therefore, can be helpful to private enterprise in determining the appropriate type of development and the proper place for it. Where there is a good Town Plan, and it is followed on a continuing basis, private enterprise has a more reliable foundation on which to plan and build. This not only encourages good development, but also helps to accomplish the Plan's specific recommendations.

Table 75

TOWN PLAN IMPLEMENTATION PROGRAM
TOWN OF NEW CASTLE

Policy Recommendation	Implementation Timeframe[a]			Action Needed[b]
	Near-Term	Short-Term	Long-Term	
A. Residential Development				
1. Rezone some properties in selected areas of Town	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning)[c] by TB.
2. Establish design and construction specifications for common driveways.	X			Drafting of specific recommendation by TE and PB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
3. Modify existing street design and construction specifications to address number of lots to be served, extension of private roads, etc.	X			Drafting of specific recommendation by TE and PB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 109 (Street and Road Specifications) and 113 (Subdivision of Land) by TB.
4. Modify existing regulations concerning resubdivision.	X			Drafting of specific recommendation by PB; adoption of amendment to subdivision regulations by PB; amendment of Chapter 113 (Subdivision of Land) by TB.
5. Modify existing regulations to prohibit the creation of "flag lots."	X			Drafting of specific recommendation by PB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
6. Modify existing regulations applicable to lot dimensions and yard requirements.	X			Drafting of specific recommendations by PB; amendment of Chapter 60 (Zoning) by TB.
7. Modify existing "dry land area" regulations applicable to minimum lot size requirements.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
8. Establish regulations concerning the delineation of "clearing and grading limit lines" on all building lots.	X			Drafting of specific recommendation by TE and PB with advice from CB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
9. Establish regulations concerning preservation of perimeter buffers.	X			Drafting of specific recommendation by PB with advice from CB; amendment of pertinent sections of Town Code by TB.
10. Establish regulations authorizing PB to require the use of conservation subdivision design.	X			Drafting of specific recommendation by PB and TB; adoption of amendment to subdivision regulations by PB; amendment of Chapters 60 (Zoning) and 113 (Subdivision of Land) by TB.
11. Establish regulations concerning residential building bulk, house siting and maximum development coverage.	X			Drafting of specific recommendation by PB and TB; amendment of Chapter 60 (Zoning) by TB.
12. Modify existing methodology applicable to computation of permitted residential density in multifamily developments.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
13. Modify existing density incentive provisions applicable to multifamily development.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
14. Establish regulations limiting commercial development to first floor locations in Millwood business center and requiring residential use of second floor space.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
15. Establish regulations permitting the creation of shared living residences for senior citizens.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
16. Establish regulations for senior citizen housing zoning district.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
17. Establish regulations permitting the conversion of single-family residences to two-family residences in selected areas within or contiguous to Chappaqua and Millwood business centers.	X			Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
18. Establish regulations concerning maximum floor area requirements for multifamily dwellings.	X			Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment to Chapter 60 (Zoning) by TB.
19. Modify existing regulations concerning the establishment of customary home occupations and professional offices in residences.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
20. Modify existing regulations concerning amateur radio and satellite dish antennas.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
B. Commercial Development				
1. Eliminate B-RO-4 District.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
2. Rezone some properties in selected areas of Chappaqua and Millwood hamlets.	X			Drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB.
3. Reevaluate types of land use permitted in hamlet business centers.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
4. Reevaluate building height regulations applicable to hamlet business centers.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
5. Develop area site plans for selected areas of hamlet business centers.	*	*	*	Preparation and adoption of area site plans by PB.
6. Develop individual area design plans for Chappaqua and Millwood business centers.	X			Preparation of area design plans by PB with advice from ARB; adoption of area design plans by PB.
7. Establish hamlet design overlay districts for Chappaqua and Millwood business centers.		X		Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
8. Reevaluate sign regulations applicable to hamlet business centers.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
C. Open Space and Recreation				
1. Develop specific open space preservation plan and recreation master plan.	X			Preparation by PB, TB and RPC; future amendment of 1989 ***Town Development Plan*** by PB to incorporate open space and recreation master plan by reference.
2. Identify and preserve important open space and recreation parcels.	X	*	*	Study by PB, TB and RPC; use of preservation techniques outlined in Tables 58, 59 and 60 of Town Plan as appropriate by PB, TB, nonprofit organizations and private landowners.

Note: For explanation of footnotes, see last page of this table.

