



The Town of North Castle Comprehensive Plan

Draft: October 2017

BEJ Planning

Town of North Castle Comprehensive Plan

[WORKING DRAFT]

North Castle, New York

Prepared for

The Town of North Castle

Prepared by

The North Castle Comprehensive Plan Steering Committee

With

BFJ Planning

115 5th Avenue

New York, NY 10003

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North Castle Comprehensive Plan

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**Hudson River
Valley Greenway**

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1. INTRODUCTION AND VISION

1. INTRODUCTION AND VISION

1.1 PLANNING BACKGROUND AND PROCESS

The Town of North Castle's last Comprehensive Plan was adopted in 1996. That document included an extensive analysis of existing conditions and outlined a wide range of recommendations, many of which were implemented through zoning amendments and capital improvements.

In 2016, the Town issued a Request for Proposals (RFP) to update its comprehensive plan and incorporate the community's goals and policies for the future in terms of commercial vitality, housing, open space, community facilities and services, and infrastructure. Particular attention was sought for ensuring the continued strength of North Castle's non-residential areas, including the hamlet centers, office zones and industrial areas. The updated Plan was intended to serve as a guide for orderly growth and change and provide a rational basis for future planning and zoning decisions. The Town retained a consultant for the Plan update in early 2017.

State municipal law provides that the Town Board may prepare a comprehensive plan with the assistance of a special committee. Accordingly, in 2014, the Town Board appointed a steering committee of 10 members to assist with the preparation of the Plan update, working with the consultant team. The committee included representatives from Town government, the Planning Board and the community at-large, and met regularly to provide direction in drafting of the Comprehensive Plan. The committee also hosted a series of public workshops to collect and incorporate community input.

The concluding Future Land Use Plan and Implementation section of this Plan incorporates the Town's essential characteristics and future goals addressed in the following chapter topics: Regional Context; Demographics and Growth Trends; Land Use and Zoning; Natural Resources; Transportation; Infrastructure and Utilities; Housing; Commercial and Industrial Development; Parks, Recreation and Open Space; Community Character and Historic Resources; and Hamlet Areas. The final piece of the Plan is an Action Agenda that is both part of the document and can also be used as a stand-alone "To Do" list for the Town Board.

1.2 PUBLIC PARTICIPATION

In undertaking this Plan, a major focus for North Castle was for the process to be open and engaging to the community, taking advantage of the local "experts" who know their Town and neighborhoods best. Public participation was identified early-on as critical for the development of a successful Plan, and several outreach methods were used to reach stakeholders from a broad spectrum of the community, as follows:

Public Workshops. A total of five public workshops were held as part of this comprehensive planning process. Two of the workshops were aimed at a Town-wide audience, while the other three focused on individual hamlet areas:

- March 20, 2017: Opening Public Workshop
- April 25, 2017: North White Plains
- May 18, 2017: Armonk
- June 12, 2017: Banksville
- October 24, 2017: Draft Comprehensive Plan

1. INTRODUCTION AND VISION

Feedback and recommendations from each of these sessions have been reviewed and appropriately integrated into this Plan. The five workshops are summarized in the Appendix.

Public Survey. Attending public meetings is difficult for people with many constraints on their time, including work, family and social obligations. As a result, there are generally only specific segments of the population who attend community workshops – those who are deeply civic-minded or those with a specific area of concern. Therefore, an online survey was used to further inform the planning process by allowing the project team to gain insights into the opinions of the portion of the population who may not be reachable by traditional outreach methods. The survey was available from April 21, 2017, to July 10, 2017, and successfully obtained participation from 483 people. The responses to the survey – which was not limited to North Castle resident – were integral in drafting the Plan chapters. A summary of the survey results is found in the Appendix.

Publicity. Several strategies were used to adequately publicize workshops and ensure a strong level of participation from the community. A dedicated section was created on the Town's website to provide information about the Comprehensive Plan update, including draft chapters. The consultant team maintained and updated a list of community stakeholders and sent e-mail blasts in advance of each public meeting. In addition, flyers were created and distributed for each event, and the Town Board made regular announcements at its meetings of opportunities for public input. Finally, the Town provided additional online engagement opportunities through its *North Castle Forward* website, a platform funded by a grant from the Hudson River Valley Greenway that allows for the posting of open-ended questions to residents about the Town's future.

1.3 PLANNING GOALS

The 1996 Comprehensive Plan outlined a set of planning goals for North Castle, which were tested with the community as part of this Plan update. Each of the goals was found to be relevant today, with some minor modifications to make clear that the Town seeks to strengthen, not simply maintain, its hamlet centers and office/industrial tax base. The overarching goals for this Plan update are as follows:

1. *Remain an attractive residential community;*
2. *Maintain and strengthen the existing hamlet centers as service and higher-density residential areas;*
3. *Maintain and strengthen the office and industrial tax base;*
4. *Maintain the delivery of high-quality municipal services;*
5. *Respect and preserve the environment while striving to achieve the goals above; and*
6. *Maintain and enhance property values through the creation, revision and enforcement of effective ordinances.*

These planning goals provide the foundation for the discussion of issues and opportunities in each chapter of this Plan, and the formulation of recommendations to address issues and capitalize on opportunities.

2. REGIONAL CONTEXT

2. REGIONAL CONTEXT

2.1 TOWN HISTORY

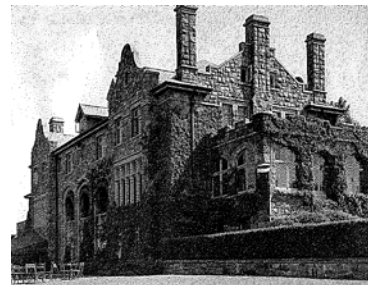
The area that is today the Town of North Castle was originally settled by the Native American tribe the Siwanoy, who were part of the Wappinger Confederacy. Europeans began settling the area around 1640 through a combination of British land grants and the purchase of large parcels from the Native American chiefs. Settlers from the Massachusetts and Connecticut areas moved into the eastern part of the area and Quakers from Long Island and nearby Rye, New York, inhabited the area known today as Armonk. The name “North Castle” stems from an old Indian fortification that was located on the hill where the IBM corporate headquarters now resides.

During the American Revolution, George Washington established his headquarters in 1776, 1778 and 1781 at the Miller House – still located on Virginia Road in North White Plains – and the Battle of White Plains was fought in 1779 in that area. The hills of North Castle created a strategic advantage for the American troops, who would fire down at the British Army. The battle marked a turning point in the Revolution, as bitter weather helped Washington’s troops halt the British advance.

In 1788, North Castle officially became a town of New York when the State passed an act that divided its counties into multiple towns. The town was originally much larger than it is today and included the current Town of New Castle, which was created three years later. Though the location of Town meetings in the early years is unknown, from 1791 to 1855, they were held in Smith’s Tavern on Bedford Road in Armonk, which is listed on the National Register of Historic Places and serves as the home of the North Castle Historical Society.

Through the mid-19th century, most of North Castle’s residents were farmers, focused on produce (especially potatoes and apples) and dairy products. From 1850 to 1880, the Town was a center of shoemaking, which ultimately employed some 300 households in North Castle. In the latter part of the century, shoemaking was taken over by factories, and the Town shed much of its population, decreasing from a high of 2,800 during the Civil War to 1,200 in 1910 – roughly the size at its founding.

In the early 20th century, wealthy New York City business people discovered North Castle as an ideal location for country estates, with its rural setting and rail connection to Manhattan, and these estates provided jobs for local residents.



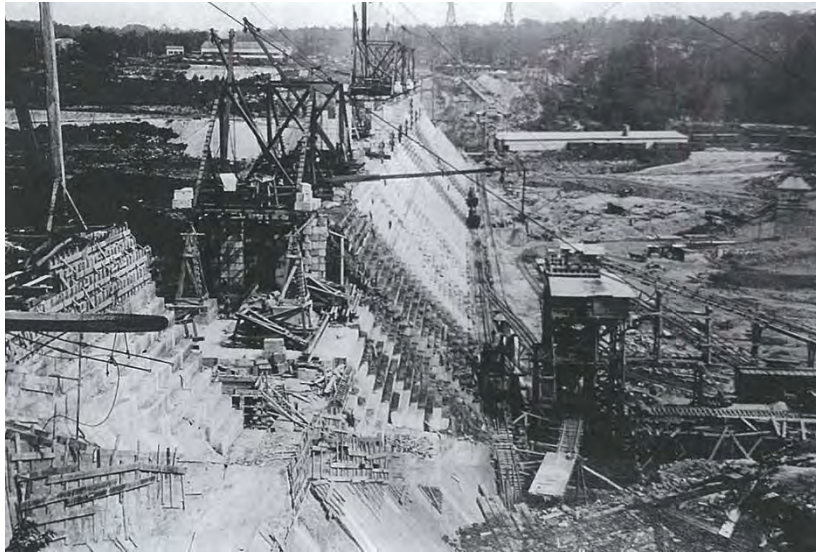
The Wampus Estate (top), former Watkins Estate (later Westchester Embassy Club, bottom left), and Windmill Farm (bottom right).

Source: *Images of America: North Castle*, Sharon Tomback and the North Castle Historical Society.

2. REGIONAL CONTEXT

From 1909 to 1917, the Kensico Dam and Reservoir were built in the location of the hamlet of Kensico, to provide fresh water to New York City. The construction brought in many immigrants from Europe – particularly Italy – who specialized in masonry and settled in North White Plains.

After World War II, North Castle's population grew substantially, and the arrival of IBM in 1964 heralded further growth, and the Town began to resemble its modern form. The completion in 1968 of I-684 between White Plains and Armonk created additional demand for both office and residential uses.¹



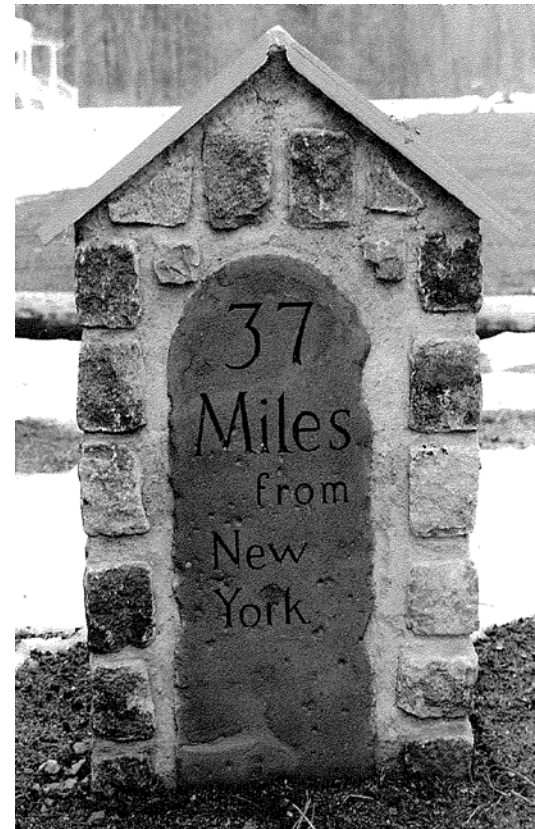
Kensico Dam Construction between 1913 and 1917.

Source: *Images of America: North Castle*, Sharon Tomback and the North Castle Historical Society.

¹ Derived from "From Smith's Tavern to I.B.M.: North Castle Celebrates 250 Years" (*New York Times*, Betsy Brown, June 1, 1986); North Castle 1996 Comprehensive Plan Update; and 2016 North Castle Planning Base Studies.

2.2 REGIONAL CONTEXT

North Castle comprises approximately 26 square miles in area and is located in the east-central Westchester County (see Figure 1). The Town is divided geographically by the Kensico Reservoir, with most of its area lying north of the reservoir, but the most densely populated area is found to the south.



Historic mile marker 37, located at Smith's Tavern on Bedford Road.

Source: *Images of America: North Castle*, Sharon Tomback and the North Castle Historical Society.

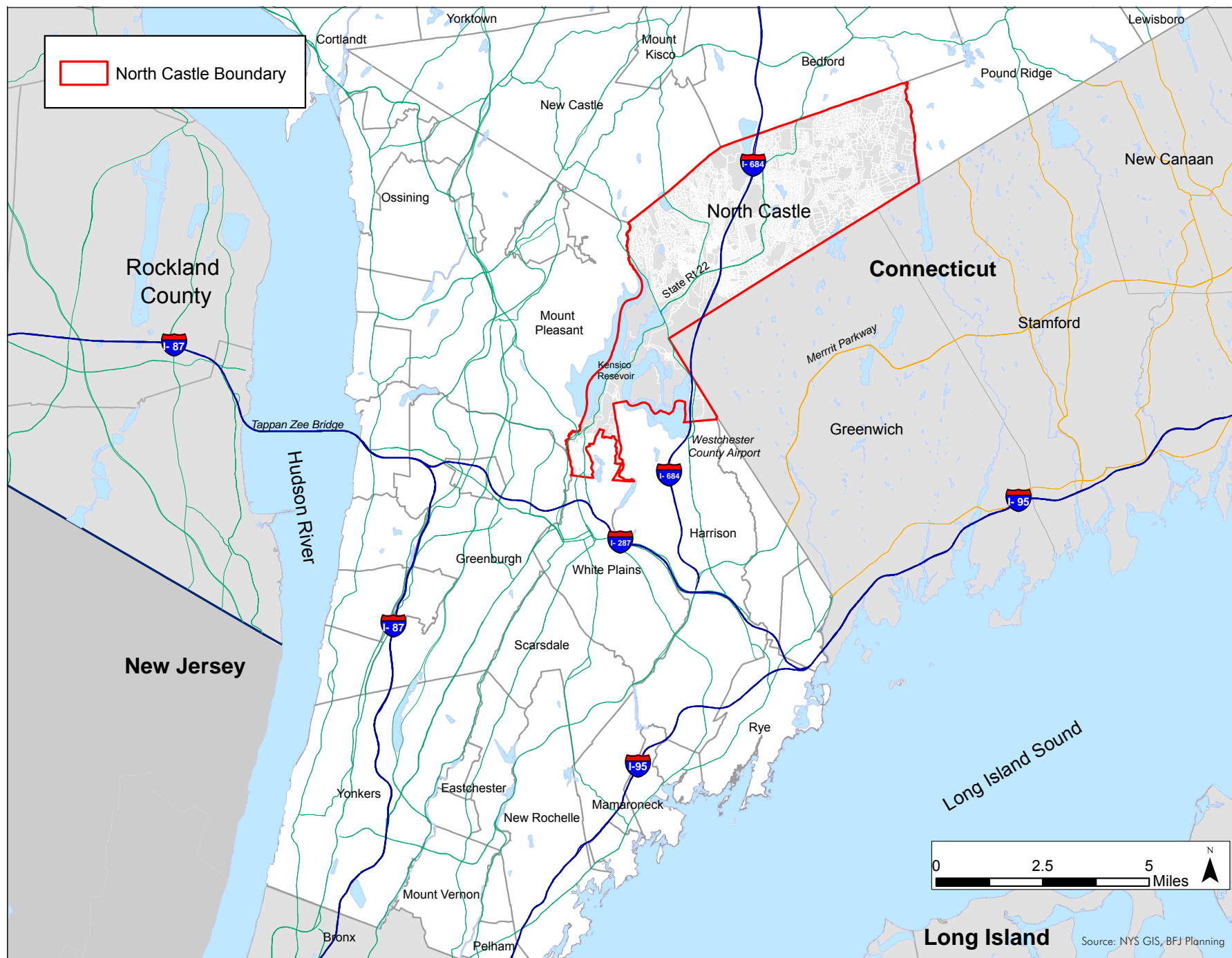


Figure 1: Regional Location Map

2. REGIONAL CONTEXT

The Town is bordered by 10 other municipalities. The City of White Plains is to the south, the Towns of Greenburgh and Mount Pleasant are to the west, the Town of New Castle is to the northwest, the Town of Bedford is to the northwest; the Town of Pound Ridge is to the northeast, the Town/Village of Harrison and the Village of Rye Brook are to the south; and in Connecticut, the Town of Greenwich and City of Stamford are to the southeast.

North Castle is well-served by two regional north-south roadways: New York State Route 22, which links to White Plains to the south and to Bedford to the north, and I-684, which terminates south of North Castle at I-287/Hutchinson River Parkway and extends north to I-84 at Brewster in Putnam County. A small portion of the Bronx River Parkway connects North White Plains to I-287 at the Kensico Dam.

The closest commuter rail access is Metro-North's North White Plains station just west of Haarlem Avenue in White Plains.

2.3 LOCAL CONTEXT

North Castle's character is largely derived from its three hamlet areas: North White Plains and Armonk in the western portion, and Banksville and surrounding rural areas to the east (see Figure 2).

North White Plains

Located in the southwest corner of the Town, North White Plains is the most dense and semi-urban portion of North Castle. Well-established residential neighborhoods are served by water and sewer in North White Plains and public sewer in the small residential area of Quarry Heights. The Town is exploring installing public water service along Old Orchard Street with the

Town/Village of Harrison. An industrial zone along Lafayette Avenue and Virginia Road has a variety of commercial businesses, while a mix of retail establishments are found along Route 22 into the City of White Plains. North White Plains is physically separated from the rest of North Castle by the Kensico Reservoir and New York City Watershed lands. Due to its geography and history, the area is at times more associated with neighboring White Plains, the nearby Metro-North railroad station and the hamlet of Valhalla in Mount Pleasant.

Armonk

The central portion of North Castle, stretching north from the New York City Watershed lands, includes areas near the Westchester County Airport; the mixed-use hamlet of Armonk, office and commercial areas close to the hamlet; and the surrounding residential developments, subdivisions and open spaces. Armonk benefits from its access to I-684 and the widened section of Route 22 between Route 120 and I-684, which has led to the development of several large office parks and commercial developments. The immediate "downtown" area is served by water and sewer infrastructure. The recent completion of the Armonk Square developed has created a central focus for the hamlet.

Banksville (Eastern District)

The far eastern portion of the Town is characterized by low-density residential development, large undeveloped areas zoned for rural residential development and various protected open spaces in the form of nature preserves and watershed properties. Several commercial uses are clustered along Bedford-Banksville Road, but the area is not served by water or sewer. Banksville is split between New York and Connecticut; the area's shopping center is across the state line in Greenwich.

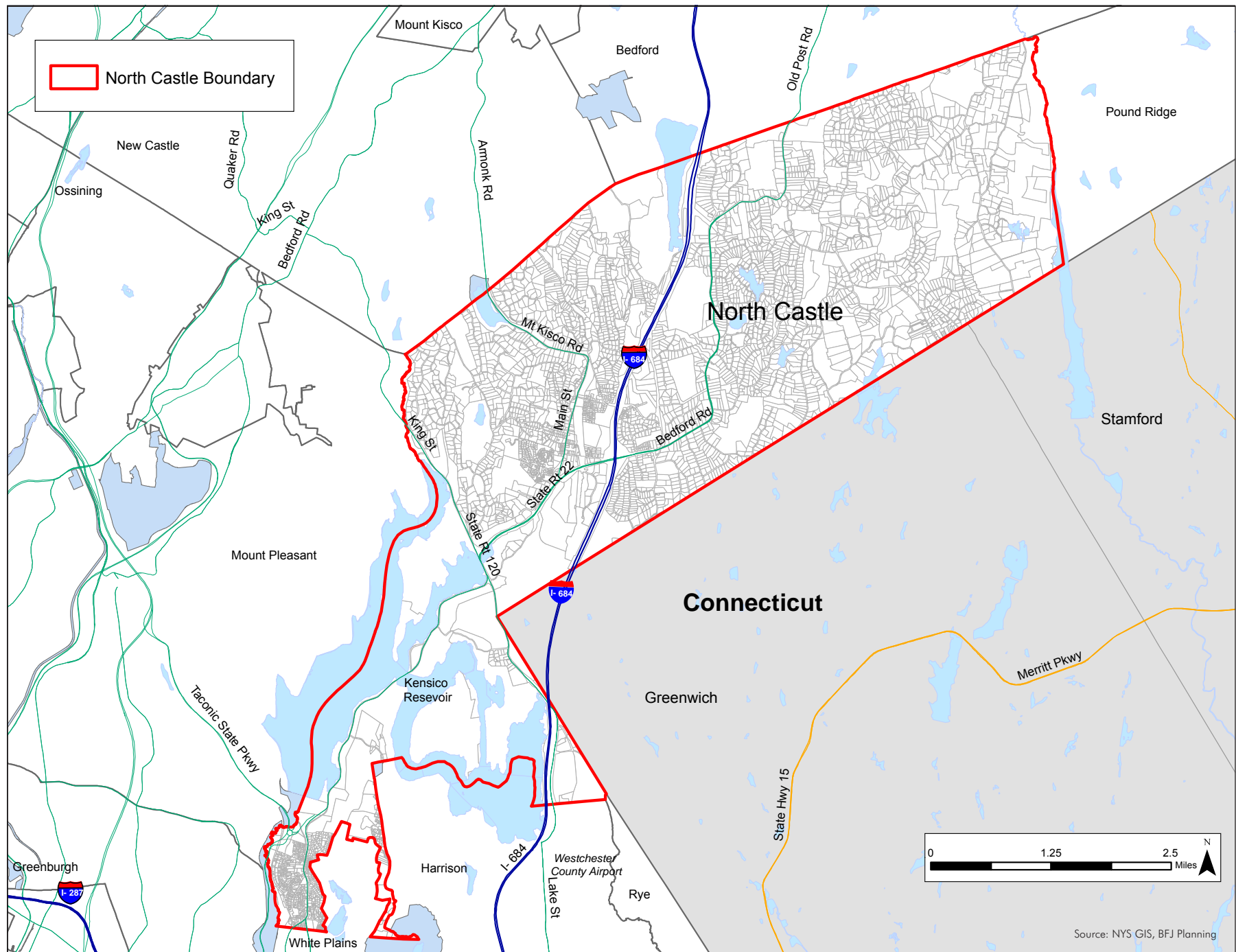


Figure 2: Local Context

2. REGIONAL CONTEXT

2.4 PLANNING CONTEXT

Relevant Regional Plans and Policies

A community's growth and development patterns are shaped most directly by the land-use and planning decisions made by its local government and by the tax rates and budget actions. However, many local concerns, such as air and water quality, traffic conditions and economic growth, have impacts that reach beyond municipal boundaries. These can be most effectively addressed when the regional context is taken into consideration. This broader outlook for growth and development is provided by vision and comprehensive plans issued by county and other municipal governments, and sometimes inter-municipal agreements. For North Castle, a number of plans developed at a regional and municipal level are relevant, including the following:

Westchester 2025: Plan Together

In 2006, the Westchester County Planning Board created *Westchester 2025*, a Web-based strategy framework for long-range planning. *Westchester 2025* is meant to help create a



single regional vision, and to assist the County planning board in advising on capital spending and incorporating the County's perspective in municipal

planning and zoning referrals. For North Castle, a key tool of *Westchester 2025* is the zoning build-out analysis developed by the Westchester County Department of Planning, which

provides an important understanding of potential development and density. The North Castle Planning Base Studies effort that preceded preparation of this Comprehensive Plan was also a part of *Westchester 2025*.

The County's 1996 plan, *Patterns for Westchester: The Land and the People*, organizes the county's municipalities, transportation network and natural environment as centers, corridors and open spaces, respectively. The premise of *Patterns* is that existing centers, if nurtured by necessary infrastructure, can support commercial and residential growth, and that existing strip development along corridors can be reshaped to capture some benefits of centers. *Patterns* identifies both Armonk and North White Plains as local centers, and Banksville as a hamlet center.

Regional Transportation Planning

The New York Metropolitan Transportation Council (NYMTC) is the Metropolitan Planning Organization (MPO) for New York City, Long Island and the lower Hudson Valley. NYMTC undertakes studies for transportation improvements in the region, forecasts future conditions and needs and makes decisions on the use of federal transportation funds.

NYMTC's 2014-2040 Regional Transportation Plan, *A Shared Vision for a Sustainable Region*, adopted in 2013, includes several projects relevant to North Castle. The most significant of these relate to the I-287 improvements connected with the Tappan Zee Bridge replacement; various improvements to I-684 and I-84 north of the Town; and infrastructure improvements along the Metro-North Harlem Line, with planned station improvements including at the North White Plains station).

2. REGIONAL CONTEXT

Regional Watershed Planning

North Castle's natural and built environment is largely defined by its surface water patterns, including rivers, lakes and reservoirs. The most significant of these is the Kensico Reservoir system, which encompasses much of the southwestern portion of the Town and separates the North White Plains hamlet from the rest of North Castle. The reservoir provides water for New York City, as well as a portion of North Castle, and development within the City's watershed lands is under the jurisdiction of the New York City Department of Environmental Protection (NYCDEP).

Most of North Castle lies within either the Bronx River or Inland Long Island Sound watersheds, which encompass 31% and 67%, respectively, of the Town's land area. Significant study has been undertaken in recent years in these watershed areas.

In 2007, the Westchester County Department of Planning released a watershed plan, the *Bronx River Watershed Assessment and Management Report*, which focused on improving water quality in the Bronx River and its tributaries by controlling the volume of polluted stormwater runoff. In 2011, the Byram Watershed Coalition published the *Byram River Watershed Management Plan* to identify strategies that address issues facing this sub-watershed of the Inland Long Island Sound watershed, including non-point source pollution, flooding and habitat degradation.

More recently, in 2016, the Mianus River Gorge advocacy group commissioned the *Mianus River Upper Watershed Analysis* to outline recommendations for managing groundwater resources in this part of the Inland Long Island Sound watershed.

Finally, the East of Hudson Watershed Corporation, a local development corporation established by the municipalities of

northern Westchester, Putnam and Dutchess Counties within the New York City watershed, implements projects to reduce phosphorous levels in stormwater runoff in the portion of the City's watershed east of the Hudson River. The group's efforts seek to reach compliance with the New York State Department of Environmental Conservation's (NYSDEC) requirements for phosphorous reduction and stormwater management.

Each of these plans, studies and strategies recognizes that drainage patterns cross municipal boundaries, and that localized planning decisions can have impacts on water resources throughout the region. Recommendations from each are discussed in greater detail in Chapter 5.

Hudson River Valley Greenway

The Hudson River Valley Greenway was created to advance New York's commitment to the preservation, enhancement and development of the scenic, natural, historic, cultural and recreational resources of the Hudson River Valley. The Greenway covers most municipalities of Westchester County, including North Castle.

By Local Law No. 10 of 2006, the Town of North Castle adopted the Westchester County Greenway Compact Plan, establishing it as a Greenway Community. Participating communities agree to ensure that local laws are consistent with regional planning efforts, and in turn are eligible for grants and other funding.

Local Planning

Through the years, the Town of North Castle has prepared and adopted plans and studies on land use planning, infrastructure, natural resources and open space. Several of the more recent and significant of these efforts are summarized below.

2. REGIONAL CONTEXT

North Castle Comprehensive Plan Update (1996)

This extensive document was the Town's first comprehensive plan in over 20 years. The 1996 Plan incorporated a detailed set of baseline analyses and a Development Plan outlining proposed land uses for the Town, largely reflecting the then-existing land-use pattern. Key changes from the prior (1974) plan included reducing residential development potential, linking trails and bikeways and creating design standards for the hamlets. The Town Board has periodically revised the Plan to reflect changes to existing and recommended land uses.

Armonk Main Street Planning and Design Study (2001)

This study aimed to address a range of issues affecting Main Street in Armonk, including a need for more parking, impacts of future anticipated development, traffic and pedestrian circulation and community character. Recommendations included reconfiguring on-street parking and adding off-street parking, implementing parking management strategies, roadway and intersection improvements, enhancing pedestrian connections to adjacent residential areas and increasing floor area ratio (FAR) to accommodate two-story development.

Open Space Study Committee Report (2003)

This report identified protection of water resources (groundwater, aquifers and reservoirs) as the most important goal for future open space preservation in North Castle. Based on an inventory and ranking of major (10+ acres) open space resources in the Town, the report recommended further efforts to assure some level of protection for undesignated spaces.

Hamlet Design Guidelines (2011)

This report provides design standards and recommendations for North Castle's three hamlet areas: North White Plains, Armonk and Banksville, in order to maintain their character and

aesthetics. The guidelines were proposed to be incorporated into a new Hamlet Overlay District that would encourage mixed-use development and design elements to create a sense of place. The overlay district has not been established.

Planning in Neighboring Municipalities

Several of North Castle's adjacent municipalities have engaged in comprehensive planning efforts in the past decade, while other plans have not been updated in some time:

- White Plains (2006)
- Greenburgh (2016)
- Mount Pleasant (1987)
- New Castle (update in process)
- Town of Bedford (2002)
- Pound Ridge (2010)
- Harrison (2013)
- Rye Brook (2014)
- Greenwich, CT (2009)
- Stamford, CT (2014)

Although the issues and opportunities examined in each of these plans differ based on local priorities, some common themes emerge. Some of these include strengthening downtown and hamlet areas through smart growth and transit-oriented development (TOD) policies; facilitating the reuse of obsolete corporate campuses; providing for a greater diversity of housing options to serve people of varied incomes and ages; and preserving and highlighting residential, cultural and historic community assets. Many of these planning strategies developed by North Castle's neighbors may be considered to address some of the Town's issues as well.

3. DEMOGRAPHICS AND GROWTH TRENDS

3. DEMOGRAPHICS AND GROWTH TRENDS

3.1 POPULATION OVERVIEW

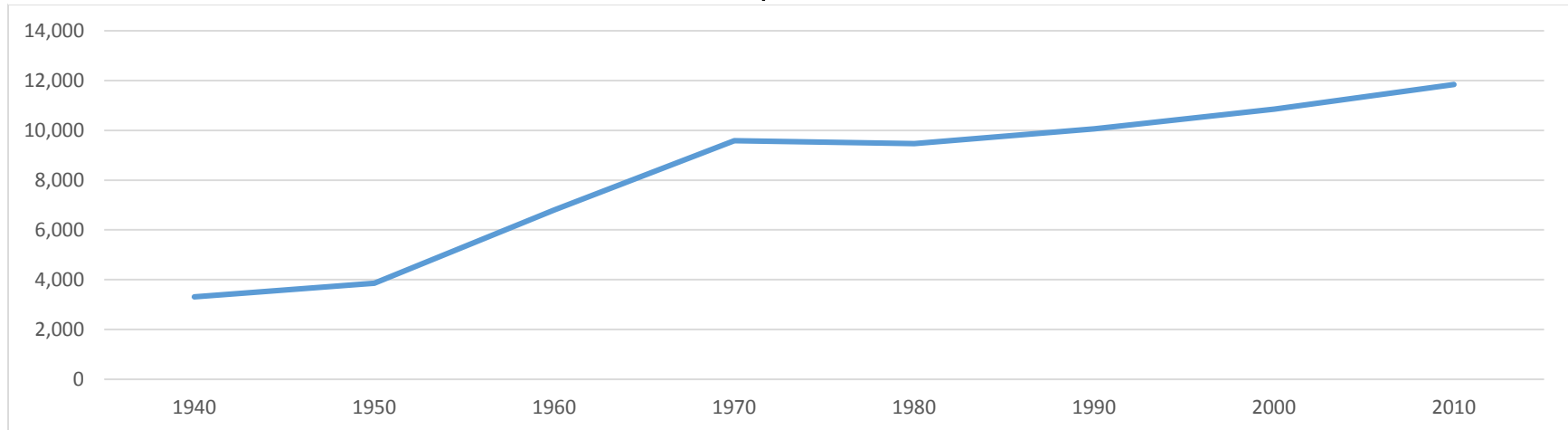
As the suburbs of New York City expanded rapidly during the post-World War II years, North Castle's population nearly tripled. The number of residents increased from 3,306 to 9,591 between 1940 and 1970, with a gain of 76% from 1950 to 1960. As shown in Chart 1, the Town's growth stalled during the 1970s – as experienced throughout the region – but began growing again after 1980, although not at the same pace as in the highest-growth period.

Regional suburban growth largely subsided over the last 30 years; however, compared with similar communities in Westchester County, the Town's growth remains relatively strong. As shown in Table 1 below, the population of North Castle has increased by 25.1%, or from 9,467 in 1980 to

11,841 in 2010. North Castle's growth during this period was more than double that of Westchester County (+9.5%). While some other municipalities in the county saw moderating growth during the 2000s, North Castle's growth was greater during the last decade than the previous two decades. Nonetheless, as discussed later in this chapter, the Town's population growth rate is unlikely to reach the level of the mid-20th century. Development restrictions linked to the presence of the New York City watershed lands, as well as zoning designed to protect low-density suburban character, have served to limit growth in North Castle and its neighbors. These factors are not likely to change.

The Town's 2010 population density was just 0.71 residents per acre (see Table 2). In all of Westchester County, only Bedford, Lewisboro, North Salem and Pound Ridge were less dense than North Castle. These surrounding communities, as well as Mount Pleasant, were all similarly low in density with less than two persons per acre.

Chart 1: North Castle Population Growth, 1940-2010



Source: U.S. Census Bureau; North Castle 1996 Comprehensive Plan Update

3. DEMOGRAPHICS AND GROWTH TRENDS

Table 1: Total Population by Municipality & Westchester County, 1980-2010

Municipality	Bedford	Greenwich, CT	Harrison	Mount Pleasant	New Castle	North Castle	Pound Ridge	White Plains	Westchester County
1980	15,137	59,578	23,046	23,760	15,425	9,467	4,009	46,999	866,599
1990	16,906	58,441	23,308	25,242	16,648	10,061	4,550	48,718	874,866
2000	18,133	61,101	24,154	26,151	17,491	10,849	4,726	53,077	923,459
2010	17,335	61,171	27,472	26,176	17,569	11,841	5,104	56,853	949,113
1980-1990	+11.7%	-1.9%	+1.1%	+6.2%	+7.9%	+6.3%	+13.5%	+3.7%	1.0%
1990-2000	+7.3%	+4.6%	+3.6%	+3.6%	+5.1%	+7.8%	+3.9%	+8.9%	5.6%
2000-2010	-4.4%	+0.1%	+13.7%	+0.1%	+0.4%	+9.1%	+8.0%	+7.1%	2.8%
1980-2010	+14.5%	+2.7%	+19.2%	+10.2%	+13.9%	+25.1%	+27.3%	+21.0%	9.5%

Source: U.S. Census Bureau, Decennial Censuses, 1980-2010.

Table 2: Population Density by Municipality & Westchester County, 2010

	Acres	Population per Acre	2010 Population	2010 Density Ranking
Bedford	25,280	0.69	17,335	40
Greenwich, CT	30,478	2.01	61,171	N/A
Harrison	11,136	2.17	27,472	31
Mount Pleasant	15,424	1.75	26,931	34
New Castle	14,784	1.19	17,569	37
North Castle	16,768	0.71	11,841	39
Pound Ridge	14,848	0.32	5,104	43
White Plains	6,336	8.38	56,853	10
Westchester County	286,720	3.31	949,113	N/A

Source: U.S. Census Bureau, 2010 Decennial Census.

3. DEMOGRAPHICS AND GROWTH TRENDS

In addition to making comparisons with neighboring municipalities and Westchester County as a whole, this chapter looks at socioeconomic conditions across North Castle's three hamlet areas of Armonk, North White Plains and the Eastern District (Banksville). Residents' opinions of the hamlet boundaries may vary based on a range of factors including zip code, school districts or historic patterns of development. This Comprehensive Plan, following the practice of the Town's Planning Department, has used the 2010 U.S. Decennial Census Tract boundaries, shown in Map 1, as follows:

- Hamlet of Armonk: Census Tract 123.03
- Hamlet of North White Plains: Census Tract 123.01
- Hamlet of Eastern District (Banksville): Census Tract 123.04

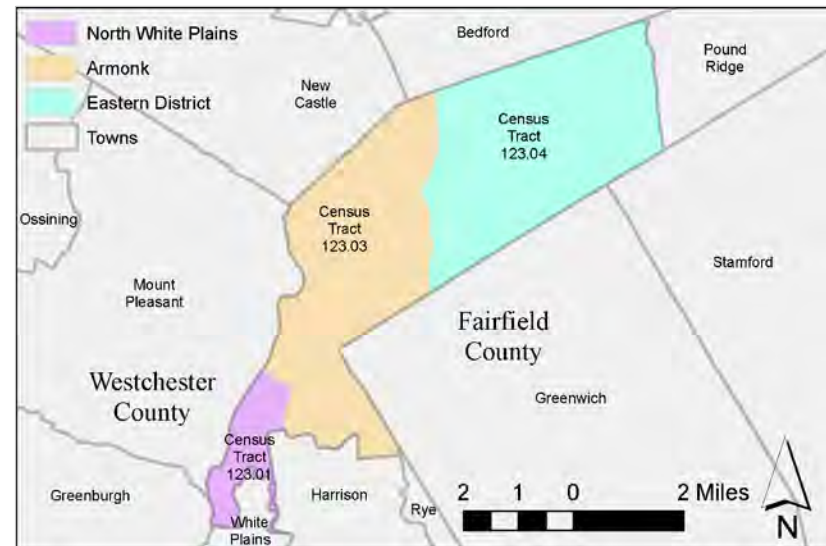
3.2 DEMOGRAPHIC TRENDS

Age Groups

North Castle residents tend to be somewhat older than those in neighboring communities. Chart 2, below, illustrates median age (half are older, half are younger) of area residents in 2000 and 2010. The median age has increased, reflecting national trends of an aging population and lower fertility rates.

Although the Town is an older community overall in the context of Westchester County, it has a sizeable population under age 18 (29.4%) compared with the County (23.2%). The youth population is concentrated primarily in Armonk and North White Plains, where about one in three residents is a minor (see Chart 3). North Castle's somewhat smaller young adult (18-34) population and slightly larger share of middle-age population (35-64) are driving the Town's older median age. Within North White Plains, for example, the share of the young adult

Hamlets & Census Tract Boundaries of North Castle



Source: U.S. Census Bureau, 2010 Census Tract Boundaries & Esri

population is just 7.4%, compared with 20.1% in the County. The lack of younger residents in North Castle may reflect the high cost of living, low number of local jobs and lack of cultural and entertainment amenities typically enjoyed by young adults.

Table 3 shows the population age groups over time for North Castle and the County. The table further illustrates how the Town has maintained an older population as a whole, despite a growing number of children. While the number of children under 18 grew by 9.2%, or 296 persons, from 2000 to 2010, the population aged 50 or older added 1,012 residents, or 31.4%. For the County, that age group increased by 49,412 residents, or 17.8%, far less substantial than the aging seen in the Town.

Looking at changes among the working and non-working age population in North Castle, the last decade saw a population gain of 4.5% among working-age residents 18-64 and a 16%

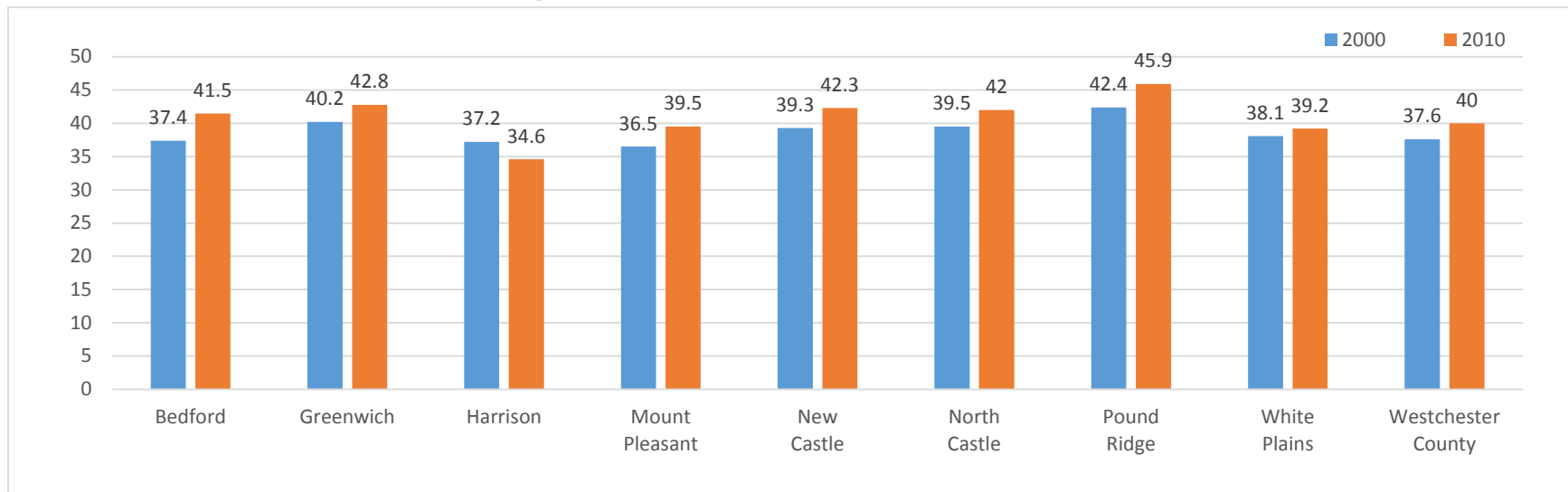
3. DEMOGRAPHICS AND GROWTH TRENDS

gain for all other residents under age 18 and 65 years or older. Such unbalanced population growth could expand the tax burden on working-age residents, as senior and youth populations typically demand higher levels of public services.

North Castle's declining share of young adults is related to the Town's housing supply, which is dominated by single-family homes in an increasingly expensive housing market. This residential make up has successfully attracted families with

young children, but the lack of small apartments ensures that young adults raised in North Castle must either live with their parents before starting families of their own or move elsewhere. In addition, housing stock diversity could also help local employers retain a competitive workforce. As older householders are expected to age in place, greater municipal resources may need to be invested to provide senior-friendly recreational activities and improve accessibility such as pedestrian friendly street systems and paratransit services.

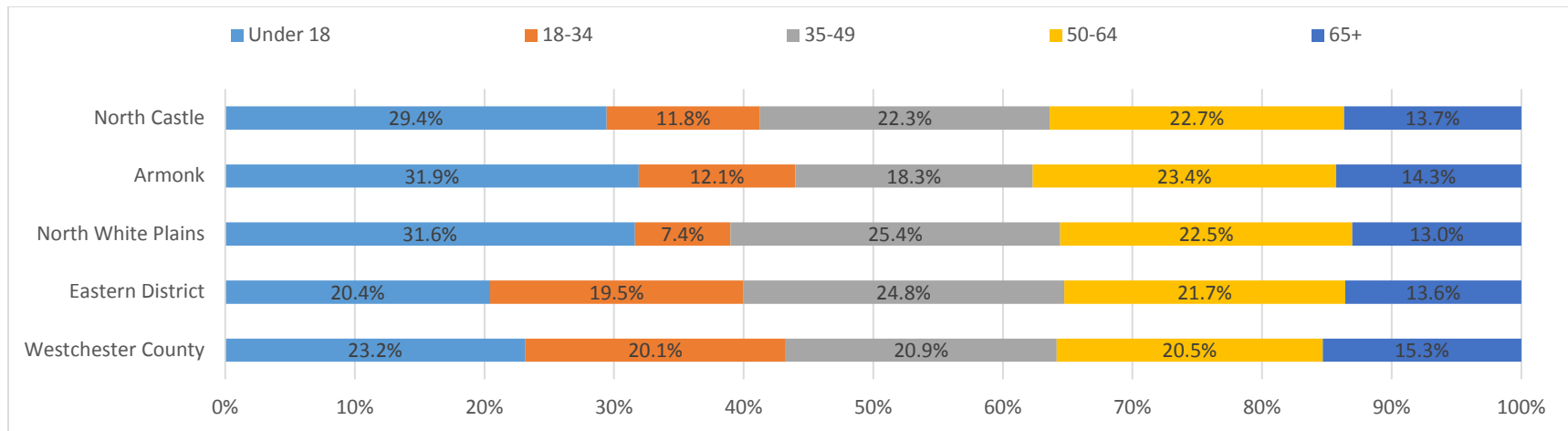
Chart 2: Median Age of North Castle and Other Area Residents, 2000 and 2010



Source: U.S. Census Bureau, 2010-2010 Decennial Censuses.

3. DEMOGRAPHICS AND GROWTH TRENDS

Chart 3: Distribution of Population by Age, 2011-2015



Source: U.S. Census Bureau, American Community Survey, 2011-2015 5-year Estimate.

Table 3: North Castle and Westchester County, Population by Age Cohort, 2000 to 2015

	North Castle					Westchester County				
	Count			Change		Count			Change	
	2000	2010	2011-15	2000-2010	2010-2015	2000	2010	2011-15	2000-2010	2010-2015
Total	10,849	11,841	12,141	9.1%	2.5%	923,459	949,113	967,315	2.8%	1.9%
Under 17	3,224	3,520	3,574	9.2%	1.5%	230,797	228,000	224,115	-1.2%	-1.7%
18-34	1,406	1,349	1,436	-4.1%	6.4%	189,987	185,000	194,174	-2.6%	5.0%
35-49	2,995	2,736	2,713	-8.6%	-0.8%	225,199	209,225	202,333	-7.1%	-3.3%
50-64	2,063	2,671	2,759	29.5%	3.3%	148,512	187,766	198,458	26.4%	5.7%
65 or older	1,161	1,565	1,659	34.8%	6.0%	128,964	139,122	148,235	7.9%	6.6%

Source: U.S. Census Bureau, 2000-2010 Decennial Censuses & American Community Survey, 2011-2015 5-Year Estimate.

3. DEMOGRAPHICS AND GROWTH TRENDS

Race/Ethnicity

As shown in Table 4, North Castle and its hamlets remain a majority white, non-Hispanic community with marginal gains in racial and ethnic diversity. While in 2000 there was an equal share of Asian/Other and Hispanic Town residents (both 4.1%), by 2010 the share of Hispanic residents had climbed to 7.1% of the population, as the Asian/Other population grew to 5.2% of the total. Much of the gain in the Hispanic population was concentrated in North White Plains, which increased its share of Hispanic people from 8.5% to 22%, a 320-person gain over the 10-year period. North White Plains also added the largest number of Asian/Other residents (+89 persons) with a smaller gain in Armonk (+55 persons). The size in all race-ethnicity categories increased except for the Black population, which lost three residents in the Town.

Compared with the County, North Castle has slightly smaller population shares of Asian/Other residents and those that identify with two or more racial groups. While the County's White non-Hispanic population share declined to nearly one in two residents, the Town's White non-Hispanic population remains the predominant race-ethnicity group. The Town doubled its resident Hispanic population in the last decade from 449 to 906 persons, while the County's Hispanic population grew by 43.6%. The Asian/Other population rose by 39.8% in the Town, nearly double the County's gain (+24.1%).

Table 4: Population by Mutually Exclusive Race-Ethnicity, 2000 to 2010

Total Population	<i>North Castle</i>		<i>Armonk</i>		<i>North White Plains</i>		<i>Eastern District</i>		<i>Westchester County</i>	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Total	10,849	11,841	4,092	4,777	1,846	2,168	4,911	4,896	923,459	949,113
White	9,682	9,994	3,627	4,221	1,533	1,396	4,522	4,377	591,776	544,563
Black	182	179	83	32	62	101	37	46	125,227	126,585
Asian/Other	442	618	184	239	63	152	195	227	45,326	56,239
2 or More Races	94	144	41	51	31	42	22	51	17,006	14,694
Hispanic/Latino	449	906	157	234	157	477	135	195	144,124	207,032
Percent of Population	<i>North Castle</i>		<i>Armonk</i>		<i>North White Plains</i>		<i>Eastern District</i>		<i>Westchester County</i>	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
White	89.2%	84.4%	88.6%	88.4%	83.0%	64.4%	92.1%	89.4%	64.1%	57.4%
Black	1.7%	1.5%	2.0%	0.7%	3.4%	4.7%	0.8%	0.9%	13.6%	13.3%
Asian/Other	4.1%	5.2%	4.5%	5.0%	3.4%	7.0%	4.0%	4.6%	4.9%	5.9%
2 or More Races	0.9%	1.2%	1.0%	1.1%	1.7%	1.9%	0.4%	1.0%	1.8%	1.5%
Hispanic/Latino	4.1%	7.7%	3.8%	4.9%	8.5%	22.0%	2.7%	4.0%	15.6%	21.8%

Source: US Census Bureau, 2000-2010 Decennial Censuses.

3. DEMOGRAPHICS AND GROWTH TRENDS

Place of Birth

Trends in resident place of birth are illustrated in Chart 4. Following Pound Ridge (9.1%), the percentage of North Castle residents that are foreign-born (11.5%) is the second lowest among all surrounding municipalities and less than half the share of such residents in Westchester County (25.3%). North Castle's foreign-born population remained largely unchanged from 2000 to the five-year average period of 2011-2015 with an estimated gain of 13 residents, from 1,383 to 1,396, while the share of such residents has fallen from 12.7% to 11.5% of the total population. Almost seven in 10 (67.6%) of North Castle's foreign-born population are naturalized U.S. citizens.

Educational Attainment

With more than two-thirds of residents aged 25 or older (69%) having attained a Bachelor's degree or higher level of education, North Castle is considered a very highly educated community (see Chart 5 below). The Town has a higher share of residents with a Bachelor's degree than most surrounding communities, although higher shares are present in New Castle (84%) and Pound Ridge (73%). North Castle's educational attainment is far higher than the County as a whole, where just under half of residents have earned a Bachelor's degree. Nearly all (97%) North Castle residents aged 25 or older have earned a high school degree or equivalent, and 37% of residents have earned at least a Master's degree.

Communities with a large percentage of married couple households typically also have high levels of educational attainment. Married-couple households provide both financial and family security, allowing individuals to pursue advanced degrees without risking loss of income. In addition to family structure, the Town's share of middle-aged residents (35-64) could be a contributing factor to high levels of educational

attainment, especially doctoral and legal degrees, which are generally obtained after age 30. Furthermore, North Castle is home to several large offices that employ a sizeable number of highly skilled information-technology and financial-service workers. IBM (850 workers) and SwissRe Life and Health (176 workers), further contribute to high educational attainment in the Town, as workers generally prefer to live within close proximity to their workplace. A high share of highly educated residents reflects the population's strong demand for social, cultural or intellectual stimulation. Further municipal investment should be focused on supporting or attracting educational and community facilities, arts groups, music or performing arts spaces or independent movie theaters.

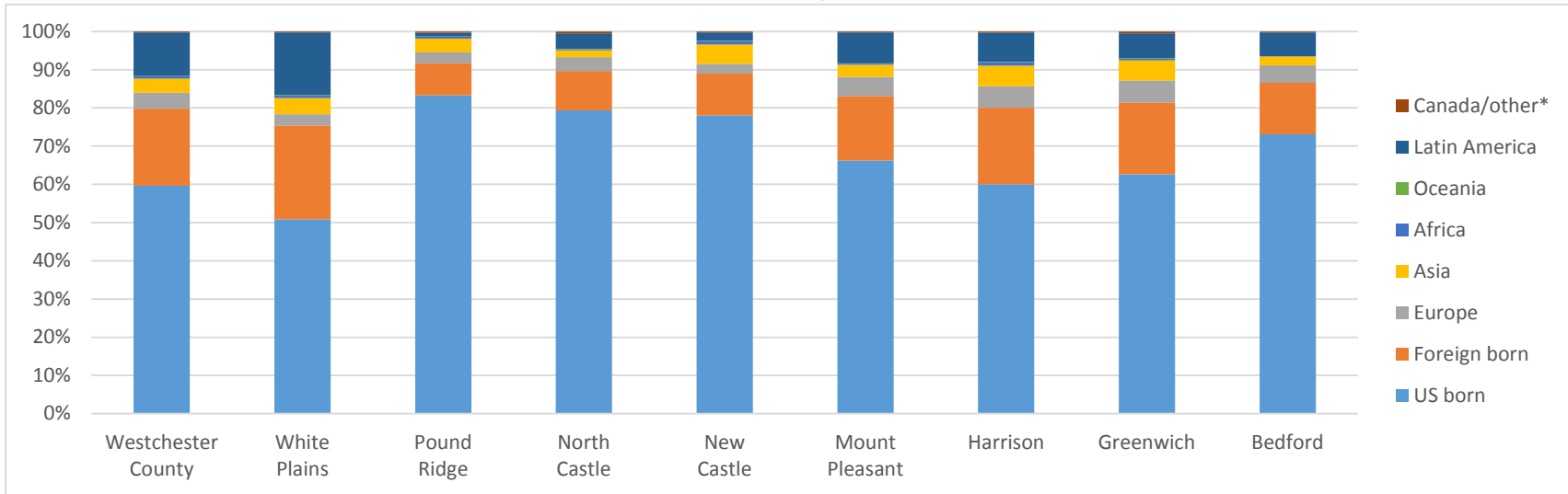
Household Incomes, Type and Size

Median household income is often a reflection of educational attainment, and that appears to be the case throughout North Castle and much of Westchester County. Table 5, below, compares median household income in North Castle, Westchester County and surrounding municipalities in the years 1999 (2000 Census) and 2015. The amounts have been adjusted for inflation to 2015 dollars to allow a more accurate look at the actual financial status.

As shown in the table, the Town saw an increase in median income in constant dollars, in contrast to many of its neighbors, which experienced declines. Median household income grew by 3.1% after inflation in North Castle, while it dropped by 6.9% in the County and over 10% in Bedford, Mount Pleasant, New Castle and Pound Ridge. North Castle's stable incomes may reflect in part the sharp growth in residents aged 50-64 with already high incomes, and the loss of young and middle-aged adults 18-49 with generally lower earnings potential.

3. DEMOGRAPHICS AND GROWTH TRENDS

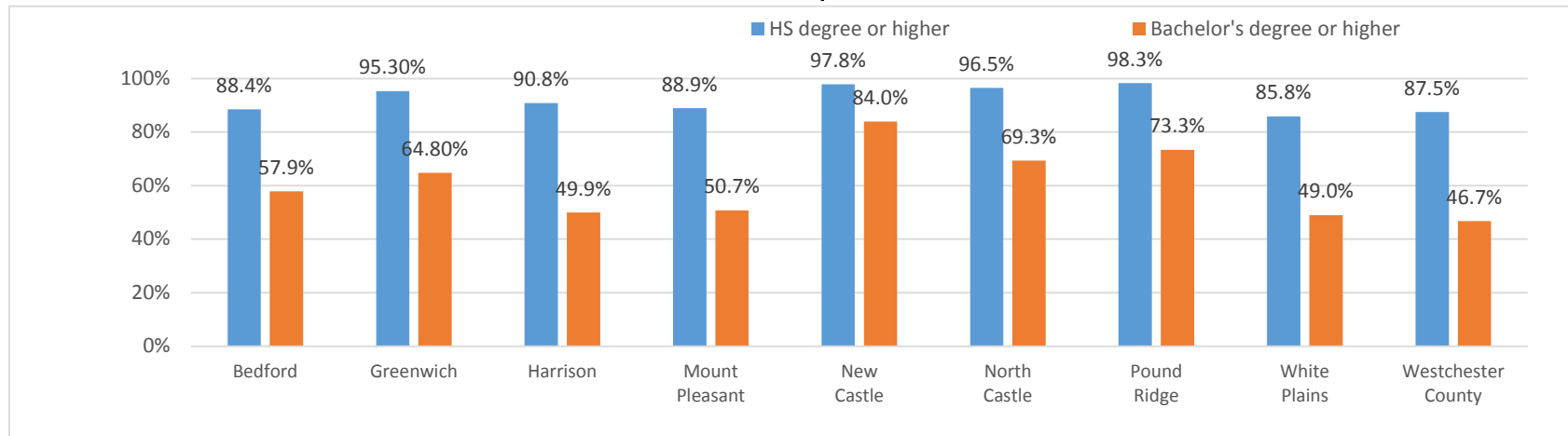
Chart 4: Share of Total Population by Place of Birth, 2011 to 2015



Note: (*) Includes Canada, Greenland, Bermuda, and St. Pierre and Miquelon.

Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimate.

Chart 5: Educational Attainment for the Adult Population 25 Years and Older, 2011 to 2015



Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimate

3. DEMOGRAPHICS AND GROWTH TRENDS

From 2000 to the five-year period of 2011-2015, North Castle added 313 households, increasing from 3,583 to 3,896 (+8.7%). Household growth was relatively weaker in the County, with a gain of 1.4%. The Town's growth was primarily the result of the addition of married-couple families (+248 households) and to a lesser extent single-parent household growth (+52 households). Both households with and without children grew at relatively similar rates (+8.3% and +9.1%, respectively).

As illustrated in Chart 6, below, households in North Castle are predominantly in the form of married-couple families, accounting for three in four households (74.9%) over the 2011-2015 five-year period. This share was substantially greater than in Westchester County, where just over half of households (52%) are married couples. Each hamlet area roughly reflects the Town's household make up. The Eastern District has a larger share of non-families without children (17.9%), but is still

significantly smaller than the County's share (30.3%). North White Plains has the highest percentage of married couples with children (45%). This is offset by smaller percentages of single-parents with children (1.4%) and non-families without children (13%) than any other hamlet or North Castle as a whole.

North Castle remains a highly attractive community for married-couple households with young children due to several factors, including its high-ranking school district, proximity to high-quality jobs and a housing supply dominated by single-family owner-occupied homes highly preferred by householders with children. Perhaps as a result of limited housing options for smaller families, there is a low share of single-parent households with children in North Castle reflecting a pattern of out-migration following separation or divorce.

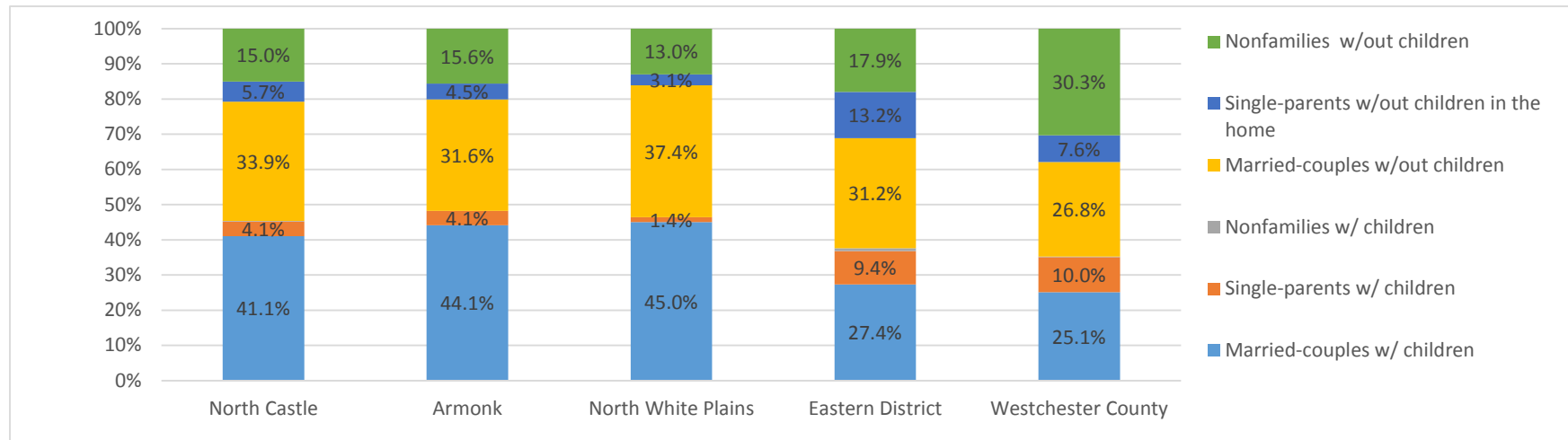
Table 5: Median Household Income, 1999 to 2015 (Adjusted to 2015\$)

Area	1999 (2015\$)		2015		Change 1999-2015	
					Number	Percent
Bedford	\$	141,868	\$	127,644	\$ (14,224)	-10.0%
Greenwich	\$	140,497	\$	128,153	\$ (12,344)	-8.8%
Harrison	\$	114,481	\$	104,469	\$ (10,012)	-8.7%
Mount Pleasant	\$	114,955	\$	102,142	\$ (12,813)	-11.1%
New Castle	\$	226,431	\$	199,426	\$ (27,005)	-11.9%
North Castle	\$	167,054	\$	172,167	\$ 5,113	+3.1%
Pound Ridge	\$	217,239	\$	176,591	\$ (40,648)	-18.7%
White Plains	\$	83,013	\$	80,442	\$ (2,571)	-3.1%
Westchester County	\$	90,155	\$	83,958	\$ (6,197)	-6.9%

Source: U.S. Census Bureau, 2000 SF 3 & American Community Survey 2011-2015 5-Year Estimate.

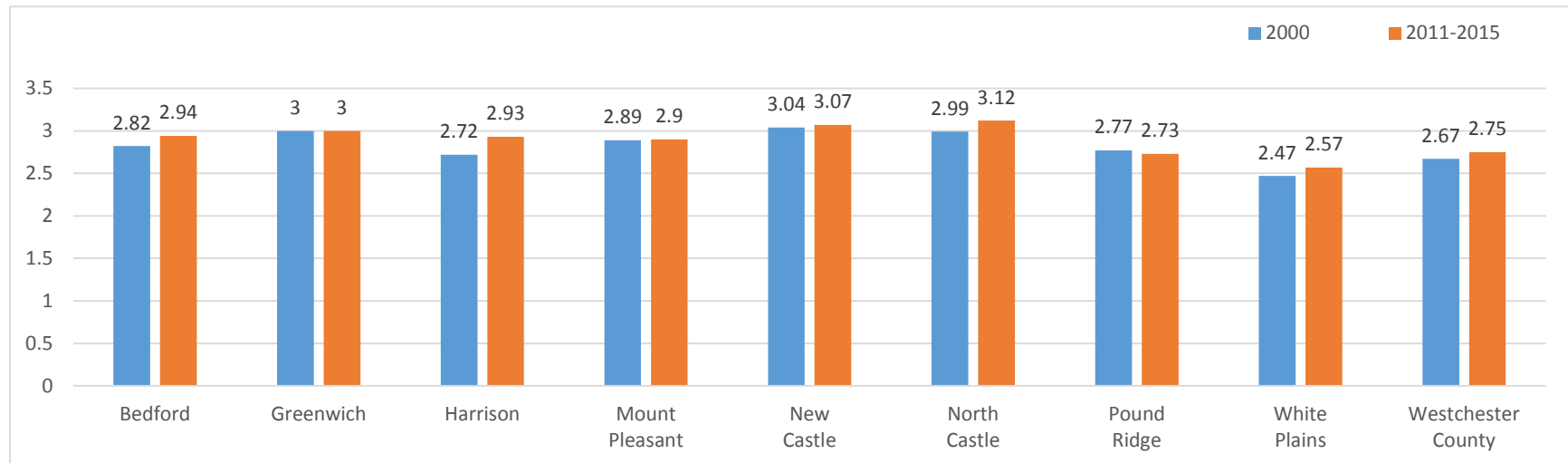
3. DEMOGRAPHICS AND GROWTH TRENDS

Chart 6: North Castle and Westchester County, Households by Type, 2011-2015



Source: U.S. Census Bureau, 2000 Decennial Census & American Community Survey 2011-2015 5-Year Estimate.

Chart 7: North Castle and Westchester County, Average Household Size, 2000 to 2015



Source: U.S. Census Bureau, American Community Survey, 2011-2015 5-Year Estimate.

3. DEMOGRAPHICS AND GROWTH TRENDS

Many factors, including householder age, household type, housing unit type, income and cultural norms, contribute to a community's average household size. As shown in Chart 7, North Castle and New Castle have equally the highest household size in the region. They have similar demographic characteristics, including older residents and higher income and educational attainment, compared with neighboring areas.

3.3 FUTURE RESIDENTIAL GROWTH

North Castle's population has grown over the past decade, but that growth is projected to slow in the coming decades. According to the New York Metropolitan Transportation Council (NYMTC) 2050 population forecasts, and the availability of developable land, the Town's population is expected to grow at an annual rate of 0.55%, somewhat less than the annual growth rate of the past decade (0.88%), but nearly equal to the rate expected in Westchester County (0.57%).

In 2012, the Westchester County Department of Planning prepared a build-out analysis, a tool used to determine the maximum amount and type of development that could occur under existing zoning conditions. The analysis found that current zoning in North Castle allows for development of only 644 additional dwelling units, with a resulting population gain of 1,787 residents if all such units were developed. The analysis suggests that current zoning will serve to meet 67.6% of future household demand. A build-out analysis is a theoretical saturation point that assumes that all undeveloped or underutilized land is developed to its maximum potential under the zoning. Such a maximum development scenario may take many years to reach, if ever.

Opportunities exist to attract young Millennials, many of whom will start families over the next decade. Recent trends suggest that both Millennials and Baby Boomers in early retirement years have shown strong housing preferences for transportation accessibility, cultural and entertainment attractions and affordable housing (see Chapter 6). Development of multi-family residential projects, particularly in areas of the Town that have good highway and transit access, could meet North Castle's future housing demand while preserving the historic character of its neighborhoods.

Several large residential projects have been proposed for North Castle in recent years, including: The Vue at 1700 Old Orchard Street (200 units, proposed), Brynwood Golf and Country Club at 568 Bedford Road (73 units, approved) and Armonk Commons at 156 Bedford Road (36 units, proposed). These projects, if approved, could serve to meet demand for a greater range of housing types; however, any future development must carefully assess potential impacts on the environment and nearby residential neighborhoods.

In recent years, the Town has seen its senior and older workforce population (aged 50-64) increase in number, while the young adult population (ages 18-34) and prime labor force age population (35-49) has declined. The high cost of housing and inadequate supply of varied housing types for rent or sale will likely make it difficult for people to age in place while young households will decrease in number.

3. DEMOGRAPHICS AND GROWTH TRENDS

3.4 ISSUES AND OPPORTUNITIES

North Castle households are considered to be resource-rich, with socioeconomic characteristics indicating a high level of prosperity. The Town has higher income, educational attainment levels and a greater share of homeowners living in single-family homes than surrounding areas. North Castle's affluence may be attributed to several factors, including the percentage of the population that is married, a large concentration of older householders, and a majority of non-Hispanic White householders, all demographic groups most likely to obtain a high level of material well-being according to the U.S. Census Bureau.² Due to factors of supply and demand, a community's level of affluence is directly related to housing values. As household incomes rise, home prices typically accelerate, resulting in a higher tax base and the ability of the local municipal government to provide higher levels of service. However, such growth in home prices may lead to concerns about the relative affordability of housing. To help ensure opportunities for the young and the elderly to stay within the community and an adequate supply of labor at all wage levels to meet local employer demand, a diversity of housing options at various prices may be desired.

² Julie Siebens, "Extended Measures of Well-Being: Living Conditions in the United States: 2011", U.S. Census Bureau, Household Economic Studies, September 2013.

4. LAND USE AND ZONING

4. LAND USE AND ZONING

The built environment – the type, location and intensity of existing and future land uses – helps to define the character of a town. It is important to know where and how much land is presently developed for residential, business, recreation and other uses. Examining these developed areas helps residents visualize desirable and undesirable aspects of land use patterns and provides a foundation for the planning policies guiding future development of vacant or under-developed parcels. A municipality's zoning and subdivision regulations are the major regulatory tools with which it can control land uses and influence future development patterns and practices. Below is a summary of the existing land use, development patterns and zoning in the Town of North Castle.

4.1 LAND USE

North Castle as a whole is a predominantly low-density residential community. With a population of 452 people per square mile according to the 2010 Census, it is the second-lowest density municipality in Westchester County (behind only North Salem). This factor primarily reflects the large amount of land area owned by the New York City Department of Environmental Protection (NYCDEP) as watershed lands.

Population density in the Town's hamlet areas of North White Plains and Armonk – and to a lesser extent Banksville – is higher than North Castle's overall density. The three hamlet areas each offer a unique character and land use pattern. Armonk maintains a pedestrian-friendly downtown area and is home to the Town's traditional retail corridor along Main Street. North White Plains is the oldest hamlet, with two distinct commercial

sections centered along Rt. 22. The area south of the Central Westchester Parkway, adjoining the City of White Plains, has a more urban, compact character, while the area to the north features suburban strip mall development. North White Plains is geographically separated from Armonk and surrounding low-density residential areas by two major land uses: office parks next to I-684 and water supply lands that surround the Kensico Reservoir. Banksville is the most rural of the three hamlets, and mixes low-density residential and commercial properties along Bedford-Banksville Road, its major thoroughfare.

As indicated in Table 6 and Figure 3, single-family homes comprise the greatest percentage of the Town's land use, representing 42% of the total land area, and the vast majority of all residential use. Apartments or multi-family residences are a small percentage of the Town's land use (1.2%), and are located primarily in Armonk and North White Plains.

The second-largest land use in North Castle is open space, consisting of public parks, private recreation, agricultural uses, cemeteries, homeowners' association common lands and other preserved areas. Of this category, nature preserves and water supply lands surrounding the Kensico Reservoir together encompass three-quarters of the open space in the Town.

Institutional (nonprofit or municipal) uses make up 2.4% of the total land area. The largest of this type of use is Fordham University's Louis Calder Center, a 113-acre biological field station located in a forested preserve next to Cedar Lake. Public school facilities also account for a large portion of the Town's community resources land area. Smaller community uses include houses of worship, fire stations, libraries and government buildings.

4. LAND USE AND ZONING

Mixed-use and retail development make up less than 1% of the Town's land area, and are generally focused in the hamlets. Main Street in Armonk is North Castle's traditional "downtown," characterized by one- and two-story buildings generally oriented toward the street with surface parking. Additional commercial uses along Rt. 22 in North White Plains are a mix of mostly auto-oriented retail establishments. Banksville has a small commercial node with several stores and restaurants.

Office use (3.7% of land area) is mainly in the form of corporate campuses and office parks near I-684. The world headquarters of IBM, the Town's largest employer, has an approximately 370-acre campus south of Armonk-Bedford Road.

Industrial land use includes manufacturing, warehouse and distribution facilities, and accounts for only 0.4% of the land area in North Castle. Several industrial properties are located in the Armonk area, just east of downtown and on Business Park Drive, taking advantage of the easy access to I-684 and Route 22. The other concentration of manufacturing, industrial and warehousing uses is along Lafayette Avenue and Virginia Road in North White Plains near the Metro-North rail yard facilities.

4.2 ZONING

Zoning is the main control for development and redevelopment of land. The Town's basic zoning requirements are discussed below, summarized in Tables 7 and 8, and depicted in Figure 4.

The Town has 30 zoning classifications. There are eight single-family residential districts, a two-family residential district and four multi-family residential districts. The Town has two mixed-use districts, 12 commercial and office districts, four industrial districts and several specialized floating or overlay districts.

Table 6: Existing Land Use

<u>Land Use</u>	<u>Acres</u>	<u>Percent of Total Land Area</u>
Residential	7189	43.0%
Single-Family	7033	42.0%
2-3 Family	152	0.9%
Condominiums, Apartments and Multi-family	4	0.02%
Commercial	684	4.1%
General Commercial and Retail*	70	0.4%
Office and Research	614	3.7%
Mixed Use	30	0.2%
Institutional and Public Uses	394	2.4%
Light Industrial	75	0.4%
Parks and Open Space	5,443	32.5%
Parks, Parkway Lands and Open Space	852	5.1%
Private Recreation	320	1.9%
Cemetery	17	0.1%
Common Homeowners Association Lands	3	0.0%
Nature Preserves	1033	6.2%
Water Supply Lands and Waterbody	3075	18.4%
Transportation/Utility/Road Rights-of-Way	1480	8.8%
Vacant/Undeveloped	1387	8.3%
TOTAL	16735	100.0%

Source: Westchester County Department of Planning (2016)

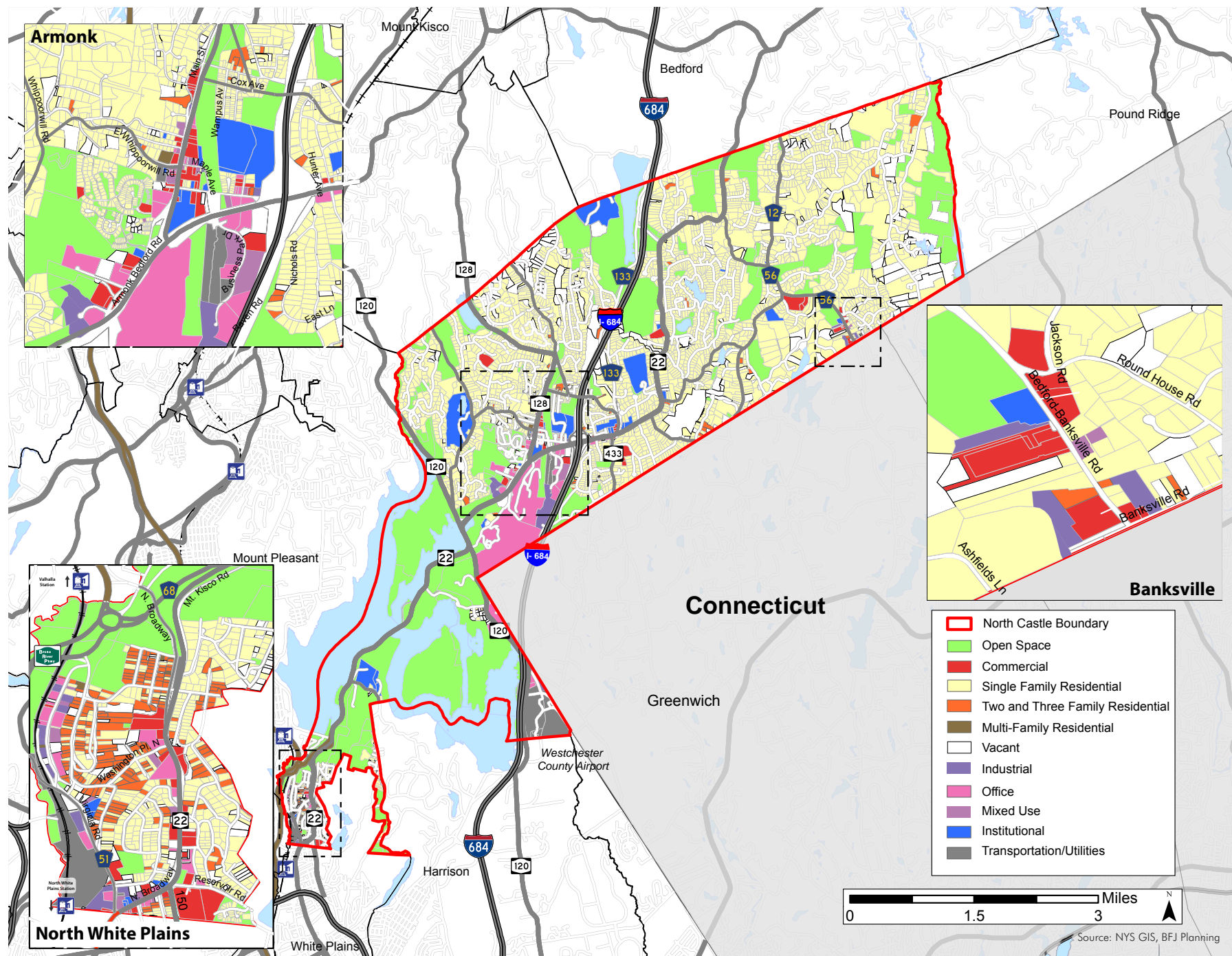


Figure 3: Existing Land Use

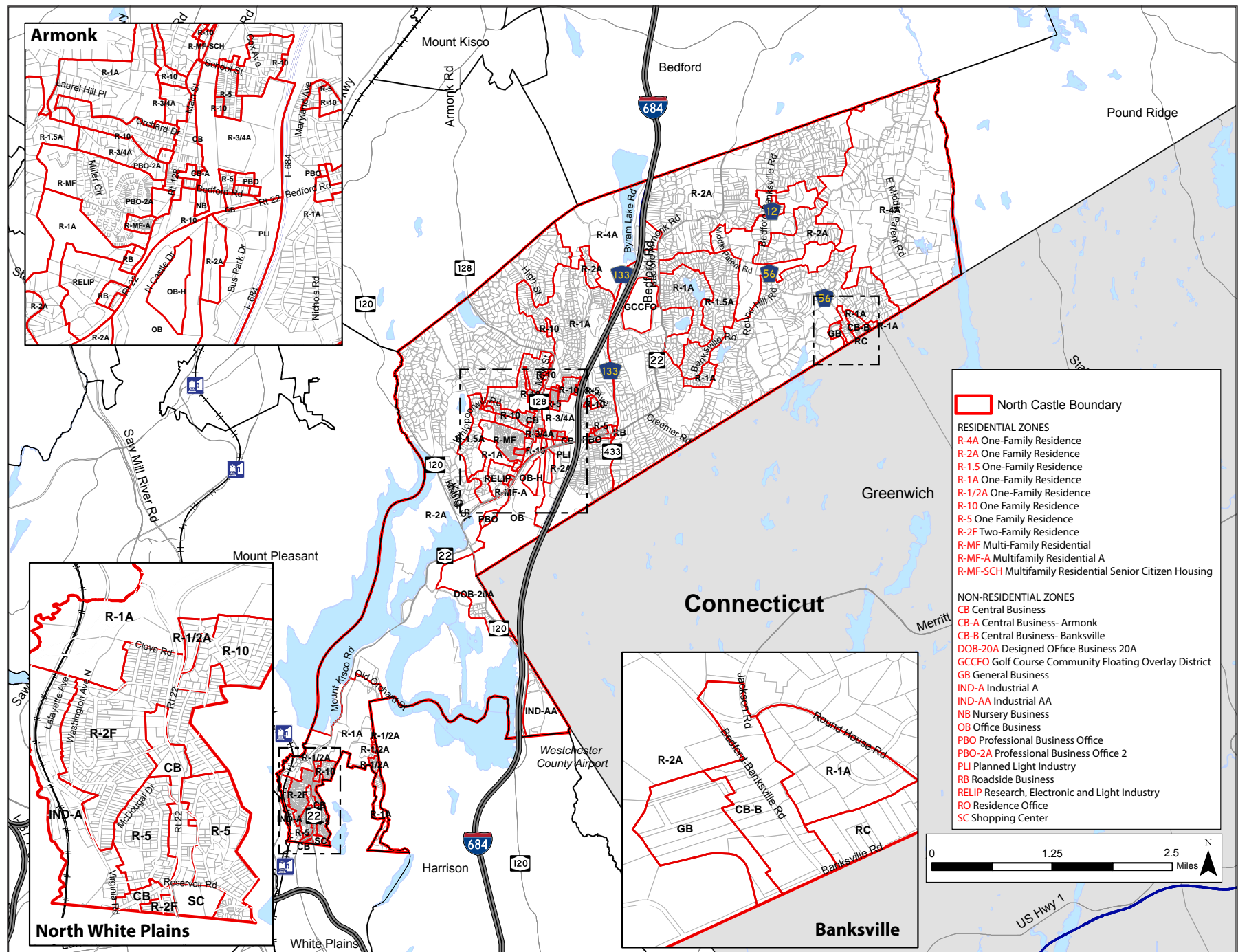


Figure 4: Zoning Map

4. LAND USE AND ZONING

Residential

Eight of North Castle's residential zones allow only single-family homes as the primary permitted use, with minimum lot sizes ranging from 5,000 square feet to 4 acres. The R-2F district is intended for single- and two-family residences, and the R-MF, R-MFA and R-MF-SS districts permit attached, semi-detached, detached or multi-family dwellings. All multi-family districts are located in Armonk. A total of 15,529 acres, or approximately 93% of the Town's land area, is zoned for residential use.

Commercial

The Town has seven commercial districts. There are three central business districts, two designated by hamlet area (Armonk, CB-A and Banksville, CB-B), and a general Central Business district (CB) that is mapped in both Armonk and North White Plains. All three central business districts are meant to provide convenient shopping options through coordinated development in their hamlet areas. The CB-A district covers the Armonk Square complex in the downtown area. The CB-B district is located on Bedford-Banksville Road. These districts are designed to accommodate the each hamlet's distinctive needs. For example, Armonk's CB-A requires that a certain percentage of second-story floor area consist of multi-family dwellings, at least 20% of which must be designated affordable, and also regulates the square footage of some eating and drinking uses. Banksville's CB-B permits any uses allowed in the Shopping Center district (SC), as well as several other nonresidential uses, more limited residential portions of mixed-use development than allowed in the CB-A district. The CB district allows principal uses permitted in CB-A and accessory uses permitted in CB-B. CB is mapped along Route 22 in North White Plains and on Armonk-Bedford Road and Main Street in Armonk.

Additional commercial zoning districts in Armonk include Nursery Business (NB), mapped on the Mariani Gardens site on Bedford Road, and Roadside Business (RB), mapped along portions of Bedford Road and Old Route 22. The SC district is in North White Plains on the Stop & Shop shopping center, and allows retail business and office use on minimum four-acre parcels. The General Business district (GB), found in Banksville, permits SC district uses as well as auto-related uses, wholesale/storage, gas stations and building materials storage and sales, on minimum 10,000-square-foot lots. A total of 159 acres, or 0.9% of total land area, is zoned for commercial use.

Office

The five office districts in North Castle allow for professional office and related uses at a variety of densities, ranging from the low-density campus development encouraged in the OB district between Old Route 22 and I-684, to the Professional Business Office districts (PBO and PBO-2A), which permit smaller-scale developments in Armonk and along Old Route 22. The Office Business Hotel district (OBH), mapped west of Community Park, is designed to permit hotels on minimum 20-acre lots. A total of 640 acres, or 3.8% of total land area, is zoned for offices.

Mixed Use

Two of North Castle's zoning districts permit a combination of residential uses and office/commercial uses. The mixed-use residential commercial district (RC) permits residential dwelling units with limited non-residential uses (office, retail, studios, restaurants) on half-acre lots. This district is mapped on Banksville Avenue just north of the state line. The residential office district (RO), located on 2 acres of land in Armonk across from Town Hall, similarly permits a combination of dwelling units and offices or studios, on smaller (5,000-square-foot lots).

4. LAND USE AND ZONING

Table 7: Summary of Existing Zoning Districts: Residential

	District	Minimum Lot Area	Required Yards			Building Height	Maximum Building Coverage	Minimum Dwelling Unit Size
			Front	Side (one)	Rear			
Single- and Two-Family	R-4A	4 acres	75ft	50ft	50 ft	30 ft	6%	1,600 sf
	R-2A	2 acres	50 ft	30 ft	50 ft	30 ft	8%	1,400 sf
	R-1.5A	1.5 acres	50 ft	30 ft	40 ft	30 ft	10%	1,300 sf
	R-1A	1 acre	50 ft	25 ft	40 ft	30 ft	12%	1,200 sf
	R-3/4A	3/4 acre	40 ft	25 ft	40 ft	2 ½ stories 30 ft	15%	1,000 sf
	R-1/2A	1/2 acre	40 ft	20 ft	30 ft	2 ½ stories 30 ft	15%	900 sf
	R-10	10,000 sf	30 ft	15 ft	30 ft	2 ½ stories 30 ft	30%	900 sf
	R-5	5,000 sf	30 ft	At least 8 ft; total both sides, 18 ft	30 ft	2 ½ stories 30 ft	30%	800 sf
Multi-family	Two-Family (R-2F)	5,000 sf	20 ft	6 ft	15 ft	2 ½ stories 30 ft	30%	800 sf
	R- MF	10 acres	75 ft	50 ft	50 ft	3 stories 30 ft		
	<i>Perimeter</i>	24 acres	75 ft	50 ft	50 ft	3 stories 30 ft		
	<i>Attached</i>	5,000 sf	20 ft	10 (0 + 10) ft	15 ft	3 stories 30 ft		
	<i>Detached</i>	7,500 sf	20 ft	10 ft, with 25 ft setback from adjacent buildings (10 + 15) ft	15 ft	3 stories 30 ft		
	R-MFA							
	<i>Perimeter</i>	5 acres	10 ft reserved	10 ft	25 ft	3 stories 30 ft		
	<i>Attached</i>	2,500 sf	10 ft reserved	0	10 ft	3 stories 30 ft		
	<i>Detached</i>	7,000 sf	10 ft reserved	6 ft	10 ft,	3 stories 30 ft		
	MFR-3	40,000 sf	20 ft	20 ft	20 ft	3 stories 30 ft		
	R-MF-SS	20,000 sf	10 ft	15 ft	5 ft	3 stories 30 ft		0.9 FAR
	R-MF-SCH	To be determined by the Town Board at the time of zoning approval.				2.5 stories 30 ft		0.15-.04 FAR

Source: Town of North Castle Code, Chapter 355, Zoning

4. LAND USE AND ZONING

Table 8: Summary of Existing Zoning Districts: Commercial and Office

District	Minimum Lot Area	Required Yards			Building Height	Maximum Building Coverage	Floor Area Ratio
		Front	Side (one)	Rear			
Residential Commercial (RC)	½ acre	40 ft	20 ft	30 ft	2.5 stories 30 ft	15%	--
Residence Office (RO)	5,000 sf	30 ft	At least 8 ft; total 18 ft	30 ft	2.5 stories 30 ft	30%	0.25
Central Business (CB)	5,000 sf	10 ft	None ¹	30 ft	2 stories 30 ft	35%	0.4
Central Business A (CB-A)	3 acres	10 ft	None	None	2 stories 30 ft	30%	0.45
Central Business B (CB-B)	5,000 sf	25 ft	None	50 ft	2 stories 30 ft	25%	0.3
Designed Office Development (DOB-20A)	20 acres	150 ft	300 ft	300 ft	3 stories 45 ft (may be reduced for lots < 20 acres)	10%	0.15
Office Business (OB)	20 acres	150 ft	300 ft	300 ft	3 stories 45 ft	10%	0.12
Office Business Hotel (OBH)	20 acres	150 ft	300 ft	300 ft	3 stories 45 ft	10%	0.12
Professional Business Office (PBO)	10,000 sf	50 ft	20 ft ¹	20 ft	1 story 15 ft	20%	0.2
Professional Business Office 2A (PBO-2A)	2 acres	50 ft ²	50 ft ²	50 ft ²	3 stories 35 ft	20%	0.3
Nursery Business (NB)	4 acres	100	None ³	30 ft ³	2 stories 30 ft	14%	0.18
Shopping Center (SC)	4 acres	75 ft	None ⁴	30 ft ⁴	2 stories 30 ft	20%	0.25
Roadside Business (RB)	30,000 sf	10 ft	None ¹	50 ft	2 stories 24 ft	25%	0.3
General Business (GB)	10,000 sf	25 ft	10 ft	25 ft	2 stories 30 ft	20%	0.3

¹ Where a lot abuts a residence zone, the required side yard must be the same as that required in the residence zone.

²May be reduced as part of site plan approval.

³ Where a lot abuts a residence zone, required yard must be at least twice that required in the residence zone.

⁴ Where a lot abuts a residence zone, at least 50 ft.

Source: Town of North Castle Code, Chapter 355, Zoning

4. LAND USE AND ZONING

Table 8: Summary of Existing Zoning Districts: Commercial and Office (continued)

District	Minimum Lot Area	Required Setbacks			Building Height	Floor Area Ratio
		Front	Side (one)	Rear		
Planned Light Industry (PLI)	4 acres (unless modified by Planning Board)	100 ft; may be reduced to 60 ft if no parking is located between building and street.	50 ft ¹	100 ft ¹	3 stories 35 ft	0.3 FAR
Research, Electronic and Light Industrial Park (RELIP)	4 acres (unless modified by the Planning Board)	100 ft ¹	50 ft ¹	100 ft; where a rear line of a lot abuts dedicated parkland, may be reduced to 50 ft ¹	2 stories 35 ft	0.3 FAR
Industrial AA (IND AA)	2 acres	50 ft ¹	50 ft ¹	50 ft ¹	2 stories 30 ft	0.3 FAR
Industrial A (IND A)	5,000 sf	10 ft	None	10 ft; unless modified by the Planning Board where the rear line of a lot abuts land utilized for rail transportation purposes.	2 stories 35 ft	0.6 FAR

¹Where a lot abuts a residence zone, the required side yard must be the same as that required in the residence zone.

Source: Town of North Castle Code, Chapter 355, Zoning

Industrial

The Town's four industrial districts range in minimum lot size from 5,000 square feet to four acres. Light industrial uses are encouraged in the Research, Electronic and Light Industrial (RELIP) district along Kaysal Court off Old Route 22, and Planned Light Industry (PLI) district, mapped on Business Park Drive, both of which have larger minimum lot areas. Smaller lot sizes are permitted for IND-A and IND-AA districts, located in North White Plains, adjacent to the railroad tracks, and east of I-684 off Route 120 at the Westchester County Airport and immediate vicinity along New King Street. A total of 429 acres, or 2.6% of total land area, is mapped for industrial uses.

Specialized Zoning Provisions

In addition to the zoning districts above, there are two un-mapped floating zones that encourage specific types of development in North Castle.

The Golf Course Community Floating Overlay District (GCCFO) has been placed on the Brynwood Country Club property and permits for the development of a residential community designed for active adults with affiliated membership to a club with a golf course and recreational facilities. The intent of this floating zone is to maintain open space resources through the preservation of golf courses.

The R-MF-SCH district has been placed along NYS Route 128 as part of the Madonna senior housing project (see below).

4. LAND USE AND ZONING

The Town has also designated three scenic roadways in recognition of their historic, cultural and environmental value: East Middle Patent Road, Mianus River Road and St. Mary's Church Road, all located in the eastern portion of Banksville. Certain development along these roadways is subject to additional standards and Planning Board review.

4.3 POTENTIAL AND PLANNED FUTURE DEVELOPMENT

Build-Out Analysis

As part of its Planning Base Studies project, the Westchester County Department of Planning conducted a build-out analysis of North Castle to determine the amount of land remaining in the Town that can be developed. The two-phase analysis first assessed the development that can be reasonably assumed on vacant land, based on current zoning and environmental constraints. Next, the analysis identified any areas of previously developed land that is not fully utilized and could thus accommodate additional development. This underutilized land consists of residentially zoned parcels that are at least three times larger than the required minimum lot size, and non-residential sites on which existing development is 50% or less than what is allowable based on maximum FAR requirements.

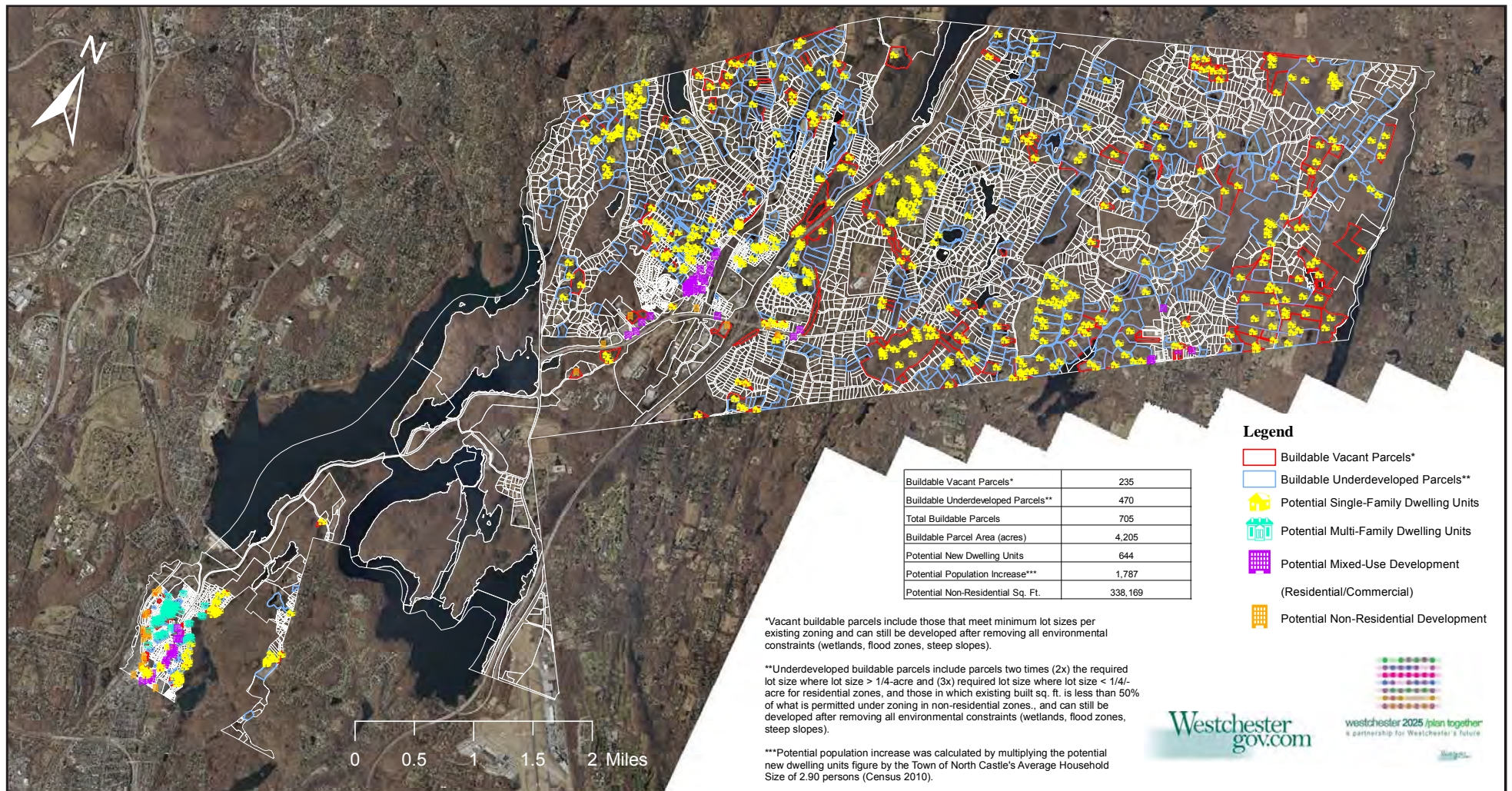
It is important to recognize that future development in the Town is based on a variety of factors, including the availability of land and the local and regional economy. The theoretical build-out analysis is a potential saturation point scenario which assumes that all undeveloped or underutilized land is developed according to the underlying zoning. This information is a guide and does not suggest actual building levels for the immediate future. Remaining land tends to be less desirable in terms of ease and cost of development because of factors such as

environmental constraints, historic or archeological significance, multiple owners, varying estate issues and a lack of land actually for sale.

Nonetheless, a build-out analysis is helpful for municipalities to fully understand the development that is possible under their current zoning, and to identify potential areas for review and adjustment based on that development. The result of the North Castle build-out analysis, shown on Figure 5, indicates that the majority of development potential in the Town is for single-family homes on under-developed parcels in R-2A and R-4A districts. Infill commercial, mixed-use and multi-family development is possible primarily in North White Plains.

Based on the analysis, the County calculated that, at full build-out, North Castle would see an additional 644 dwelling units, leading to an additional population of 1,787 people, or growth of 15% from the Town's 2010 population of 11,841. The build-out analysis also estimated a potential 338,169 square feet of additional commercial space.

This build-out analysis projects the maximum growth given existing land uses and zoning. While this growth is possible under current regulations, the likelihood that this scale of development would occur in the next 10 years is very low. Demographic and real estate trends in the region suggest that this scale of development could take up to 50 years to occur. The largest population growth in the Town occurred between 1950 and 1970, when land was available for development and the region was experiencing unprecedented suburban growth. As noted in Chapter 3, population growth has since slowed, and new development is anticipated to be correspondingly modest.



Source: Westchester County Planning Base Studies

Figure 5: Build-Out Analysis

4. LAND USE AND ZONING

Barring unforeseen circumstances, a more modest build-out is likely, to be expected at a scale of approximately 12 units per year, based on a build-out period of 50 years. This is consistent with recent trends in residential building permits issued in North Castle. In 2015, the Town issued 24 residential building permits; 10 multi-family and 14 single-family residential use.

In addition, topographic and environmental considerations limit potential development on vacant land. The County's build-out analysis found that only 235 parcels, or about 42% of all vacant parcels, are zoning-compliant and could be developed after accounting for environmental constraints.

Development in the Pipeline

Approximately 8 percent of North Castle's land area is classified as vacant, creating short-term potential for development. The Town has recently seen more development interest, with market conditions continuing to improve in the wake of a national recession, as shown by the successful Armonk Square project. Major development projects approved or proposed include:

- Brynwood Golf & Country Club – 73 condominium units at the golf club on Bedford Road (approved in 2015).
- The Vue – 200 units of multi-family housing in two three-to four-story buildings over underground parking on Old Orchard Street (proposed).
- 162 Bedford Road – 36 multi-family units, including six affordable units, at a former lumberyard (approved). The applicant is seeking to shift the affordable units as well as additional market-rate units to a separate site at 470 Main Street. Redevelopment of 470 Main Street would include 16 new units, 10% affordable.

- Madonna Senior Housing – 16 units of senior housing on NYS Route 128 (approved).

4.4 ISSUES AND OPPORTUNITIES

Hamlet Zoning

North Castle's hamlet centers – Armonk, North White Plains and Banksville – present opportunities for infill development that should be encouraged as a way for the Town to grow while maintaining its established character. The hamlets are regulated in three zoning districts. The CB-A zone is mapped for Armonk Square, the CB-B zone covers Banksville and the CB zone encompasses all of North White Plains and most of Armonk. However, the area of North White Plains along Route 22 north of Reservoir Road to Hillandale Avenue has an auto-oriented, strip commercial feel that differs from the rest of the hamlet and from Armonk, which are both characterized by smaller lots and a more walkable environment. For this northern portion of Route 22 in North White Plains, the Town should look at creating a new zone that reflects its built environment. In this new district, the addition of multi-family uses may be appropriate because of proximity to the train station. Such uses could be either in a mixed-use or all-residential context, and could be as high as three stories.

Creation of a new zone for Route 22 north of Reservoir Road could eliminate the need to create hamlet overlay zones, as recommended in the 2011 Hamlet Design Guidelines. Instead, stronger design can be facilitated through development of tailored design guidelines in each of the hamlets that cover the existing hamlet business zones and a new district for Route 22 in North White Plains. These guidelines should build off the 2011 study, but be more specific with strategies for each zone.

4. LAND USE AND ZONING

The Town should also consider if zoning revisions are needed to limit “formula businesses,” i.e. chain stores, which often require a large footprint, may be inconsistent with a hamlet context, and can be detrimental to local retail. Grocery stores and gas stations should not be included in formula retail restrictions.

A final land-use issue in Armonk concerns ground-floor residential uses, which are allowed by special permit, so long as the portion of the first floor fronting a street contains retail or similar active uses. In a downtown context, residential uses should generally be supported on upper floors, rather than ground floors, to contribute to an active street-level context. However, in some cases, ground-floor residential may be appropriate, with a sufficient retail “liner” along the street, and the current special permit requirements allow the Town Board to look at such applications on a case-by-case basis. This Plan recommends that the existing special permit provisions for ground-floor residential in the CB and CB-A districts be retained.