	Policy Recommendation	Implementation Timeframe[a]			Action Needed[b]
		Near-Term	Short-Term	Long-Term	
3.	Secure access to landlocked public open space and recreation sites and to private open space and institutional lands for recreational purposes.	*	*	*	Acquisition of land and/or access easements by TNC.
4.	Provide additional public active recreational facilities.	*	*	*	Study of needs by RPC; approval by TB; construction by TNC.
5.	Establish system of bikeways, walkways and trails.	*	*	*	Study by PB, TB, and RPC; approval by PB as part of development proposal review; acquisition of land and/or access easements by TNC; construction by TNC and/or private landowners.
6.	Establish "open space ombudsman" position.	X			Creation of position by TB; hiring and/or appointment by TB.
7.	Establish regulations concerning tree preservation.	X			Drafting of specific recommendation by PB with advice from CB; amendment of pertinent sections of Town Code by TB.
8.	Establish regulations concerning disturbance of steep slopes.	X			Drafting of specific recommendation by PB with advice from CB; amendment of pertinent sections of Town Code by TB.
9.	Reevaluate provisions of Town wetlands law.	X			Study of existing regulations by PB and CB; drafting of specific recommendation by PB; amendment of Chapter 137 (Wetlands) by TB.
10.	Reevaluate provisions of Town zoning law concerning historic preservation.	X			Study of existing regulations by PB; drafting of specific recommendation (as needed) by PB; possible amendment of Chapter 60 (Zoning) by TB.
D.	**Transportation**				
1.	Realign Taconic State Parkway (TSP) northbound exit ramp to Route 100; realign Campfire Road and close existing TSP grade crossing.		X		Construction by NYSDOT.
2.	Create grade-separated interchange at Saw Mill River Parkway/Roaring Brook Road intersection.			X	Study by NYSDOT and TNC; approval by NYSDOT and TNC; construction by NYSDOT with TNC endorsement.
3.	Extend North Greeley Avenue to Roaring Brook Road.			X	Study by PB and TB; approval by TB if determined to be necessary; construction by TNC.
4.	Extend Schuman Road to Station Road.		X		Approval by PB as part of development proposal review subject to approval by NYSDOT and TB with construction by private developer or approval by NYSDOT, private landowner and TB with construction by TNC.
5.	Realign selected segments of Town roads to improve safety.	*	*	*	Approval by PB as part of development proposal review with construction by private developer and/or approval by TB with construction by TNC.
6.	Realign Lake Road west of Croton Lake Road for safety reasons and to provide access to landlocked Town parkland.			X	Approval by NYC, private landowner and TB; construction by TNC.
7.	Revise Official Map to reflect desirable right-of-way reservations for proposed roads.	X			Study by PB; drafting of specific recommendation (as needed) by PB; possible amendment by TB.
8.	Implement TOPICS and similar types of roadway/intersection improvements.	X	X	X	Construction by NYSDOT with TNC endorsement.
9.	Convert Hunts Place (also known as lower King Street) to two-way road or reverse existing westbound one-way flow to improve circulation around Chappaqua Train Station.	X			Study by TE, PB and TB; preparation of plan by TE; installation of traffic signal at Greeley Avenue/King Street intersection by NYSDOT; amendment of Chapter 123 (Vehicles and Traffic) by TB; elimination or restriping of parking spaces by DPW.
10.	Establish speed zone on Route 100 between Station Road and Shingle House Road with possible extension to Hidden Hollow Road.	X			Approval by NYSDOT; amendment of Chapter 123 (Vehicles and Traffic) by TB; installation of signage by NYSDOT.
11.	Develop sidewalk plans for Chappaqua and Millwood hamlet areas, including designation of appropriate pedestrian crossing zones.	X	X		Study by TE and PB; preparation of plans by TE; approval by TB and NYSDOT (if applicable); establishment of sidewalk district(s) by TB; construction by TNC and/or abutting property owners.
12.	Redesign layout of existing municipal parking lots to maximize capacity.	X			Study and preparation of plans by TE; approval by PD (or TB); restriping of lots by DPW.
13.	Provide northern secondary access to Parking District's planned off-street parking facilities on east side of North Greeley Avenue.		X		Study by TE, PB and TB; acquisition of land and/or access easement by PD (or TNC); construction by PD (or TNC).
14.	Provide additional merchant parking facilities on west side of North Greeley Avenue.		X		Study by TE, PB and TB; preparation of plan by TE; acquisition of land by PD (or TNC); construction by PD (or TNC).
15.	Construct one or more parking decks over existing surface lots.		X	X	Study by TE, PB and TB; preparation of plans by engineering consultant; approval by TB; construction by PD (or TNC).
16.	Relocate long-term metered parking spaces currently located north of Woodburn Avenue to main commuter lot behind Town Hall.		X		Study by TE, PB and TB; preparation of plan by TE; approval by PD (or TB); amendment of Chapter 123 (Vehicles and Traffic) by TB; relocation by DPW.
17.	Establish variable time restrictions for parking spaces, designed to ensure frequent turnover of spaces near core of business centers.		X		Study by TE, PB and TB; drafting of specific recommendation by TE and PB; approval by PD (or TB); amendment of Chapter 123 (Vehicles and Traffic) by TB; installation of signage by DPW.
18.	Reevaluate merchant parking permit policies.		X		Study by TE, PB and TB; drafting of specific recommendation by TE and PB; approval by PD (or TB); amendment of Chapter 123 (Vehicles and Traffic) by TB.
19.	Align boundaries of Parking District with B-RP District.	X			Study by TE, PB, and TB; drafting of specific recommendation by PB; amendment of Chapter 60 (Zoning) by TB and/or adoption of special legislation by PD (or TB).
20.	Provide additional commuter parking facilities.			X	Study by TE, PB and TB; preparation of plan by TE; approval by TB; construction by TNC.
E.	**Community Facilities and Services**				
1.	Provide new water pumping station from Catskill Aqueduct.		X		Approval by NYCDEP, NYSDOH and WD (or TB); construction by WD (or TNC).
2.	Provide new above-ground water storage facility at West End of Town.		X		Approval by WCDOH and WD (or TB); construction by IBM as part of Hudson Hills site development or construction by WD (or TNC) on alternative site to be selected by WD (or TB) after study by TE, DPW and TB.
3.	Provide water filtration plant.		X		Study by TE, DPW and TB; acquisition of site by WD (or TNC); preparation of plan by engineering consultant; approval by NYSDOH and WD (or TB); construction by WD (or TNC).
4.	Complete implementation of concrete relining program for unlined water mains.		X	X	Approval by WCDOH and WD (or TB); construction by DPW.