Commercial and Office Zoning

North Castle appears to have an excessive number of office and light industrial zones with confusing regulations. For example, the PLI and RELIP zones are quite similar in permitted uses and area and bulk provisions, as are the OB and DOB-20A districts. The regulations for these zones are found in multiple sections of the zoning code as well as in schedules attached to the code. The Town should undertake a comprehensive analysis of the office and commercial zones, with the goal of streamlining and clarifying their regulations so that they function effectively in a contemporary context. This may include consolidation of some zones with similar area, bulk and use provisions.

For the PLI and DOB-20A zones, in particular (Business Park and former MBIA campus), the Town should explore allowing for a

modest introduction of residential uses, at a scale comparable to surrounding land-use patterns. Retail, personal-service, entertainment and ancillary higher-education uses may also be permitted for these districts, but any retail should be limited to accessory uses to avoid competition with established shopping areas, especially downtown Armonk. The Town may consider a similar approach to the RELIP zone on Old Route 22, given that it is very similar to the PLI district and the land-use character along this corridor is shifting from a light industrial/commercial environment to a more mixed-use setting. See Chapter 12.

In Armonk, the Town should assess the NB district on Bedford Road (currently Mariani Gardens but on the market) to ensure that it remains a low-impact use that buffers the historic district. The 1996 Comprehensive Plan called for the NB zone to allow nursery-related uses, with future municipal or recreational uses considered based on the Town’s needs and fiscal condition. This Comprehensive Plan supports a continuation of these uses, with the addition of residential and professional office uses similar to the RO zone. Retail should not be allowed in the NB district, to avoid competing with the existing Armonk retail core.

Parking

The Town should consider establishing an in-lieu fee for off-street parking to facilitate new uses and redevelopment, while addressing ongoing parking needs. More parking is needed in downtown Armonk, and the Town is looking at options to create additional off-street spaces. An in-lieu fee could be considered in which property owners who cannot provide all of the required parking on-site may be allowed to pay a reasonable fee into a fund specifically designated for new or improved parking. Fees generated could be used toward building parking as envisioned along Kent Place or other appropriate locations.

4. LAND USE AND ZONING

Neighborhood Scale

Some concerns were raised during the planning process about the scale of new homes in North Castle. The Town last revised its regulations in 2010 for floor area ratio (FAR) in single-family zones, after considerable study and analysis. The FAR provisions are based on lot area, rather than zoning district, which helps to account for undersized lots. At this time, the Town Board does not see a need to revisit the FAR regulations. The Planning Board and Residential Project Review Committee (RPRC), whichever has jurisdiction, takes neighborhood context into account. All projects must be determined to be compatible with the surrounding neighborhood, and compliance with FAR regulations does not, alone, ensure the project is approved.

Another issue that may affect neighborhood character is the presence of home-based businesses. The current zoning regulations for these uses are out-of-date and do not reflect current society (see Chapter 8).

4.5 RECOMMENDATIONS

Hamlet Zoning

1. Consider rezoning the commercial area along Route 22 in North White Plains, between Reservoir Road and Hillandale Avenue, to a new zone that better reflects the existing development pattern. This could include allowing multi-family residential, either in a mixed-use or all-residential context, up to three stories in height.
2. Explore potential design guidelines for commercial areas in the hamlets. These should build on guidelines created in the 2011 study, and could be applied to the CB-A zone, the CB-B zone, the CB zone and a potential new business zone in North White Plains.

3. Consider zoning revisions limiting formula businesses (excluding grocery stores and gas stations).
4. Retain the existing special permit requirements for ground-floor residential uses in the CB and CB-A zones.

Commercial and Office Zoning

1. Undertake a comprehensive analysis of the office and commercial zones to streamline and clarify their regulations, including potential consolidation of zones.
2. Consider adjusting the PLI and DOB-20A zones to allow for residential uses, at an appropriate scale. Retail, personal-service, entertainment and ancillary higher-education uses may also be permitted for these areas, but any retail should be limited to accessory uses to avoid competition with existing retail. A similar approach may be considered for the RELIP zone on Old Route 22
3. Limit future uses in the NB district to those uses currently permitted, as well as municipal, recreational, residential or professional offices, but not retail. This district should continue to contain low-impact uses that serve as a buffer for the historic district.

Parking

1. Consider permitting in-lieu payments for off-street parking to facilitate new uses and redevelopment. Fees could be used to fund construction of public off-street parking, such as along Kent Place in Armonk.

Neighborhood Scale

1. Continue to take neighborhood context into account in approving new single-family homes.

4. LAND USE AND ZONING

5. NATURAL RESOURCES

5. NATURAL RESOURCES

Natural resources provide many community benefits, both measurable and intangible. Environmental features such as wooded areas and watercourses can create aesthetic appeal which contributes to quality-of-life and strong property values, as well as generating more quantifiable positive impacts such as stormwater management, improved air and water quality, flood mitigation and maintenance of wildlife habitat.

This chapter discusses North Castle's environmental setting and ways to protect and enhance its sensitive natural features. These assets contribute significantly to its residential quality-of-life and to its attraction for visitors and businesses alike. The protection and enhancement of these resources are essential to the preservation of the Town's special community character.

5.1 TOPOGRAPHY

Much of North Castle's development pattern is defined by its topography, which consists mainly of low hills with steep slopes. Topography ranges from a low of approximately 182 feet above sea level to a high of about 758 feet above sea level. Approximately 31% of the Town's land area, or about 2,470 acres, contains steep slopes. Major steeply sloped areas are found near the Town's waterbodies, including the Kensico Reservoir and adjacent water supply lands, as well in low-density residential areas (see Figure 6). Some of the Town's highest elevations are in residential areas northwest of Armonk along Whippoorwill Road and east of Byram Lake Reservoir, around Chestnut Ridge Road.

The business areas of Armonk and Banksville are relatively devoid of steep slopes; however, much of North White Plains is characterized by steep hillsides of more than 25%, found throughout established residential neighborhoods. The hamlet's challenging topography has an impact on its land use and activity. In particular, as Figure 7 shows, there are four hills in North White Plains, generally bounded by Lafayette Avenue, McDougal Drive, Palmer Avenue and Overlook Road. This topography creates a series of natural barriers among neighborhoods and businesses along Route 22, the key commercial thoroughfare of the hamlet, hindering both vehicular and pedestrian access.

Generally, development of steep slopes greater than 15% is difficult, though not impossible, due to construction costs and the undesirability of road grades that exceed 10%. In addition, during construction, soil erosion and surface water runoff can increase as a result of clearing vegetation from steep slopes. Slopes of 25% and greater usually present severe restrictions to construction activities. With the exception of North White Plains, most steep slopes in the Town are either undeveloped or are developed with low-density residential uses.

Future development on steep slopes is possible in certain circumstances, with special design considerations and strict monitoring during construction, but such development must comply with North Castle's steep slope law. Section 355-18 of the Town's Zoning Code prohibits disturbance of a steep slope area (25% or greater over a horizontal area measuring at least 25 feet in all directions), hilltop or ridgeline unless a disturbance permit is granted by the Planning Board.

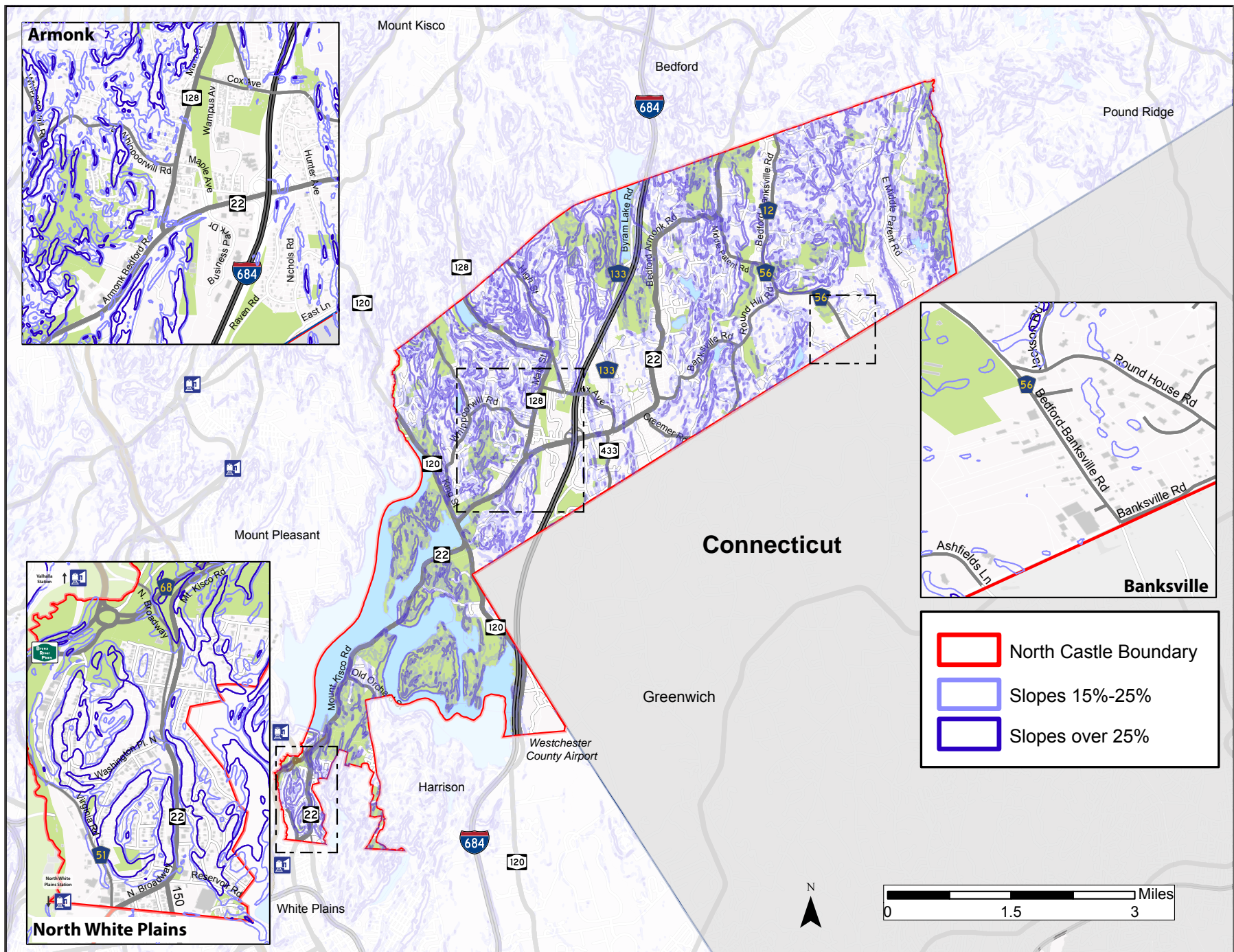


Figure 6: Steep Slopes

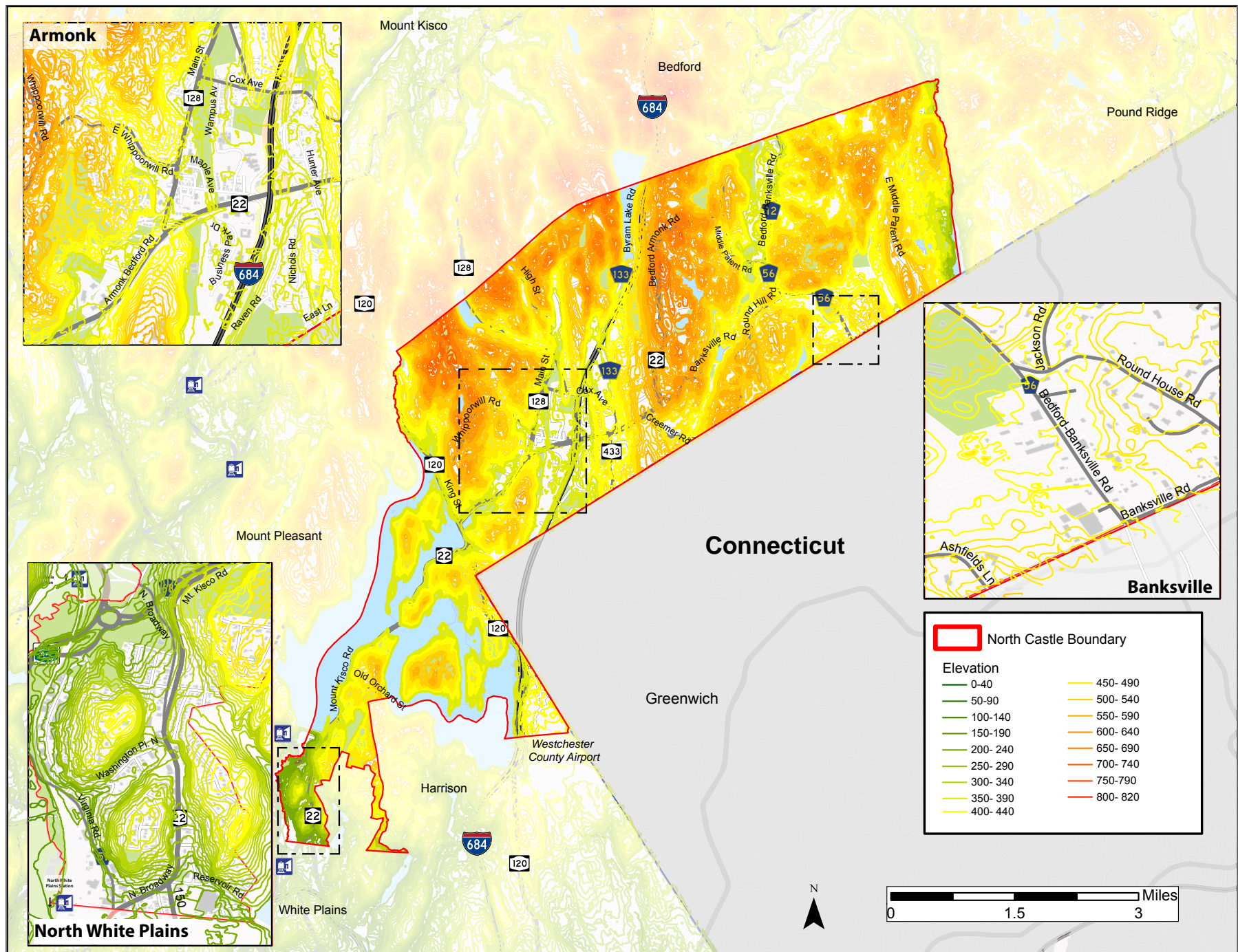


Figure 7: Topography

5. NATURAL RESOURCES

5.2 FLOODING, WATERCOURSES AND WETLANDS

Watersheds

Water resources – both natural and manmade – also define much of North Castle’s landscape. The Town is located in four major watersheds: the Bronx River Watershed, Inland Long Island Sound Watershed, Croton River Watershed, and Coastal Long Island Sound Watershed (see Figure 8). Most of its land area is within the Bronx River and Inland Long Island Sound watersheds, which comprise 31% and 67%, respectively, of the Town. The Coastal Long Island Sound and Croton River watersheds together make up about 1.2% of land area.

As noted in Chapter 2, there are several recent studies on watershed issues within North Castle and its surrounding area, including the Byram River Watershed Management Plan, the Mianus River Upper Watershed Analysis and the Bronx River Watershed Assessment and Management Plan. Among the plans’ overlapping goals are maintaining high water quality by eliminating non-point sources of pollution (i.e. stormwater runoff), improving habitats and encouraging compatible recreation activities. The plans also call for the adoption and enforcement of ordinances that protect natural features and groundwater quality, and recommend that communities maintain and share data to assist in monitoring capacity of water resources, and undertake education and restoration activities to engage the public. This section summarizes recommendations from each plan.

Byram River Watershed Management Plan (2011)

- Support a process for analyzing data by establishing a baseline and continued monitoring;

- Diminish non-point sources of pollution, including runoff from road de-icing practices; and
- Promote sustainable land-use practices that contribute to ecological health and protect wildlife and landscapes while enhancing the area’s natural resources by encouraging compatible recreational uses.

Mianus River Upper Watershed Analysis (2016)

- Require preparation of water recharge budgets and analysis of off-site drawdown impacts for any proposed larger new wells;
- Distinguish between water withdrawal and consumption when considering new projects;
- Ensure that residential parcels that are developed with individual wells and septic systems meet minimum parcel size criteria to support wells and adequately dilute septic system wastewater discharges;
- Adopt aquifer overlay protection ordinances to provide measures of groundwater quality protection, and ensure they provide protection for bedrock aquifers and for the more limited acreages of surficial geologic aquifers;
- In considering proposed development, undertake additional off-site test and review activities to ensure reliability and persistence of stream flows;
- Reduce road salting practices; and
- Support capacity monitoring or stream gauging measures to further aid the protection of the Mianus River aquifers and the flow of the Mianus River through the Mianus River Gorge.

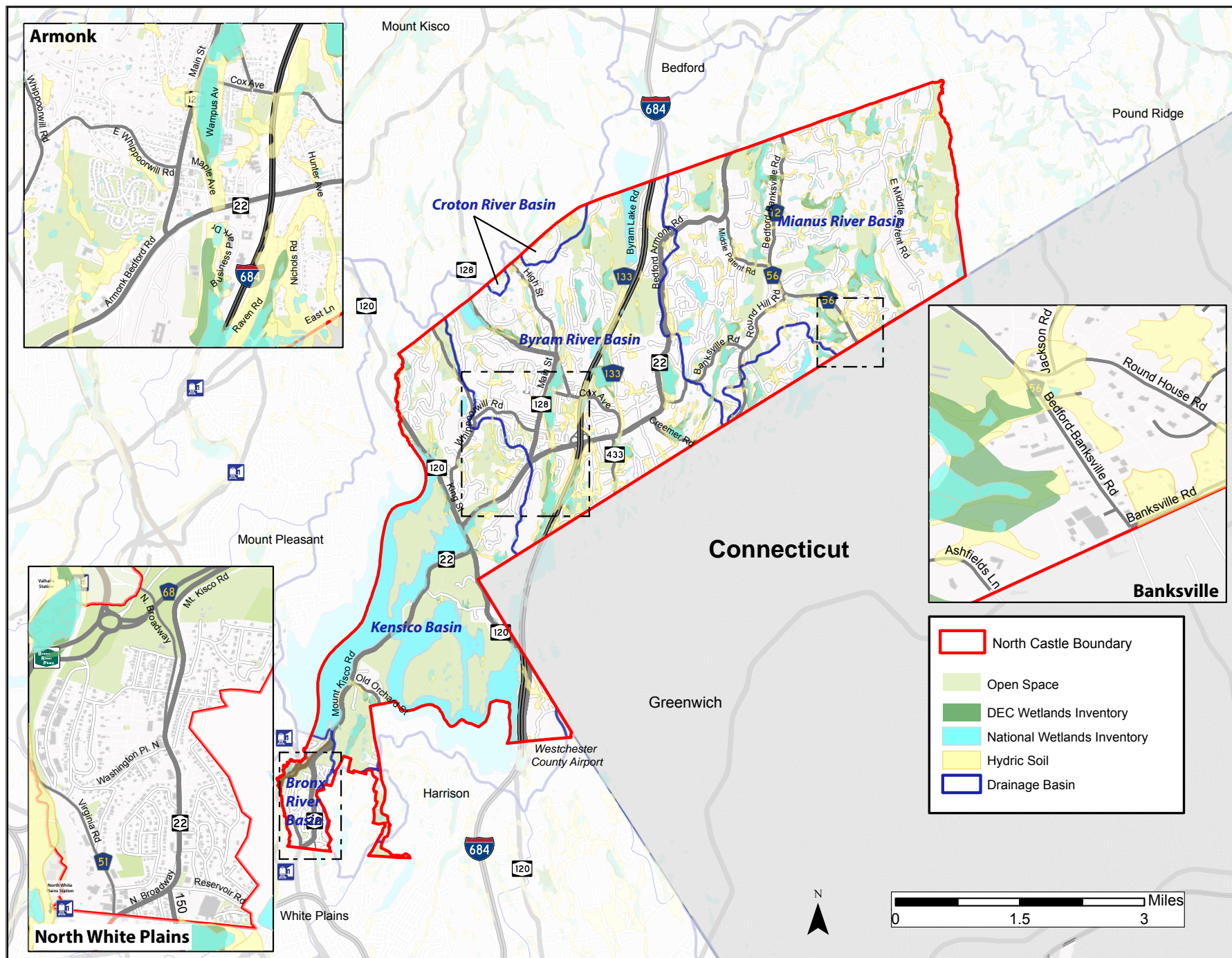


Figure 8: Watersheds and Wetlands

5. NATURAL RESOURCES

Bronx River Watershed Assessment and Management Plan (2007)

- Improve water quality by eliminating illicit discharges, increasing litter prevention and trash cleanup efforts, and reducing sources of sediment loading;
- Enhance in-stream and riparian (waterfront) habitat along the river and its tributaries to sustain a diversity of aquatic insect and fish communities;
- Incorporate the historical aspects of the river and the Bronx River Parkway into overall watershed education and restoration planning;
- Advance local awareness of the Bronx River through pollution prevention education and watershed restoration outreach activities;
- Promote recreational activities like fishing, trail walking, birdwatching and canoeing/kayaking by improving water quality, riparian habitat and passage along the mainstem from the Kensico Reservoir to the Bronx;
- Mitigate negative impacts of stormwater runoff on hydrology and water quality through stormwater retrofits, flood prevention and pervious area restoration;
- Provide information needed to evaluate flood management, habitat and recreational benefits of existing impoundments when determining pond dredging and wetland creation potential;
- Encourage intermunicipal coordination in managing water quality and habitat issues in the Bronx River watershed through the Bronx River Watershed Coalition;

- Identify specific actions to help the County and municipalities meet federal, state and regional regulatory and policy criteria; and
- Integrate water resource activities with public health, regional transportation and greenway planning, and redevelopment projects.

Flooding

All of North Castle's major water resources, as well as portions of Armonk and Banksville, are located within areas of moderate flooding (see Figure 9). The Federal Emergency Management Agency (FEMA) has classified these areas as part of the 100-year flood zone. FEMA produces these floodplain maps in order to implement its National Flood Insurance Program (NFIP), which allows property owners in participating communities to purchase flood insurance in exchange for state and community floodplain management regulations that reduce future potential flood damage. If a community adopts and enforces a floodplain management ordinance for new construction in floodplains, the federal government will make insurance available in the community to mitigate flood losses.

The primary source of flooding in North Castle is Wampus Brook. Flooding of the brook has caused property damage in Wampus Brook Park, increased the potential for future flooding at the Hergenhan Recreation Center (the Town's primary emergency shelter), damaged the School Street culvert and caused flooding of the sewer plant access road. Other localized areas of known flooding include Virginia Road near Lafayette Avenue, Clove Road and Kaysal Court near the Bronx River, and part of the Public Works yard near Town Hall.

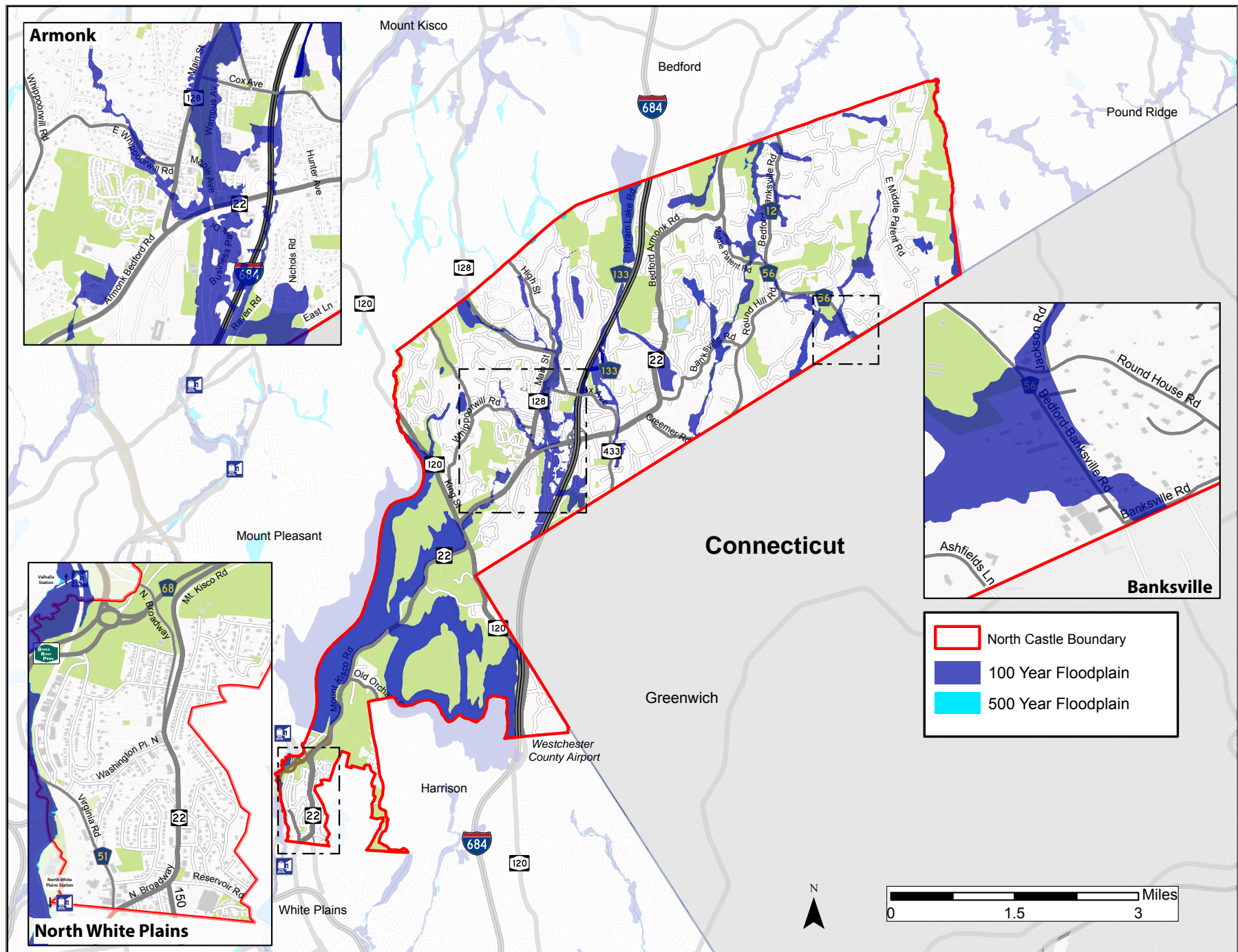


Figure 9: Flood Zones

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Chapter 177 of the Town Code establishes standards for construction within areas of special flood hazard, which are defined as the land in the floodplain subject to a 1% or greater chance of flooding in any given year (commonly referred to as the base floodplain or 100-year floodplain).

Wetlands

Wetlands act as natural storage basins for floodwaters and aid in groundwater recharge; they also provide wildlife habitat and contribute to natural and scenic beauty. There are three levels of wetland recognition: local, state and national.

Section 340 of the Town Code defines wetlands as “those areas that have a predominance of hydric soils and/or are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of hydrophobic vegetation typically adapted for life in saturated soil conditions.” This definition encompasses wetlands designated by the New York State Department of Environmental Conservation (NYSDEC), and watercourses and waterbodies. Based on the *Soil Survey of Putnam and Westchester Counties*, published by the U.S. Department of Agriculture’s Natural Resources Conservation Service, the Town has about 2,023 acres of mapped hydric soils. Not all hydric soils are wetlands, and the survey is not meant to replace detailed site planning.

The Town’s wetlands regulations control construction-related activities within 100 feet of a wetland, waterbody or watercourse, unless there is an area of slope in excess of 25%, in which case the buffer area is expanded to 150 feet or all of the steeply sloped area (whichever is less).

At a State level, wetlands over 12.4 acres in size are mapped and regulated by the NYSDEC. A total of 71 of these areas are distributed throughout North Castle, comprising 897 acres.

Smaller wetlands have been identified in the Town by the National Wetland Inventory (NWI), a non-regulatory mapping system prepared by the U.S. Fish and Wildlife Service. NWI-mapped wetlands total about 2,229 acres, including freshwater ponds, swamps, marshes, lakes and rivers.

5.3 SOILS

The physical properties of soils have a direct impact on development, based on their ability to absorb stormwater runoff, filter out pollutants carried by runoff, support structures and sustain plant and animal life. Other key characteristics include the rate of water percolation, stability and erosion potential. Considering the engineering properties of soils present on a site is an integral part of site design. Figure 10 shows the general pattern of soils in the Town, based on the following hydrologic group definitions:

- **A** – High infiltration rate, low runoff potential when thoroughly wet; very deep, well-drained to excessively drained; sands or gravelly sands; high rate of water transmission.
- **B** – Moderate infiltration rate, moderate runoff potential when thoroughly wet; moderately deep or deep; moderately well-drained to well-drained; moderately fine to moderately coarse; moderate rate of water transmission.

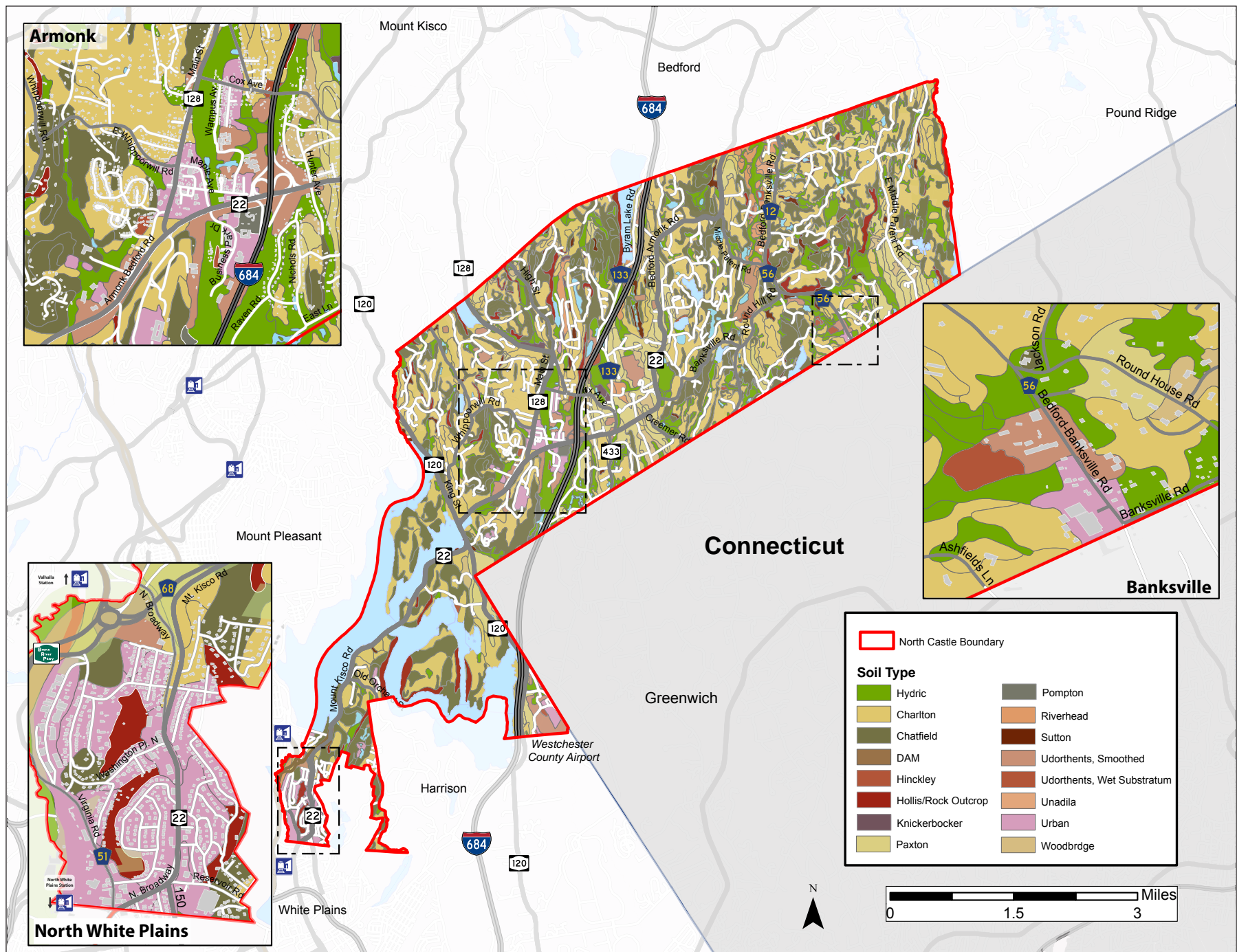


Figure 10: Soils

5. NATURAL RESOURCES

- **C** – Slow infiltration rate, slow runoff potential when thoroughly wet; has layer that impedes downward movement of water; moderately fine to fine; slow rate of water transmission.
- **D** – Very slow infiltration rate, high runoff potential when thoroughly wet; has permanent high water table; claypan or clay layer at or near the surface, or shallow over nearly impervious layer; clayey soil that has high shrink-swell potential; very slow rate of water transmission.

As illustrated in Figure 10, the predominant soil types in North Castle are Charlton (hydrologic group B) and Chatfield (group B/C), moderately drained soils with a moderate-to-slow infiltration rate. Portions of hydric soils surrounding waterbodies have very slow infiltration rate and greater runoff potential, with implications for stormwater management.

5.4 STORMWATER MANAGEMENT AND DRAINAGE

Land development often eliminates natural features that moderate stormwater runoff and exposes soil to erosion. Runoff also carries soil and other pollutants into streams, lakes, rivers and estuaries. In severe storms, bank erosion, flooding, road washouts and flooded basements are a direct result of uncontrolled stormwater runoff.

New York State requires urbanized communities, including the Town, to establish Phase II stormwater management programs to control stormwater on developed sites. This requirement means that the quantity, rate and quality of runoff should not change significantly between pre- and post-development.

The State's Phase II regulations are limited to areas over one acre, but the Town has enacted a more stringent regulation, requiring a Stormwater Pollution Prevention Plan (SWPPP) for development activities involving at least 5,000 square feet.

A leading contributor to stormwater runoff is impervious surface, or any material that prevents infiltration of water into the soil. Roads, rooftops, parking lots, driveways, sidewalks and other paved areas all fall into this category. As shown in Figure 11, about 1,462 acres, or 9% of North Castle's total land area, is covered with impervious surfaces. Some 75% of that amount is coverage from roadways, parking areas and sidewalks, with the other 25% consisting of buildings and structures.

In addition to generating stormwater runoff that can lead to contamination of water bodies and groundwater, large paved areas can also contribute to the "urban heat island" effect, in which a developed area may be significantly warmer than surrounding rural areas due to a prevalence of dark surfaces that absorb more heat. There are several ways that municipalities can reduce impervious coverage, including regulatory changes to control the amount of lot coverage, design of parking areas to incorporate landscaped areas and use of permeable pavements that allow water to infiltrate.

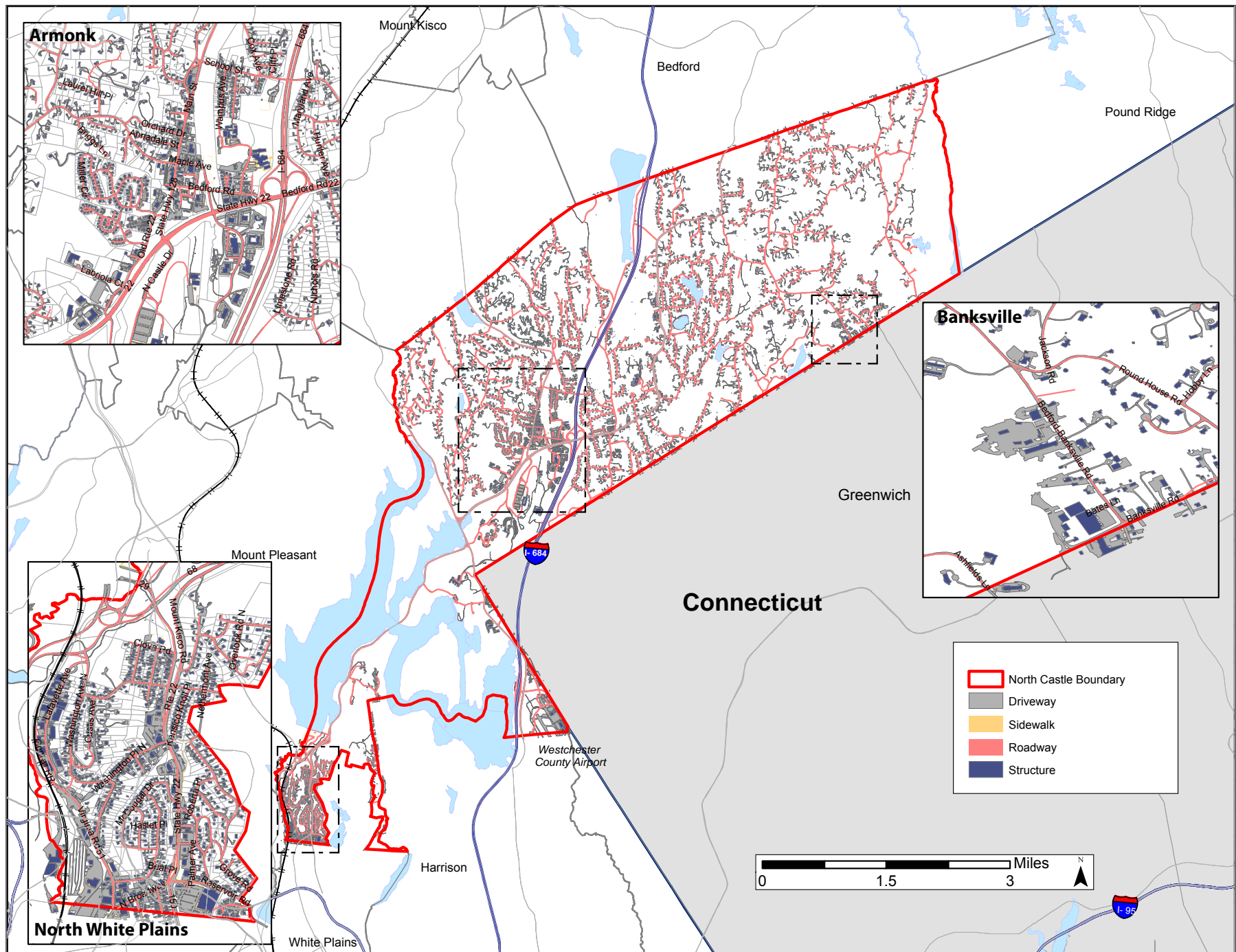


Figure 11: Impervious Surfaces

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5.5 CRITICAL ENVIRONMENTAL AREAS

A Critical Environmental Area (CEA) is a State-, County- or locally designated geographic area with exceptional or unique environmental character. Five Westchester County-designated CEAs are in North Castle: the area within the 60 Ldn noise contour of the Westchester County Airport,³ Byram Lake, the Mianus River/Mianus River Gorge Preserve, County-designated watershed properties, and County and State parklands (Bronx River Parkway Reservation, Cranberry Lake Preserve, Kensico Dam Plaza and Wampus Pond Park).

Development proposed in a CEA requires a more rigorous review than other areas. The potential impact of any Type I or Unlisted Action on the environmental characteristics of the CEA is a relevant area of environmental concern and must be evaluated under the State Environmental Quality Review Act (SEQRA).

5.6 TREES

Mature trees are an important part of North Castle's community character, provide habitat areas for a variety of wildlife and also play a critical role in stormwater management. In many ways, they can be considered natural green infrastructure.

The Town has adopted ordinances, in Chapter 308 of its Code, to protect trees on public and private land. These regulations require permits for tree removal within a property's regulated setback zone or landscape buffer zone, in wetland areas. Permits are also required for the removal of significant trees,

³ According to the Westchester County Airport, Ldn, also known as Day/Night Average Noise Level (DNL), represents the average noise exposure over a 24-hour period as a day-night average sound level. The

those with a diameter of 24 inches or greater at 4.5 feet. Prior approval by the town is required for the removal of public street trees. Removal of a tree is permitted by right under actual or ongoing emergency conditions. Tree removal without a required permit can result in fees and other penalties.

5.7 WATER, AIR, NOISE AND LIGHT POLLUTION

Water Quality

Water quality is a major issue for North Castle, as nearly 20% of the Town's land is comprised of water supply uses. The Kensico Reservoir is part of the New York City water supply system, under the jurisdiction of the New York City Department of Environmental Protection (NYCDEP). The Town is one of 12 municipalities that make up the Northern Westchester Watershed Committee (NWWC), which acts as an advisory committee for protection of the New York City Watershed.

All waters in New York are assigned a letter classification denoting their best use. Classifications AA or A are assigned to waters used as a source of drinking water, swimming and other recreation or fishing, while Classification B indicates a best usage for swimming and other recreation. Classification C is for waters supporting fishing, and Classification D is appropriate for fishing, but not for supporting fish propagation. As of 2017, the NYSDEC classified the Kensico, Byram Lake and Mianus Reservoirs as AA. Converse Lake, which extends into portions of Banksville, also was designated AA. The Kensico River Tributaries are classified A and the Byram River (upper and minor tributaries) and Wampus Lake are classified B. The Bronx

Federal Aviation Administration (FAA) has developed a metric which integrates the DNL metric to depict noise exposure levels from an aircraft around an airport into noise contours of equal DNL.

5. NATURAL RESOURCES

River (upper and tributaries) and Wampus River and its tributaries received a C classification. Chapter 7 discusses the Town's drinking water infrastructure in more detail.

Air Quality

Poor air quality can cause a range of health issues, including respiratory illness and asthma. Air pollution can also cause haze and smog; reduce visibility; damage buildings; and harm water bodies, plants and wildlife. Traffic, which can include impacts on air quality, was cited as a major concern in North White Plains.

Air pollution can stem from point (stationary) sources, such as power plants; area (non-point) sources, or the cumulative impact of small individual sources; mobile sources, such as automobiles; and biogenic sources that occur naturally in vegetation. The most significant sources of carbon monoxide emissions, by far, are single-occupancy vehicles.

A potential source of negative air quality impacts for North Castle is traffic congestion on major roadways, notably I-684 and NYS Route 22. Stop-and-go traffic can create as much as four-to-five times the air pollution as traffic that flows smoothly. Two potential improvements to this situation are 1) the gradual introduction of hybrid and electric vehicles, and 2) capacity improvements to relieve traffic congestion (see Chapter 6). The Westchester County Airport, located partially in the Town, is also a considerable source of air pollution. The Town should continue to work with Westchester County, or a potential future private owner, on air, noise and other impacts from the airport.

In 2007, the Town Board established the Sustainable North Castle Committee. A task force for the Committee drafted an Action Plan for Energy, Transportation and Land Use in 2008. North Castle became a Climate Smart Community in 2009, adopting a pledge to reduce greenhouse gas (GHG) emissions

and prepare for the potential effects of climate change. The Town completed a GHG inventory in 2010 as part of the Mid-Hudson's Regional GHG Inventory. North Castle is also a member of Sustainable Westchester, a consortium of local governments that facilitates effective sustainability initiatives.

Noise Pollution

Noise can be defined as undesirable or unwanted sound that interferes with quality-of-life, and can also cause hearing loss and have an adverse effect on mental health. Environmental noise is considered with regard to several factors, including level – which relates to perceived loudness of a noise – but also its character, duration, time of day and frequency of occurrence.

Chapter 210 of the Town Code regulates activities that may result in adverse noise impacts, including the playing of instruments or bands, outdoor dining and sidewalk cafes, and the operation of tools used in building construction or repair or lawn and garden maintenance.

Light Pollution

Light pollution is excessive or obtrusive artificial light. While it is most often associated with heavily populated areas with significant development, even relatively small amounts in more rural or low-density areas can create problems. Light pollution can generally be grouped into the following categories, although some sources of light may fall into more than one category:

- *Light trespass* occurs when unwanted light enters one's property, such as when a strong light enters the window of one's home from the outside;
- *Over-illumination* is the excessive use of light;

5. NATURAL RESOURCES

- *Glare* can range from being blinding to causing temporary visual impairment to producing discomfort;
- *Light clutter* refers to excessive groupings of lights; and
- *Skyglow* is the effect that can be seen over populated areas, and results from the combination of all light sources in an area reflected into the sky.

Adverse effects of light pollution include energy waste, impacts on public health and disruption of plant and animal ecosystems. One of the most effective ways to reduce light pollution is by using full cutoff lighting fixtures that prevent light from shining in unwanted areas and may allow lower wattage lamps to be used. Use of these fixtures should be appropriate to the area of the Town and the level of activity.

5.8 HAZARD MITIGATION

With recent weather events such as Hurricanes Irene and Sandy, there is a major focus in the New York metropolitan region on the need to plan for hazardous events. During both of these weather events – as well during severe storms in March 2010 – North Castle experienced extensive flooding, wind damage and power outages. The most significant impacts were felt during Hurricane Sandy, when 98% of the Town’s residents lost power and more than half of its roads were closed in the immediate aftermath. Full power was not restored for 15 days, and the Town’s water and sewer treatment plants had to operate under generator power for the duration of the outage.

North Castle participates in the Westchester County Hazard Mitigation Plan, adopted in 2015. The plan establishes a set of 17 County-wide mitigation strategies to deal with the potential

impacts of emergency and disaster-related events. For North Castle, the County’s plan identified threats from flooding, severe storms and wildfire as posing the greatest hazard risks. High-priority actions to address these concerns include:

- Supporting non-structural flood hazard mitigation alternatives for at-risk properties within the floodplain;
- Installing interior drainage in the basement of the Hergenhan Recreation Center (the Town’s emergency shelter) to alleviate flooding;
- Installing generators for the H.C. Crittenden Middle School, North Castle Highway Department, North White Plains Community Center and Town Hall Annex;
- Performing a comprehensive flood mitigation evaluation of the Wampus Brook watershed;
- Replacing the School Street culvert at Wampus Brook with a bridge;
- Installing a drainage system to control stormwater at the end of Leatherman Court;
- Trimming trees near Wampus Brook Park and along Route 22;
- Performing stump and tree removal and spillway maintenance to Long Pond Dam; and
- Obtaining a replacement generator for Town Hall.

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5.9 ISSUES AND OPPORTUNITIES

North Castle's existing environmental regulations are doing a good job of protecting the local environment. Laws regulating tree removal and development in wetlands and steep slopes have been recently updated and do not need major revisions. However, there are some areas where targeted improvements may be made to promote even stronger stewardship of natural resources and support sustainability initiatives.

Stormwater Management

As discussed above, the Town has taken a strong approach to stormwater management, enacting regulations that are more stringent than the New York State requirements. The Town's focus now should be one of maintenance and enhancement of existing facilities, as well staying current with best practices and taking advantage of opportunities for additional improvements. Recognizing that many properties were constructed before the current stormwater regulations were in place, and that the requirement to install stormwater facilities may only be triggered by new construction or redevelopment, the Town should explore ways to encourage owners to voluntarily install stormwater management measures. This may include education initiatives and possible incentives. In addition, the Town should continue strong protection of tree cover through the tree removal permitting process. Trees and other established vegetation play a key role in controlling runoff by soaking up stormwater and stabilizing sloped areas.

Sustainability

This chapter discusses several potential measures to address sustainability, and other chapters recommend added actions, like changes to land-use regulations and sidewalk improvements, that enhance environmental sustainability.

Because of the complexity and interconnectedness of sustainability strategies, this Plan recommends that the Town undertake a comprehensive sustainability plan. The effort should be coordinated with Sustainable North Castle and build on their past efforts, to develop a "green action plan" that includes such measures as:

- Revising zoning and subdivision regulations to include incentives and standards for green buildings and infrastructure.
- Retrofitting municipal facilities to incorporate green building measures.
- Passing legislation to facilitate green residential projects.
- Conducting energy audits as needed for Town facilities.
- Exploring long-term environmental and financial benefits of LED street lighting.
- Providing regulations for residential lighting and revising commercial lighting standards to be in line with Dark Sky recommendations.
- Gradually replacing cars and trucks in the Town's fleet with high-efficiency options.
- Exploring ways to address environmental impacts of road salt and fertilizer, especially on ground water.

Hazard Mitigation

The Westchester County Hazard Mitigation Plan recommends a number of important measures to improve address environmental hazards and improve emergency management in North Castle. The Town should continue to seek grants and other available funding to implement the plan's priority action items. In particular, as discussed elsewhere, the replacement of the School Street culvert is of critical importance.

5. NATURAL RESOURCES

5.10 RECOMMENDATIONS

Stormwater Management

1. Explore ways to encourage property owners to voluntarily install stormwater management measures, including education initiatives and possible incentives.
2. Continue strong protection of tree cover through the tree removal permitting process.

Sustainability

1. Undertake a comprehensive sustainability plan, working closely with Sustainable North Castle and building on their prior efforts.

Hazard Mitigation

1. Implement priority action items identified for North Castle in the County's Hazard Mitigation Plan.

6. TRANSPORTATION

6. TRANSPORTATION

6.1 COMMUTATION PATTERNS AND MODE SHARE

Commutation Patterns

North Castle has an estimated working population of 4,673 people. As of 2014, 447 employed residents (9.6%) work within North Castle. A third, 1,570 residents, commute to other destinations in Westchester County, such as White Plains (8% overall) and Mount Pleasant (4% overall). The remaining 57% of working residents commute outside of the county. Over half of those commute to Manhattan (22% overall) and neighboring Fairfield County (10% overall).

While the share of commuters to New York City and Fairfield County has remained stable, the percentage of workers employed within Westchester County has decreased by 5% since 2004.

Approximately 8,079 people are employed within North Castle. Of these, 447 (5.5%) are North Castle residents, 3,148 (44.5%) live elsewhere in Westchester County and 11.5% live in Fairfield County. Nearly 1,000 people (12%) live in New York City.

North Castle's employment is concentrated in office parks along the Route 22 corridor, Route 120, Westchester County Airport, and the hamlets of Armonk and North White Plains.

Other Traffic Generators

Census journey-to-work data do not account for trips made outside of work or trips made by non-employed populations. In addition to shopping and dining destinations such as downtown Armonk and Route 22 in North White Plains, other traffic generators within North Castle include the following:

Schools: Most North Castle residents live within the Byram Hills School District, whose campuses are in Armonk. The district provides bus transportation to more than 2,500 students attending public, private and specialized schools in the region. North White Plains is in the Valhalla Union Free School District, while small portions of the Eastern District are in the Bedford Central School District, and New York City watershed lands are in the Harrison Central and Mount Pleasant Central districts.

Senior Citizens: North Castle is home to one assisted-living home, the Bristol, in Armonk. Programming for senior citizens is offered several times a week at the Hergenhan Recreation Center in Armonk and the North Castle Community Center in North White Plains. Some of the senior population relies on assisted mobility in the form of paratransit services and community shuttles to access stores and health-care services.

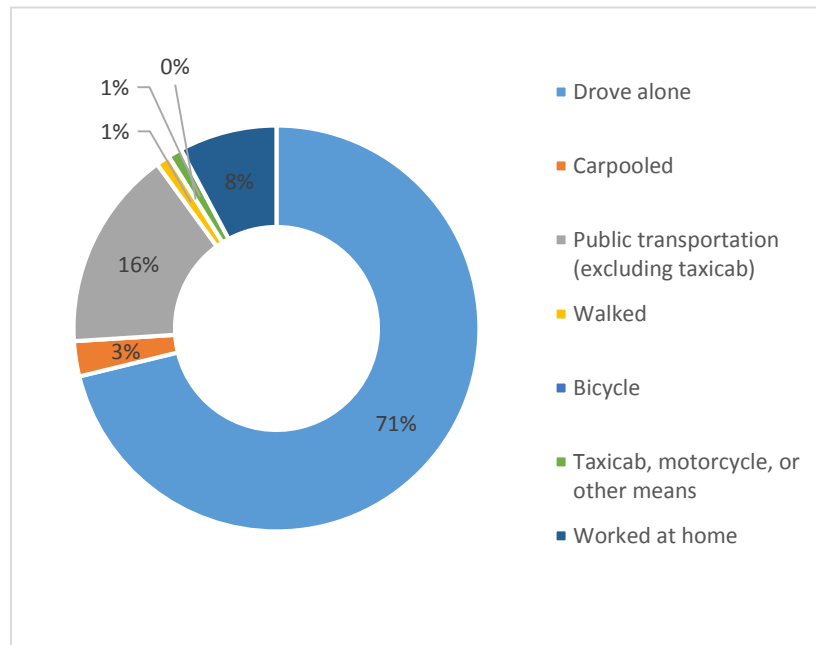
Mode Share

Chart 8 below shows the primary transportation mode used by residents to travel to work, according to the Census Bureau's American Community Survey (ACS 2015 5-Year Estimate). Three-quarters of residents drive to work, the vast majority doing so alone. Sixteen percent of residents travel by public transportation. The ACS estimates that 1% of residents walk and zero percent commute by bicycle as their primary mode. Eight percent of residents work at home.

Women, who constitute 45% of the workforce, drive at a higher percentage than men and account for a higher share of people working from home. A higher share of the town's male population works outside of the county and has longer commute times. Nearly 20% more men than women commute 60 or more minutes to work. Transit use is higher among men than women, suggesting that more men commute to New York City.

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Chart 8: Means of Transportation to Work



Source: U.S. Census, ACS 2015 5-Year Estimate

Vehicle ownership: North Castle has a high vehicle ownership rate, with over 98% of households owning at least one vehicle. This is substantially higher than the County-wide average of 91% of households owning vehicles.

6.2 ROADWAYS

North Castle relies on its network of state, county, and local roadways to unify its various built and natural environments. Figure 12 shows the functional classification of roadways, as determined by the New York State Department of Transportation (NYSDOT). The purpose of this categorization is

to describe a roadway's relative capacity, mobility and land access. Figure 12 also shows NYSDOT's 2015 estimate of annual average daily traffic (AADT).

Interstate: North Castle is bisected by Interstate 684, which originates in Brewster and terminates at I-287 in Harrison. In North Castle, I-684 runs parallel to the Byram River until it briefly crosses through the northwest corner of Greenwich. The highway continues between Rye Lake and Westchester Airport before it enters Harrison. I-684 has two interchanges in North Castle. Exit 3, an interchange with Route 22, is immediately east of Armonk. Exit 2, at Westchester County Airport also provides access to NYS Route 120 at Airport Road/New King Street.

Parkways: North White Plains is the terminus of two of the state's Scenic Byways, The *Bronx River Parkway* and the *Taconic State Parkway*. The Bronx River Parkway is a 19-mile north-south limited access divided highway, with some at-grade intersections, that begins in the Bronx. The parkway terminates at Kensico Circle where it connects to the southern terminus of the Taconic State Parkway, which continues north through Valhalla to I-90 in Columbia County.

Kensico Circle provides a connector between both Parkways and NYS Route 22. As a result, Route 22 acts partially as a connection between the Bronx and Taconic Parkways and the Central Westchester Parkway/I-287.

The *Central Westchester Parkway* connects I-287 at Exit 7 and NYS Route 22.

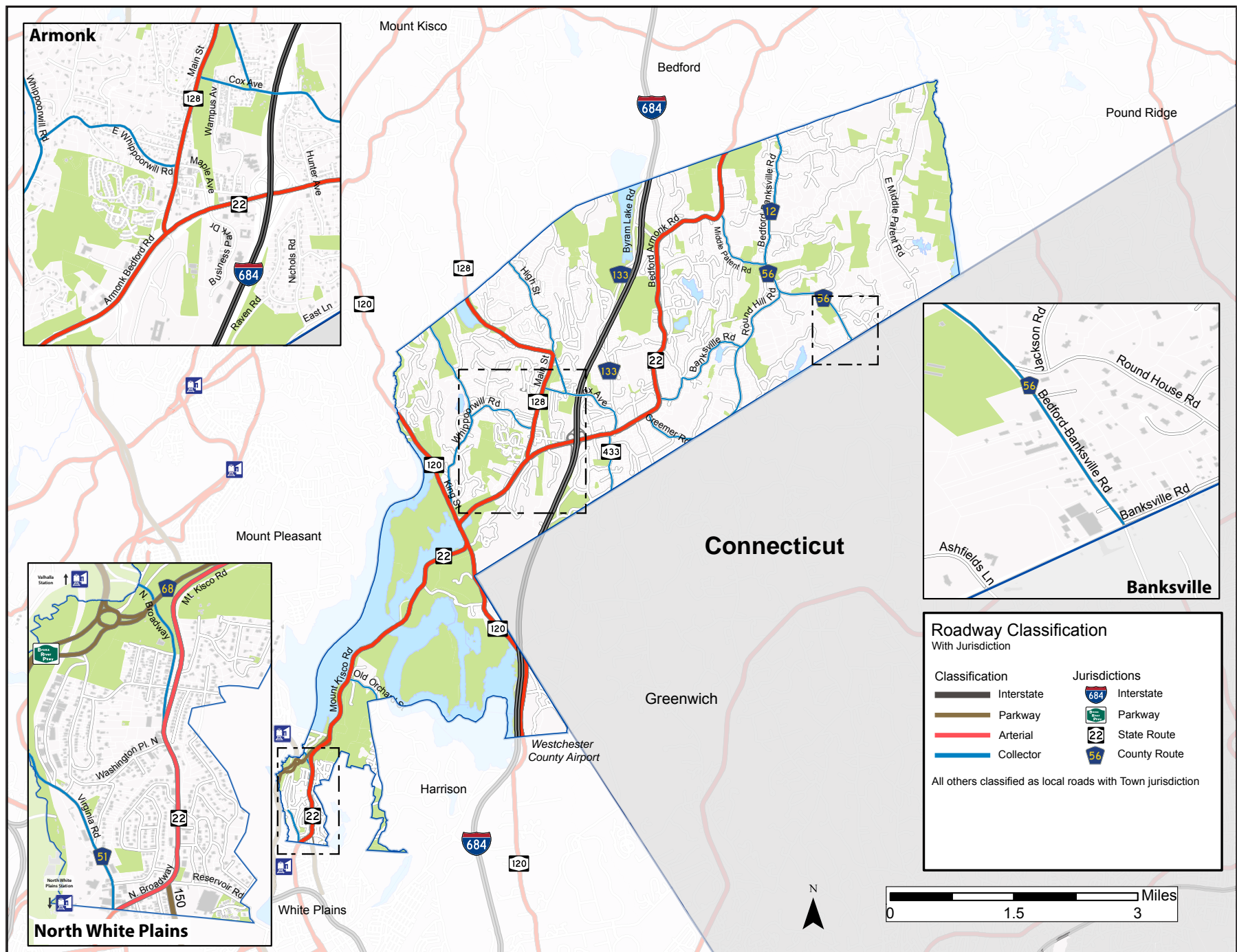


Figure 12: Roadway Classification

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Arterials: *NYS Route 22* is a north-south route that serves as North Castle's primary local arterial roadway. In North White Plains, Route 22 is four-lanes and acts as the conduit between the Central Westchester Parkway/I-287 and Kensico Circle. After splitting from North Broadway, Route 22 is designated Mt. Kisco Road, a four-lane highway that runs along the Kensico Reservoir toward Armonk.

At King Street, the route runs concurrently with Route 120 for a third of a mile. In Armonk, Route 22 is designated Armonk Bedford Road. The section between Route 120 and Route 433 is a four-lane divided highway with several high-capacity intersections serving the hamlet and I-684 interchange. East of Route 433, Armonk Bedford Road narrows to two lanes, which curves through northeast North Castle to the Town of Bedford.

NYS Route 120, King Street, is a two-lane north-south route that connects Westchester County Airport and western Armonk. *NYS Route 22* runs concurrently with King Street between the terminus of Mount Kisco Road and Armonk Bedford Road.

NYS Route 128, Main Street, is a two-lane north-south roadway that begins at Route 22 and continues north to New Castle. Main Street is Armonk's primary commercial corridor between Bedford Road and Old Mount Kisco Road, featuring on-street parking, sidewalks and pedestrian crossings.

Collectors: The primary function of North Castle's collector roadways are to connect arterial roadways to local streets. The posted speed limit is 30 miles per hour.

North White Plains

North Broadway is classified as a collector roadway after it splits from *NYS Route 22* (see North White Plains inset in Figure 12). This section of North Broadway, designated as County Route 29,

is two lanes and edges the residential neighborhood to the west. Despite its classification as a collector, the roadway functions as a minor arterial, carrying regional traffic to and from the Bronx River and Taconic State Parkways. Average annual daily traffic is estimated at 14,000 vehicles, nearly a third more traffic than is carried on Mt. Kisco Road. County Route 29 continues northwest into Valhalla.

Virginia Road, County Route 51, is a two-lane north-south route spanning between North Broadway in White Plains to Hillside Avenue, County Route 100, in Valhalla. The route has at-grade crossings with Metro-North and the Bronx River Parkway. *Virginia Road* carries an average daily volume of 7,000 vehicles.

Orchard Street and Old Orchard Street are two-lane roads that follow the perimeter of the Kensico Reservoir and Cranberry Lake Preserve in Harrison, offering an access option to Route 22 in North White Plains.

Armonk – Central North Castle

Armonk's collector roads are generally two-lane roads that provide access to local roads from the arterial road network.

NYS Route 433, North Greenwich Road, is a short north-south route between Route 22 and the state line, after which it becomes Riversville Road and continues southward in Greenwich. The route carries a daily average of 5,500 vehicles.

Byram Lake Road, County Route 133, is a north-south route between Cox Avenue and Route 117 in Mt. Kisco. North of the high school, the routes run parallel to I-684 and the Byram River.

Cox Avenue/High Street is a north-south road that spans from the Town line to Route 22. High Street is designated as Cox Avenue south of Greenway Road. Cox Avenue travels east-west

6. TRANSPORTATION

to cross I-684 between School Street and Byram Lake Road. The road provides an alternative to the busiest section of Route 22, terminating at a point where the route narrows to two lanes.

Whippoorwill Road is a north-south road that splits off of King Street north of Route 22. The road terminates at Bedford Road in Chappaqua. The roadway's eastern spur, East Whippoorwill Road, ends in the heart of Main Street in Armonk.

Eastern District (Banksville)

North Castle's Eastern District relies on a network of collector roads to access Route 22 and arterials in neighboring towns. These two-lane roads provide access to quiet local roadways in the Town's least populated areas.

Bedford-Banksville Road is a north-south County Route that begins at the state line and terminates at Route 22 in Bedford. The section between the state line and Middle Patent Road is designated as County Route 56. North of Middle Patent Road, the route is designated as County Route 12. Bedford-Banksville Road is the main corridor of the Banksville hamlet, which straddles the state line. In Greenwich, the road continues as North Street and connects to the Merritt Parkway.

Round Hill Road is a north-south road that runs primarily through Greenwich. In North Castle, it intersects with Banksville and Mead Roads before ending at Bedford-Banksville Road.

Banksville Road is a one-mile east-west road that terminates at Route 22.

Middle Patent Road provides connection between Bedford-Banksville Road (County Route 12) and Route 22.

Local Roads: Local roads are streets that generally provide access to adjacent properties. All of these streets are owned

and maintained by the Town, with the exception of private streets that are located within office parks and residential subdivisions. Several local roads serve as local collectors that supplement designated arterial and collector roads.

Traffic Volumes

Figure 13 shows 2015 estimates for average daily traffic volumes for arterial and collector roadways included in NYSDOT's traffic count program. Aside from I-684 and the Bronx River Parkway, which carry an estimated 58,700 and 18,500 vehicles through North Castle, respectively, the heaviest traffic volumes are seen along Route 22 in North White Plains. The segment between the Central Westchester Parkway and the start of Mt. Kisco Road has daily traffic volumes of 22,400 vehicles. Most of this traffic, about 14,000 vehicles, continues along North Broadway toward the Taconic State Parkway. The segment of Mt. Kisco Road that runs along Kensico Lake carries an average of close to 11,000 vehicles. Daily volumes along King Street (Route 120/120A) range from 8,500 to 12,500 between Armonk and the Westchester County Airport.

In Armonk, the heaviest traffic volumes are on Route 22 between Route 120 (King Street) and County Route 433 (North Greenwich Road). The segment between Route 128 (Main Street) and the I-684 interchange carries a daily average of 18,200 vehicles. Traffic volumes on Route 22 steadily decrease east of County Route 433 as the roadway narrows and carries less regional traffic. Main Street, within the hamlet, carries a daily average of 7,400 vehicles. Daily traffic volumes along surrounding collector roads generally range between 1,000 and 3,000 vehicles.

In North Castle's Eastern District, collector roads handle between 700 and 3,500 vehicles per day.

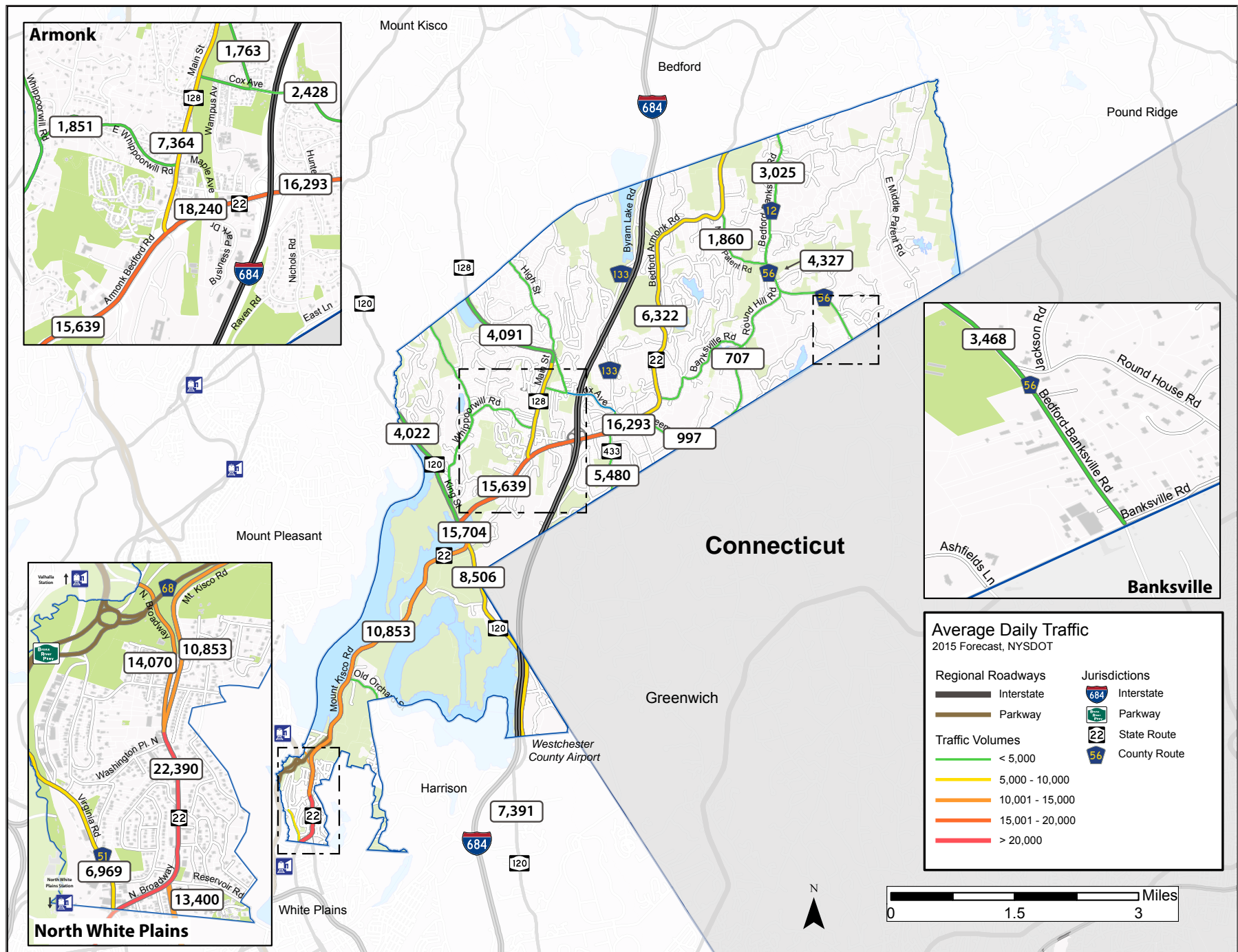


Figure 13: Traffic Volumes

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Traffic Safety and Road Conditions

Crash data were obtained from NYSDOT for the most recent three-year period, January 2014–December 2016. A total of 842 crashes occurred within North Castle.⁴ The following table provides a summary of total crashes by severity:

Table 9: Total Crashes by Severity (Jan 2014 - Dec 2016)

Severity	Crashes
Fatality	2
Injury	195
Property Damage (PDO) & Non-Reportable	645
TOTAL	842

Source: NYSDOT

The Town Police Chief reports that, historically, Route 22 between North White Plains and Armonk has experienced fatalities. This can be attributed to a combination of high traffic volumes, the curvature of the road and relatively high speeds.

Figure 14 shows the location of motor vehicle crashes that occurred on public streets. Table 10 lists the 10 intersections with the most crashes; these occurred along arterial and collector streets that carry the largest share of traffic volumes.

The figure also shows the location of pedestrian and bicycle crashes, all of which were reported with injuries. In total, there were four crashes resulting in a pedestrian injury and three crashes resulting in bicyclist injury.

Often, traffic safety issues are related to road condition. In North Castle, local roads have evolved to carry traffic volumes of major roads, with multiplying access points as parcels have been subdivided and new driveways created. Common elements

include roads with little or no shoulder, narrow roads, poor alignment, limited visibility, high traffic volumes and congestion.

Table 10: High-Crash Intersections (Jan 2014 - Dec 2016)

Intersection	Injury	PDO	Total
N. Broadway & NYS Rt 22 & Hillandale Ave	8	32	41
NYS Rt 22 & Central Westchester Pkwy	4	24	28
Mt. Kisco Rd & Bronx River Parkway	9	12	21
NYS Rt 22 & Maple Ave	3	18	21
NYS Rt 22 & King St (Signalized Intersection)	4	15	19
NYS Rt 128 & Bedford St	0	19	19
NYS Rt 22 & CR 433	4	15	19
I-684 Exit 2 Interchange & Airport Rd (CR 35)	2	16	18
NYS Rt 128 & Maple St	3	14	17
NYS Rt 22 & Byram Lake Rd	4	1	15

Source: NYSDOT

There are opportunities to improve roadway and intersection design and add pedestrian and bicycle infrastructure. The crash analysis identified several high-crash intersections, mostly in Armonk and North White Plains, which could be improved through changes to intersection design (see Figure 14). In North White Plains, they include the intersection of Reservoir Road, Route 22 and the Central Westchester Parkway, and the signaled intersection where Route 22 splits into North Broadway and Mt. Kisco Road. In Armonk, intersections with the most crashes include Maple Avenue and Route 22; North Main Street and Route 22; and North Main Street and Maple Avenue.

⁴ Excluding crashes that occurred on I-684 and on private property

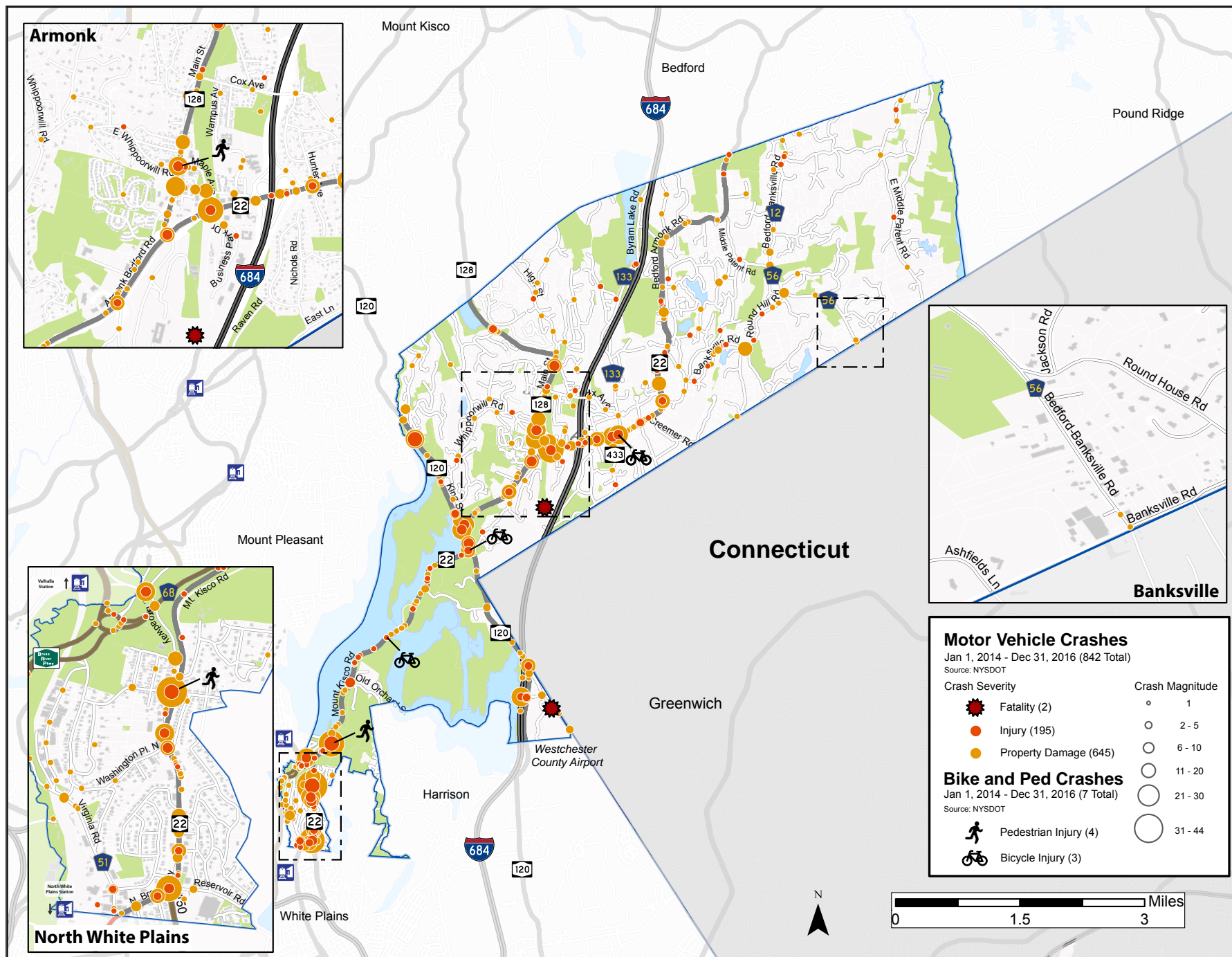


Figure 14: Motor Vehicle Crashes by Severity

6. TRANSPORTATION

6.3 PUBLIC TRANSIT

Metro-North Rail Service

Commuter rail stations are not within close proximity for most North Castle residents. The North White Plains train station, located just outside the hamlet in the City of White Plains, serves as a mid-line terminus for the Metro-North Harlem Line. On weekdays, Metro-North operates 12 southbound trains in the morning peak (6-8 am) and 12 northbound trains during the evening peak (5-7 pm) from the North White Plains Station. Ride time to Grand Central Terminal ranges from 40 to 55 minutes.

The Town maintains a small parking lot on Fisher Lane in White Plains, with approximately 50 spaces, and offers permits to North Castle residents. Commuter permits are priced at \$300 for six months. The lot is currently full with a wait list exceeding 200 applicants. Metro-North has recently built a 500-space structure (operated by LAZ Parking) across the street from the Town lot. Permits are priced at \$1,228 a year, \$642 for six months, or \$322 for three months. Daily meters are available for \$7.25 for 16 hours and \$10 for 24 hours. Parking is free on weekends and holidays.

Bus Service

Westchester County is the primary local bus provider for the Town. The Bee-Line operates two full routes, the 6 and the 12, and one commuter shuttle, the Loop H (see Figure 15). Table 11 lists the bus routes with service hours and average rush-hour headways.

Route 6 operates along Route 22 in North White Plains before continuing on North Broadway to Valhalla and south to the White Plains Transit Center (stops are present one block from the North White Plains train station). Route 12 provides service to

Westchester County Airport and terminates at Main Street and Bedford Road in Armonk. Select Route 12 buses provide service to the Westchester Business Park during rush hour.

Table 11: Westchester Bee-Line Routes

Bus Route	Destination	Service Span	Rush Hour Frequency
6	Yonkers to Pleasantville via North White Plains	7 AM – 10 PM*	30 minutes
12	White Plains Transit Center to Armonk via Harrison	7 AM – 7 PM	30 minutes
Loop H (Shuttle)	White Plains to Armonk	7 AM – 10:15 AM, 3PM – 6:15 PM	30 minutes

Source: Westchester County

**Primary service hours of Route 6 bus is between 7am to 7pm, last trip scheduled between 9 and 10pm.*

In addition, Bee-Line provides shuttle bus service for workers commuting to the White Plains region using Metro-North. The Loop H shuttle provides express service between White Plains station and several office parks in Armonk, including the IBM campus and Swiss Re. Shuttle service operates 7 runs in the morning rush and 8 in the afternoon rush. The shuttle schedule is coordinated with north and southbound Harlem line trains.

Paratransit Services

Westchester Bee-Line Paratransit service provides door-to-door transportation for senior citizens and people with disabilities who are unable to use fixed-route services. Riders must be approved by the Westchester County Office of the Disabled. Rides must be reserved in advanced and cost \$4 each way.

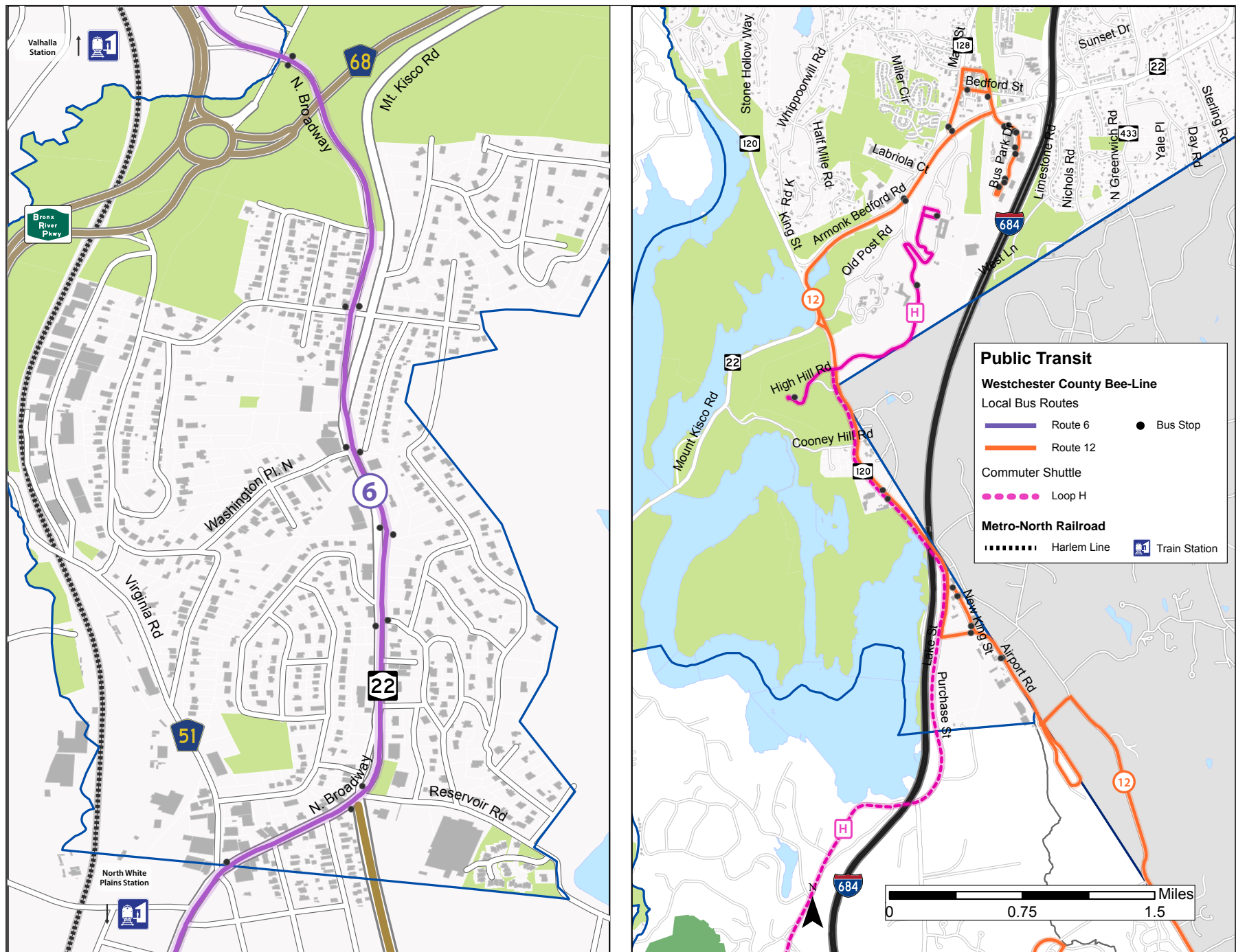


Figure 15: Public Transportation

6. TRANSPORTATION

6.4 BICYCLE CIRCULATION

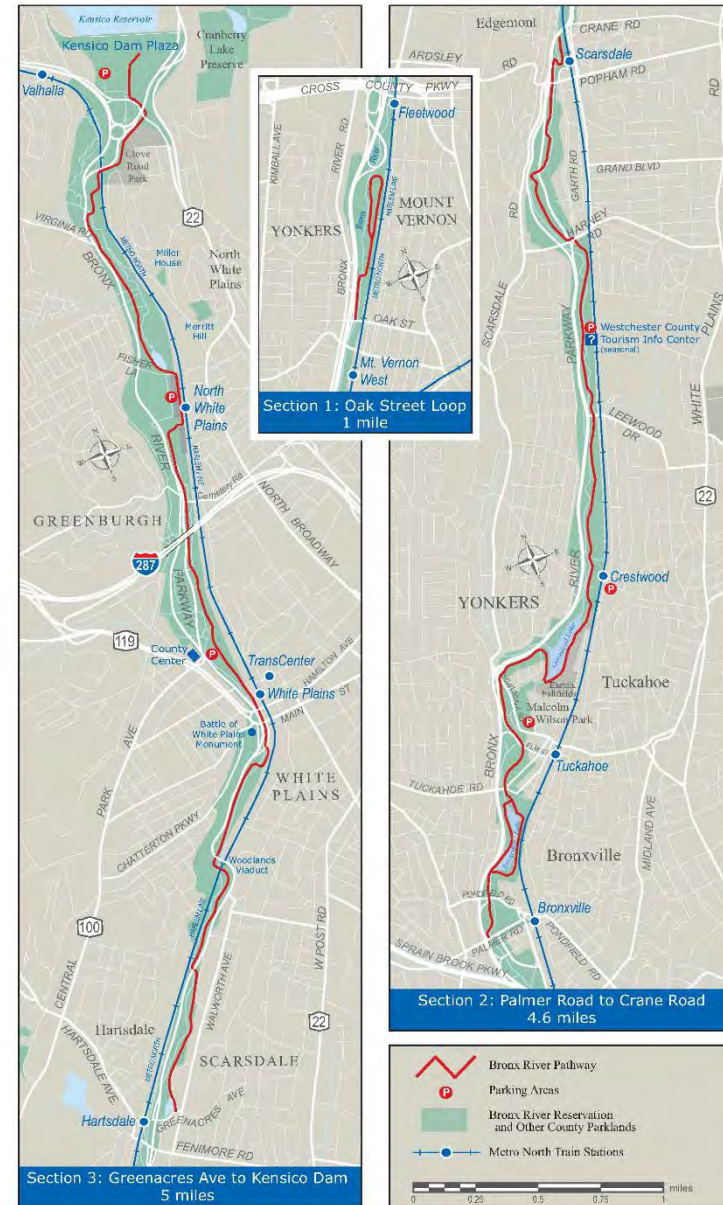
No roadways in North Castle have been designated as bicycle routes for exclusive or shared-use markings. The Town is the northern terminus of the Bronx River Parkway's multi-use path that runs along the parkway's linear park. As shown in Figure 16, this path runs in three sections: a short loop in Mount Vernon; a 4.5 segment from Palmer Road in Bronxville to Crane Road in Scarsdale; and a 5-mile segment from Greenacres Avenue in Scarsdale to Kensico Dam. The County plans to complete a missing piece in Scarsdale in 2017, creating an uninterrupted path between Bronxville and North Castle. This path is a major attraction for recreational cyclists in the region. Additional bike paths throughout the Town are limited; although there is no official designation, Route 22 in North White Plains is known to attract significant groups of long-range cyclists on weekends. Route 22 has "share the road" signage between Armonk and North White Plains. The Town considered plans for several bike paths in Armonk in 2013, which were not built. Residents have expressed interest in revisiting these plans.

Bicycle Routes in Armonk:

Route 22 in North Castle is a popular route for long-range cyclists traveling in large groups. On weekends, these groups can occupy most of the road, causing traffic congestion and safety concerns.

In 2013, the Town completed an initial study to determine the feasibility of creating a bicycle route in central North Castle. The study resulted in an initial plan to create a bicycle route network in five phases, shown in Figure 17, and discussed below.

Figure 16: Bronx River Parkway Path



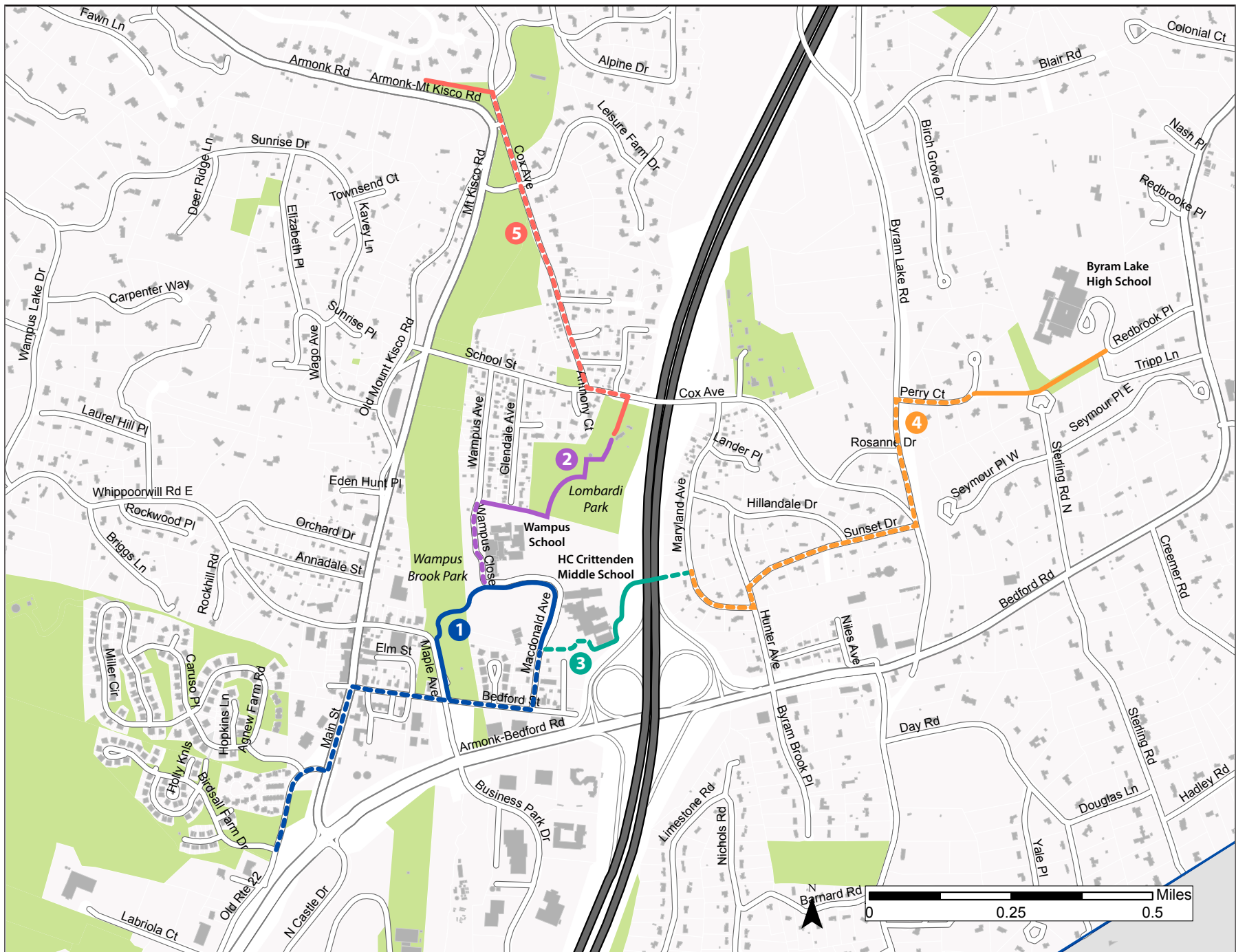


Figure 17: Proposed Local Bicycle Routes

6. TRANSPORTATION

1. **Initial Loop:** 1.34 mile on-street and multi-use path. The on-street route would consist of bicycle lanes and/or use of shared-lane “sharrow” markings. The route connects Birdsall Farm Drive and Wampus Park via Main Street, Bedford Road, and MacDonald Avenue. The loop would create a new connection between the Wampus School and North Castle Recreation Center.
2. **Lombardi Park Extension:** 0.45 mile 10-foot wide multi-use path constructed in and around Wampus Brook Park. The path would connect to the Initial Loop at the Wampus School and connect to Lombardi Park.
3. **Maryland Avenue Extension:** 0.38 mile route consisting of 10 foot wide multiuse path and use of existing bridge over I-684. The route would begin at the HC Crittenden Middle School and end at Maryland Avenue.
4. **High School Extension:** 1.14 mile primarily on-street bicycle lane or shared-lane “sharrow” markings connecting from the end of the Maryland Avenue Extension to the Byram Hill High School. The route would use Maryland Avenue, Sunset Drive, Byram Lake Road, and Perry Court. A connection would be created between the Perry Court cul-de-sac and the High School.
5. **Sands Mill Extension:** 0.95 mile primarily on-street bicycle lane or shared-lane “sharrow” markings connecting Lombardi Park to Sands Mill Road at NYS Route 128/Main Street. The route would follow Cox Avenue to Greenway Road where it would proceed off road to Sands Hill Road, just north of Main Street.

Connections to Bronx River Parkway: There is interest in connecting the Bronx River Parkway path and Armonk via a multi-use path on Route 22. This path would bring people from the parkway’s northern terminus to the Kensico Dam and end in Armonk’s historic district (see Figure 18).

6.5 PEDESTRIAN CIRCULATION

North Castle’s pedestrian activity is concentrated in the hamlet commercial areas. In Armonk, continuous sidewalks are present on both sides of Main Street between Bedford Road and Annadale Street. Limited stretches of sidewalk are available on streets that intersect with Main Street, such as Bedford Road and Maple Avenue.

In the hamlet of North White Plains, continuous sidewalks are present along Route 22 near the border of White Plains. Sidewalks become irregular several blocks into North Castle and are maintained only on the west side of North Broadway once Route 22 becomes Mt. Kisco Road. A network of sidewalks is present around the North White Plains train station.

Banksville features one pedestrian crossing at the intersection of Bedford-Banksville Road at Banksville Road, in Greenwich. This is linked to 250 feet of sidewalk lining a strip mall development. Bedford-Banksville Road does not have shoulders, however grassy and paved areas in front of buildings serve as informal pedestrian paths.

Outside of the aforementioned areas, pedestrian facilities are minimal. With the exception of major arterials, the Town’s roadways do not have shoulders to accommodate pedestrians.

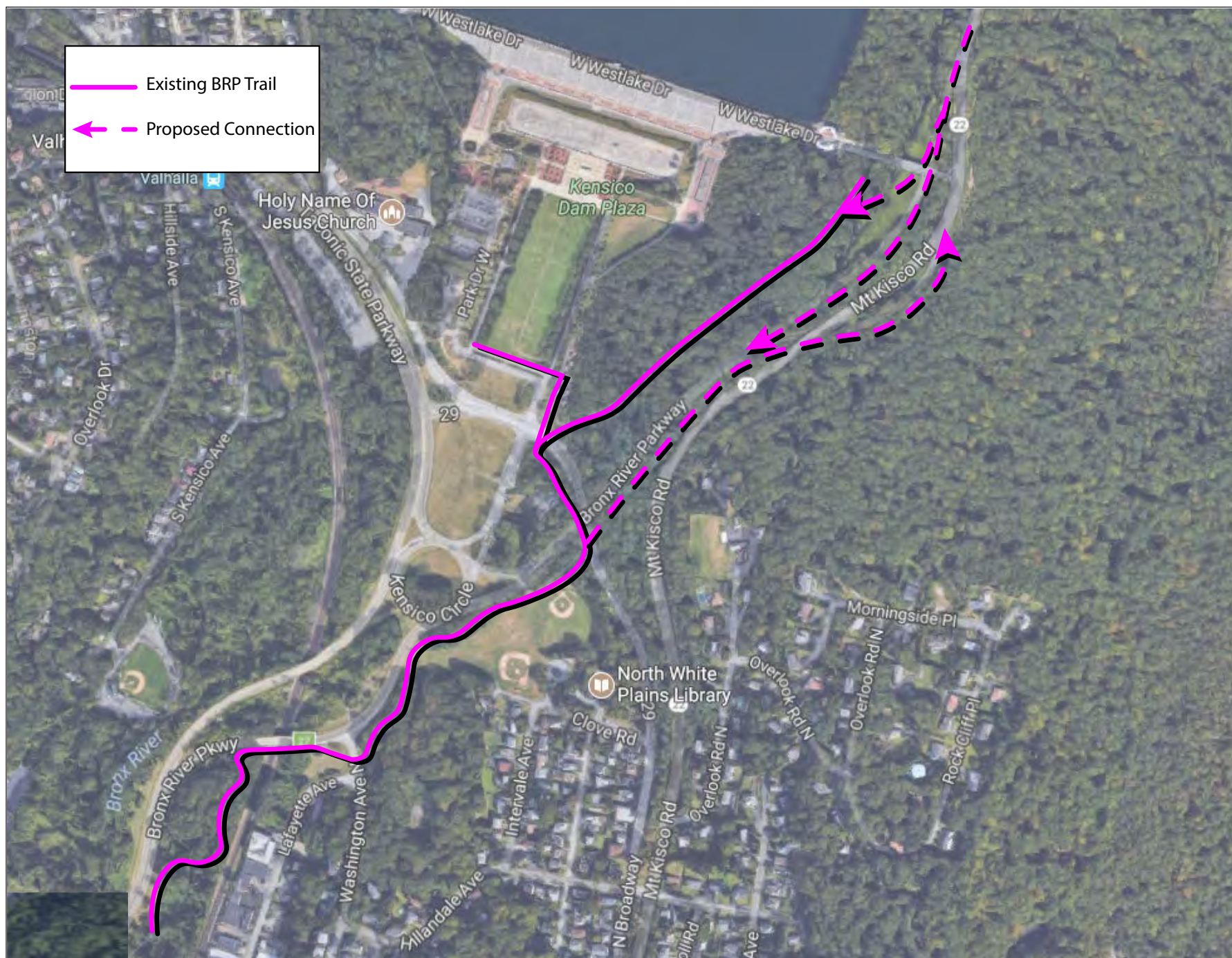


Figure 18 : Proposed Bronx River Pathway Connection

6. TRANSPORTATION

6.6 AIRPORT

Westchester County Airport is located in the Towns of North Castle and Harrison and the Village of Rye Brook. The airport provides commercial, business, military and private flight services to the New York metropolitan region. The airport is currently operated by the County with plans to retain a private operator.

Figure 19 shows an aerial photo of the airport parcel and surrounding roadways. The airport is situated between Route 120 (Purchase Street) and Route 120A (King Street). Its main terminals and parking facilities are accessed from Airport Road (County Route 135), a short two-lane road between the I-684 Exit 2 interchange and the roundabout at Rye Lake Avenue. Facilities located at the southwest corner of the site can be accessed from Tower Road from Route 120.

In 2012, the airport recorded nearly 1 million passenger boardings. In an effort to protect the surrounding community, the airport operates under a strict passenger limit that permits 240 passengers to pass through the terminal each half-hour. In addition, under a voluntary agreement, planes are not permitted to take off between the hours of midnight and 6:30 am.

The airport is undergoing a master plan update to address its increase in commercial demand for the next 15 years. The plan will not increase the airport's overall footprint or length of the runways, but recommendations include capital projects to enhance operations. Recommendations include an additional two departure gates, construction of a corporate jet hangar, additional facilities for U.S. Customs and County police, and the expansion and reconstruction of parking facilities including an additional access point from Route 120 in Harrison and a proposed parking garage on New King Street in North Castle.

6.7 ISSUES AND OPPORTUNITIES

Congestion in North White Plains

Residents and stakeholders have expressed concern about congestion along Route 22 caused by the lack of a direct connection between I-287 and the Bronx River and Taconic State Parkways. Traffic currently merges from Central Westchester Parkway to Route 22 and continues northwest on North Broadway to Kensico Circle. Thus, Route 22 functions as an arterial four-lane road through North White Plains with average daily traffic volumes that exceed those on the Bronx River Parkway.

The inability of Route 22 to fully accommodate peak hour traffic in North White Plains is the single-most important transportation issue in North Castle. An arterial road that does not adequately serve through traffic leads to drivers taking local roads through residential neighborhoods. This leads to a deterioration in the quality-of-life in these neighborhoods. This issue has become so serious in North White Plains that the Police and Highway Departments are considering signage that will prohibit drivers taking a right turn onto Washington Place East.

For these reasons, this Comprehensive Plan's first recommendation is for the State to undertake a comprehensive study of Route 22 and the options to alleviate traffic congestion along the roadway. This should include ways to improve use of the Bronx River Parkway by creating better connections to the Parkway such as at Cemetery Road in White Plains.

Further constraint is placed on the hamlet due to the lack of suitable roadways that underpass the Metro-North right-of-way. For example, the Cemetery Road underpass is only wide enough for one car to pass at a time and cannot accommodate trucks, and Virginia Road is impeded by the at-grade train crossing.