Note: For explanation of footnotes, see last page of this table.

Policy Recommendation	Implementation Timeframe[a]			Action Needed[b]
	Near-Term	Short-Term	Long-Term	
5. Enlarge water mains in Stanwood area and elsewhere as needed to improve fire protection.		X	X	Approval by WCDOH and WD (or TB); construction by DPW.
6. Provide for looping of water mains.	*	*	*	Approval by PB as part of development proposal review subject to approval by WCDOH; construction by private developer and WD (or TNC).
7. Expand sewer service in selected areas.		X	X	Study and preparation of plans by TE and DPW; approval by WCDEF, WCDOH and TB; expansion of existing sewer district(s) and/or establishment of new sewer district(s); construction by relevant SD (or TNC).
8. Develop long-range plan for solid waste disposal.		X		Study by TE, DPW, TB and other cooperating municipalities; preparation of specific plan by consultant; approval by RRD or TB (and other cooperating municipalities if applicable).
9. Expand garbage recycling program.		X		Study by TE, DPW and TB; preparation of specific plan by consultant; approval by TB.
10. Install dry hydrants to improve fire protection in areas lacking a central water supply system.	*	*	*	Approval by PB as part of development proposal review; construction by private developer.
11. Explore options for expanding Town Hall and/or relocating some departments to "satellite" locations.		X	X	Study by SBG and TB; preparation of specific plans by architectural consultant; approval by TB; construction/renovation by TNC.
12. Expand Town Garage to provide for enclosed storage of all vehicles and equipment.			X	Study by DPW; preparation of specific plan by consultant; approval by TB; construction by TNC.
13. Provide additional enclosed facility for sand and salt storage.			X	Study by DPW; preparation of specific plan by consultant; approval by TB; construction by TNC.
14. Provide new facility for Chappaqua Post Office.		X		Approval and construction by U.S. Postal Service.
15. Provide new facility for Millwood Post Office.			X	Study and approval by U.S. Postal Service; lease of new space or construction of new building by U.S. Postal Service.
16. Monitor enrollment trends for purpose of projecting need for future school facilities and programs and for grade reorganization.		X	X	Study by CSD and other school districts serving New Castle; implementation of selected plans by pertinent school districts.
17. Relocate Chappaqua School District Administrative Offices to new building on Horace Greeley High School site.		X		Approval and construction by CSD.