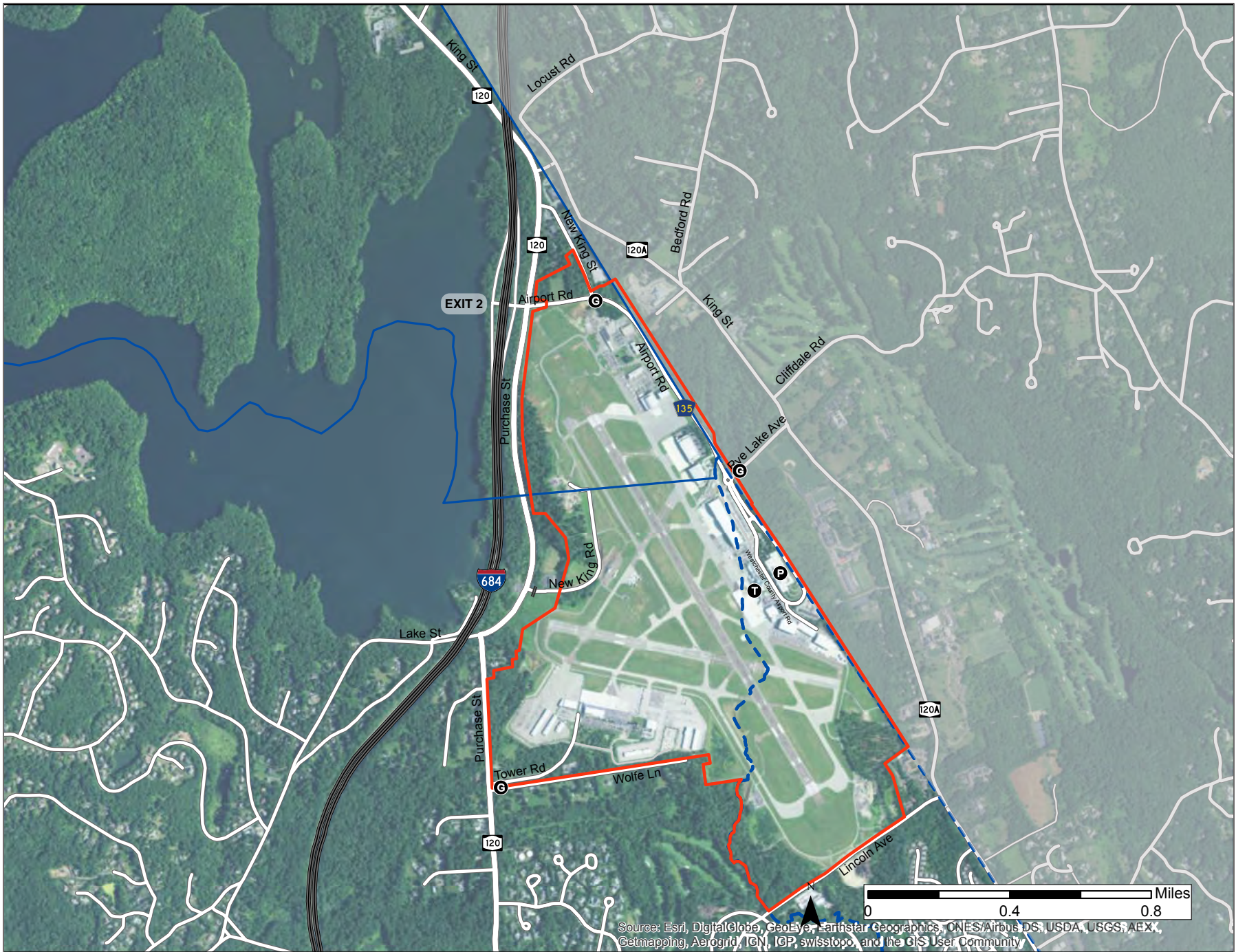


Figure 19: Westchester County Airport

6. TRANSPORTATION

Road Connectivity

Having streets connect to each other in a road hierarchy or grid system is a basic concept of transportation planning. Behind the concept is providing safety, reducing miles driven and enhancing access. Providing alternative ways to get to a destination allows fire, police and service vehicles to access a destination from more than one location. Thus, if one road is blocked there is an alternative means of access. This also applies to traffic in general.

An example in North Castle is the road system in downtown Armonk. While it is a basic grid, Main Street provides the only north-south road. The Police Chief has pointed out that a closure of Main Street for a street fair or an emergency reason leaves no obvious alternative road for north-south access. From this concern came the recommendation for the extension of Maple Avenue north to either the existing CVS store or beyond, to create an alternative to Main Street (see Figure 20). This recommendation would need grant funding, bonding or capital budget allocation and might be built in phases.

Complete Streets

The concept of complete streets is a transportation approach that recommends streets to be designed for pedestrians and cyclists as well as motorists. Complete streets are seen as providing access and mobility for all roadway users of all ages and abilities. Such design features can include sidewalks, lane striping, paved shoulders suitable for use by bicyclists, signage, crosswalks and traffic calming measures. At a State level, both New York and Connecticut have recently endorsed this concept.

The concept needs to be applied within the context of each different municipality. In North Castle, densities throughout most of the Town are relatively low, with one-, two- and four-acre

zoning. Putting sidewalks or bike lanes in low-density residential neighborhoods is not warranted because of insufficient use, cost and potential change to neighborhood character. However, in a hamlet center like Armonk, a sidewalk policy makes sense, and this plan supports filling in sidewalk gaps and extending some sidewalk areas including a sidewalk connection between the Armonk hamlet and the business park via Maple Avenue. Sidewalk connections can provide a choice for senior citizens in senior living facilities if they do not use paratransit services.

There are several areas in North Castle where the Town should explore providing or enhancing pedestrian connections:

Route 22 at Maple Avenue: The Town should encourage pedestrian activity between downtown Armonk and Business Park Drive to connect these commercial districts. This would also benefit users of the North Castle Community Park and residents of the Bristol Assisted Living residence.

Downtown Armonk: Much of the Armonk business area is highly walkable, but there are sidewalk gaps along its periphery, such as along Route 128 (Main Street) north of Maple Avenue. In addition, there is no direct pedestrian link from the elementary/middle school complex off Wampus Avenue to Main Street. The Town should explore opportunities to fill in gaps to enhance pedestrian circulation in the hamlet.

Access to North White Plains Train Station: Most of the North White Plains hamlet is within walking distance of the station, but sidewalks are limited within the neighborhoods. Key walking routes to the station should be prioritized for implementation of sidewalks, such as portions of Route 22 and Virginia Road.

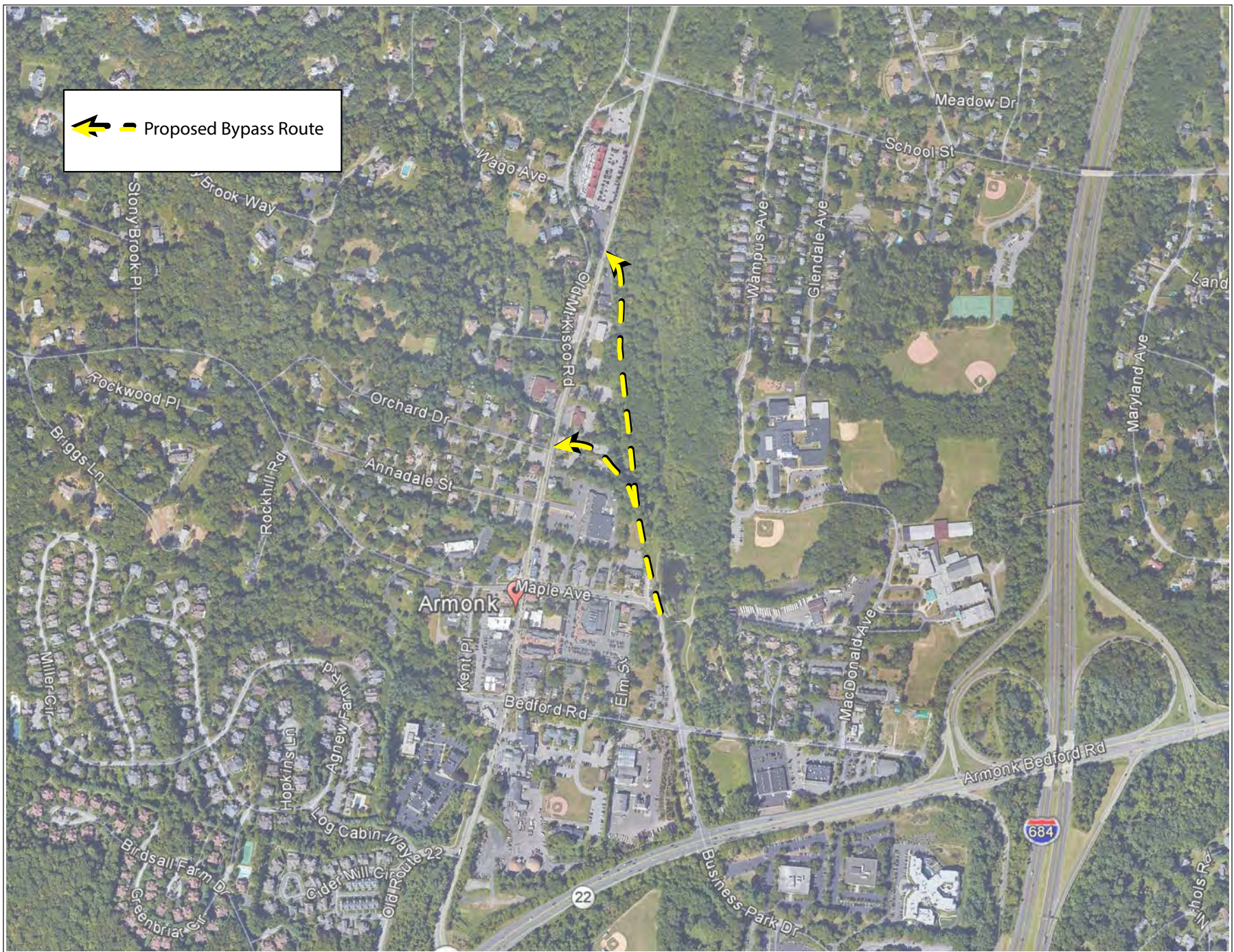


Figure 20: Proposed Main Street Bypass

6. TRANSPORTATION

Bicycle lanes are also supported where previous studies indicate sufficient roadway widths for safe travel. One such bicycle connection is between Armonk hamlet and Crittenden Middle School. However, bicycle access needs to fit into the existing roadway network and built context. For example, a separate bike lane is not appropriate on Main Street, as it would replace parking that serves existing stores. In this case, the roadway should simply be marked so that drivers know that bikes may share the road.

In some cases, it is difficult to do both sidewalks and bicycle lanes at the same location. An example is Route 22 in North White Plains. This is a very high-volume road with relatively high speeds. The roadway lanes are already undersized in that they are not uniformly 11-12 feet wide. The road is not wide enough to include both continuous sidewalks and designated bike lanes. In the Comprehensive Plan workshop for North White Plains residents favored sidewalks as a safe and more inclusive measure that better serves all ages and abilities.

6.8 RECOMMENDATIONS

Vehicular Circulation

Route 22 in North White Plains: Given the significant concern by residents of congestion and speeding along Route 22 in North White Plains, and the lack of options to direct regional traffic to alternate roadways, this Plan recommends that the State undertake a comprehensive study of Route 22 to improve conditions for drivers as well as pedestrians and cyclists. This study should include the addition of sidewalks, crosswalks, lighting, gateway signage, landscaping and wayfinding throughout the corridor in North White Plains.

Improvements along Route 22 should also incorporate a demand-activated pedestrian crossing in one of two locations 1) across from 845 N. Broadway, between Washington Place East and Dunlap Way, or 2) at the offset intersection of Palmer Avenue and McDougal Drive. This recommendation is dependent on adding sidewalks on the east side of Route 22.

Moving north, this Plan recommends that the Town, in coordination with NYSDOT, study a potential “road diet” of Route 22 north of Hillandale in North White Plains and Route 120 in Armonk to potentially remove one lane of traffic in each direction. Implementation of such a road diet, which would be contingent on maintaining enough capacity to serve traffic volumes, could provide room for dedicated bike lanes and an expanded divider median to prevent vehicles from crossing the center line. This could improve safety for road users: drivers by preventing head-on collisions by vehicles leaving their driving lane, and cyclists by providing a designated bike lane.

Route 22 in Armonk: The intersection of Maple Avenue and Armonk-Bedford Road (Route 22) generates traffic congestion and backups during rush hour due to signal timing issues. A potential solution to this is the creation of two left turn lanes from Maple Avenue onto the eastbound lanes of Route 22.

Other Recommended Roadway and Intersection Improvements Figure 21 identifies other locations Town-wide where road conditions need addressing. See Tables 12 and 13 for a list of roadways and intersections flagged for improvement, based on a review of outstanding items from the 1996 Comprehensive Plan and input from the Police Chief and highway foreman.

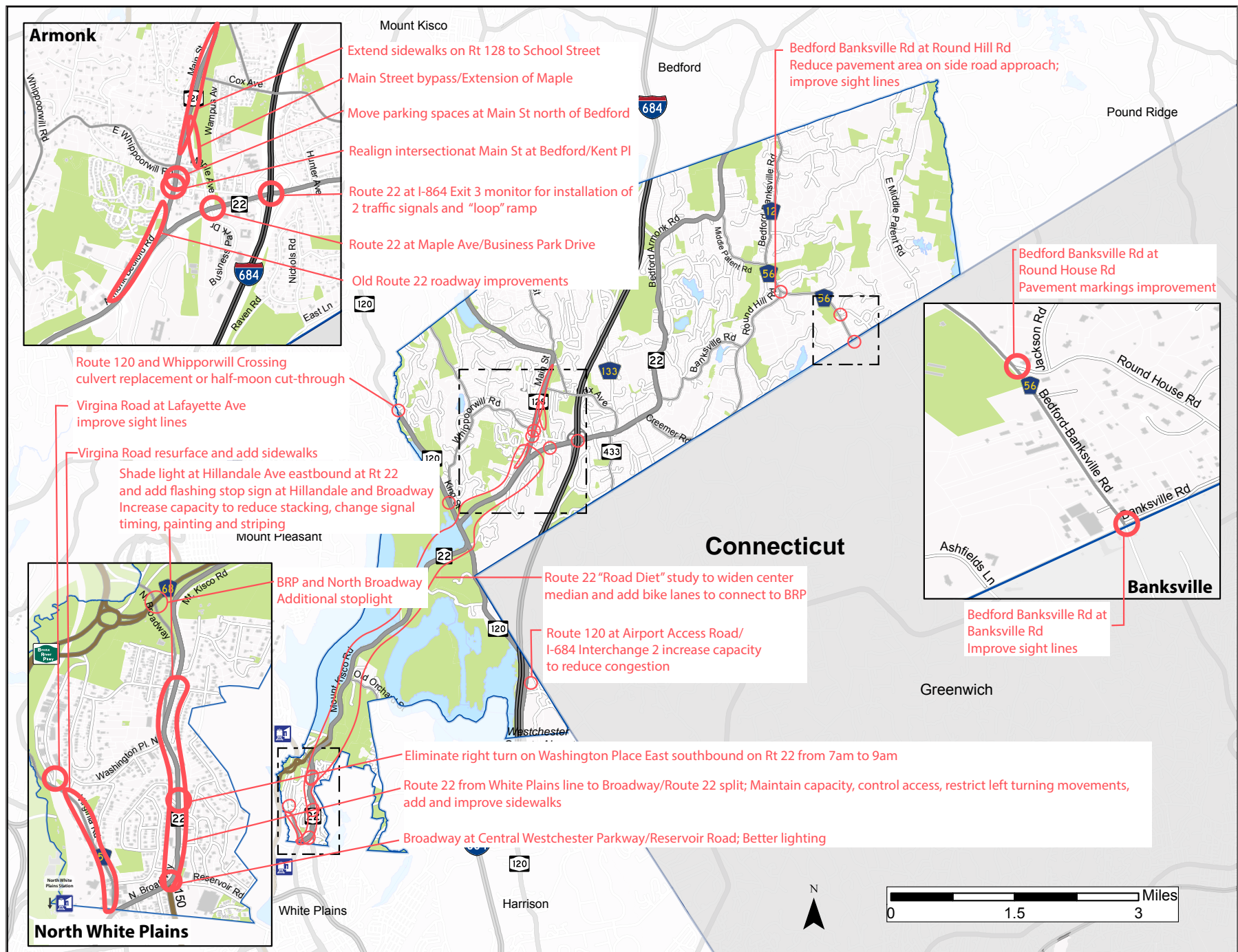


Figure 21: Suggested Roadway/Intersection Improvements

6. TRANSPORTATION

Table 12: Recommended Improvements: Roadways

Roadway Segment	Action
<i>North White Plains</i>	
Broadway (Route 22), between White Plains City line and Broadway/Route 22 split	Maintain capacity, control access, restrict left turning movement, improve sidewalks
Broadway/Route 22 split to Hillandale	Improvements to left turn lane, additional pedestrian crossing and demand actuated light south of Washington Place East
Virginia Road to Washington Avenue North	Add sidewalks to facilitate access to North White Plains station
Hamlet-wide	Add concrete curbing improvements where needed
<i>Armonk</i>	
School Street	Replace culvert, dredge Wampus Brook
Route 22, from Hillandale Avenue to Route 120	Study a possible road diet to reduce Route 22 to one lane in each direction, widen the center median and provide bike lanes.
Route 128 to School Street	Extend and improve sidewalks
<i>Eastern District</i>	
Hickory Kingdom Road, section east of Kingdom Ridge Road	Upgrade as needed and add curve sign
Middle Patent Rd, between Route 22 and Bedford-Banksville Road	Minor widening, clearing along edge of roadway; improve vertical alignment at intersection with Route 22 and elsewhere; improve alignment, pavement condition; upgrade drainage as needed
St. Mary's Church Rd	Improve road alignment, widen to provide two travel lanes; improve sight lines

6. TRANSPORTATION

Table 13: Recommended Improvements: Intersections

Roadway Segment	Action
North White Plains	
Broadway at Central Westchester Parkway/Reservoir Road	Better lighting
North Broadway (Route 22)	Increase capacity to reduce congestion
North Broadway at Bronx River Parkway	Additional stop light
Hillandale Avenue at Broadway and Route 22	Shade light at Hillandale Avenue eastbound at Route 22; add flashing stop sign at Hillandale and Broadway
Virginia Road at Lafayette Avenue	Improve sight lines
Armonk	
Main St north of intersection with Bedford	Remove three on-street parking spaces
Bedford and Kent Place at Main Street	Realign
Whippoorwill Rd East and Main Street/Maple Avenue	Realign
Main Street Bypass (Maple Street extension)	Extend Maple Street north and reconnect to Main Street at a location to be determined (see Figure 6.11)
Banksville Road at Sniffen Road/Long Pond Road	Upgrade signs, pavement markings
High Street at Greenway Road	Improve sight lines
Route 22 at Maple Street	Add crosswalk on Route 22, double left turn lanes from Maple onto Route 22
Old Route 22	Implement NYCDEP streetscape and parking improvements
Route 120 at Route 22 (north and south intersections)	Realign intersections; add capacity
Route 120 at Whippoorwill Road	Realign side road approach to improve sight line
Route 120 at Whippoorwill Crossing	Either replace culvert or cut in a new road to eliminate half-moon
Route 120 at Airport Access Rd/I-684 Exit 2	Increase capacity to reduce congestion
Route 22 at I-684 Exit 3	Monitor for installation of 2 traffic signals and “loop” ramp to eliminate northbound left turn
Eastern District	
Bedford-Banksville Road at Round Hill Road	Reduce pavement area on side road approach; improve sight lines
Bedford-Banksville Road at Round House Road	Improve pavement markings
Bedford-Banksville Road at Banksville Avenue	Improve sight lines

6. TRANSPORTATION

Sidewalks

Business Park: The Town should work with NYSDOT to connect Maple Avenue and Business Park Drive by adding a sidewalk to the west side of Maple Avenue and extending it across Route 22 with a crosswalk with a pedestrian signal. This would require an extension of sidewalks on Maple Avenue and Business Park Drive and the creation of double left turn lanes at the light, and widening Maple Avenue where it intersects with Route 22, creating space for a crosswalk on the west side of Maple Avenue. Pedestrians could share a signal phase with the left turn lanes, eliminating potential conflicts with turning vehicles.

Downtown Armonk: Sidewalks should be extended along the east side of Main Street to School Street, and along School Street to Wampus Avenue. This would improve pedestrian circulation to the Armonk business area and to the schools.

North White Plains: In addition to the pedestrian improvements along Route 22 identified above, the Town should proceed with planned sidewalk additions along Washington Avenue North and Virginia Road (working with the County as needed) to facilitate pedestrian access to the train station.

Bicycle Circulation

Downtown Armonk: The Town should revisit bike lane plans identified in the 2013 study, balancing the need to expand bicycle infrastructure with parking. Along Main Street, bikes will need to be accommodated with share-the-road signage, rather than dedicated lanes, due to the need to preserve on-street parking (see Figure 17).

North White Plains: The Town should explore an extension of the Bronx River Pathway to Armonk via Route 22. This proposed pathway link could be implemented with a potential “road diet” on Route 22 north of Hillandale. Reducing this section of Route 22 to one lane in each direction could create enough room to expand the center median and create bike lanes in each direction to connect to the Bronx River Pathway (see Figure 18).

Public Transportation

To improve bus connectivity between Armonk and the North White Plains train station, the Town should advocate with Westchester County to extend the Bee-Line’s Loop H of the Commuter Shuttle or Route 12 to connect with the station.

Park and Ride/Carpool Facility: The addition of a park-and-ride and/or carpool facility could be useful for North Castle residents using the North White Plains train station. The facility should be sited in an existing and underutilized parking lot that is central and easily accessible from major roadways. Community Park is one potential location. A park-and-ride area could help reduce parking issues at the North White Plains station, and could be especially useful to non-commuters who go into New York City after rush hour and are unable to find parking at the station.

Airport

The long-term health of the County Airport has major potential impacts on North Castle. This Plan supports the existing airport in its current footprint, as well as the possibility for new, airport-supportive ancillary uses along New King Street. Such uses, which could be expected to generative positive economic impacts for the Town and support the existing airport, could be considered by special permit from the Town Board. The Plan does not support expansion of commercial flights at the airport.

6. TRANSPORTATION

7. INFRASTRUCTURE AND UTILITIES

7. INFRASTRUCTURE AND UTILITIES

North Castle's infrastructure supports its residential and commercial uses. Often referred to as "grey infrastructure," it consists of man-made improvements that support human settlement, such as water and sewer systems and electric and telecommunication lines. This chapter addresses the major infrastructure systems within the Town and existing conditions and trends. Maintaining the infrastructure in North Castle is an important factor in preserving the Town's quality-of-life and economic development efforts.

7.1 WATER SUPPLY

Although most of the Town is served by private wells, North Castle has five public water districts (see Figure 22) that draw water from a variety of sources. These include wells controlled by North Castle; sources from New Castle (as back-up supply); the quasi-public Westchester Joint Waterworks (WJWW); and the Kensico Reservoir of the New York City watershed system. In compliance with U.S. Environmental Protection Agency (EPA) and Westchester County Health Department regulations, water delivered to the tap in all districts is chlorinated to ensure that it remains bacteria-free. The Town's Water Department performs water quality monitoring daily in addition to the required monitoring sample analysis that is performed by New York State Certified Laboratories. Annual water quality reports are delivered by May 31 of each year and are available on the Town's website.

North Castle residents receive water predominantly through various aquifers of groundwater sources. Approximately 90% of residents in the Town access water from drilled private wells. A

portion of North White Plains' water comes from Westchester County Water District 1, which gets water from the New York City water supply. A small portion of the water supply in Quarry Heights is provided by WJWW.

Water District 1 – North White Plains

Water District 1 is in North White Plains (excluding Quarry Heights) and is supplied by the recently upgraded Valhalla well and the New York City supply system. The water is re-treated at the North Broadway pump house and pumped directly into the Overlook Road water storage tank for distribution.

Two storage tanks totaling 1 million gallons were recently rehabilitated. The district also has an upgraded ultraviolet disinfection treatment system for the Kensico supply, bringing it into full compliance with EPA and County Health Department regulations.

There are 697 accounts in Water District 1, roughly evenly divided between residential and commercial. The New York City Department of Environmental Protection (NYCDEP) restricts the Town's usage allowances on water coming from the City's supply. These numbers are based on residential population only, even though water is also supplied to commercial uses. As a result, the Town changed the pricing structure in this district in 2012. Commercial properties are now charged a premium stepped rate to accommodate their usage.

Most of the Water District 1 infrastructure is in excess of 75 years old and consists of small-diameter distribution mains. Upgrades to the distribution system should be expected during the next 10 years.

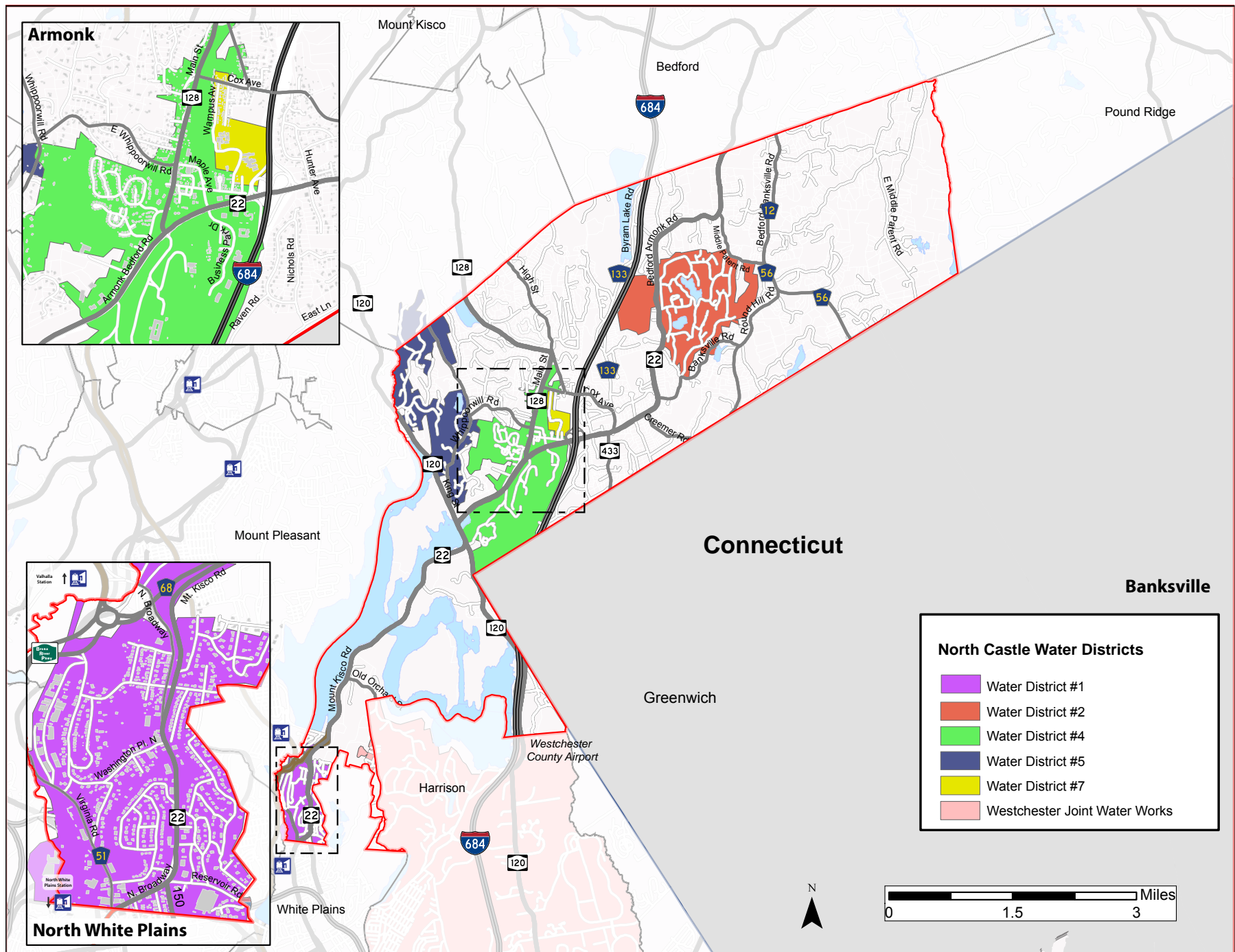


Figure 22: North Castle Water Districts

7. INFRASTRUCTURE AND UTILITIES

Water District 2 – Windmill Farms

Water District 2 is located in Windmill Farms and has 374 service connections. This district features four functional municipal wells with recently modified pump equipment, controls and emergency power. A 600,000-gallon storage tank was installed in 2006. A comprehensive modeling study of the system in 2012 found that the district's system had undersized mains, uneven pressure distribution and low carrying capacity due to aged pipes, leading to inadequate capacity to meet demand and fire-flow requirements. In response, the district completed a significant upgrade to the district's system in 2015, with a replacement of the entire distribution system including 49,000 linear feet of piping, 93 fire hydrants, 118 gate valves and 370 new service connections.

The Brynwood project recently approved by the Town has been added to Water District 2, and its new residential uses are obligated to provide an additional well source.

Water District 4 – Armonk

Water District 4 is in downtown Armonk and serves 402 connections, including the IBM campus. This district is made up of six functional wells along with a 1-million-gallon storage tank and a filtration system operational on the two original School Street wells. Water District 4 also provides water to Water Districts 5 and 7. The district has a critical need for additional supply, and the Town is exploring several options for additional well sources.

Water District 5 – Whippoorwill

Water District 5 supplies 118 homes in the Whippoorwill neighborhood. Its water is purchased from Water District 4, which has critical supply issues. An interconnection between

this district and the Town of New Castle provides additional water supply in case of emergency. Water District 5 experiences distribution problems due to antiquated and undersized water mains.

Water District 6 – Orchard Street

Water District 6 has been established but no infrastructure is currently installed. Pipes are in place that serve the Harrison side of Orchard Street, but not yet the North Castle side. WJWW is seeking to upgrade the Park Lane pump station, with funding from the Town. Any future development on the Jennie Clarkson property or vicinity off Orchard Street, if built, would be served by the upgraded station.

Water District 7 – School Street and Bedford Road

Water District 7 connects the School Street and Bedford Road areas of Water District 4. This district serves the Wampus and Crittenden schools and the homes on Wampus and MacDonald Avenues. The schools have taken on capital debt in order to pay their share. These bonds will be paid off in 2021, at which point the Town could potentially connect Water Districts 7 and 4 to reduce administrative costs and allow for cost sharing.

7.2 SANITARY SEWER SYSTEM

North Castle is comprised mostly of individual septic systems serving its residential areas. Most commercial buildings are connected to its five sewer districts (see Figure 23) that are served by one local sewage treatment plant and three County plants outside of Town. The southeastern part of North Castle is in the County's Blind Brook Sewer District, and the southwestern portion is in the Upper Bronx Sewer District and Mamaroneck Sewage Treatment Plant.

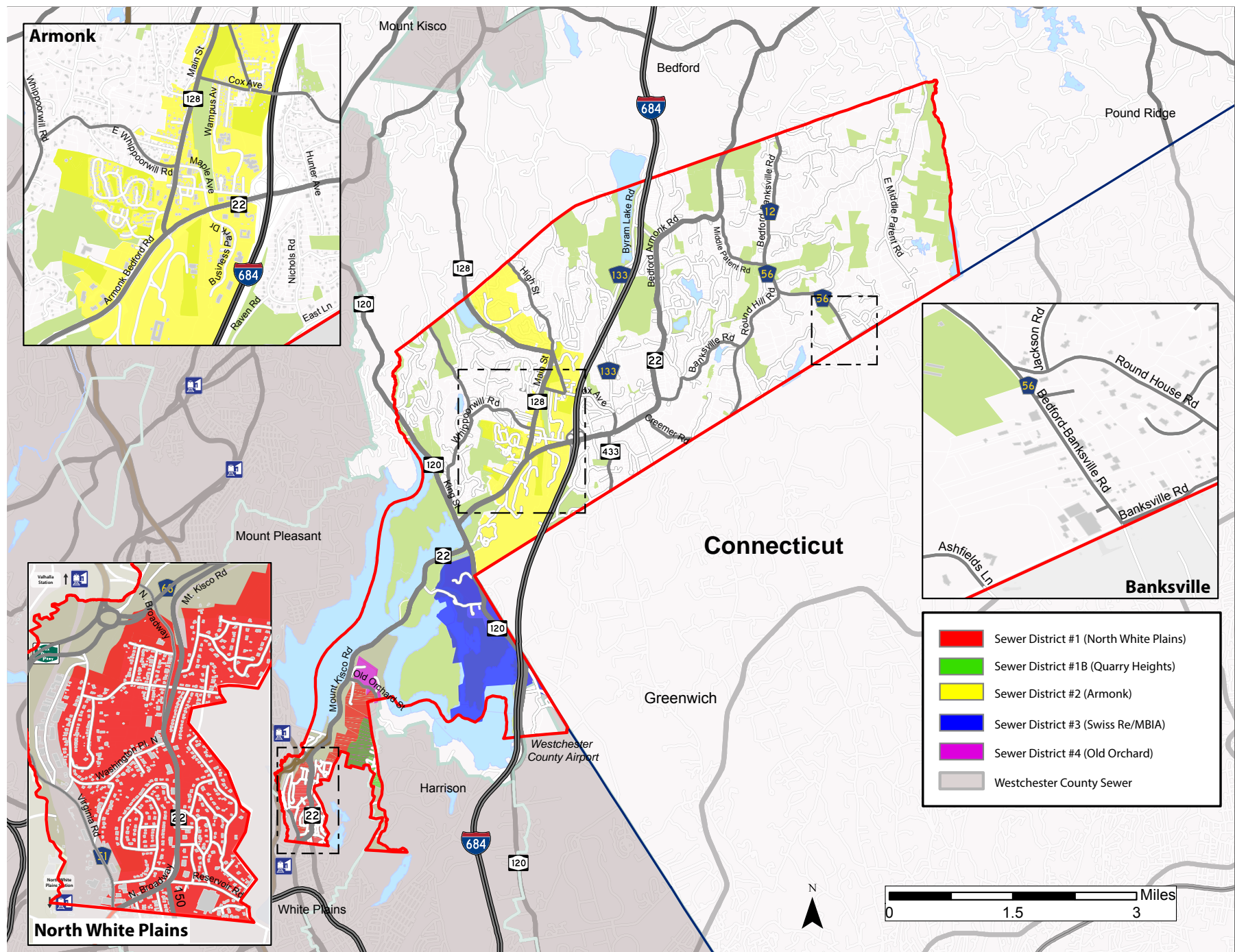


Figure 23: North Castle Sewer Districts

7. INFRASTRUCTURE AND UTILITIES

Sewer District 1

Sewer District 1 is in North White Plains and is conveyed into Westchester County treatment plants. The sewer lines in this district need to be upgraded and relined to address infiltration and inflow issues. North Castle's Water and Sewer Department maintains the manholes and collection lines for this district.

Sewer District 1B

Sewer District 1B is a low-pressure collection system that serves approximately 62 homes in the Quarry Heights neighborhood. The district is made up of ejector pumps; gravity sewer was not cost-effective here due to the area's rocky terrain. This district is conveyed through Harrison to a County treatment plant.

Sewer District 2

Sewer District 2 is in Armonk. There are five pump stations served by a treatment plant at the business park. The Town created a Sewer Task Force in 2008 to assess ways to increase sewage treatment capacity at the district's treatment plant. This district is at capacity, and the Town is looking to expand the district from 500,000 gallons/day to 700,000 gallons/day.

Biological treatment, secondary clarifiers and denitrification were added for discharge in this district, which eventually goes into Long Island Sound via Wampus Brook and the Byram River.

Sewer District 3

District 3 serves Swiss Re, the former MBIA building, Route 120 and New King Street, and discharges through the County's Blind Brook plant. There are three pump stations that serve the office parks and tie into a County trunk sewer at the County airport.

Sewer District 4

Sewer District 4 is located at Old Orchard Street in Quarry Heights, serving the Jennie Clarkson facility, BOCES and

approximately six houses. This district discharges at Blind Brook. If approved, any future projects at Jennie Clarkson or in the vicinity would be served by Sewer District 4, in which case, the district would need to be upgraded by the project applicant.

7.3 STORMWATER SYSTEM

New York State regulations require that regulated municipalities (including North Castle) obtain a permit from the Department of Environmental Conservation (NYSDEC) for the discharge of stormwater runoff into their surface waters. As a condition of the permit, municipalities must develop and implement a comprehensive stormwater management system that includes mandated programs and practices in the following categories:

- Public education and outreach on stormwater impacts;
- Public participation and involvement;
- Illicit discharge detection and elimination;
- Construction site stormwater runoff;
- Post-construction stormwater management in new development or redevelopment; and
- Pollution prevention for municipal operations.

One of the requirements of the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewers (MS4s) is the preparation of an annual report that describes pollutants of concern and their sources and the steps being taken to reduce pollutants in stormwater runoff.

7. INFRASTRUCTURE AND UTILITIES

Some measures that North Castle takes to address stormwater management include:

- Enforcement of a Town law requiring all residents with septic systems to have the system inspected at least once every five years, and repaired or rehabilitated as necessary.
- Conducting regular inspections of stormwater outfalls.
- Reviewing stormwater pollution prevention plans (SWPPPs) as part of construction project approvals.
- Working with the East of Hudson Watershed Corporation (EOHWC) to identify potential stormwater retrofit projects for its regional stormwater management plan.
- Maintenance of municipal facilities such as sweeping streets and parking lots, inspecting and cleaning catch basins and avoiding the use of fertilizers or pesticides on parkland.

The portions of North Castle that are within the New York City Watershed are subject to heightened New York State MS4 stormwater regulations and stricter wastewater provisions under the New York City Water Supply Rule and Regulations.

Areas within North Castle that are prone to stormwater flooding include School Street and Maple Avenue. School Street, in particular, floods to the point of closure at least once a year, and needs to be reconstructed above the floodplain, with a new crossing of the Wampus River provided. The Town should seek grant funding toward this project.

Green Infrastructure

When implemented appropriately, green infrastructure can reduce runoff volume, peak flow and flow duration; improve groundwater recharge, protect water resources, reduce downstream flooding and property damage and provide water quality improvements. The NYSDEC Stormwater Management Design Manual provides guidelines for preservation of natural features and conservation design, reduction of impervious cover and infrastructure techniques for runoff reduction.

7.4 SOLID WASTE

Solid waste in North Castle is handled via the Westchester County Daniel P. Thomas Material Recovery Facility in Yonkers. The facility received about 7,954 tons of municipal solid waste from North Castle in 2016. Of the Town's total waste, 3,278 tons (41%) was recycled. There are no active municipal solid waste landfills in Westchester County.

Suburban Carting Co. serves as the Town's contracted vendor and provides weekly removal services for trash and single-stream (fully commingled) recycling in North Castle. Bulk materials are collected only with prior notice to the hauler. Leaves must be in biodegradable bags. Hazardous waste must be brought directly to the Westchester County Household Material Recovery Facility (H-MRF) in Valhalla. Residents must pay a minimal fee to the H-MRF because North Castle does not contribute tax fees to Refuse Disposal District No. 1. Electronic waste can be dropped off once a month at Town Hall. Once a year, North Castle organizes a town-wide cleanup day and provides pick-up bags, safety vests and paper shredding services to volunteers.

7. INFRASTRUCTURE AND UTILITIES

7.5 ELECTRICITY AND ENERGY

Consolidated Edison, Inc. provides electric power and natural gas to residents in this part of Westchester County. The Westchester service covers 925,000 people within the county's 450 square miles, 30,000 businesses and 350,000 housing units. There are 349,000 residential and commercial electric customers, and 232,000 residential and commercial gas customers.

ConEd implemented a number of improvements in the wake of Superstorm Sandy in 2012, when North Castle experienced severe power outages due to downed trees during the storm. The utility installed taller poles and undertook a major tree clearing effort.

Privately purchased fuel oil is delivered and stored in above- or below-ground tanks. In-ground petroleum tanks with greater than 110-gallon capacity are regulated by the Westchester County Health Department. Many North Castle residents use propane to heat their homes. Empty propane tanks may be brought to the H-MRF or to any of several private companies (for a small fee) for recycling.

Renewable Energy

Approximately 1,083 acres of North Castle are south facing and may be appropriate for solar power installations. In 2016, the Town created a new Chapter 258 within the Town Code to regulate solar infrastructure siting. The chapter established a permitting process for solar energy systems and allowed rooftop collectors and building-integrated photovoltaic systems in any zoning district. Ground-mounted and freestanding solar collectors are allowed in all non-residential zoning districts, with large-scale types of these collectors requiring a special use

permit from the Town Board in addition to site plan approval from the Planning Board.

Swiss Re, one of North Castle's largest employers, recently installed a 2-megawatt solar array at its complex on King Street. The project, which has 7,700 photovoltaic panels on approximately 9 acres of land, is expected to provide 60% of the 700-person office's power.

7.6 TELECOMMUNICATIONS

Verizon provides land-line telephone service to Westchester County. Both Verizon's FiOS service, which bundles Internet, telephone and television over a fiber-optic communications network, and Cablevision's Optimum high-speed Internet service, are available throughout the county, including North Castle.

Cellular service is provided by various national carriers. Cell towers and transmitters are located on private, as well as government, property. The location and local government ability to regulate cell towers and antennas are subject to the Federal Telecommunications Act. In addition, Chapter 292 of The Town Code regulates the placement and operation of cellular facilities. As much as practicable, the Town promotes co-location of cellular facilities on existing infrastructure, such as at the municipal sewer plant and on water towers.

7. INFRASTRUCTURE AND UTILITIES

7.7 ISSUES AND OPPORTUNITIES

North Castle's infrastructure system is vital to preserving quality-of-life for residents, supporting existing businesses and promoting economic development efforts, as well as improving the Town's environmental sustainability. The following section highlights current issues and opportunities for improvement.

Address Water Supply Issues

The most critical infrastructure issue facing North Castle is the need for additional water supply for Water District 4, which serves downtown Armonk, the Business Park and the IBM campus, and also provides water for Water Districts 5 and 7. The Town is assessing various alternatives for additional supply, including drilling additional wells at the Business Park or at Town-owned property on Willow Pond Road or along I-684. Another option, though likely more expensive, may be to connect to WJWW infrastructure in the event that WJWW builds a filter plant at the County Airport. Identifying sites for added water supply for Water District 4, and developing the infrastructure to serve those sites, is a major priority for the Town. Also, the Town needs to locate an alternative tank site for this water district.

In Water Districts 1 and 5, there are issues with the distribution systems, resulting from outdated and undersized components. The Town should undertake a modeling analysis of the entire Water District 1 system to identify weak points. Based on this analysis, improvements should be implemented to this district's distribution system to replace inadequate portions. A similar approach could be taken with Water District 5.

Looking ahead, the bonds on Water District 7 expire in 2021. At that point, the Town should consider combining Water Districts

4 and 7, which could reduce overhead and administrative costs associated with having two separate districts.

As discussed above, most of North Castle is not on the public water system, and instead relies on private well sources. In neighborhoods where there is no public water, the Town's goal is to provide cisterns to serve those residences. These cisterns should be maintained by the applicable fire department.

Address Sewer Capacity Issues

Regarding sewer capacity, the primary area of focus should be Sewer District 2, where there are capacity constraints due to current and anticipated growth in the area. The Town should continue efforts to expand this district's capacity to 700,000 gallons a day. In Sewer District 1, the Town should implement upgrades to address infill and infiltration issues.

Address Stormwater Flooding in the Downtown

Stormwater-related flooding issues are most prevalent in downtown Armonk, near the Wampus River. The most critical step to address these issues is replacement of the School Street culvert, which is causing the roadway to sink, with a new bridge.

Longer-term, the Town should seek funding to dredge the Wampus River, which has experienced significant siltation in Wampus Brook Park, contributing to flooding in this area. There are also locations in the Mianus and Middle Patent areas that need upgrading to address flooding during major storms; these sites need to be identified and appropriately addressed.

The Town should also continue to facilitate the use of green infrastructure techniques, based on the NYSDEC Stormwater Management Design Manual.⁵

⁵ <http://www.dec.ny.gov/chemical/29072.html>

7. INFRASTRUCTURE AND UTILITIES

Address Telecommunications Issues

Residents have noted that cellular telephone service outside the hamlet centers is spotty. At the same time, new cell towers and similar infrastructure are unpopular due to visual impacts. The Town should continue to work with cellular providers to identify co-location opportunities for cellular infrastructure that minimize aesthetic impacts, and to explore the potential for alternative technology in place of towers.

7.8 RECOMMENDATIONS

Water Supply

1. Address critical water supply issues in Water District #4, focusing on several alternative site options.
2. Undertake a modeling analysis of the entire Water District #1 system to identify weak points. Based on this analysis, implement improvements to the district's distribution system to replace undersized components.
3. Locate a secondary tank site for Water District #4.
4. Explore the potential to combine water districts #4 and #7 once the bonds issued by the school district for district #7 mature.
5. Provide cisterns in neighborhoods not served by public water, with such infrastructure to be maintained by the applicable fire department.

Sanitary Sewer

1. Expand the capacity of Sewer District #2 to allow for future development.

2. Upgrade Sewer District #1 to address infill and infiltration and implement relining.

Stormwater Management and Flooding

1. Replace the School Street culvert to address flooding and sinking of the road.
2. Dredge the Wampus Brook and implement stormwater improvements throughout the Wampus River valley.
3. Identify locations in the Mianus and Middle Patent areas that need upgrading to address flooding during major storms.
4. Facilitate the use of green infrastructure techniques in new development and redevelopment.

Telecommunications

1. Address inadequate cellular service outside of the hamlet centers by facilitating the location of cellular infrastructure in appropriate locations.

7. INFRASTRUCTURE AND UTILITIES

8. HOUSING

8. HOUSING

8.1 HISTORY AND OVERVIEW

North Castle maintained its agricultural character well into the mid-20th century, when additional residential development began to alter the Town's land-use composition. With the arrival of the railroad to nearby towns in the mid-1800s, the Town began a shift away from agricultural life and population declined temporarily. At the beginning of the 20th century, however, North Castle became a destination for families leaving New York City to build large residential estates within commuting distance of their business. Estates such as Wenga Farm, Red Brooke Farm and North Castle Farm were developed and became local employment centers.

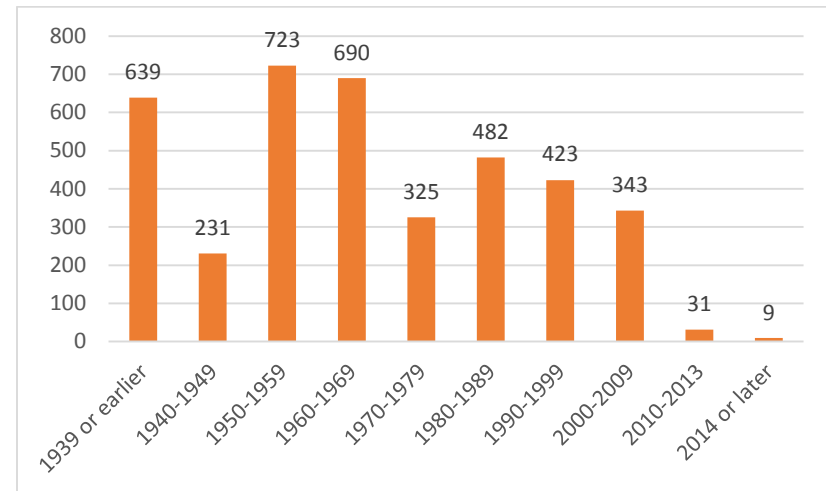
The hamlets' residential character evolved further over the 20th century as well. In 1909, the Village of Kensico was destroyed and flooded to build the Kensico Reservoir, a key component of New York City's water supply. Some of the village's residents moved to Quarry Heights, Valhalla or North White Plains.

As the Great Depression and World War II created pent-up demand for people seeking homes outside of central cities, the construction of regional highways, along with the introduction of affordable home loans by the Federal Housing Administration (FHA) and the Veterans Administration (VA), all played a role in the shift from cities in New York and Connecticut to the suburbs.

North Castle's residential development demonstrates this pattern of growth. Over half (59%) of the Town's current homes were constructed prior to 1970, with over 22 percent built before 1949. The largest period of residential growth was between 1950 and 1980, when 45 percent of today's housing

units were built (see Chart 9). Some 20 percent of the Town's existing housing stock was built between 1990 and 2014.

Chart 9: Number of Housing Units by Year Built

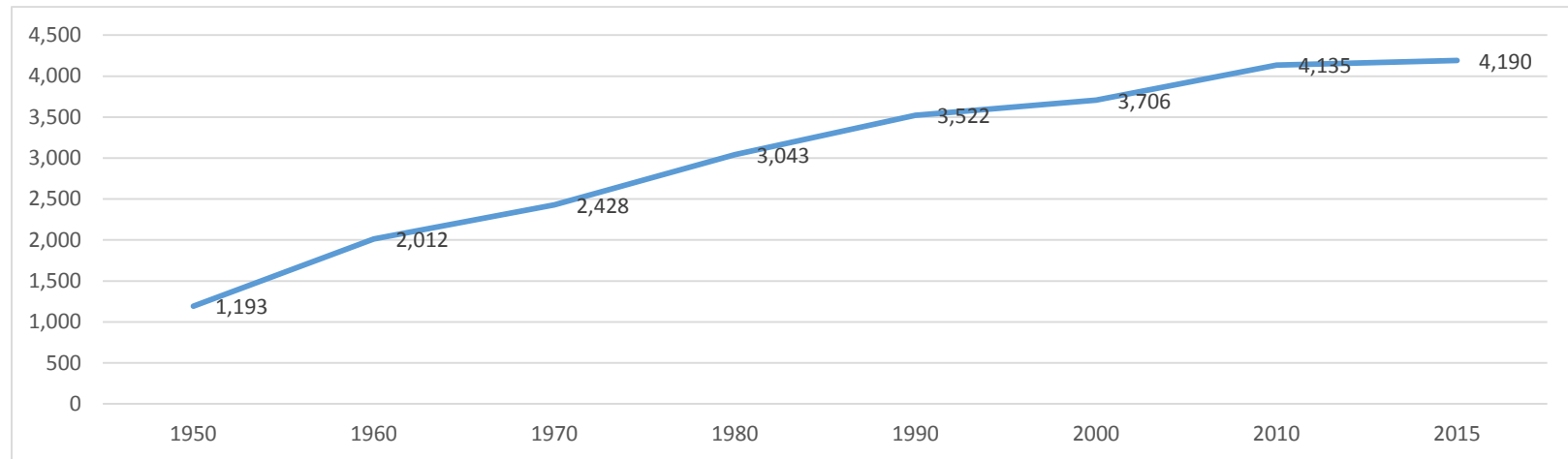


Source: American Community Survey 2011-2015

Substantial residential growth continued in North Castle in the latter part of the 20th century, with the number of housing units in the Town increasing by 613 in the last two decades (see Table 14 and Chart 10). A higher rate of new construction occurred between 2000 and 2010 than during prior decade. The number of units rose by 5.2 percent between 1990 and 2000 and 11.6 percent between 2000 and 2010. As shown in Table 8.1, the rate of growth in units was slightly higher in North Castle than in the majority of its neighboring communities, or in Westchester as a whole. The only neighboring communities to outpace housing unit growth between 2000 and 2010 were White Plains and Pound Ridge. However, the Town had more available land in the 1990s and early 2000s than older communities, many of which were essentially built out.

8. HOUSING

Chart 10: Change in North Castle Housing Units, 1950-2015



Source: U.S. Census, 1950-2010, American Community Survey 2011-2015

Table 14: Change in Housing Units: North Castle and Neighboring Areas, 1990-2015

	1990	2000	2010	2015	% Change 1990-2000	% Change 2000-2010	% Change 2010 - 2015
North Castle	3,522	3,706	4,135	4,190	5.2%	11.6%	1.3%
Bedford	5,987	6,020	6,326	6,297	0.6%	5.1%	-0.5%
Harrison	7,985	8,680	8,956	8,708	8.6%	3.2%	-2.8%
Greenwich	23,515	24,511	25,631	24,242	4.2%	4.6%	-5.4%
Mount Pleasant	12,972	13,985	14,826	14,922	7.8%	6.0%	0.6%
New Castle	5,569	5,843	6,037	6,098	4.9%	3.3%	1.0%
Pound Ridge	1,814	1,868	2,108	2,254	3.0%	12.8%	6.9%
White Plains	20,714	21,576	24,382	23,114	4.2%	13.0%	-5.2%
Westchester County	336,727	349,445	370,821	370,032	3.8%	6.1%	-0.2%

Source: U.S. Census, 1990-2010, American Community Survey 2011-2015

8. HOUSING

North Castle's increase in housing units (18.9%) was slightly lower than overall population growth (20.6%) between 1990 and 2015, as seen in Table 15. The ratio of persons per unit has remained fairly stable, showing an increase from 1990-2000 and a dip between in the next decade to 2.86 in 2010. In 2015 the number had grown slightly to 2.89, with an overall growth of 0.04 from 1990-2015.

Table 15: North Castle Total Population and Housing Units, 1990-2015

Year	Population	Housing Units	Persons per Unit
1990	10,061	3,522	2.85
2000	10,849	3,706	2.93
2010	11,841	4,135	2.86
2015	12,141	4,190	2.89
1990-2015			
Change	2,080	668	0.04
Percent Change	20.6%	18.9%	1.4%

Source: U.S. Census, 1990-2010, American Community Survey 2011-2015

As shown in Chart 11, below, the housing stock in North Castle is newer than in neighboring communities and Westchester County as a whole. Only 16.2 percent of the Town's housing stock was constructed in 1939 or earlier, compared with 32.9 percent in White Plains, 29.7 percent in Mount Pleasant, 29% in Greenwich and 31 percent in the county overall. Moreover, with 24.6 percent of North Castle's housing stock constructed in the last 25 years, its share of newly constructed housing is nearly twice as high as surrounding communities and Westchester County. In Mount Pleasant 13 percent of homes

were built since 1990, compared with 13.2 percent in Harrison and 10.7 percent in the county. However, given that the share of housing built in the last five years in North Castle is comparable to surrounding cities and towns, the Town's recent housing boom appears to have leveled off.

Table 16 shows North Castle housing units by structure type in 2000 and 2015. As is typical in the suburban New York region, the majority of housing is single-family: a total of 3,260, or 88 percent of all units, in 2000, and 3,569, or 85 percent of all units, in 2015. Data on housing types for the period indicate that growth is evident in attached and detached single-family homes and larger apartment buildings.

Table 16: North Castle Housing Units by Type, 2000 to 2015

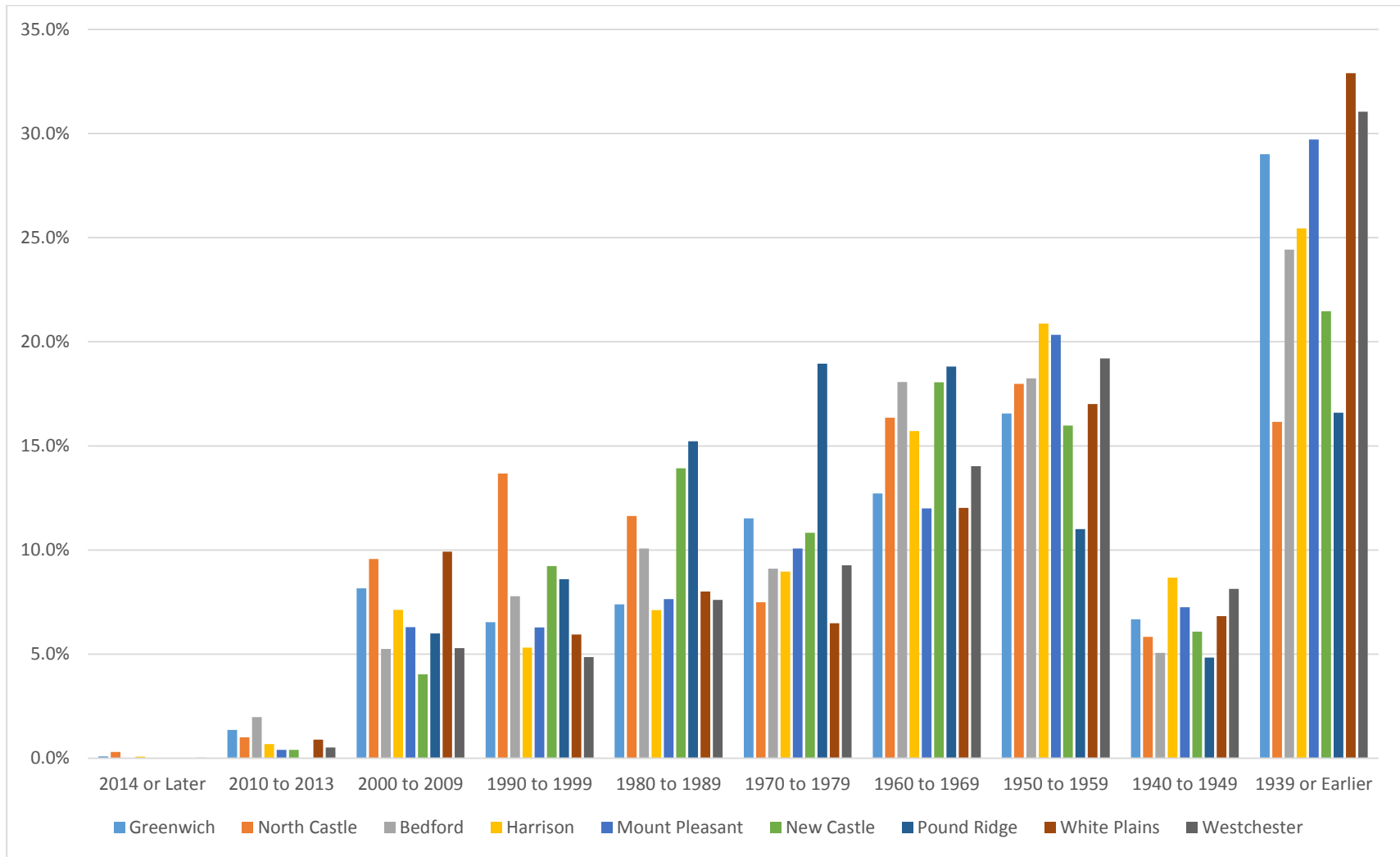
Unit Type	Units		Percent Share		Change	
	2000	2015	2000	2015		
Total	3,706	4,190	100%	100%		
1, detached	3,260	3,569	88%	85.2%	309	9.48%
1, attached	119	211	3.2%	5.0%	92	77.3%
2	205	258	5.5%	6.2%	53	25.85%
3 or 4	65	59	1.8%	1.4%	-6	-9.23%
5 to 8	12	0	0.3%	0.0%	-12	N/A
10 to 18	6	0	0.2%	0.0%	-6	N/A
20 to 48	14	73	0.4%	1.7%	59	N/A
50 or more	N/A*	0	0.0%	0.0%	N/A*	N/A
Mobile home	0	20	0.0%	0.5%	20	N/A
Boat, RV, van, etc.	0	0	0.0%	0.0%	0	N/A

Note: (*) There was an obvious source data error in the 50+ unit category; the data have been eliminated

Source: U.S. Census, Summary File 3, 2000 & American Community Survey 2011-2015 5-Year Estimate

8. HOUSING

Chart 11: Housing Stock Share by Year Structure Built



Source: U.S. Census, American Community Survey 2011-2015 5-Year Estimate

8. HOUSING

Approximately 42 percent of North Castle's land area is zoned for single-family residential. There are eight single family residential zones in the Town, with minimum lot sizes ranging from 5,000 square feet to 4 acres. Accessory apartments are allowed within single-family homes in order to encourage the legal creation of smaller housing units for a greater variety of household types.

Two-family and multi-family residential uses have increased between 2000 and 2015. The Town's two-family district (R-2F) requires a 5,000-square-foot minimum lot size. North Castle's four multi-family districts permit density at one unit per 25,000 square feet in the R-MF District and one unit per 14,000 square feet in the R-MF-A District. The R-MF-SCH District permits density at a range of floor area ratios (FAR) of 0.15 to 0.4. The R-MF-SS District's maximum FAR is 0.9.

Both two-family homes (6.2% of the Town's housing stock) and multi-family housing of three units or more (3.1% of housing stock) are permitted in parts of North White Plains and Armonk. Of the Town's 307 multi-family units, 286 units are found in Armonk: at Wampus Close, Whippoorwill Ridge, Whippoorwill Commons, Whippoorwill Hills, Cider Mill and 22 Old Route 22 (under construction). Castle Glen is located off Reservoir Road in North White Plains.

Recent trends in building permit data (see Table 17) suggest that single-family units will continue to dominate the Town's housing market. Between 1996 and October 2015, 83 percent of building permits issued were for single-family units. However, the number of multi-family permits has grown over time, with 10 such building permits issued in 2015. There were 20 two-family unit permits issued during this period, making up 2.7 percent of the total.

Table 17: Residential Building Permits, 1996-2015

Year	Single-Family	Two-Family	Multifamily	Total
1996	36	0	0	36
1997	47	2	0	49
1998	70	0	0	70
1998	113	0	0	113
2000	84	2	0	86
2001	46	4	24	74
2002	N/A	N/A	N/A	N/A
2003	49	8	35	92
2004	32	4	36	72
2005	23	0	0	23
2006*	14	0	0	14
2007	12	0	0	12
2008	8	0	0	8
2009	10	0	0	10
2010	1	0	0	1
2011	12	0	0	12
2012	14	0	0	14
2013	7	0	0	7
2014	11	0	0	11
2015**	14	0	10	24
Total	603	20	105	728
Percentage	82.8%	2.7%	14.4%	100%

(*) Beginning in 2006, building permits for new structures only are counted. Prior to 2006, permits for certain other work were also included.

Source: U.S. Census Bureau Building Permits Survey, prepared by the Westchester County Department of Planning. 2015 data are from the Town of North Castle.

8. HOUSING

8.2 OCCUPANCY

Between 2000 and 2010, residential vacancies increased in North Castle, as well as all neighboring municipalities, but have since decreased (see Table 18). Homeowner vacancies rose from 0.8 percent to 4.6 percent in the Town from 2000 to 2010, falling to 2.9 percent in 2015. Similar patterns are apparent in neighboring communities, but North Castle's homeowner vacancy rate in 2010 was the highest of the communities compared. In 2015, the Town had the second-highest homeowner vacancy rate, exceeded only by Bedford (3.9%).

The vacancy rate of renter-occupied housing in North Castle fell from 4.1 percent to zero in 2010, before increasing to a new high of 6.4 percent in 2015. This trend is unique among its neighbors and the county. Westchester as a whole and Bedford experienced rising rental vacancy rates from 2000-2015, while Greenwich, Mount Pleasant and White Plains all peaked in 2010 and New Castle and Harrison saw declining vacancies in the same period. Bedford was the only municipality with a higher rental vacancy rate than North Castle in 2015 (7.5%).

8.3 TENURE

In North Castle, owner occupancy remains the dominant form of tenure. According to the 2015 American Community Survey, nearly 88 percent of North Castle's housing units were owner-occupied. Other municipalities have higher rates of renter occupancy, typically where multi-family housing is more plentiful such as in Harrison and White Plains (see Table 19).

Tenure plays a significant role in resident turnover. According to the 2011-2015 American Community Survey, 19 percent of North Castle residents changed residence in the last five years,

Table 18: Homeowner and Renter Vacancy Rates, 2000-2015

	Owner vacancy rate			Rental vacancy rate		
	2000	2010	2015	2000	2010	2015
Greenwich	1.1	2.1	1.9	2.8	7.9	6.3
Bedford	0.6	0.9	3.9	2.4	3.9	7.5
Mount Pleasant	0.4	0.6	1.5	2.2	3	2
New Castle	0.5	0.9	1.5	2.9	0	0
North Castle	0.8	4.6	2.9	4.1	0	6.4
Pound Ridge	1.1	4.3	1.4	7	0	0
White Plains	0.8	0.5	1.9	2.1	3.9	2.2
Harrison	0.7	0.5	0.2	2.2	2.1	1.3
Westchester County	0.9	1.4	1.9	3	5.2	6.5

Source: U.S. Census, 2000-2010, American Community Survey 2011-2015

lower than the County (24%) and all other neighboring municipalities except New Castle (11%) and Mount Pleasant (15%). Turnover was highest in Greenwich, where 32 percent of residents had lived in a different residence since 2010.

Among homeowners, North Castle's rate of turnover was 13.9 percent, similar to that of neighboring municipalities. However, the Town's renter population turnover rate from 2010 to 2015 (57%) was exceeded only by that of Greenwich (62%). In all of the surrounding communities this rate was higher for renters than owners, except New Castle, where the owner turnover rate was 11.6 percent and renters' was 4.2 percent (see Chart 12).

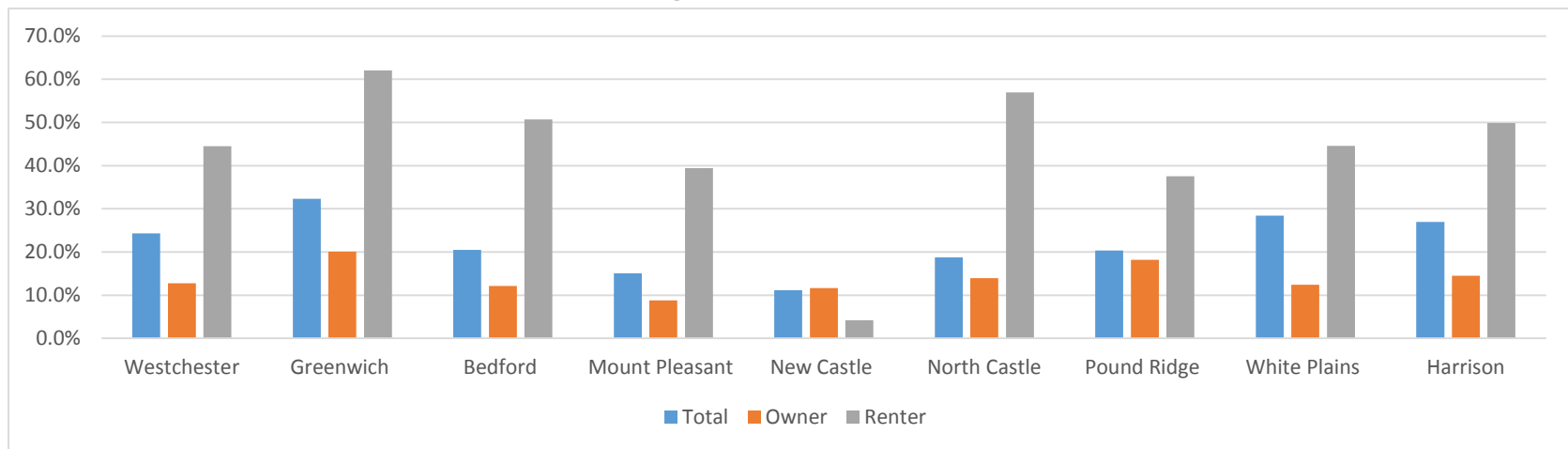
8. HOUSING

Table 19: Housing Units by Tenure, 2000-2015

	Housing Units by Tenure, 2000-2015									Tenure by Percentage Share of Total Housing Units					
	Total Occupied Units			Owner occupied			Renter occupied			Owner occupied			Renter occupied		
	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
North Castle	3,583	3,495	3,896	3,120	3,123	3,412	463	372	484	87.1%	89.4%	87.6%	12.9%	10.6%	12.4%
Bedford	5,731	5,651	5,491	4,287	4,177	4,107	1,444	1,474	1,384	74.8%	73.9%	74.8%	25.2%	26.1%	25.2%
Harrison	8,394	8,575	8,181	5,389	5,692	5,264	3,005	2,883	2,917	64.2%	66.4%	64.3%	35.8%	33.6%	35.7%
Mount Pleasant	13,737	14,119	14,351	9,894	9,961	10,077	3,843	4,158	4,274	72.0%	70.6%	70.2%	28.0%	29.4%	29.8%
New Castle	5,732	5,867	5,743	5,256	5,460	5,341	476	407	402	91.7%	93.1%	93.0%	8.3%	6.9%	7.0%
Pound Ridge	1,699	1,830	1,902	1,593	1,724	1,653	106	106	249	93.8%	94.2%	86.9%	6.2%	5.8%	13.1%
White Plains	20,921	23,012	21,877	10,928	12,595	11,132	9,993	10,417	10,745	52.2%	54.7%	50.9%	47.8%	45.3%	49.1%
Greenwich	23,230	22,483	22,083	15,990	16,438	14,845	7,240	6,045	7,238	68.8%	73.1%	67.2%	31.2%	26.9%	32.8%
Westchester County	337,142	345,795	341,866	202,673	216,753	210,195	134,469	129,042	131,671	60.1%	62.7%	61.5%	39.9%	37.3%	38.5%

Source: US Census, Summary File 1, 2000 & 2010

Chart 12: Total Population in Occupied Housing Units by Tenure by Year Household Moved Into Unit, 2010-2015



Source: U.S. Census, 1950-2010, American Community Survey 2011-2015

8. HOUSING

Rental housing is available throughout the Town, regardless of zoning district or structure type. As of 2010, the U.S. Census counted 372 occupied rental units in North Castle, a decennial loss from 2000 of 91 units, 19.6 percent. However, by 2015, the number of rental units was higher than it had been in 2000, with a total of 484 rental units occupied.

The Town does not have any rent stabilization or rent-control regulations; rents are determined entirely by supply and demand.

8.4 SALES ACTIVITY

According to Houlihan Lawrence Real Estate, as of early-August 2017, 128 single-family residences were for sale in North Castle, with prices ranging from \$365,000 to \$7.5 million. A variety of unit sizes were available. There were two two-family homes for sale in North White Plains ranging in price from \$774,000 to \$849,000 and one in Armonk for \$899,000. No condominium units were available.

Some new residential development is on the horizon. Major development projects approved or proposed include the Brynwood Golf and Country Club (approved, 73 condo units), The Vue (proposed, 200 multi-family units), 162 Bedford Road (approved, 36 multi-family units) and Madonna Senior Housing (approved, 16 senior housing units). See Chapter 4 for further discussion of development in the pipeline.

The Town Assessor determines the fair market value of the real estate properties for North Castle, with the valuations used to apportion the amount of Town, County, School and Special District taxes to be levied. The Town has not completed a re-valuation since 1965. As shown in Table 20, over the period from the peak of the housing market to the present, 2013 to 2016, the assessed value of the Town's taxable properties has remained steady, with slow increases of less than 1 percent annually. Increases in assessed values are usually associated with new housing, commercial developments, improvements to existing property and increased real estate values generally.

Table 20: Assessed Value in the Town of North Castle, 2013-2016

Year	Assessed Value		Total	Total Annual Change
	Taxable	Tax Exempt		
2013	\$ 107,017,880	\$ 33,473,550	\$ 140,491,430	
2014	\$ 107,193,358	\$ 33,149,795	\$ 140,711,613	0.15%
2015	\$ 107,561,818	\$ 33,837,126	\$ 141,398,944	0.49%
2016	\$ 108,464,957	\$ 33,836,144	\$ 142,301,101	0.64%
Absolute Change	\$ 1,393,077	\$ 362,594	\$ 1,809,671	1.3%
Percent Change	1.3%	1.1%	1.3%	

Note: Town-wide revaluations last occurred in 1965.

Source: Town of North Castle Assessor

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8.5 HOUSING AFFORDABILITY

Affordable housing is a general term that can mean private or public housing, but generally refers to housing that is sold or rented at below-market rates. Throughout Westchester County and the Tri-State region, affordability of housing is an issue, as the financial situations of owners and renters have often not kept pace with the rise in value of new and existing homes, creating an affordability gap. As a rule of thumb for moderate income households, housing is considered affordable when it costs no more than 30 percent of a household's monthly household income for rent/mortgage, taxes and utilities. Designated affordable housing is guaranteed to remain affordable for a set period to households qualifying under specific income guidelines. In the case of North Castle and surrounding municipalities with high median income, there is greater flexibility in household income. The percentage of income dedicated to housing costs may exceed 30 percent for middle income or market rate housing.

Rental Households

Adjusted for inflation, median gross rent in North Castle, including the cost of rent plus all utilities, increased sharply (33%) between 2000 and 2010 and grew to a lesser degree (3%) between 2010 and 2015. A similar trend is evident in Westchester County as a whole, where rents increased by 13 percent between 2000 and 2010, and 4 percent between 2010 and 2015. With the exception of New Castle, all of the neighboring communities' rents increased between 2000 and 2010; however, as shown in Table 21 below, a number of these municipalities experienced decreases in rent from 2010 to 2015, including Bedford (-7%), Mount Pleasant (-8%), New Castle (-14%), Pound Ridge (-13%) and Greenwich (-2%). At \$2,101 in 2015, North Castle's median gross rent is \$151 more

than Westchester County's 100% Area Median Income (AMI) standard for one-person households, and \$129 less than 100% AMI for a two-person household for 2017.

Chart 13 shows the monthly share of household income that North Castle renters spent on housing costs over the five-year period from 2011 to 2015. Using the 30 percent threshold for over-burdened households, about 32 percent of North Castle renters spent too much on housing in 2015, compared with 29 percent in Pound Ridge, 31 percent in New Castle, 41 percent in Harrison, 42 percent in Greenwich, 55 percent in White Plains, 53 percent in Mount Pleasant, 65 percent in Bedford and 53 percent in Westchester County overall. Rental housing affordability in North Castle appears to be steady, as the share of overburdened renters stayed largely the same from 2000 (32%) to 2010 (31%) and from 2010 to 2015 (32%). Other communities in the area have experienced significant increases in the number of overburdened households. While all of North Castle's neighboring communities had an overburdened rate under 42 percent in 2000, the County's rate rose to 50 percent in 2010 and 53 percent in 2015. Pound Ridge is the only nearby community with a rate of cost burden that has declined between 2010 and 2015.

According to the recent Housing Settlement (see discussion below), affordable housing in Westchester County must be offered to residents whose incomes are equal or less than 60 percent of area median income (AMI) for rental units and equal or less than 80 percent for owned units. North Castle's median gross rent is higher than this threshold for one-, two-, and three-person households, but is below the threshold for households of four or more people, signifying the strong need for affordable housing for families with children.

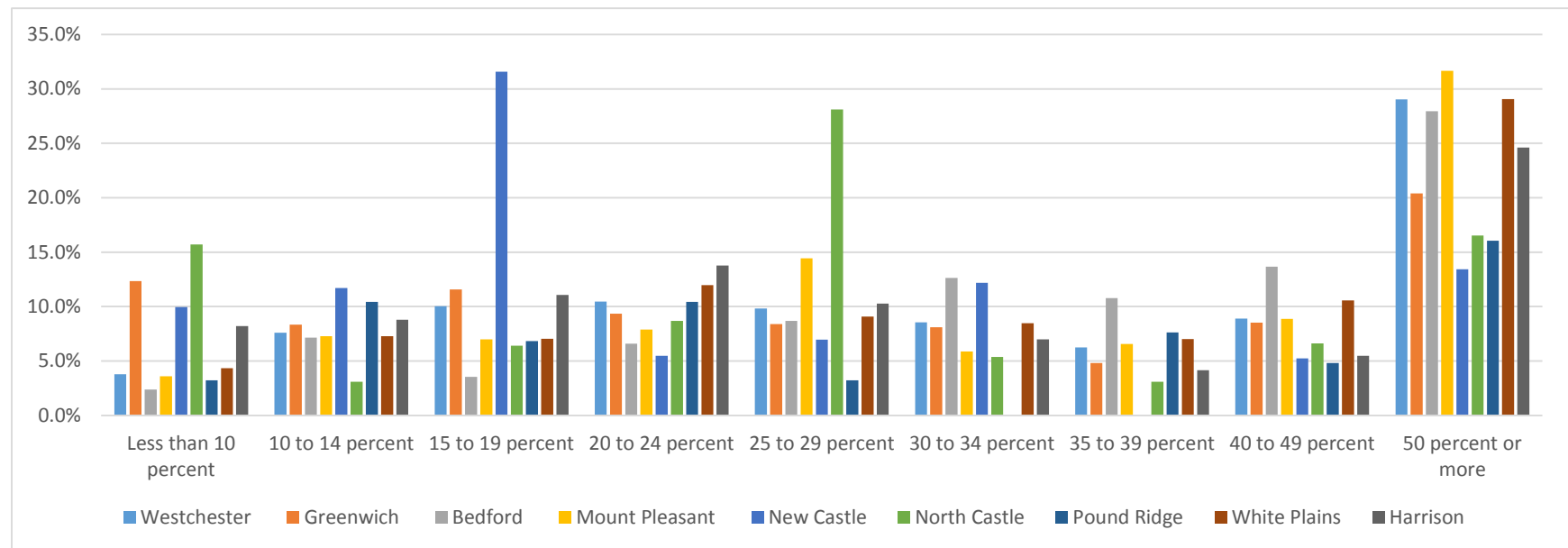
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Table 21: Gross Rent, 2000-2015 (in 2015\$)

	2000	2010	2015	% change 2000-10	% change 2010-15
North Castle	\$ 1,538	\$ 2,041	\$ 2,101	33%	3%
Bedford	\$ 1,381	\$ 1,533	\$ 1,421	11%	-7%
Harrison	\$ 1,606	\$ 1,855	\$ 1,860	16%	0%
Mount Pleasant	\$ 1,294	\$ 1,494	\$ 1,373	15%	-8%
New Castle	\$ 1,892	\$ 1,815	\$ 1,557	-4%	-14%
Pound Ridge	\$ 1,326	\$ 1,983	\$ 1,726	50%	-13%
White Plains	\$ 1,209	\$ 1,392	\$ 1,554	15%	12%
Greenwich, CT	\$ 1,819	\$ 1,835	\$ 1,800	1%	-2%
Westchester County	\$ 1,154	\$ 1,307	\$ 1,364	13%	4%

Source: U.S. Census, Summary File 3, 2000 & American Community Survey 2007-2011 and 2011-2016 5-Year Estimate

Chart 13: Gross Rent as a Percentage of Household Income, 2015



Source: US Census, American Community Survey 20011-2015 5-Year Estimate.

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Monthly Owner Costs

As monthly owner costs are generally lower for homeowners that have paid off their mortgage compared with those who have not, Charts 14 and 15 show monthly owner costs according to mortgage status. Among mortgage holders over the years from 2011-2015, 42 percent of North Castle households paid more than 30 percent of their income on housing, higher than White Plains (34%), New Castle (38%), Greenwich (38%), Bedford (40%) and Westchester County (42%) but lower than Mount Pleasant (42%), Harrison (47%) and Pound Ridge (48%). Residents in all of these areas spent a larger share of their monthly income on owner costs over the 2011-2015 period than in 2000. In North Castle, the share of income spent on housing increased from 37 percent to 42 percent.

North Castle had a relatively low percentage of overburdened non-mortgage holding households compared with surrounding municipalities and the county as a whole. The Town's share of homeowners that paid more than 30 percent of their income on monthly costs was 23 percent, significantly lower when compared with those that were still paying their mortgage (42%), but higher than the 16 percent recorded in 2000.

Westchester Housing Settlement

The 2008 Westchester Housing Settlement provides an extensive background for North Castle's approach to affordable housing. In the settlement, 750 units of affordable housing were to be developed by the end of 2016 in certain areas of 31 municipalities in the County, including the Town. The County was ordered to produce an Implementation Plan and allocate \$50 million for the development of these units, 630 of which were to be provided in municipalities where black residents make up less than 3 percent of the population and Hispanic residents

make up less than 7 percent. The remaining 120 units must meet different criteria for cost and ethnic concentrations.

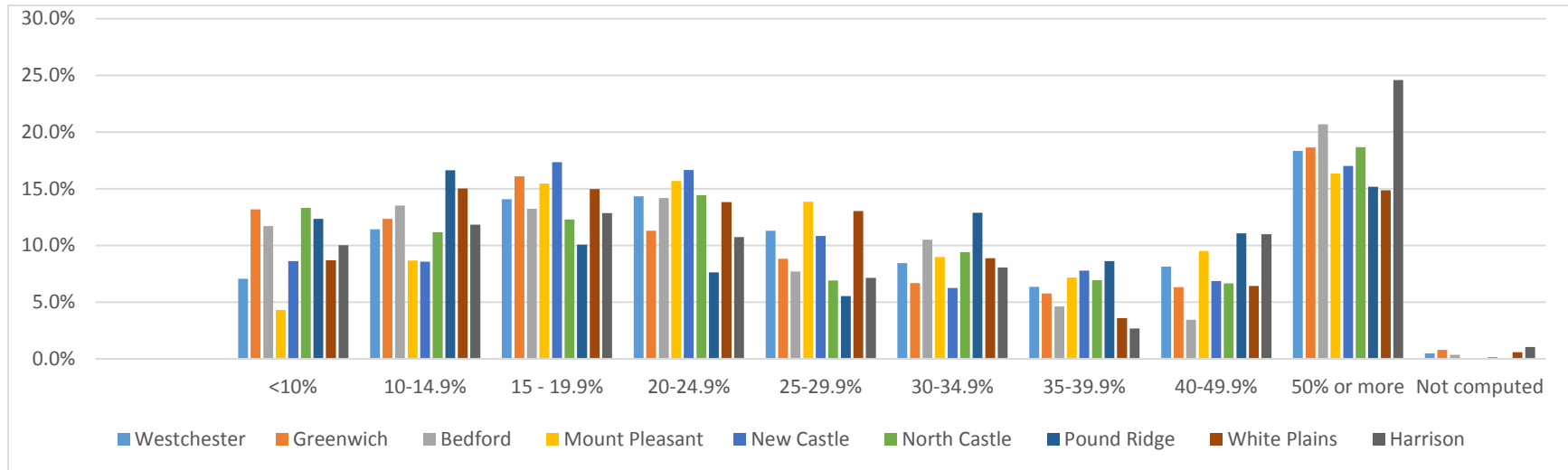
Following the settlement, the Town of North Castle adopted new zoning ordinance provisions to ensure the provision and promotion of fair and affordable housing development, using the County's model ordinance.

Fair and affordable housing has been termed in the both the County's ordinance and the Town's Floating Zoning District as affordable housing, which refers to for-sale homes that are affordable to households earning no more than 80 percent of Westchester County's AMI, and where the annual housing cost per unit, including common charges, principal, interest, taxes and insurance, does not exceed 33 percent of 80 percent AMI, adjusted for family size. Rental units must be affordable to households with annual income not exceeding 60 percent of Westchester County's AMI, with annual housing costs including rent plus utilities not to exceed 30 percent of the 60 percent AMI, adjusted for family size. All affordable units must be marketed according to rules set forth in the Westchester County Fair and Affordable Housing Affirmative Marketing Plan.

As of August 2017, the Town has built 10 units of affordable housing at Armonk Commons, located at 22 Old Route 22. This development has produced 10 two-bedroom units for sale and will qualify under the settlement. All 10 units will be sold to households at or below 80 percent of AMI. In addition, the single-family home located at 3 Maryland Avenue is available for sale, meeting eligibility requirements that the applicant's household income must be at or below 80 percent of the County's AMI. The Town has also approved a proposal for an additional six units of affordable housing at 170 Bedford Road.

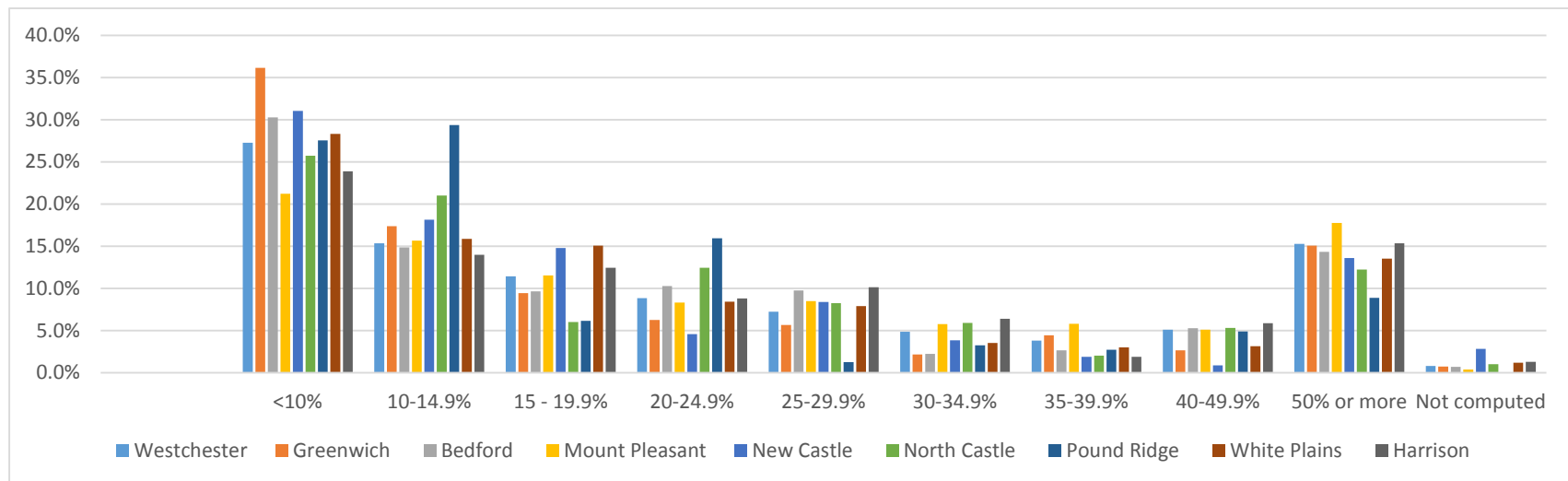
8. HOUSING

Chart 14: Selected Monthly Mortgage Holding Owner Costs as a Percentage of Household Income, 2015



Source: U.S. Census, American Community Survey 2011-2015 5-Year Estimate

Chart 15: Selected Monthly Non-Mortgage Holding Owner Costs as a Percentage of Household Income, 2015



Source: U.S. Census, American Community Survey 2007-2011 5-Year Estimate

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Middle-Income Housing

Middle-income units have been created in North Castle under with the Town's previous affordable housing regulations. In the early 1990s, the Town established a housing board to administer these middle income units (MIU), addressing a gap between affordable housing for low- to moderate-income households and market-rate housing. Today, the Whippoorwill Commons and Whippoorwill Hills developments have set aside a combined total of 24 middle-income units in Armonk.

8.6 ISSUES AND OPPORTUNITIES

Preserve and Enhance North Castle's Neighborhoods

North Castle is known for its attractive, stable neighborhoods, which greatly contribute to its appeal. This Comprehensive Plan seeks to support these neighborhoods, retaining their overall appearance, character and quality-of-life. Recommendations in other chapters of the Plan suggest various measures that have the potential to enhance North Castle without detracting from its existing residential areas, and in fact, can further quality-of-life improvements in neighborhoods as well.

The Town should continue to maintain good relationships with homeowner associations, major property owners and landlords to ensure that lines of communication are open and that properties are well maintained. The Building Department should continue to be diligent in enforcement of State and Town regulations and the conditions of approved site plans, subdivisions and other land-use approvals. Such consistent oversight of residential areas, as well as commercial areas that abut them, will assure that North Castle upholds its strong reputation as a desirable community. In addition, the Town should consider instituting a program to provide neighborhood

enhancements such as trees, sidewalks, streetlights and other infrastructure improvements.

Explore Ways to Create More Varied Housing Choices

While North Castle today is mostly defined by its attractive low-density residential neighborhoods, offering a greater variety of housing types could help the Town to retain Baby Boomers in retirement and attract younger people who wish to stay but cannot afford a single-family home. An efficient approach to greater variety of housing would prioritize attractive multi-family options in locations that maximize access to the community assets that make the Town so attractive, with a focus on targeted infill development in appropriate locations. This approach is particularly useful in retaining new young families who may find the schools and community quality of North Castle attractive but for whom the existing supply of larger single-family houses is financially out of reach. The growth in older age groups of the population over the coming decades suggests encouraging siting and design of new and infill development of smaller, lower-maintenance units for seniors near services, enabling more of the population to age in place and stay connected to the community physically and socially.

8.7 RECOMMENDATIONS

Growth, Development and Housing

1. Preserve the current overall development pattern of North Castle and its neighborhoods. Be sure new development responds to environmental constraints, particularly for preservation of the New York City watershed.
2. Guide multi-family housing toward the most walkable areas and places where public water and sewer are already available. The highest residential density should continue to

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be located in hamlet areas that have the necessary supporting infrastructure: Armonk and North White Plains. Banksville and the Eastern District are not served by such infrastructure and should thus maintain a lower density.

3. Increase housing opportunities that respond to North Castle's changing population, including seniors and young adults, through infill development and strategic locations with accessible infrastructure, such as the Armonk and North White Plains business areas.
4. Explore options to rezone business and office parks in order to create opportunities for infill mixed use residential development where office uses have become, or could become, obsolete. These locations could include the Business Park, the former MBIA site, Old Route 22 and Mariani Gardens, areas where affordable housing for smaller households will minimize traffic and parking impacts. Additional residential uses in these areas can also help to support Armonk businesses.
5. Continue the current provision of accessory units in the zoning code, but explore potential revisions to make them more user-friendly. For example, provisions such as the four-year waiting period and requirement of a public hearing may be onerous and impede the introduction of new accessory units. They may also be a disincentive to legalizing existing, but un-approved, accessory units.
6. The Building Department should continue to identify and work toward eliminating illegal apartments, particularly in North White Plains where these infractions have caused safety hazards and parking problems for residents.

7. Revise the antiquated home occupation regulations to property regulate 21st century home-based businesses.
8. Spend set-side budgeted amounts for neighborhood improvement projects and beautification.

Affordable and Middle-Income Housing

North Castle has demonstrated foresight by establishing a Housing Board in the 1990s that implements requirements for middle-income housing in order to maintain moderately priced units aimed at Town employees and residents. As a result, the Town's existing zoning code provides a model for middle-income units (MIUs) that was developed before the County's model ordinance on affordable housing. The current calculation defining middle-income families calculates a multiplier based on family size and the median annual Town-paid salaries of full-time North Castle employees. The Town could simplify this formula to conform to the new County affordable housing requirements. At present, County-wide affordable housing is set to be 60 percent of Westchester County AMI for rentals and 80 percent of AMI for sales. The Town could adjust its current calculation of middle-income eligibility to 80 percent of Westchester County AMI for MIU rental and 100 percent of AMI for MIU sales.

In addition, the Town could consider using incentive zoning to encourage developers to contribute to the Town's stock of affordable and middle income housing. In exchange for additional residential density or floor area ratio (FAR), a developer could provide a higher percentage of affordable units.

Subdivisions

Additional recommendations from the existing comprehensive plan on subdivision design that are still relevant today include:

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1. Subdividing parcels for residential use should encourage a cohesive community. Wherever possible, new lots should have internal roadway access in order to promote safety and encourage efficient traffic-flow while protecting the Town's aesthetic character.
2. Road connectivity between adjoining residential developments should be encouraged, where appropriate, to connect and improve traffic circulation and provide easy access for Town services and emergency vehicles.
3. Open space such as wetlands, steep slopes, hilltops, ridgelines and other scenic resources should be set aside or kept as open space in the event of new subdivisions.
4. The Town should continue to encourage protection of environmentally sensitive, scenic and aesthetic resources through Section 278 of the Town Law.

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9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Commercial development in North Castle includes a mix of office, retail and light industrial uses. According to 2016 assessment data, commercial land uses account for 4.5 percent of land area in the Town, or 699.4 acres. The vast majority, or 90.7%, is located in the hamlet of Armonk, followed by North White Plains (5.7%) and the Eastern District (3.6%). Office and professional buildings, mainly in office campuses south of downtown Armonk, occupy the largest area (530.8 acres). Storage, warehouse and distribution facilities account for 73.9 acres, while mixed-use, retail services and restaurants occupy 42.7 acres, 22.8 acres and 13.4 acres, respectively.

Commercial uses in North White Plains along Route 22, Virginia Road and Lafayette Avenue are most easily accessed via automobile, while Armonk's downtown business district is more pedestrian-friendly, with a variety of small commercial uses including retail, offices and food places in a compact area. The center of this walkable district is the newly built Armonk Square development. The downtown area along Old Route 22 is accessible primarily by car and includes a range of commercial uses, as does the area along Business Park Drive near the intersection of Route 22 and I-684. Planned streetscape improvements along Old Route 22 will enhance walkability of this area and increase the number of on-street parking spaces.



Armonk Square



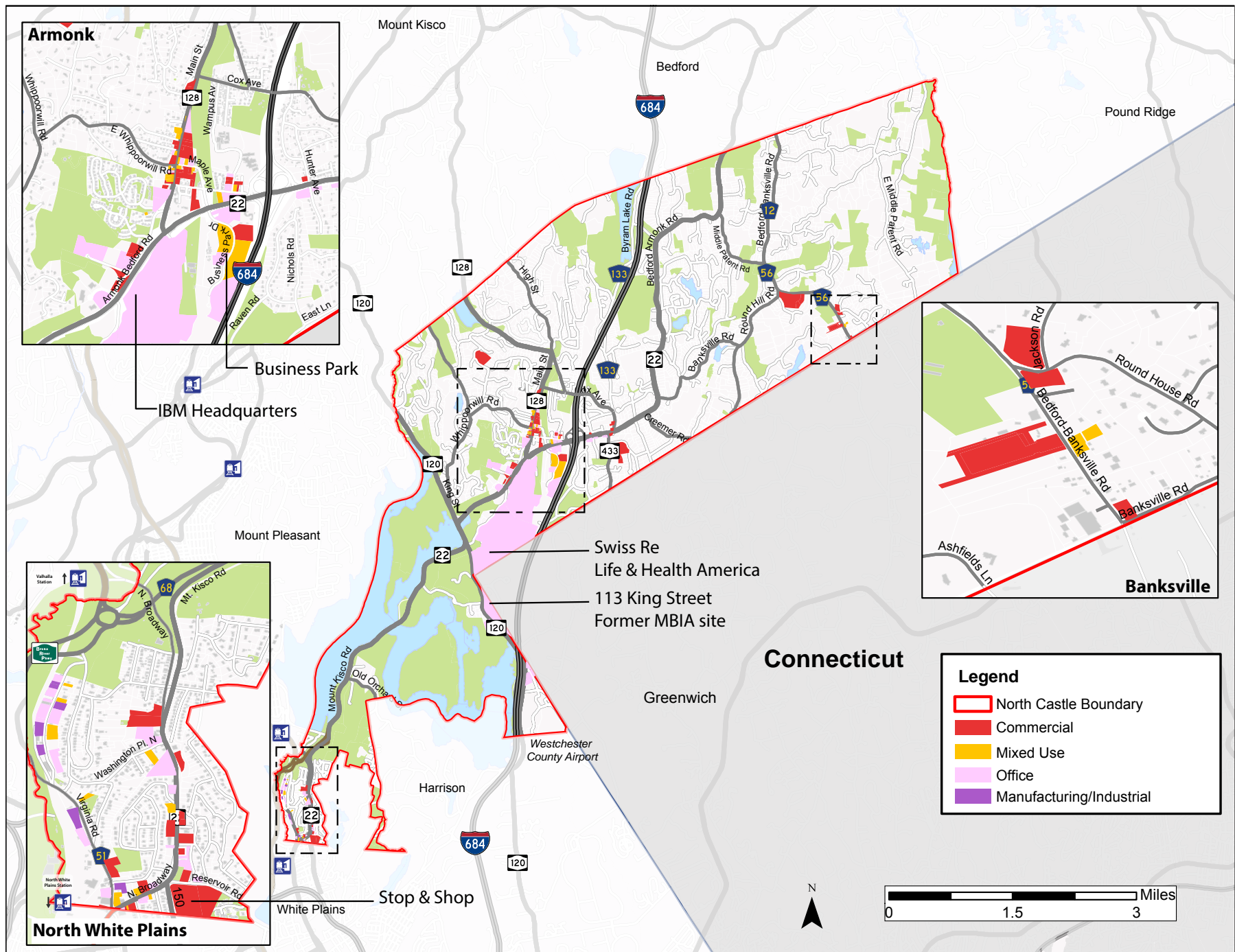


Figure 24: Commercial, Office and Industrial Land Use

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

9.1 EMPLOYMENT AND WORKFORCE

As shown in Figure 25, jobs in North Castle are primarily clustered within the hamlet of Armonk. Two smaller job clusters are found north of Westchester County Airport, and in North White Plains near the Metro-North station. In the Eastern District, jobs are fewer and more scattered. Much of the area's employment is found along Bedford-Banksville Road and in residential areas, where residents work from home. The largest job concentrations are at the IBM and Swiss Re campuses, as well as at the Westchester Business Park and Armonk Square. While most of the jobs in each industry sector are concentrated in Armonk, data from Esri (a supplier of geographic information system software) indicate that North White Plains is notable for its relatively large number of wholesale trade (315) and food store jobs (157) along Route 22, where Stop & Shop and several restaurants are located.

As illustrated in Table 22 and Chart 16, below, from 2000 to 2016, employment in North Castle increased from 7,623 to 9,126 workers (+19.7%), outpacing job growth in Westchester County as a whole (+4.1%). Among industry supersectors (see Chart 9.1), the majority of job gains in North Castle occurred among service industries (+1,507), followed by the transportation & warehousing sector (+436) and goods-producing industries (+180). The trade supersector lost 620 jobs, led by losses in the wholesale trade sector (-526) while retail trade decreased by 94 jobs. Among service industries, the largest job gains occurred in government services (+312), followed by professional & technical services (+268), finance & insurance Services (+246), health care & social assistance

services (+220), and accommodation & food services (+175). The information sector and educational services (non-public) suffered losses of 268 jobs and 80 jobs, respectively

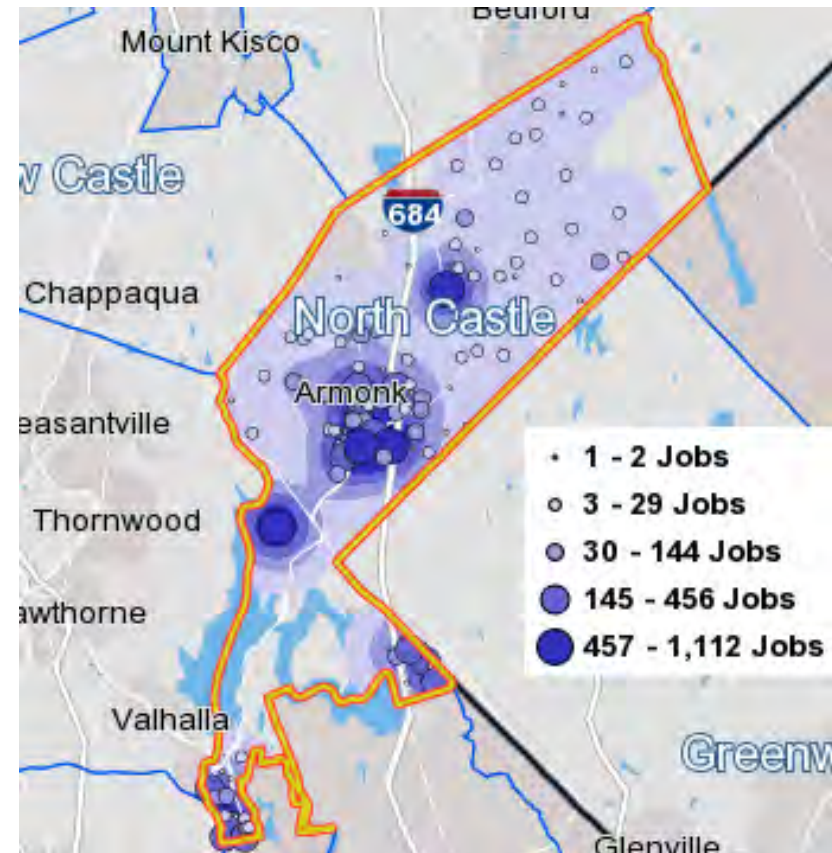


Figure 25: North Castle Worker Clusters, 2014

Note: The job cluster north of the Kensico Reservoir is actually the Swiss Re site at 175 King Street.