[a] Timeframe indicated is proposed, except for Policy Recommendations D-1 and E-1 which have already been scheduled for completion as noted.
Near-Term - 6 months to 1 year
Short-Term - 1+ year to 5 years
Long-Term - 5+ years
* - Ongoing as needed

[b] PB - New Castle Planning Board
TB - New Castle Town Board
TE - New Castle Town Engineer
CB - New Castle Conservation Board
ARB - New Castle Board of Architectural Review
RPC - New Castle Recreation and Parks Commission
PD - New Castle Parking District No. 1
WD - New Castle Water District No. 1
SD - New Castle Sewer District
RRD - New Castle Residential Refuse District
DPW - New Castle Department of Public Works
SBG - New Castle Superintendent of Buildings and Grounds
TNC - Town of New Castle
WCDOH - Westchester County Department of Health
WCDEF - Westchester County Department of Environmental Facilities
NYCDEP - New York City Department of Environmental Protection
NYSDOT - New York State Department of Transportation
NYSDOH - New York State Department of Health

Reference to the above boards, individuals, commissions, districts, departments and jurisdictions, etc. is assumed to include agents of such entities as appropriate, e.g., TNC may include contractors hired by the Town of New Castle.

[c] Refers to *Code of the Town of New Castle, New York*

TOWN OF NEW CASTLE, N.Y.

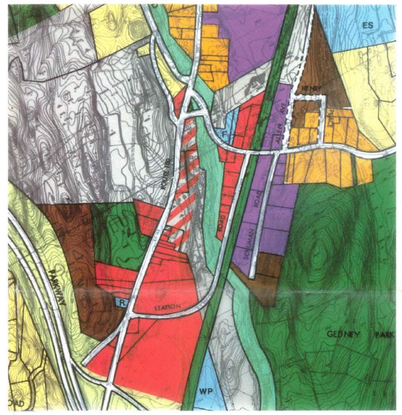
TOWN DEVELOPMENT PLAN

- LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- RETAIL/SERVICE BUSINESS
- RESEARCH/OFFICE BUSINESS
- LIGHT INDUSTRY
- UTILITY
- PROPOSED — PUBLIC RECREATION/OPEN SPACE
- SEMIPUBLIC & PRIVATE RECREATION/OPEN SPACE
- PARKWAY
- WATERSHED/WATER SUPPLY
- INSTITUTION
- PUBLIC & SEMIPUBLIC

WP Water Pumping Station
WS Water Storage Tank
F Fire House
PH Police Headquarters
A Ambulance Corps
T Town Hall
M Municipal Parking
RR Train Station
PW Public Works
L Library
ES Public Elementary School
MS Public Middle School
HS Public High School
S Other School
R House of Worship
C Cemetery

- HILLTOP/SLOPE PRESERVATION
- STREAM/WETLAND PRESERVATION

- PARKWAY
- PROPOSED — MAJOR ROAD
- PROPOSED — COLLECTOR ROAD
- PROPOSED — LOCAL ROAD
- RAILROAD



MILLWOOD HAMLET CENTER

SCALE IN FEET
400 0 400 800 1200 1600

SCALE IN FEET
800 0 800 1600 2400 3200

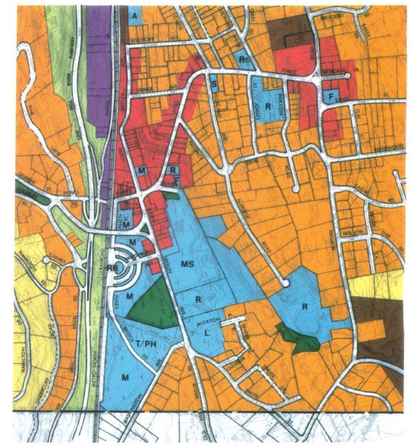
NOTES :
Photogrammetric information reproduced from :

- New York State Department of Transportation, Routes 133 and 134 Corridor Study Maps (1968 Photography)
- New York State Department of Transportation, Route 117 Corridor Study Maps (1963 Photography)
- New York City Department of Water Supply, Gas and Electricity Maps of Croton and Kensico Watersheds (1937-38 Photography)
- USGS Maps of Ossining Quadrangle (1971 Photography)

Datum is Mean Sea Level
Grid based on New York State Plane Coordinate System

Prepared by Frederick P. Clark Associates
Planning/Development/Environment/Transportation
Rye, New York

November 1989



CHAPPAQUA HAMLET CENTER

SCALE IN FEET
400 0 400 800 1200 1600

TOWN OF SOMERS
TOWN OF YORKTOWN
TOWN OF CORTLANDT
TOWN OF OSSINING
TOWN OF MOUNT KISCO
VILLAGE OF MOUNT KISCO
TOWN OF BEDFORD
TOWN OF NORTH CASTLE
TOWN OF MOUNT PLEASANT