Source: U.S. Census Bureau's OnTheMap Longitudinal Employer Household Dataset, 2014.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Table 22: Annual Average Employment, North Castle, 2000-2016

Town of North Castle	Annual Average Employment				Percent Change	
	2000	2005	2010	2016	2000-2016	2010-2016
Total	7,623	9,024	9,217	9,126	+19.7%	-1.0%
Agriculture, Forestry, Fishing & Hunting	68	37	24	20	-70.6%	-16.7%
Construction	631	621	541	660	+4.6%	+22.0%
Manufacturing	755	548	382	954	+26.4%	+149.7%
Wholesale Trade	993	809	788	467	-53.0%	-40.7%
Retail Trade	724	588	516	630	-13.0%	+22.1%
Transportation & Warehousing	165	356	444	601	+264.2%	+35.4%
Information	301	157	110	33	-89.0%	-70.0%
Finance & Insurance	734	1,072	1,159	980	+33.5%	-15.4%
Real Estate & Rental & Leasing	NA	NA	406	382	NA	-5.9%
Professional & Technical Services	550	607	579	818	+48.7%	+41.3%
Management Of Companies & Enterprises	NA	919	1,074	NA	NA	NA
Admin & Waste Services	306	420	432	362	+18.3%	-16.2%
Educational Services	201	274	134	121	-39.8%	-9.7%
Health Care & Social Assistance	401	449	368	621	+54.9%	+68.8%
Arts, Entertainment & Recreation	150	220	234	160	+6.7%	-31.6%
Accommodation & Food Services	543	557	463	718	+32.2%	+55.1%
Other Services, Except Public Admin	259	354	324	379	+46.3%	+17.0%
Unclassified	7	39	19	73	+942.9%	+284.2%
Government	835	997	1,220	1,147	+37.4%	-6.0%

Source: New York State Department of Labor, QCEW, 2000-2016

While the County saw a job gain of 5.8 percent since 2010, North Castle lost 91 jobs (-1%). The largest losses by industry sector were in wholesale trade (-321) and finance & insurance services (-179), which lost 500 jobs due to the relocation of the MBIA headquarters. After a dip in manufacturing employment from 2005 to 2010, that sector added 572 jobs in the last six years, the largest gain of any sector, while professional & technical services, health care & social assistance, and accommodation & food services each added roughly 250 jobs from 2010 to 2016. The recent employment gain suggests that

North Castle is adding a wide range of jobs available to both highly skilled and low-skilled workers. The growth in health care and manufacturing jobs is promising, given that wages are typically higher but educational requirements for entry-level positions are less stringent than in most other sectors.

Since 2000, the number of establishments in North Castle declined from 921 to 905 firms, peaking in 2010 at 942 businesses. Over the 16-year period, the Town lost 55 goods-producing firms and 67 trade firms, gaining 94 firms in other services and 12 firms in transportation & warehousing services

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

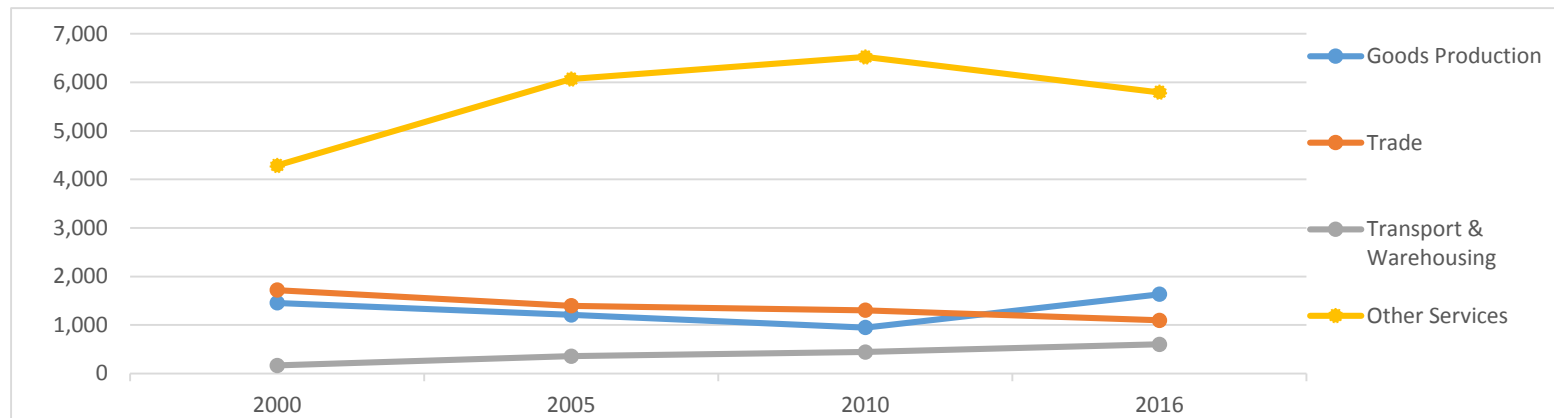
(see Chart 17). Industry sectors with the most losses included the construction sector (-39), wholesale trade (-32), retail trade (-35) and information (-20). However, the other services and unclassified services⁶ sectors added 24 firms and 50 firms, respectively. These sectors include industry sub-classifications such as repair and maintenance firms; personal and laundry services firms; religious, grantmaking, civic, professional and similar organizations; and private household aides.

Major Employers

The Town's largest employers are identified in Table 23. Since 2005, jobs at the three largest employers, IBM, Swiss Re and Byram Hills School District, have remained fairly stable. In 2014,

MBIA Insurance Corp., an insurance and financial services firm, relocated from a 38-acre office campus in Armonk to a smaller campus in Purchase, a loss of roughly 500 jobs for North Castle. In 2016, IBM announced that it would close its Somers campus of 2,000 workers, transferring all operations staff to its Armonk campus in spring 2017. Additional staff are expected to return to the Armonk campus due the firm's decision to move its large remote workforce back to physical offices. Other major employers for 2016 include Mariani Gardens, an upscale garden center; a distribution center for Advance Auto Parts, formerly Car Quest Distribution; Production Resource Group, an entertainment equipment rental service; and Grand Lux Realty, a real estate services firm established in 2006.

Chart 16: Annual Average Employment, North Castle, 2000-2016

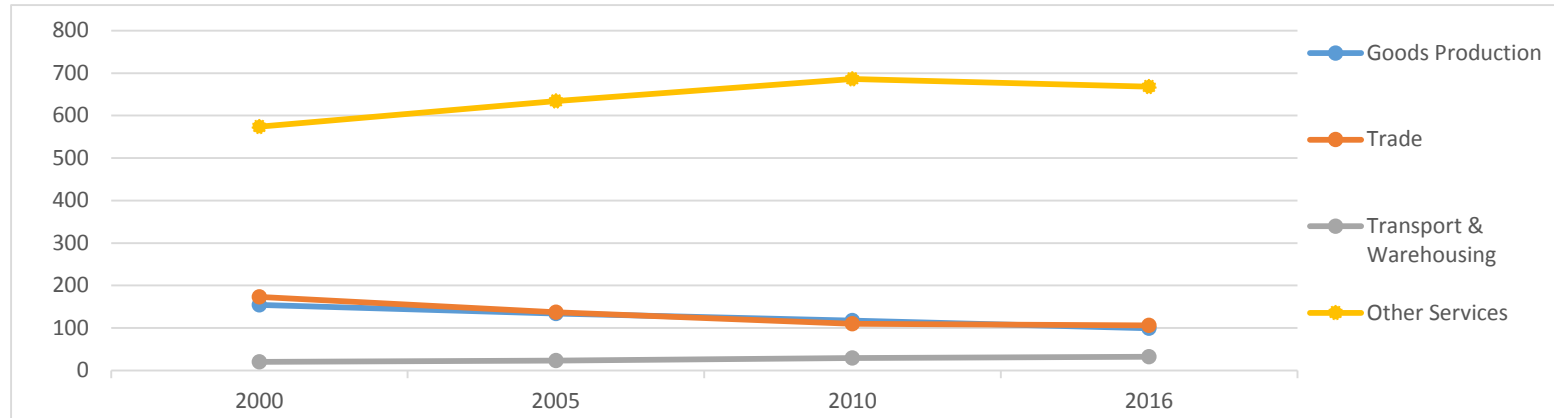


Source: New York State Department of Labor, QCEW, 2000-2016

⁶ Unclassified firms may include industry sectors with a small number of local establishments, such as mining and utilities, which are unclassified for confidentiality purposes.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Chart 17: Total Establishments, North Castle, 2000-2016



Source: New York State Department of Labor, QCEW, 2000-2016

Table 23: Largest Employers in the Town of North Castle, 2005 & 2016

2005			2016		
Employers	Workers	% of Total	Employers	Workers	% of Total
IBM	850	8.9%	IBM*	850	9.9%
Swiss Re	700	7.4%	Swiss Re & Health	700	8.2%
Byram Hills School District	507	5.3%	Byram Hills School District	551	6.4%
MBIA	500	5.3%	Breezemont Day Camp	267	3.1%
Breezemont Day Camp	267	2.8%	Mariani Gardens	250	2.9%
Car Quest Distribution	150	1.6%	Town of North Castle	171	2.0%
Cine Magnetix	150	1.6%	Advance Auto Parts	150	1.7%
Town of North Castle	150	1.6%	Cine Magnetix	150	1.7%
Fox Meadow Farm	101	1.1%	Production Resources Group	150	1.7%
Alfredo LDC	100	1.1%	Grand Lux Realty	130	1.5%
Total Workers (2005)	9,509	100.0%	Total Workers (2014)	8,572	100.0%

Note: (*) Job gains due to the Somers campus closure are expected in 2017.

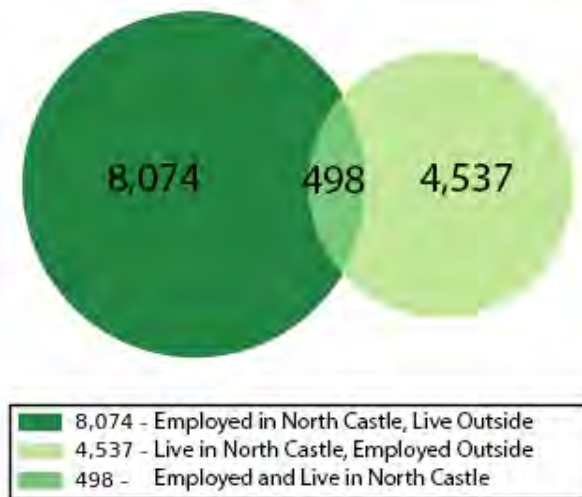
Source: Reference USA 2017, Westchester Magazine, Westchester County Business Journal and U.S. Census Bureau's LEHD Program, 2005 and 2014.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Spatial Relationship of Jobs to Residency

As shown in Chart 9.3, only 498 North Castle residents work in the Town; the remaining resident workforce commutes elsewhere. Of these, the greatest share of North Castle resident workers are employed elsewhere in Westchester County (1,698 or 33.7%), followed by New York City (1,454 or 28.9%) and Fairfield County (473 or 9.4%). Aside from New York City and North Castle, the top work destination municipalities include White Plains (388 or 7.7%), Mount Pleasant (206 or 4.1%) and Stamford (170 or 3.4%). According to the U.S. Census Bureau's 2011-2015 American Community Survey, the majority of North Castle resident workers traveled to work alone via automobile (74%), followed by travel via rail (13.3%), carpool (2.8%) and bus (1.4%). Another 7.8 percent worked from home.

Chart 18: North Castle Worker Inflows & Outflows, 2014



Source: U.S. Census Bureau's OnTheMap Longitudinal Employer Household Dataset, 2014

9.2 COMMERCIAL MARKET SEGMENTS

Office Market

From the early 1960s, when IBM opened its 420,000-square-foot headquarters campus in Armonk, until the late 1990s, North Castle experienced strong growth in office development, reflecting its accessibility to Westchester County Airport, I-684 and Routes 22 and 120. Along with IBM's headquarters, the Westchester Business Park, Labriola Court and MBIA campus all contributed to the Town's reputation as a prime area for high-quality office space. These properties were all designed as self-sufficient campuses with expansive open space and parking areas, along with accessory uses on-site to serve office workers including food service, fitness and day-care services. Office campuses have increased in land area over the past 20 years, from roughly 300 acres in 1996 to 530 acres in 2016, all located within Armonk. Two major office campuses were constructed in the late 1990s: IBM's replacement for its 1963 headquarters and MBIA's campus. Other major offices uses include campuses close to Westchester County Airport, along the Route 120/King Street corridor, such as Swiss Re Life and Health America and the Citi Group Armonk conference center.

In addition to the now-vacant MBIA campus, there are vacancies at several other office campuses, including 1,100 square feet of space available at 80 Business Park Drive, three spaces totaling 13,700 square feet at 84 Business Park Drive, three spaces totaling 19,200 square feet at 200 Business Park Drive, and a 3,870-square-foot space at 28 Kaysal Court.

Office Development in Progress: While local office development activity remained strong in the past, changes in worker preferences and the needs of businesses in the 21st century have reduced demand for traditional office campus facilities.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Since 2013, there has been no major office development proposed or constructed. In 2016, IBM announced plans to close its Somers office campus and relocate those workers to Armonk. The consolidation will be accompanied by renovation at the Armonk campus, but no official expansion is planned. The largest office development underway is at Carquest's 215 Business Park Drive property, which received approval in 2017 to add a 45,000-square-foot warehouse/office building to accompany an existing 112,000-square-foot building. Smaller-scale new office construction projects include a new 10,250-square-foot warehouse/office building approved in 2017 at 78 Lafayette Avenue, and a second-floor office space to be built at Growth Products LLC's 80 Lafayette property.



Offices located at Business Park Drive

Office Demand Outlook: Since 2008, Westchester County's office market has seen vacancy rates rise from roughly 16 percent to current levels of 19 percent, as average asking prices have dropped from \$35 to \$29 per square foot, according to Cushman & Wakefield, all signs of weak demand. Countywide demand increased in the first quarter of 2017, with the first quarter of positive net absorption in three years. In general, recent demand has been concentrated in the White Plains Central Business District, where public transit accessibility is strongest, new Class A office space is plentiful and high-quality workforce amenities are located. Much of the weak demand is the result of an oversupply of office space in the Northern Westchester market area, where vacancies were nearly 40 percent in the second quarter of 2017. In the Central submarket area, which includes North Castle as well as Hudson River communities from Briarcliff Manor to Hastings-on-Hudson, vacancy levels and asking rents were somewhat lower than in the County as a whole. In the recent past, leasing deals were primarily for units of 5,000 square feet or less; however in 2017, firms are leasing much larger spaces. Two firms signed leases of 80,000 square feet and 100,000 square feet in White Plains, and nearly all sales and lease transactions in 2017 of 10,000 square feet or more were in the White Plains and Central submarket areas, a sign of improving regional demand.

With several vacancies at Business Park Drive and the former MBIA headquarters, the Town's supply of office space may exceed demand given structural changes in the local economy, worker preferences toward urban environments near public transit and trends in open floor layouts. If long-term vacancies persist, property owners should consider renovations or conversions to meet current demand.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

In other office campuses in Westchester County, recent conversions to other uses include medical research, fitness, residential and retail. The Wegmans grocery store chain is currently seeking approval to construct a 125,000-square-foot grocery store and 8,000-square-foot standalone retail store for a restaurant that will replace an aging corporate office park containing three buildings in the once highly sought Platinum Mile office park corridor along I-287. The project is symbolic of many years of planning efforts by local and county officials to convert the Platinum Mile “into a multi-use district that pairs business offices with residences, schools, medical uses, retail and entertainment outlets.”⁷ In the past 15 years, 1.4 million square feet of office space has been repurposed within the East I-287 market area and 5 million square feet has been converted in Westchester County as a whole.⁸ Beyond the White Plains market area, many office parks older than 40-50 years have been targeted for demolition and conversion, while younger parks have been renovated. Aside from the IBM campus, North Castle’s office parks were primarily constructed from the early 1980s to the mid-1990s, with most buildings roughly 25 to 35 years in age. In several years, office buildings constructed during the early 1980s will be obsolete and opportunities will exist for adaptive reuse (conversions) or demolition.

Retail Market Analysis

According to 2016 assessment data, retail services account for 22.8 acres of land in North Castle, including 10.7 acres of general retail services, 3.9 acres of neighborhood shopping centers, 0.9 acres of large retail outlets and 7.3 acres of large retail food stores. An additional 13.4 acres of land are used by dining establishments, 8.3 acres for motor vehicle services and

2.4 acres for banking services. As shown in Chart 19, Esri reports that more than two-thirds of North Castle’s 167 retail establishments are concentrated in Armonk (109), followed by North White Plains (36) and the Eastern District (22). North Castle is home to 49 eating and drinking places, the most common form of retail business in the Town.

Retail Gaps Analysis: Retail market data show that total retail demand from North Castle residents is \$404.9 million per year, yet only \$246.8 million in retail sales receipts are seen locally—indicating that \$158.1 million in resident expenditures are leaving North Castle (see Chart 20). As shown by Chart 21, within the Town, leakage is most significant among motor vehicle & parts dealers (\$48.1 million), general merchandise stores (\$23.6 million), clothing & clothing accessories stores (\$21.1 million) and health & personal care stores (\$17 million). Surplus sales occur within the sectors of building materials, garden equipment & supply stores (\$13.3 million) and electronics & appliance stores (\$586,200).



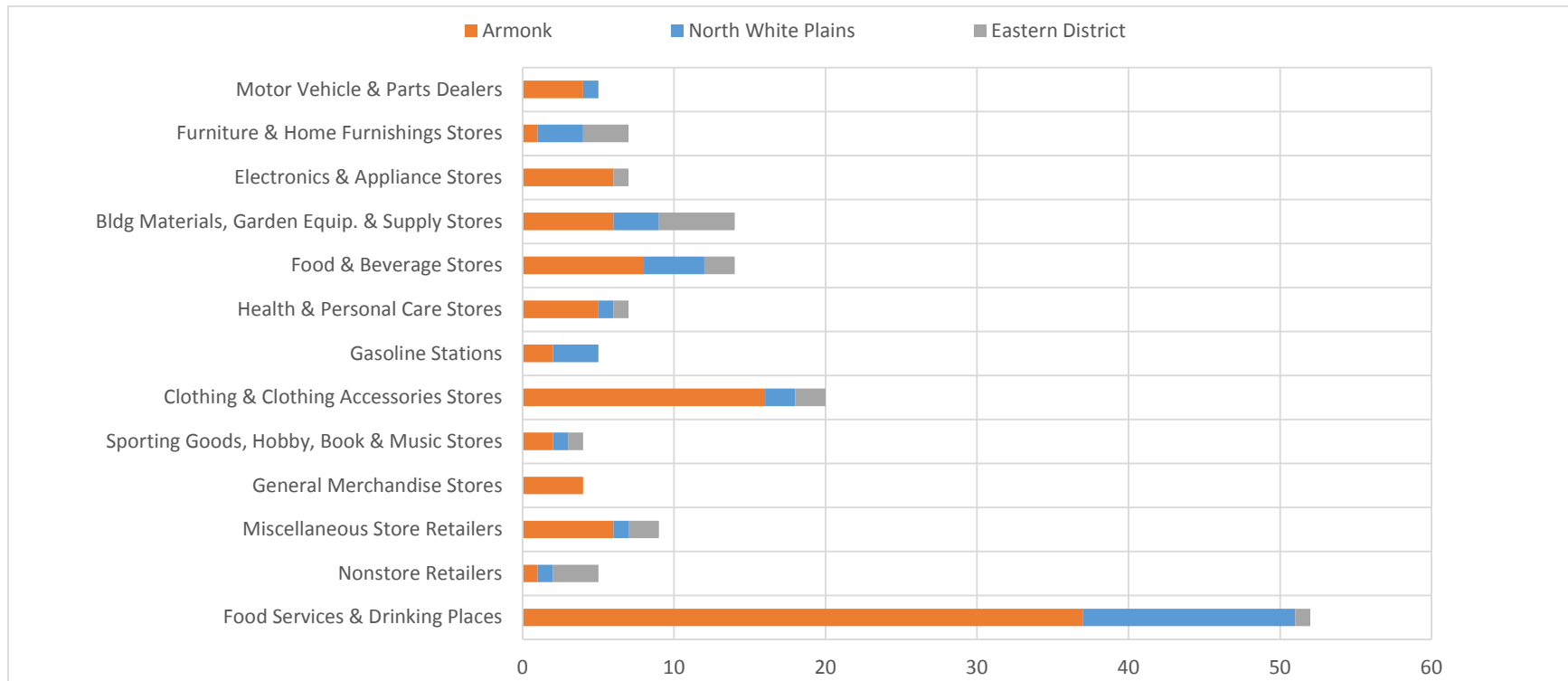
Armonk Square

⁷ Garcia, Ernie. “Wegmans a sign of evolving ‘Platinum Mile.’” *The Journal-News*, December 16, 2016.

⁸ DiChristopher, Tom. “Medical tenants fill Westchester County's empty office spaces.” *The Real Deal*, September 8 2014.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

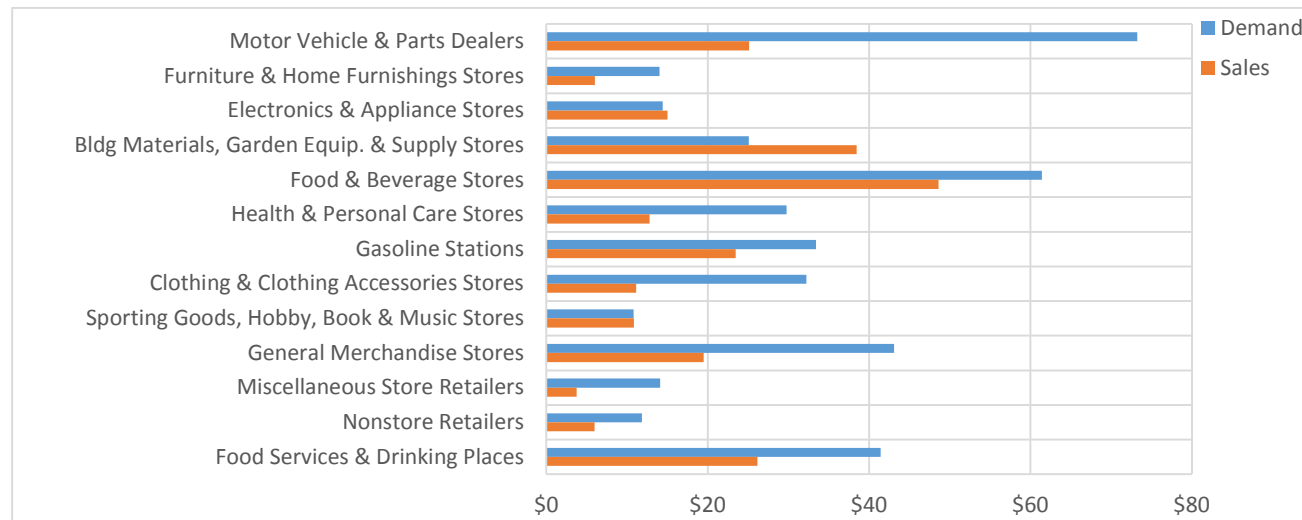
Chart 19: Retail Establishments in North Castle, 2017



Source: Esri and Infogroup, 2017

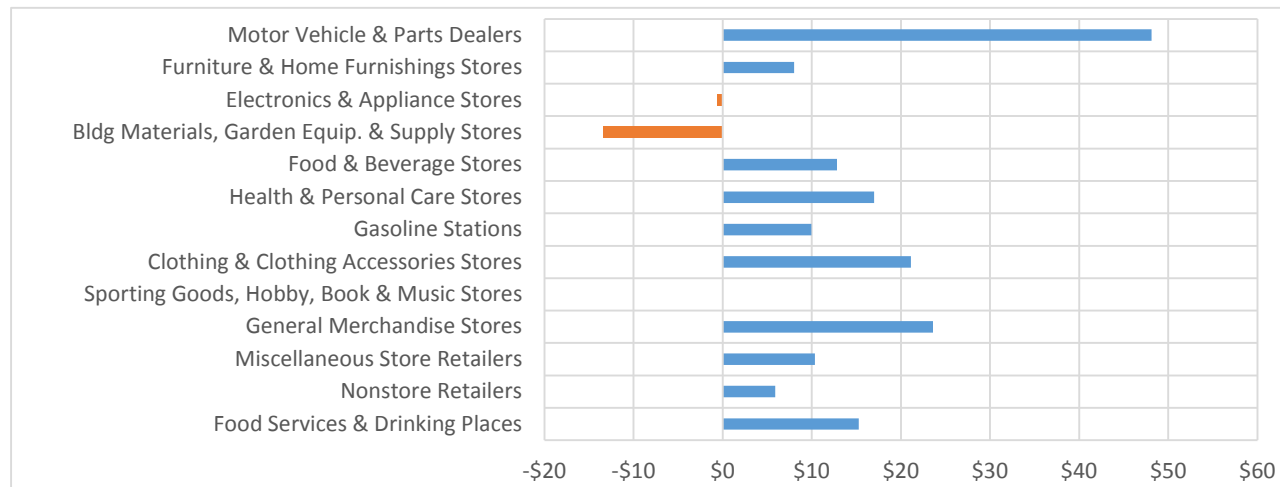
9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Chart 20: Retail Sales and Demand in North Castle, 2017 (in \$Millions)



Source: Esri and Infogroup, 2017

Chart 21: Retail Leakage in North Castle, 2017 (in \$Millions)



Source: Esri and Infogroup, 2017

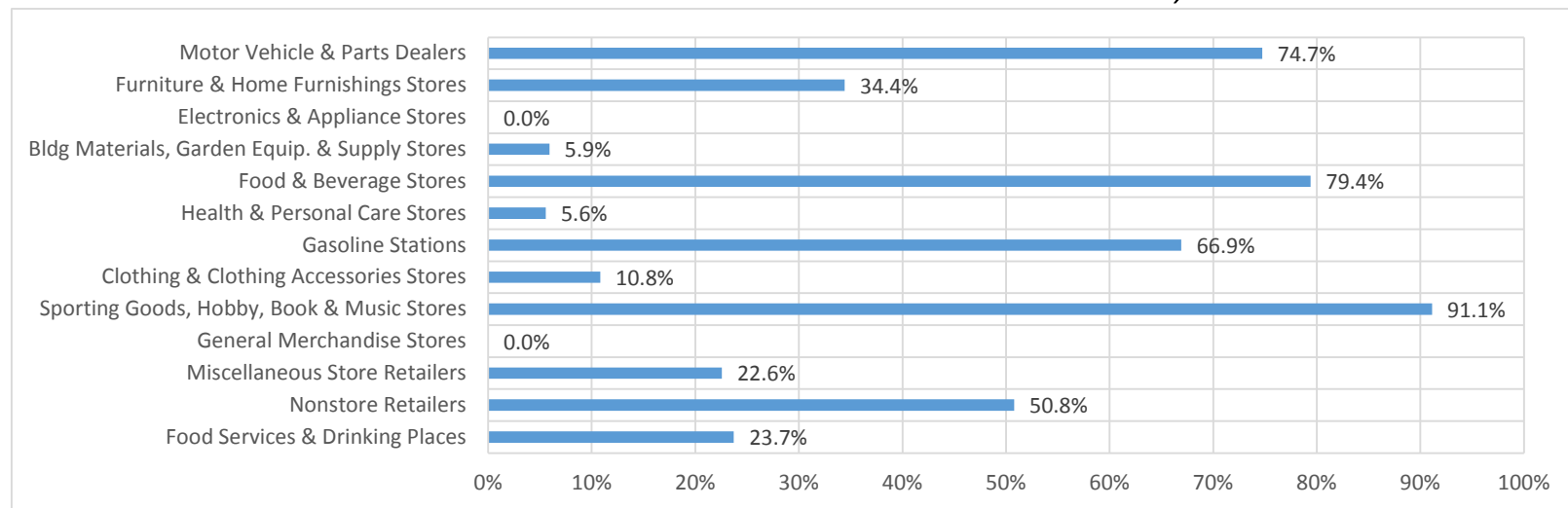
9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

North White Plains

With a cluster of shops along Route 22 and a small residential community, annual retail sales (\$99.3 million) in North White Plains far outweigh demand from local residents (\$38.3 million) by a factor of more than 2.5 to 1. The hamlet's retail sector is anchored by Super Stop & Shop which accounts for one-third of the area's total retail sales and nearly 80 percent of North Castle's food & beverage store sales. Several small convenience goods and services shops are located at Sir John's Plaza, one of only two strip shopping centers in the Town, though this shopping center has several vacancies. The majority of

retail sales from North Castle's motor vehicle & parts dealers; gas stations; and sporting goods, hobby, book & music stores take place in North White Plains (shown in Chart 22). The strongest unmet demand for services from the resident population is in the sectors of general merchandise stores (\$4.2 million) and health & personal care stores (\$2.1 million). However, there is no shortage of such retailers at the Crossroads Shopping Center, Galleria Mall and Westchester Mall in neighboring White Plains, and some general merchandise and health/personal care items may also be found at the Super Stop & Shop on Route 22.

Chart 22: North White Plains' Share of all North Castle Retail Sales, 2017



Source: Esri and Infogroup, 2017

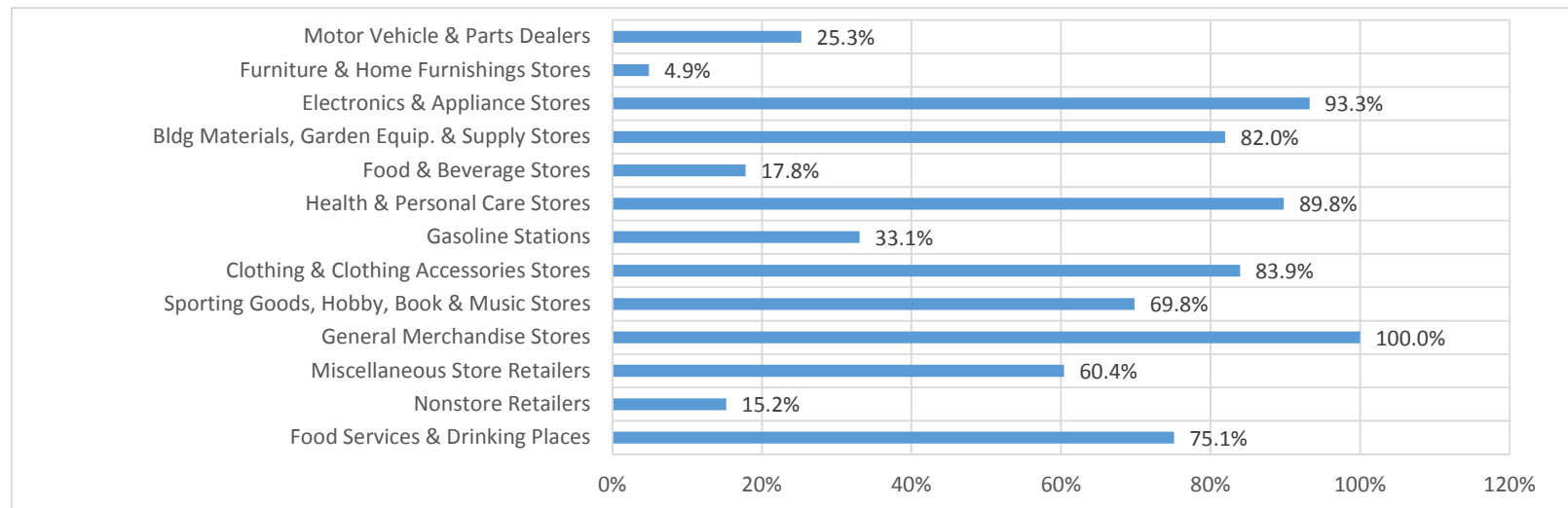
9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Armonk

With a walkable, mixed-use environment, downtown Armonk is the primary center for retail trade in the Town. In 2013, the area was enhanced with the addition of the 3.5-acre Armonk Square complex on Main Street featuring shops, offices, residences and a grocery store. Armonk Square has been credited with revitalizing the local retail market; commercial vacancy rates dropped and have stayed low since its opening.⁹ Armonk Town Center, built in 1998 on Route 128, is another Armonk retail node. As shown in Chart 23, in most retail sectors, the majority of Town-wide retail transactions are in Armonk. Top sectors by annual sales are building materials, garden equipment & supply (\$31.5 million); eating & drinking places (\$19.6 million); and general merchandise (\$19.5 million).

Local retail establishments largely meet local demand for services, although annual demand for retail goods and services (\$169 million) in 2017 is about 20 percent higher than local retail sales (\$139.3 million). Typical of communities lacking major strip mall centers, the largest retail leakage in Armonk is among motor vehicle & parts dealers (\$24.3 million), followed by food & beverage stores (\$16.8 million) and gas stations (\$6.1 million). In several sectors, sales exceed local demand: building materials, garden equipment & supply stores (\$20.9 million); electronics & appliance stores (\$7.9 million); and sporting goods, hobby, book & music stores (\$3 million).

Chart 23: Armonk's Share of all North Castle Retail Sales, 2017



Source: Esri and Infogroup, 2017

⁹ Fallor, Evan. *Fairfield County Business Journal*, October 17, 2015.

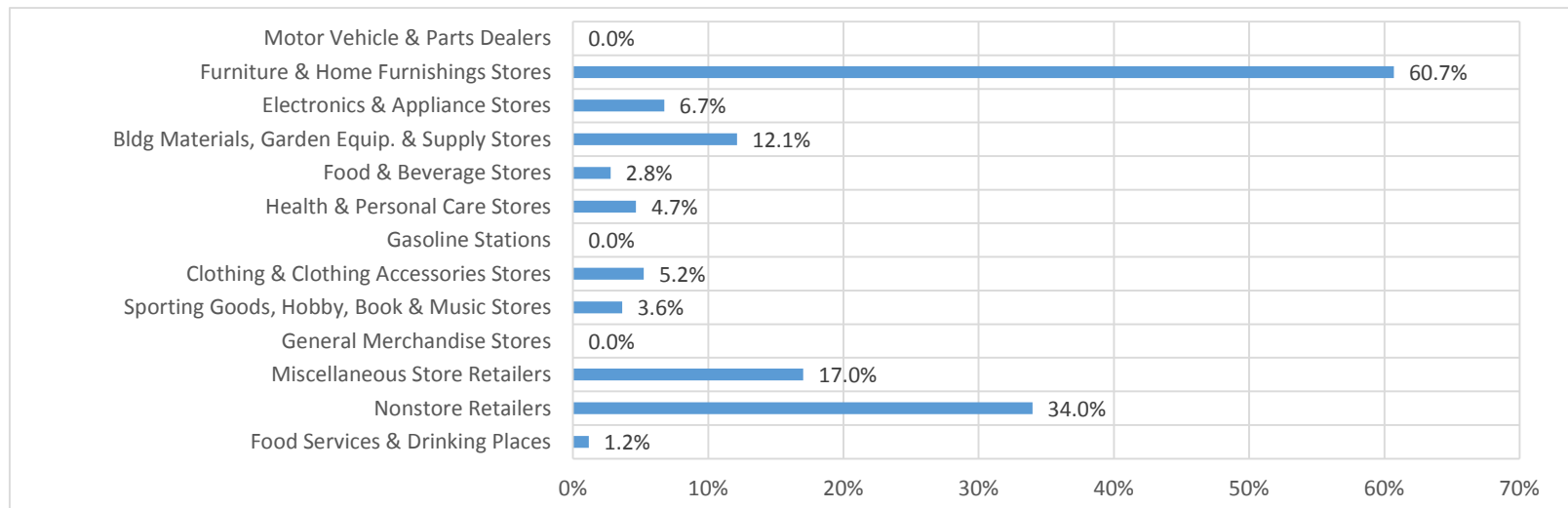
9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Eastern District

Rural and primarily residential, the Eastern District is notable for its lack of retail business establishments, with just 20 retail trade businesses and a single restaurant, La Crémaillère. The top retail sectors by annual sales include building materials, garden equipment & supply stores (\$4.7 million) and furniture & home furnishings stores (\$3.6 million). Local retail establishments meet only a small portion of resident demand. Local demand for retail services significantly exceeds local supply, with estimated household consumption of goods and

services at \$197.6 million, compared with retail sales of \$15.2 million, or a gap of \$182.4 million. The largest retail leakage in the Eastern District is among motor vehicle & parts dealers (\$35.9 million). Leakage is also substantial in the sectors of food & beverage stores (\$28.4 million); general merchandise stores (\$21 million); and food services & drinking places (\$19.9 million). Although there are no retail surpluses among the primary retail sectors, in the subsectors of lawn & garden equipment & supply stores and home furnishings stores, surplus sales of \$2.2 million and \$239,000 are estimated.

Chart 24: Eastern District's Share of all North Castle Retail Sales, 2017



Source: Esri and Infogroup, 2017

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT



Traditional retail on Main Street in Armonk.

Retail Development Proposed or in Progress: Aside from Armonk Town Center in the late 1990s and Armonk Square in 2013, North Castle has seen little significant retail development in recent years. No major retail projects have been proposed since 2013, while only small conversions, expansions or new construction have been approved. The largest recent project was the conversion in 2015 of a former supermarket at 450 Main Street into a CVS, which included 17,400 square feet for CVS and a 2,500-square-foot retail space.

In North White Plains, several small retail sites have recently been approved, including: the replacement of an office building with a 3,200-square-foot retail building at 868 North Broadway and the replacement of a gas station with a retail store at 660

North Broadway. At 850 North Broadway, a 1,100-square-foot carry-out restaurant (Toxic Wings), an 865-square-foot carry-out restaurant (Ralph's Ices) and a 1,175-square-foot retail store have replaced the former Little Spot restaurant.

Retail Demand Outlook: In recent years, many of the nation's largest retail chains have filed for bankruptcy protection, closing hundreds of brick-and-mortar stores at shopping malls and strip centers as consumers increasingly shift their purchases to online retailers. North Castle's retail market, which includes mainly convenience-based retail and services, high-quality restaurants and food shops, is relatively free of major chain stores and may therefore be more protected from e-commerce retailers, lending it stability over the near-term. Additionally, the regional retail market in Westchester is considered strong, with an availability rate of less than 5 percent in 2017 and rising asking rents of roughly \$28 per square foot.

To support future demand and consumer shopping preferences, new retail projects should move away from ancillary boutique shops and embrace mixed-use layouts with clusters of complementary uses. Among retail subsectors where local demand exceeds area sales, North White Plains generally lacks sufficient local demand to support additional establishments while Armonk and the Eastern District, with their large residential communities, could sustain additional retailers. Shown in Table 24 below, the number of new potential retailers is estimated based on average area store sales and local unmet demand for selected retail subsectors that could be attracted to North Castle's existing retail market.¹⁰

¹⁰ Retail sectors with substantial leakage that generally prefer large strip mall or shopping mall centers were excluded; these include: Auto Parts, Accessories & Tire Stores and Department Stores.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Given North Castle's high household disposable income and demographic composition, a consumer preferences analysis by Esri estimated that residents have a very strong demand for the consumption of luxury goods and services. While demand for eating out is above average compared with U.S. households, eating at home is generally preferred. These preferences are largely confirmed by the immediate popularity of the DeCicco & Sons market at Armonk Square. As demand has been noted for

restaurants and grocery stores in the Eastern District, planning efforts should focus on attracting similar food businesses such as neighborhood grocers, restaurants and food delivery services. With limited foot traffic in this area, a small mixed-use site accessible by car along Bedford-Banksville Road with a food store, retailer and other convenience shopping may be desired.

Table 24: Selected Unmet Retail Demand in North Castle, Armonk and the Eastern District

Industry Group	Average Store Sales* (In Millions)	Unmet Demand (In Millions)				Potential Firms			
		North Castle	North White Plains	Armonk	Eastern District	North Castle	North White Plains	Armonk	Eastern District
Furniture Stores	\$7.1	\$7.1	\$0.6	\$3.0	\$3.5	1.0	0.1	0.4	0.5
Bldg Material & Supplies Dealers	\$13.5	\$13.5	(\$0.3)	\$4.0	\$9.9	1.0	(0.0)	0.3	0.7
Grocery Stores	\$14.7	\$14.7	(\$29.2)	\$20.0	\$23.9	1.0	(2.0)	1.4	1.6
Clothing Stores	\$13.4	\$13.4	\$1.6	\$1.5	\$10.3	1.0	0.1	0.1	0.8
Shoe Stores	\$0.7	\$2.9	(\$0.3)	\$1.5	\$1.7	4.1	(0.5)	2.1	2.5
Jewelry, Luggage & Leather Goods Stores	\$0.7	\$4.8	\$0.6	\$1.1	\$3.2	7.1	0.9	1.6	4.6
Florists	\$0.3	\$1.5	\$0.1	\$0.5	\$0.9	5.2	0.5	1.6	3.1
Office Supplies, Stationery & Gift Stores	\$0.6	\$4.1	\$0.4	\$1.6	\$2.1	6.5	0.6	2.6	3.3
Used Merchandise Stores	\$1.0	\$1.6	\$0.2	\$0.6	\$0.8	1.5	0.2	0.6	0.8
Drinking Places - Alcoholic	\$0.4	\$2.9	\$0.3	\$1.2	\$1.4	6.8	0.6	2.9	3.3
Restaurants/Other Eating Places	\$11.0	\$11.0	(\$2.7)	(\$3.8)	\$17.5	1.0	(0.2)	(0.3)	1.6

(*) Average store sales estimated for 6-mile radius of Armonk's downtown area.

Source: Esri and InfoGroup, 2017

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Other Commercial Uses

North Castle is home to 32 transportation and warehousing and 13 manufacturing firms located on roughly 75 acres of land. Two clusters of these businesses are found on Labriola Court, east of downtown Armonk, and on Business Park Drive, in close proximity to I-684 and Route 22. Another cluster of firms is located along Lafayette Avenue and Virginia Road in North White Plains, including the Byram Concrete facility, a highly active industrial site neighboring the Metro-North rail yard facilities. With employment in these industrial sectors growing in recent years, the Town can expect to continue seeing strength in these areas due to its existing clusters.

North Castle is home to just one place of accommodation open to the public: La Quinta Inn & Suites, a two-star, 140-room hotel in the Westchester Business Park.¹¹ Since 2009, Westchester County has experienced substantial growth in hotel construction, with hotels opening or proposed in Yonkers, New Rochelle, Tuckahoe, Dobbs Ferry and Sleepy Hollow. As of September 2016, the County had 6,695 rooms, up by 802, or about 13.6 percent from 2008. Occupancy rates have recovered from their recession levels, reflecting both a strong competitive position compared with New York City hotels and Westchester's own robust tourism industry, as well as continued strength in business travel.¹²

Given that most Westchester County hotels cater primarily to business customers, an analysis was conducted of hotel rooms per worker employed in the industry of "management of

corporations and enterprises." The analysis indicates there are 0.2 hotel rooms per worker in North Castle, compared with 0.6 in White Plains, 0.7 in both Westchester County and Stamford, and 0.8 in Greenwich (see Table 25).

Table 25: Hotel Rooms per Management Professional Employee, North Castle and Comparable Communities

Area	Hotel Rooms (2017)	Employment (2014)	Rooms per Worker
North Castle	140	764	0.2
White Plains	1,000	1,646	0.6
Westchester County	6,695	9,672	0.7
Stamford	2,564	3,740	0.7
Greenwich	691	848	0.8

Source: Urbanomics, 2017, based on analysis of data from the U.S. Census Bureau's LEHD Program, hotels.com, Expedia and TripAdvisor

If an additional 300 rooms entered the market in North Castle, the ratio of rooms per worker would increase to that of White Plains. Thus, sufficient demand exists for at least two small hotels or one large hotel in North Castle. Additionally, two- and three-star hotels are predominant in Stamford and White Plains while all hotels in Greenwich are four-star hotels.

¹¹ The IBM Learning Center in Armonk is not open to the public unless the interested party has rented out conference rooms. Thus, this facility was not included in the hotel demand analysis. The analysis also does not

include rentals available on Airbnb or VRBO, which are not regulated by the Town and are very limited in number.

¹² Matsuda, Akiko. "Lots of new hotels going up. Here's where, why." *The Journal-News*: October 3, 2016.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

9.3 ISSUES AND OPPORTUNITIES

Competitiveness of Office Market

North Castle's office market is generally doing well, and has not experienced the same level of vacancy and obsolescence that has affected portions of neighboring Purchase in recent years. Much of this reflects the strength of the Town's prime commercial user, IBM, as well as the fact that North Castle's stock of office buildings is generally newer than many of its neighbors. Nonetheless, the Town does have vacancies, most notably the 38-acre former MBIA campus on King Street and nearly 35,000 square feet located in several buildings in the business park.

North Castle's experience is not unique; office areas along the I-287 and King Street corridors are showing high vacancy rates, while the Town of Somers has grappled with the loss of both IBM and Pepsico, which employed thousands of workers at two large campuses. In the face of this change, other communities have explored broadening the range of uses allowable in formerly all office areas, recognizing that the market for large, single-tenant users is vastly different than when these buildings were constructed in prior decades. The most notable example of this shift is in Harrison, which has allowed the introduction of multifamily residential, retail and recreational uses.

For North Castle, any change in the mix of uses allowable in office/light industrial must be carefully balanced with three factors: 1) the capacity of municipal water and sewer, 2) the need to preserve the strength of downtown Armonk and other existing retail areas, and 3) the goal of protecting the Town's low-density residential character and quality-of-life. For these reasons, introducing major retail uses in the business park or along King Street is not recommended, as it would create direct

competition with downtown Armonk. Instead, the Town may consider allowing, subject to certain standards, low-scale multifamily residential uses, at both the business park and along portions of King Street. Any such development should be carefully controlled to ensure sufficient infrastructure capacity and minimal negative effects in terms of traffic, community services, impacts on schools and quality-of-life. If done well, new residential uses could support existing retail, enhance the competitive edge of nearby office parks and improve the Town's tax base.

Vitality of Local Retail

At both a regional and national scale, the retail sector is undergoing tremendous shifts that have transformed the traditional brick-and-mortar retail landscape. North Castle has weathered these changes relatively well, with the Armonk Square development, in particular, helping to shore up local retail and create more shopper activity. However, even in the fairly healthy retail environment of downtown Armonk, there are concerns about vacant storefronts; these concerns are even more prevalent along Route 22 in North White Plains.

Given the ongoing instability in the overall retail sector, North Castle should remain cautious. In Armonk, the existing business areas should not be expanded, and the focus instead should be on upgrading and redeveloping existing stores to activate any empty spaces. In North White Plains, the emphasis should be on improving the Route 22 corridor (see Chapter 6) to enhance the attraction and viability of retail. It is anticipated that Banksville will continue to see limited retail interest given its rural nature. However, the Town should continue to assess whether additional low-scale commercial uses could be allowed; for example, participants in the public engagement process for this Plan expressed a need for a gas station in Banksville.

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Potential for an Additional Hotel

As noted above, North Castle has only one public place of accommodation, the La Quinta in the Business Park. Some residents have indicated a desire for a modern facility with more upscale amenities, and there appears to be demand for at least one additional hotel facility. In addition to promoting a hotel in the OBH zone, where it is currently permitted on large parcels (required land area is 4,700 square feet per room), the Town should consider amending the zoning in the Planned Light Industry (PLI) district, mapped in the business park, to better facilitate a small, boutique-type hotel. Adding a hotel there, together with limited new residential uses, would increase downtown Armonk's potential customer base, while transportation improvements discussed in Chapter 6 would better link the business park with downtown, making it more accessible to potential customers.

9.4 RECOMMENDATIONS

Adjust Office Zoning to Allow Limited Residential Uses

As discussed in Chapter 8, the Town should consider possible changes to the PLI and Designed Office Development (DOB-20A), which cover the Business Park and former MBIA campus, respectively, to allow a modest introduction of residential uses. Such uses should be at a relatively low scale – either in low-rise multifamily buildings or in townhouses – to reflect North Castle's existing land-use pattern. New housing in these areas should be designed to complement adjoining offices, with amenities such as landscape buffers and sidewalks connecting to nearby retail and recreational assets. Any retail should be limited to uses accessory to the main principal uses. A similar approach could be explored for the Research, Electronic and Light Industrial Park (RELIP) zone along Route 22, where there

are office/industrial vacancies and recent development and planned streetscape improvements have the potential to shift the corridor to a more varied commercial environment.

Protect the Vitality of Existing Retail Areas

To ensure that retail in North Castle remain healthy and competitive, the existing retail areas should not be expanded, and should instead be enhanced through transportation improvements, landscaping and other beautification and targeted infill housing as appropriate. This is particularly true along Route 22 in North White Plains, where the current condition of the roadway and certain properties is contributing to long-term vacancies and a generally weak retail environment. Any retail uses in office parks should not be expanded beyond what is permitted under current zoning, and such retail must be clearly accessory and incidental to the primary office use.

Consider Zoning Changes to Attract New Uses

Given local preferences and the current hotel market, North Castle should be able to support at least one additional hotel. While continuing to promote hotels in the OBH zone, the Town should consider adjusting the provisions in the PLI district, to facilitate the location of a modern hotel with amenities. For example, the zoning code defines both hotels and motels – with the key difference being that hotel rooms may contain individual kitchen facilities – but the PLI district only allows motels. The bulk controls for motels in the PLI district appear to promote large hotels more typical of highway development, through such measures as a minimum lot size of 5.5 acres, minimum lot area of 1,600 square feet per room and frontage on a state or county road. These are not conducive to a smaller boutique hotel. The Town should look at re-working the zoning controls for hotels to promote high-quality design and amenities that are attractive both to business travelers and visitors as well as North Castle

9. COMMERCIAL AND INDUSTRIAL DEVELOPMENT

residents, like a restaurant and bar. Having such a facility within walking distance of downtown Armonk would support existing stores and restaurants.

The Business Park may also be an ideal location for entertainment, cultural or ancillary higher-education uses that have a larger footprint than may be accommodated in downtown Armonk, such as a small movie theater, bowling alley, art gallery, museum, etc. Such uses would be complementary to the downtown and are similar in scale to indoor recreation (i.e. fitness centers) that are already allowed in the PLI district. In addition, entertainment and cultural uses tend to have peak usage at different days and times of day (nights and weekends) than office and light industry, which could create opportunities for efficiency in site design and parking utilization.

10. PARKS AND OPEN SPACE

10. PARKS AND OPEN SPACE

The quality, quantity and variety of parks and open spaces are important attributes that help define the character of a community. Much of North Castle's community character lies in its attractive residential neighborhoods and the parks and recreational facilities that serve them. The benefits of parks and open space are varied, in that they provide opportunities for social interaction and healthy activity; help preserve natural features and environmentally sensitive areas; serve important drainage and stormwater management functions; and enhance neighborhood aesthetics.

North Castle's Recreation and Parks Department is responsible for providing recreation programs and services to all Town residents. These include adult, senior and youth programs and two summer day camps. In addition to stewarding the Town's parks, the department maintains and organizes rentals of the Town's facilities. Facilities are available to non-commercial organizations for events including the Pool and Tennis Club, Hergenhan Recreation Center, North Castle Community Center, the gazebo, picnic pavilions and the Town's athletic fields.

10.1 TOWN PARKS AND OPEN SPACES

North Castle has over 2,872 acres of open space, including public parks, private recreation, nature preserves and water supply land. Table 26 categorizes all of North Castle's open space by type and provides the acreage for each.

Public Parks and Open Space

The Town has 15 municipal parks located throughout its hamlets and residential areas.

In North White Plains, **Clove Road Park** includes the North Castle Community Center and its playground, multi-purpose field and Little League baseball field. Next to Clove Road Park is the multi-use **Bronx River Parkway**. **Fountain Park** is a wooded area south of Clove Road Park, also accessible from Hillandale Avenue. **Miller Park** is located at the southern end of the hamlet, at the corner of Reservoir Road and North Broadway. This small park, which features a monument and seating area, is under one acre in size, but serves as a gateway to the Town.

In the Quarry Heights neighborhood, **Quarry Park** is a small neighborhood park on William Street off Old Orchard Street with a playground and a grass field. **Strauss Park** is also located off Old Orchard Street, and is mostly wooded with a grass ballfield, adjacent to the County's Cranberry Lake Preserve.

Armonk's main park is the 55-acre **Wampus Brook Park**, located west of Main Street between Bedford Road and School Street. The Wampus River runs through the park, and the Wampus School, HC Crittenden Middle School and Hergenhan Recreation Center are on either side. The Town recently considered a proposal to redesign the southern portion of Wampus Brook Park (south of Bedford Road and next to Maple Avenue) to improve drainage and provide seating, a walkway and parking. **North Castle Community Park**, located off Business Park Drive between the office park and IBM campus, features baseball, softball, soccer fields, tennis courts, a running track and a picnic pavilion. The park also contains a private indoor sports and tennis facility. Town Hall's **Legion Field** is off of Bedford Road behind the Town Hall office and court buildings and features a non-regulation sized softball diamond at the center of the site.

10. PARKS AND OPEN SPACE

Table 26: Major Open Spaces and Recreation Areas

Name	Acres
Local Parks and Open Space	
Betsey Sluder Preserve	93
Cat Rocks Park	113
Cedar Hill/Huntwood Park	19
Clove Road Park	15
Fountain Park	15
Johnson Tract	10
John A. Lombardi Park	20
Miller Park	1
North Castle Community Park	47
Quarry Park	1
Strauss Park	9
Town Hall and Legion Field	8
Wampus Brook Park	55
Winkler Park	4
County Parks and Parkway Lands	
Bronx River Parkway Reservation*	27
Cranberry Lake Preserve*	156
Kensico Dam Plaza*	65
Miller Hill	3
Silver Lake Park*	57
Wampus Pond Park*	82
Washington's Headquarters (Miller House)	1
Nature Preserves	
Byram Lake Preserve	29
Eugene and Agnes Meyer Preserve*	259
Mianus River Gorge Preserve*	564
Nature Conservancy (Middle Patent Rd., Mianus River Rd.)	46
Nichols Preserve*	81
Westmoreland Sanctuary*	622

Private Recreation		Acres
North Castle Town Pool Complex**		11
Breezemont Day Camp		13
Brynwood Golf & Country Club		155
Fishing Club of White Plains		15
Lindeman Farm		51
Whippoorwill Country Club*		175
White Birch Farm		25
Windmill Club		25
Institutional and Public Assembly		
Byram Hills High School		64
Byram Hills School District Property, Round Hill Road		14
Coman Hill Elementary School		13
Crittenden Middle School		19
Jennie Clarkson Campus		37
Louis Calder Center, Fordham University		109
St. Patrick's Church		13
Wampus Elementary School		25
Water Supply Lands		
Byram Lake/Mount Kisco Water Supply Lands*		293
Greenwich/Port Chester Waterworks Lands*		195
New York City Water Supply Lands*		4,851
Windmill Water District		73
Cemetery		
Middle Patent Cemetery		14
Nurseries		
Roth Nursery		25
Troy's Garden Nursery		28
Mariani Gardens		4

* Indicates portion of property located in the Town of North Castle

** The Town plans to acquire this privately owned land by the end of 2017.

Source: Westchester County

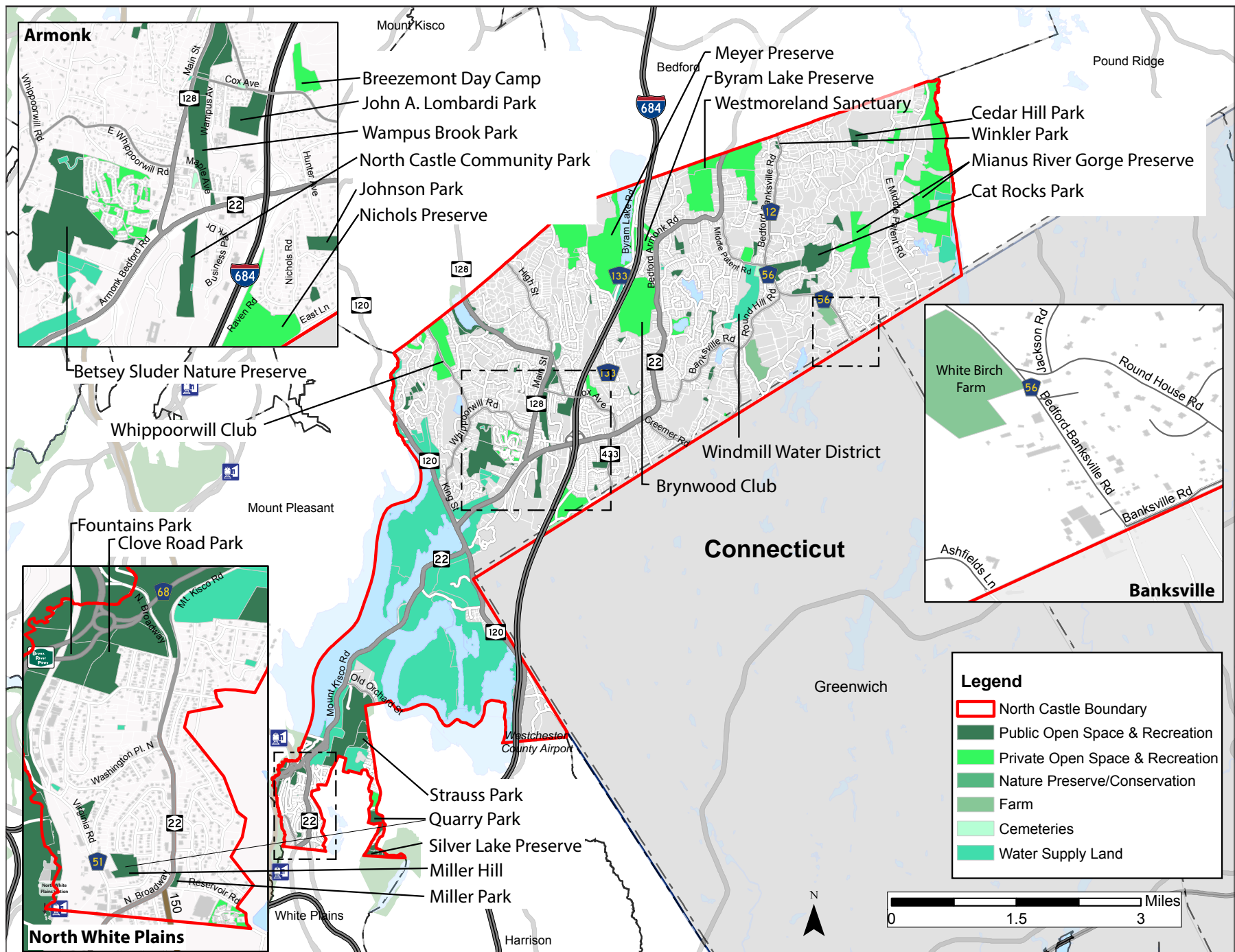


Figure 26: Parks, Recreation and Open Space

10. PARKS AND OPEN SPACE

The Eastern District of North Castle, including areas surrounding the Banksville hamlet, features a number of wooded areas and recreational resources. **Cat Rocks Park** is a 113-acre nature preserve located on Bedford-Banksville Road. It includes hiking trails and areas for wildlife observation, though these are only accessible from nearby private property **Cedar Hill/Huntwood Park** and **Winkler Park** are smaller open spaces in the Eastern District featuring both active and passive recreational options.

Private Open Space

Several privately owned areas in North Castle provide recreational or open space benefits either to members or the surrounding neighborhoods. The largest of these are country clubs: the 175-acre **Whippoorwill Club** along Whippoorwill Road and the 155-acre **Brynwood Golf and Country Club** between Route 22 and I-684. The Golf Course Community Floating Overlay District (GCCFOD) was established at the site of the Brynwood club as part of an approved project to develop a portion of the property as a residential community of active adults. The floating zone provides for preservation of most of the site as designated green space.

Other private open spaces in North Castle include farms, private clubs, a day camp and the **North Castle Pool and Tennis Club** (privately owned but managed by The Town). Membership to the swimming facilities are available to Town residents and the Byram Hills School District. Two private equestrian facilities are in the Eastern District, **Lindeman Farm** on Mead Road and White Birch Farm on Bedford-Banksville Road. Other private clubs include the **Armonk Tennis Club** on Route 22; the **Daniel Grey Fishing Club**; located across Middle Patent Road from the Windmill Water District Lands; the **Grand Slam Health and Tennis Club** in Banksville; **Breezemont Day Camp** on Cox Avenue in Armonk; and the Windmill Club, part of the Windmill Farm

residential development east of Armonk. These properties provide substantial green space and recreational opportunities for the Town. The western portion of the **Mianus River Gorge Preserve** is located in North Castle and features over seven miles of publicly accessible trails along the Mianus River (see Figure 26). A number of the Town's nature preserves are also privately owned open space, including Betsey Sluder Preserve, Westmoreland Sanctuary and Nichols Preserve.

In addition, there are several institutional open spaces, including the 109-acre **Louis Calder Center** in Armonk on Whippoorwill Road, which serves as Fordham University's Biological Field Station, and the 37-acre **Jennie Clarkson Home for Youth**, home to the REACH Academy in Quarry Heights, next to New York City Water Supply Lands and the BOCES campus.

Water Supply Land

Four municipal water supplies own property in North Castle. The largest is the New York City water supply lands, occupying 4,851 acres of land in the western portion of the Town between Armonk and North White Plains. In addition, the Windmill Water District owns 73 acres of land in Armonk; the Greenwich/Port Chester Waterworks owns 195 acres in the Eastern District; and the Town of Mount Kisco owns 293 acres in North Castle for the Byram Lake/Mount Kisco water supply lands. Access and recreation activities are limited in these lands. Permits are required through the New York City Department of Environmental Protection (NYCDEP) for fishing on the New York City Reservoirs, while the Town/Village of Mount Kisco also requires a fishing permit for its Byram Lake reservoir.

10. PARKS AND OPEN SPACE

10.2 ISSUES AND OPPORTUNITIES

North Castle has a long history of stewardship of its natural resources and open spaces. Those efforts should continue, and the Town should take advantage of new opportunities to enhance recreational opportunities for its residents.

Enhance Existing Town Open Spaces

North Castle's publicly accessible open spaces are valuable recreational and aesthetic assets, and should continue to be maintained and enhanced. While there may be opportunities to create new open spaces in a targeted, fiscally responsible way, the major emphasis for North Castle should be on maintaining and upgrading its existing open spaces.

Wampus Brook Park South: This is an underutilized open space across Bedford Road from Wampus Brook Park in Armonk. The Town has recently considered plans to enhance this space with walking paths, additional parking, landscaping and benches.

Maintenance and Upgrades: Several parks, particularly those in Quarry Heights and North White Plains, are in need of improved maintenance and equipment upgrades. Other identified issues include the need for restrooms at the Community Park, improvements at the Town pool complex and replacement of the Parks garage (currently located at Lombardi Park).

Explore New Recreational Opportunities as Needed

Residents near Fountain Park have voiced a desire to improve this park for passive recreation use. The park currently has limited public access and requires clean up and waste removal.

The Town should also explore possibilities to permit additional passive recreational access to water resources, such as the area south of the Business Park where the Wampus and Byram

Rivers converge. This area could provide trails that would serve as amenities for both the Business Park and users of Community Park.

Additional issues and recommendations related to hamlet area parks are discussed in Chapter 12.

10.3 RECOMMENDATIONS

Parks

Many respondents to the public survey for this Plan were not aware of the existing parks and recreational facilities available in North Castle. The Town should create maps of all public parks and open space areas and provide these in hard copy and on its website, to educate residents about the amenities available to them.

The Town should build bathroom facilities at Community Park. Existing plans for pre-fabricated facilities offer a low-cost and easily implemented option that would provide the necessary facilities during times of heavy use. Longer-term, the Town should consider the construction of a new recreation facility at Community Park. The specific activities and facilities accommodated in such a center would need to be based on identified community recreational needs to ensure that it is not duplicative or redundant with existing municipal facilities and the private tennis facility located at the park.

At Wampus Brook Park South, the Town continues to explore options to enhance the park in a cost-effective way. Bids to implement recent plans were determined to be too high to proceed at this time. The Town should evaluate scaled-back plans that focus on adding parking to serve the northern part of the park as well as nearby downtown shops. Other amenities at

10. PARKS AND OPEN SPACE

Wampus Brook South could be provided later. If a proposed parking garage project at the Westchester County Airport proceeds, environmental mitigation related to that project may include funding for Wampus Brook improvements.

In the event that pedestrian improvements outlined in Chapter 7 are implemented, there is an opportunity to connect North Castle Community Park and Wampus Brook Park across Route 22. A trail that joins to new sidewalks along Maple Avenue and a pedestrian crossing between Maple Avenue and Business Park Drive could enable the Town to expand accessibility of its two major parks in Armonk. New sidewalks throughout the business park could further this connectivity, and potential passive recreational access to the wetland/river areas south of the Business Park could also be connected via walking trails.

In North White Plains, the Town should work with local residents to improve Fountain Park for passive recreational use.

Playgrounds

Improvements should be made to existing playground facilities at public parks, including Clove Road Park and Quarry Park among others, where equipment is out of date. Plans for Wampus Brook Park South should also consider including a playground facility.

Department Facilities

The Parks Department garage should be replaced. The optimal location for a new garage would be at a combined new facility shared with the Highway Department at the current highway garage site behind Town Hall. Relocation of the Parks Department garage to the Town Hall site could also free up space at Lombardi Park for additional recreational uses.

Town of North Castle Pool

The Town has plans to purchase the Town of North Castle Pool by the end of 2017 and should make improvements to its facilities, including resurfacing the pool deck and refinishing the pool's interior. In addition, the Town should pursue plans to construct a small building that could be rented for events and provide storage space at the pool site.

Preservation of Existing Privately Owned Open Spaces

North Castle contains several privately owned large open space areas, including golf courses, membership clubs and research institutions, which contribute to its natural and scenic character. Although there are no significant changes expected with these properties, the Town should closely monitor their status and take advantage of opportunities to preserve them, either through acquisition or public-private partnership, when possible.

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

11. COMMUNITY CHARACTER AND HISTORIC RESOURCES

North Castle is rich in its history and natural resources, generating a reputation in the region as a community with a legacy dating back to before the American Revolution. At the same time, the Town provides a range and quality of services that contribute greatly to North Castle's quality-of-life. The breadth of the Town's historic, cultural and municipal resources is instrumental in establishing North Castle's character and attractiveness for residents.

11.1 HISTORIC RESOURCES

As noted in Chapter 2, North Castle became a strategic location for the Revolutionary War. Earliest Town records date to 1736, and the Town was incorporated in 1788. Since its establishment, North Castle's industry focused mostly on agriculture through the 19th century before becoming a center of shoemaking. By the 20th century, the Town became a destination for wealthy New York City business people interested in owning country estates in a rural setting within commuting distance of Manhattan. While the Town experienced a population decline around 1910, the rest of the 20th century was characterized by significant population expansions, particularly in the postwar period. Following World War II, Armonk and North White Plains began to grow as a result of subdivisions of large estates, and major new businesses came to the Town, most notably IBM in 1959.

This development pattern has resulted in a mix of architectural styles of varying periods. There are over 100 homes in North

Castle that are at least 100 years old, some of which date back to the pre-Revolutionary era, the late 1700s and early 1800s. The Town's housing stock includes a range of styles: Greek Revival, Craftsman, Colonial and contemporary. Commercial areas around downtown Armonk include structures built before 1900 as well as mid- to late-20th century and more recent buildings such as Armonk Square on North Main Street. Thus, while there many historic buildings and structures in North Castle, and the Bedford Road Historic District represents an intact group of classically inspired styles, the Town overall does not have a uniform "look" from a particular era or style.

North Castle has three resources listed on the National Register of Historic Places: Smith's Tavern, the Elijah Miller House/Washington's Headquarters and the Bedford Road Historic District.



Smith's Tavern, headquarters of the North Castle Historical Society

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

To be eligible for National Register listing, resources must be over 50 years old and should be 1) associated with events that have made a major contribution to the broad patterns of U.S. history or with the lives of significant people; 2) embody distinctive characteristics of a type, period or construction method; or 3) have yielded or may yield important historical data. Benefits of listing include eligibility for tax credits and federal, state and private grants.

Each of North Castle's National Register resources is also designated as Town Landmarks by the Landmarks Preservation Committee. The full list of locally designated landmarks is as follows:

North Castle Landmarks Preservation District No. 1 encompasses the Town Hall, Highway Department and Cornell-Birdsall House properties, the Westchester Chinese Christian (formerly Methodist) Church, and the Bedford Road Historic District. The Bedford Road Historic District, created by the Town Board in 1979 and listed on the National Register in 1985, incorporates St. Stephen's Episcopal Church and Cemetery, an out-building and six Greek Revival-style houses, creating a linear assemblage of seven contiguous properties (see map below). The uniform spacing, setback of the buildings and regularity of architectural design enhances the streetscape.

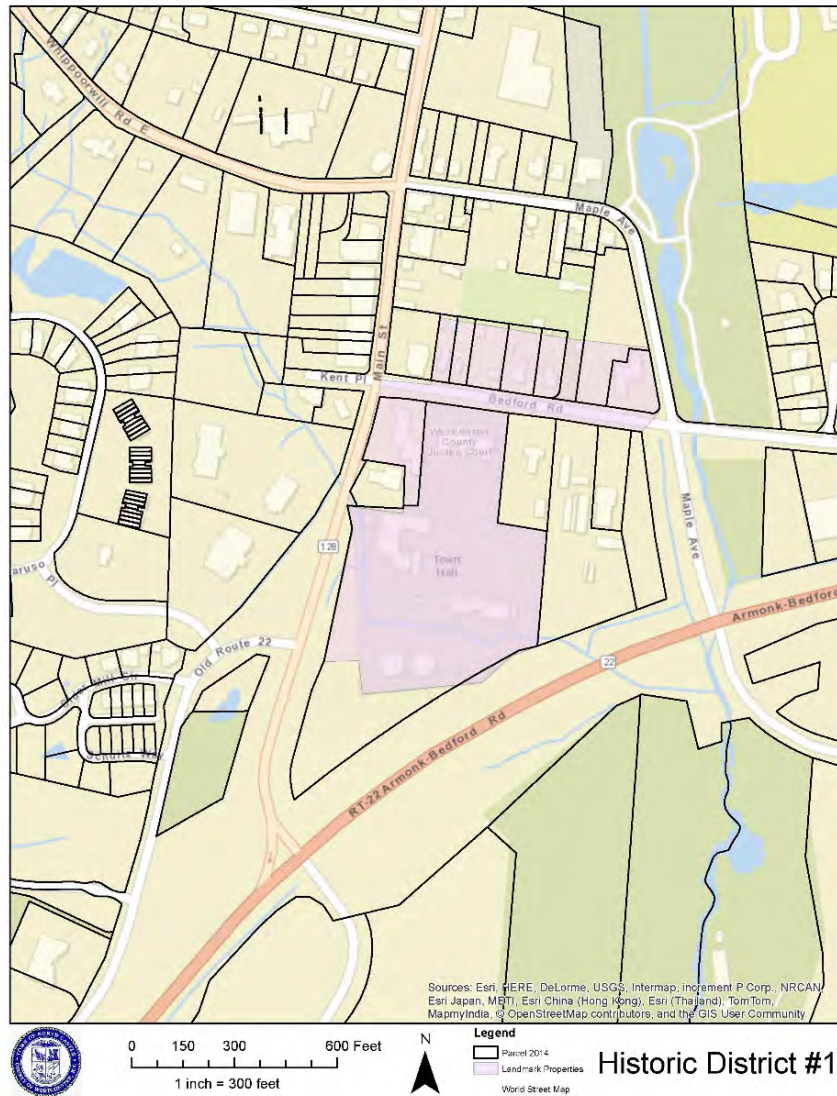
Smith's Tavern (440 Bedford Road/Route 22) has been a militia headquarters, tavern, town hall, stagecoach stop, voting place and post office. The complex also includes the Brundage Blacksmith Shop, East Middle Patent one-room schoolhouse, an outdoor privy and the 1798 Quaker Meeting House, but only the tavern itself is listed on the National Register.



Bedford Road Historic District



11. COMMUNITY SERVICES AND HISTORIC RESOURCES



Elijah Miller House/Washington's Headquarters (140 Virginia Road) was used as Washington's Headquarters during the Battle of White Plains in 1776. This property has been owned by Westchester County since 1917. The Elijah Miller House Committee was formed in 2005 to advise and educate Town Board members about the history and condition of the house and property. The Town was seeking ways to work with the County to save the original house on Virginia Road and Miller Hill Park, located on McDougal Drive. The park is the only Revolutionary War battle site in the County still in its natural setting. Earthworks on Miller Hill protected the right wing of Washington's army during the Battle of White Plains. The house was accepted for listing on the National Register in 1976, added to the New York State Register of Historic Places in 1980 and listed on the Westchester County Inventory of Historic Places in 1988. However, it is in a state of disrepair and has been closed to the public for several years. In May 2017, the County agreed, with several stipulations, to renovate and reopen the Miller House in its current site, at an estimated cost of \$1.3 million.



Elijah Miller House/Washington's Headquarters on Virginia Road

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

Zia/Graf Building (85 Round Hill Road).

Brundage House (481 Bedford Road/Route 22) Built around 1778, this small farmhouse structure was rebuilt with extensive additions in 2010-2012.

Lyon House (336 Bedford-Banksville Road).

Breezemont Hotel (62 Cox Avenue) Currently serving as the main building for the Breezemont Day Camp, this building was constructed in the mid-1800s and was used as a 50-room hotel until 1911.



Breezemont Hotel

During the National Bicentennial, five historic sites in North Castle were given permanent historical markers. Markers are present at Thomas Wright's Mills-Major John Andre Monument; Elijah Miller House/Washington's Headquarters; Miller Hill

Revolutionary War Battle Site; Historic Smith's Tavern and Middle Patent Rural Cemetery.

North Castle has been designated a Preserve America Community and a Certified Local Government. The Certified Local Government Program partners local, state and national governments to focus on historic preservation at a grass roots level. Its designation provides the Town with access to expert technical advice from New York State and National Park Service.

Chapter 195 of North Castle's Code covers the powers and duties of the Landmarks Preservation Committee. The committee is responsible for establishing criteria for the identification of significant historic, architectural and cultural landmarks and for delineating historic districts. Designation of identified structures or resources as landmarks and approval or disapproval of applications for certificates of appropriateness are under the committee's purview. The Committee has jurisdiction over exterior architectural features and areas adjacent in order to ensure proper appreciation of the landmark.

In addition to local landmarks, the Town has designated three scenic roadways: East Middle Patent Road, Mianus River Road and St. Mary's Church Road. This designation recognizes the roadways' unique visual character, with stone walls, mature vegetation, water bodies, scenic vistas and historic structures, all of which contribute to North Castle's overall character. Certain development along scenic roadways is subject to Planning Board site plan review.

Bedford Road has been designated a Washington-Rochambeau National Historic Trail by the National Park Service.

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

11.2 CULTURAL RESOURCES

Various cultural attractions contribute to North Castle's reputation as a vibrant and engaging place. Whippoorwill Hall is the largest Town-owned theater space in North Castle, and hosts concerts and stage performances by Hudson Stage Company, the Armonk Players and more.



The Town is also home to many events that bring the community together and encourage an active social atmosphere, including:

Once a month in the summertime the Armonk Chamber of Commerce hosts monthly events on Thursdays, which include live music, activities, workshops and food and drink specials in downtown Armonk.

The Small Town Theater Company hosts **summer concerts at Wampus Brook Park**, where members of the community can picnic and enjoy free entertainment.

Following the annual holiday lighting ceremony at the gazebo in Wampus Brook Park, the Town hosts a **Frosty Day and Parade** to commemorate the popular children's character, whose setting was based on Armonk. Local businesses and groups participate in events and activities along Main Street, Maple Avenue and in the park.

Since 1961, the Friends of the North Castle Library has hosted the **Armonk Outdoor Art Show** to raise funds for the library. The

show has been held at Community Park since 1997 and hosts nearly 200 exhibitors, attracting visitors from around the region.

11.3 MUNICIPAL FACILITIES AND SERVICES

Town Administration

Town administration, most municipal departments and North Castle's Justice Court are all housed at Town Hall on Bedford Road. The one-story building encompasses the office of the supervisor, the police department and the court. The Town Hall Annex (Cornell-Birdsall House) is located off of Bedford Road behind Town Hall, and houses additional Town departments.

Public Safety

Police: The North Castle Police Department is a New York State Accredited Law Enforcement Agency operating out of the Town Hall building. The department has an accident investigation unit, bike unit, emergency service unit and child safety seat unit.

Fire: North Castle's fire protection is an all-volunteer service provided mainly by three fire companies: Armonk Independent Fire Company, Banksville Independent Fire Company and the North White Plains Fire Company No. 1. All three districts are comprised entirely of local volunteers and respond to fires, motor vehicle accidents and emergency medical situations.

The Armonk Fire Department was established in 1930. It is located at 400 Bedford Road and services Armonk and part of Banksville, with approximately 60 volunteer fire response members and 20 medical technicians.

The Banksville Independent Fire Department (BIFD) was started in 1949 and is located at 33 Bedford-Banksville Road in

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

Banksville, but serves three municipalities in two states: Bedford, Banksville (North Castle) and Greenwich, CT.

The North White Plains Fire Department was founded in 1912 and is located at 621 North Broadway in North White Plains.

Emergency Medical Services: The Town is served by two ambulance services, operated by the Armonk Independent Fire Company and the Valhalla Ambulance Corps., Inc., which provides service to North White Plains.

Building and Planning

The Building and Engineering Department is responsible for code enforcement in the Town. The department reviews applications for building and demolition permits, tree removal permits, signage and fire safety compliance, and conducts inspections to ensure compliance.

Working closely with the Building Department is the Director of Planning, who reviews all applications submitted for approval to the Architectural Review Board, Planning Board and Zoning Board of Appeals. The Town Planner also works on supporting economic development activities, grant applications, drafting of zoning text changes and other planning studies or initiatives.

Parks and Recreation

The Parks and Recreation Department oversees the Town's recreation programs recreational facilities. North Castle's primary recreational facilities are John A. Lombardi Park and Community Park, but events are held throughout the year at facilities in the community, including the Hergenhan Recreation Center and the North White Plains Community Center.



Community Park



North Castle Public Library, Armonk

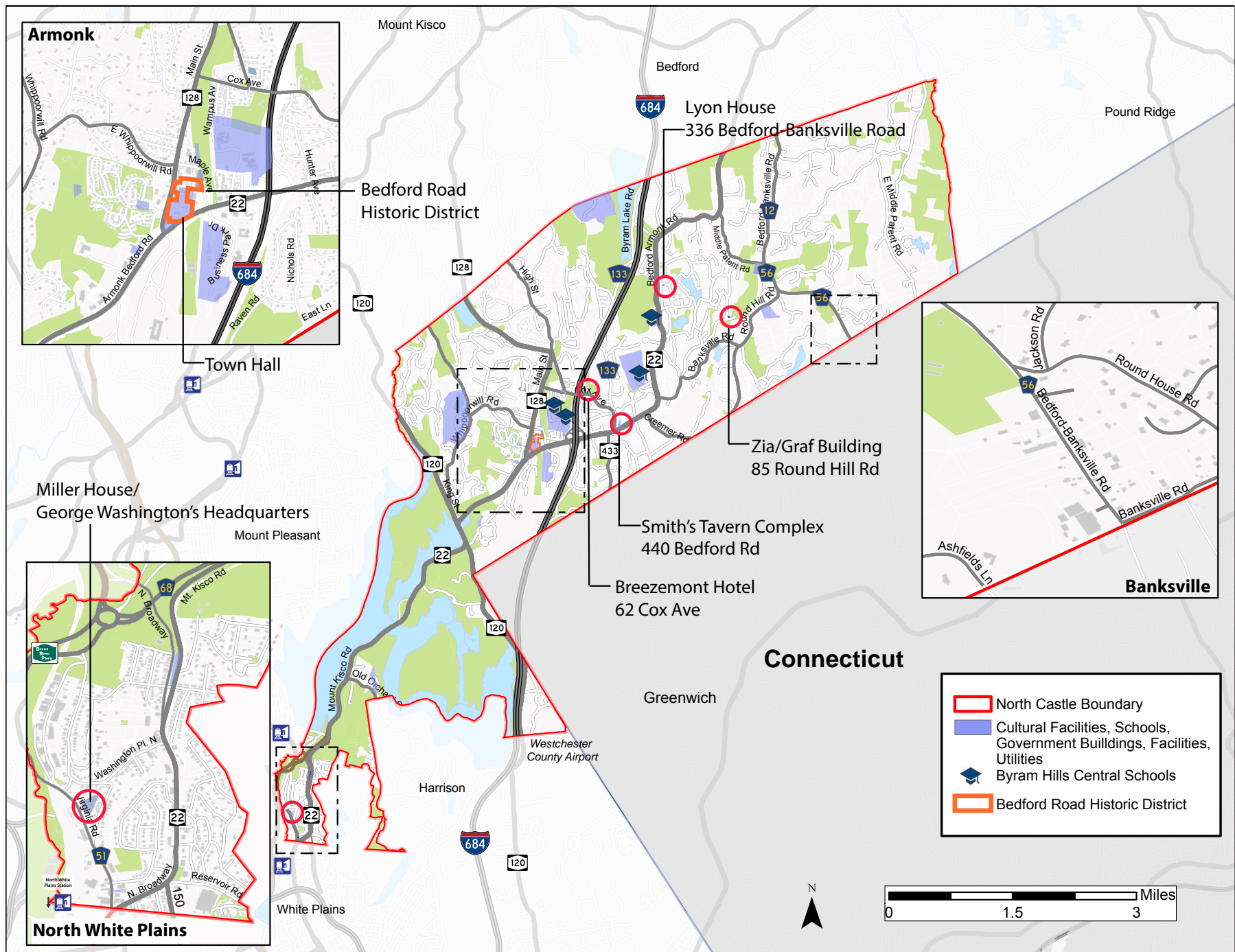


Figure 27: Historic, Cultural and Municipal Facilities

11. COMMUNITY SERVICES AND HISTORIC RESOURCES



North White Plains Community Center and Library

11.4 SCHOOLS

North Castle is served by four school districts. The majority of the Town is located in the Byram Hills Central School District located in Armonk. Mount Pleasant and Valhalla School Districts serve a large portion of North White Plains. The Bedford School District covers part of the Eastern District that is largely wetlands; as a result few school children from the Town are enrolled in this district (see Figure 28). Table 31 shows the enrollment for all four school districts from 2000-2017 and projections through 2027. All five school districts are projected to experience decline over the next 10 years to varying degrees.

Byram Hills School District¹³

The Byram Hills School District covers approximately 23 square miles, most of which is located in North Castle. In addition to the Town, this district also serves residents of Mount Pleasant, New Castle and Bedford. The district has two elementary schools, one middle school and one high school.

- **Coman Hill Elementary School** is located at 558 Bedford Road in Armonk and has 470 students in grades K-2.
- **Wampus Elementary School** is located at 41 Wampus Avenue in Armonk and has 535 students in grades 3-5.
- **H.C. Crittenden Middle School** is located at 10 MacDonald Avenue in Armonk, with 547 students in grades 6-8.
- **Byram Hills High School** is located at 12 Tripp Lane in Armonk. It has 820 students in grades 9-12.



H.C. Crittenden Middle School, Armonk

¹³ Enrollments for all individual schools are for the 2016-17 school year.

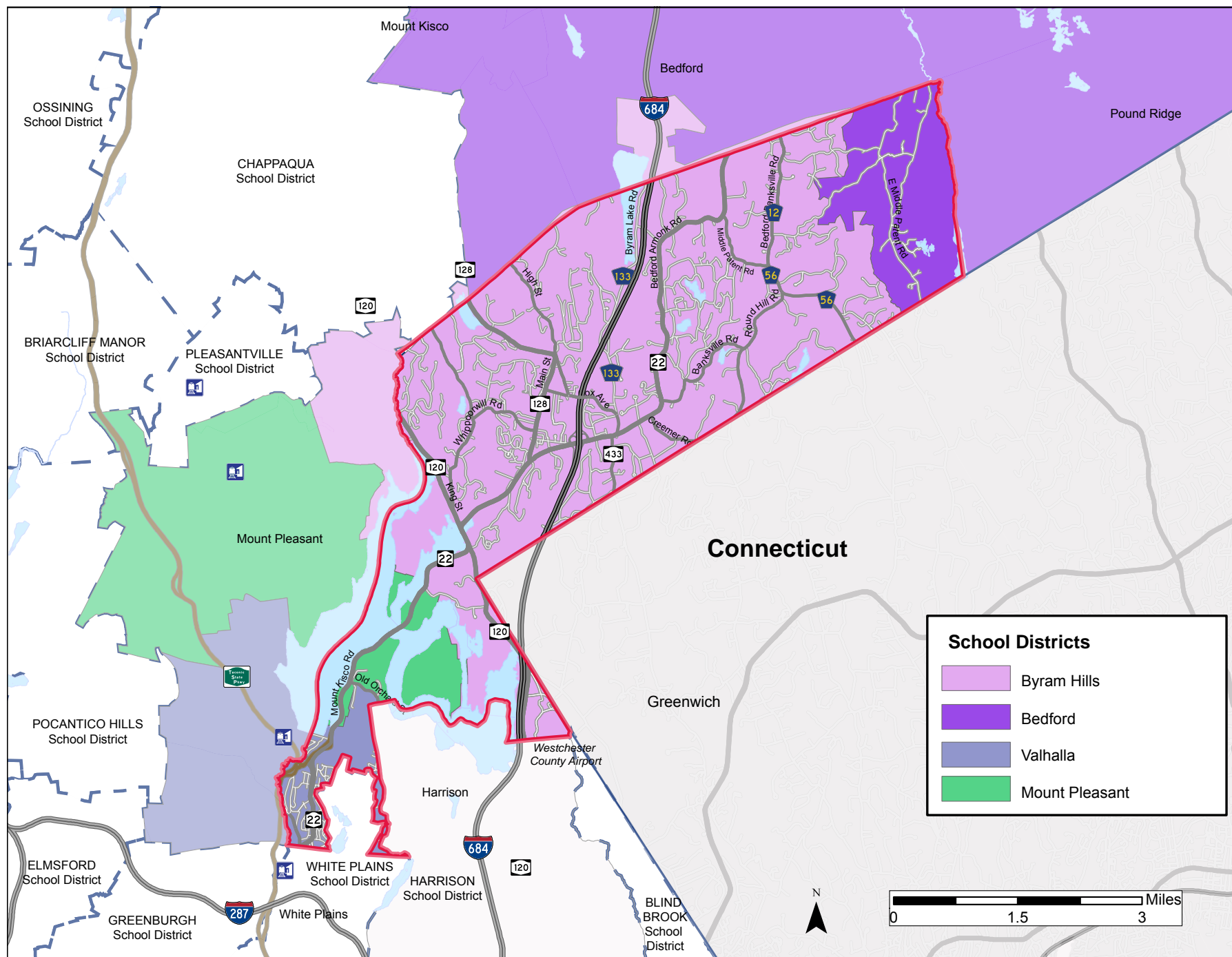


Figure 28: School District Boundaries

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

For the 2016-2017 school year, total K-12 enrollment in the Byram Hills School District was 2,372 students. Enrollment has declined consistently since 2009, with the greatest decrease between the 2010-2011 and 2011-2012 school years. Enrollment peaked at 3,499 during the 2008-2009 school year, 32.2% higher than the 2016-2017 period. District-wide enrollment is projected to continue a steady decline for the next two school years (to 2017-2018), according to the New York State Department of Education.

Table 27: Byram Hills School District Enrollment, 2000-01 to 2016-17

	K-5	6-8	9-12	Total	Change
2000-2001	1243	608	632	3023	
2001-2002	1260	627	675	3102	2.6%
2002-2003	1309	634	714	3197	3.1%
2003-2004	1318	650	739	3265	2.1%
2004-2005	1353	650	792	3389	3.8%
2005-2006	1350	654	807	3351	-1.1%
2006-2007	1363	641	803	3366	0.4%
2007-2008	1336	663	819	3394	0.8%
2008-2009	1307	671	837	3499	3.1%
2009-2010	1264	690	841	3497	-0.1%
2010-2011	1168	688	858	3236	-7.5%
2011-2012	1111	673	857	2646	-18.2%
2012-2013	1081	675	880	2643	-0.1%
2013-2014	1066	618	892	2583	-2.3%
2014-2015	1054	604	870	2538	-1.7%
2015-2016	1001	587	870	2467	-2.8%
2016-2017	997	545	816	2372	-3.9%

Source: New York State Education Department 2000-2017

Valhalla Union Free School District

The Valhalla School District covers approximately 5 square miles and serves residents in North White Plains, as well as Mount Pleasant and Greenburgh. The district has two elementary schools, one middle school and one high school.

- **Virginia Road Elementary School** is located at 86 Virginia Road and has 306 students in grades K-2.
- **Kensico School** is located at 320 Columbus Avenue and has 310 students in grades 3-5.
- **Valhalla Middle School** is located at 300 Columbus Avenue, with 341 students in grades 6-8.
- **Valhalla High School** is located at 300 Columbus Avenue. It has 501 students in grades 9-12.

Table 28: Valhalla Union Free School District Enrollment, 2000-01 to 2016-17

	K-5	6-8	9-12	Total	Change
2000-2001	617	290	341	1861	
2001-2002	630	324	356	1933	3.9%
2002-2003	660	336	365	1964	1.6%
2003-2004	695	349	394	2050	4.4%
2004-2005	736	313	432	2111	3.0%
2005-2006	746	333	436	2163	2.5%
2006-2007	768	330	425	2171	0.4%
2007-2008	772	330	426	2176	0.2%
2008-2009	771	346	394	2177	0.0%
2009-2010	741	370	408	2203	1.2%
2010-2011	746	399	428	2293	4.1%
2011-2012	694	420	424	1540	-32.8%
2012-2013	676	403	453	1536	-0.3%
2013-2014	653	394	467	1521	-1.0%
2014-2015	630	368	493	1495	-1.7%
2015-2016	619	352	504	1480	-1.0%
2016-2017	614	341	498	1458	-1.5%

Source: New York State Education Department 2000-2017

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

For the 2016-2017 school year, total K-12 enrollment in the Valhalla Union Free School District was 1,458 students. Enrollment has declined consistently since 2011, with the greatest decrease occurring between the 2010-2011 and 2011-2012 period (-32.8%). Enrollment peaked at 2,293 during the 2010-2011 school year, 36.4% higher than the 2016-2017 period. District-wide enrollment is projected to continue a steady decline for the next two school years (to 2017-2018), according to the New York State Department of Education.

Mount Pleasant Central School District

The Mount Pleasant Central School District covers approximately 10 square miles across the boundaries of North Castle and Mount Pleasant. The district has two elementary schools, one middle school and one high school.

- **Hawthorne Elementary School** is located at 225 Memorial Drive and has 426 students in grades K-2.
- **Columbus Elementary School** is located at 580 Columbus Avenue, with 429 students in grades 3-5.
- **Westlake Middle School** is located at 825 West Lake Drive, with 474 students in grades 6-8.
- **Westlake High School** is located at 825 West Lake Drive. It has 552 students in grades 9-12.

For the 2016-2017 school year, total K-12 enrollment in the Mount Pleasant Central School District was 1,881 students. Enrollment has declined consistently since 2011 with the greatest decrease occurring between the 2010-2011 and 2011-2012 period (-25.7%). Enrollment peaked at 2,642 during the 2010-2011 school year, 28.8% higher than the 2016-2017 period. District-wide enrollment is projected to continue a steady decline for the next two school years (to 2017-2018), according to the New York State Department of Education.

Table 29: Mount Pleasant Central School District Enrollment, 2000-01 to 2016-17

	K-5	6-8	9-12	Total	Change
2000-2001	821	416	539	2311	
2001-2002	859	444	526	2418	4.6%
2002-2003	901	403	539	2383	-1.4%
2003-2004	914	397	526	2405	0.9%
2004-2005	924	419	528	2393	-0.5%
2005-2006	927	462	524	2435	1.8%
2006-2007	937	482	539	2552	4.8%
2007-2008	951	476	551	2536	-0.6%
2008-2009	964	466	584	2572	1.4%
2009-2010	939	449	589	2571	0.0%
2010-2011	917	496	594	2642	2.8%
2011-2012	883	491	587	1964	-25.7%
2012-2013	898	473	571	1953	-0.6%
2013-2014	876	472	579	1948	-0.3%
2014-2015	852	460	584	1913	-1.8%
2015-2016	852	475	558	1896	-0.9%
2016-2017	851	474	550	1881	-0.8%

Source: New York State Education Department 2000-2017

Bedford Central School District

The Bedford School District covers portions of Pound Ridge, Bedford, North Castle and New Castle. It has five elementary schools, one middle school and one high school.

- **Bedford Hills Elementary School** is located at 12 Babbitt Road, with 301 students in grades K-5.
- **Bedford Village Elementary School** is located at 45 Court Road, with 273 students in grades K-2.
- **Mount Kisco Elementary School** is located at 47 W Hyatt Avenue and has 581 students in grades K-5.
- **Pound Ridge Elementary School** is located at 7 Pound Ridge Road, with 312 students in grades K-5.

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

- **West Patent Elementary School** is located at 80 West Patent Road, with 344 students in grades K-5.
- **Fox Lane Middle School** is located at 632 S. Bedford Road, with 965 students in grades 6-8.
- **Fox Lane High School** is located at 632 S Bedford Road. It has 1,404 students in grades 9-12.

For the most recent school year, total K-12 enrollment in the Bedford school district was 4,180 students. Enrollment has fallen since 2011, with the greatest decrease occurring between the 2010-2011 and 2011-2012 period (-22.3%). Enrollment peaked at 5,697 during the 2010-2011 school year, 27% higher than in 2016-2017. District enrollment is projected to continue a steady decline for the next two school years, according to the New York State Department of Education.

Table 30: Bedford Central School District Enrollment, 2000-01 to 2016-17

	K-5	6-8	9-12	Total	Change
2000-2001	1953	795	960	4889	
2001-2002	2004	834	1058	5047	3.2%
2002-2003	1980	865	1066	5155	2.1%
2003-2004	2009	882	1190	5315	3.1%
2004-2005	2057	907	1263	5392	1.4%
2005-2006	2009	975	1252	5365	-0.5%
2006-2007	2005	994	1281	5487	2.3%
2007-2008	1997	999	1277	5518	0.6%
2008-2009	1992	971	1286	5607	1.6%
2009-2010	1964	954	1335	5658	0.9%
2010-2011	2008	992	1339	5697	0.7%
2011-2012	1988	994	1300	4424	-22.3%
2012-2013	1973	990	1361	4471	1.1%
2013-2014	1906	987	1366	4412	-1.3%
2014-2015	1867	961	1388	4374	-0.9%
2015-2016	1830	966	1429	4371	-0.1%
2016-2017	1783	943	1380	4180	-4.4%

Source: New York State Education Department 2000-2017

11.5 ISSUES AND OPPORTUNITIES

Promote Historic Preservation Efforts

North Castle has a number of historically significant buildings and structures. The Town landmarks, including two structures on the National Register of Historic Places, are an important reminder of North Castle's history and should continue to be preserved through the Landmarks Preservation Committee.

Maximize Efficiency of Municipal Facilities and Resources

North Castle provides a wide range of services to its residents, contributing greatly to its quality-of-life. The challenge is to balance those services with the reality of fiscal constraints and to avoid overburdening taxpayers. Finding ways to reduce costs and increase efficiency without sacrificing services, including pursuing shared-services opportunities and intergovernmental coordination, should be a major Town priority.

Within North Castle, there may be opportunities for reconfiguration or reorganization of municipal facilities to improve functionality and reduce costs. For example, the Highway Department facility behind Town Hall is outdated and lacks significant garage space. To address these issues, the Town should explore the potential to construct a new, consolidated facility and garages for the highway and parks department at the current site behind Town Hall. Such a facility could provide for enhanced functionality and aesthetics.

Another opportunity for improvements to municipal facilities is at Town Hall. The Town should implement recommendations on reconfiguring the existing facilities by connecting through the courtyard space to accommodate additional police and court uses. In addition, there may be future opportunities to increase Town Hall space by purchasing the American Legion building at 17 Bedford Road and relocating some administrative services.

11. COMMUNITY SERVICES AND HISTORIC RESOURCES

Table 31: Change in Total Enrollment, 2000-2017, and Projected Enrollment, 2017-2027

	Valhalla		Byram Hills		Mount Pleasant		Bedford	
	Total	Change	Total	Change	Total	Change	Total	Change
2000-2001	1861		3023		2311		4889	
2001-2002	1933	3.9%	3102	2.6%	2418	4.6%	5047	3.2%
2002-2003	1964	1.6%	3197	3.1%	2383	-1.4%	5155	2.1%
2003-2004	2050	4.4%	3265	2.1%	2405	0.9%	5315	3.1%
2004-2005	2111	3.0%	3389	3.8%	2393	-0.5%	5392	1.4%
2005-2006	2163	2.5%	3351	-1.1%	2435	1.8%	5365	-0.5%
2006-2007	2171	0.4%	3366	0.4%	2552	4.8%	5487	2.3%
2007-2008	2176	0.2%	3394	0.8%	2536	-0.6%	5518	0.6%
2008-2009	2177	0.0%	3499	3.1%	2572	1.4%	5607	1.6%
2009-2010	2203	1.2%	3497	-0.1%	2571	0.0%	5658	0.9%
2010-2011	2293	4.1%	3236	-7.5%	2642	2.8%	5697	0.7%
2011-2012	1540	-32.8%	2646	-18.2%	1964	-25.7%	4424	-22.3%
2012-2013	1536	-0.3%	2643	-0.1%	1953	-0.6%	4471	1.1%
2013-2014	1521	-1.0%	2583	-2.3%	1948	-0.3%	4412	-1.3%
2014-2015	1495	-1.7%	2538	-1.7%	1913	-1.8%	4374	-0.9%
2015-2016	1480	-1.0%	2467	-2.8%	1896	-0.9%	4371	-0.1%
2016-2017	1458	-1.5%	2372	-3.9%	1881	-0.8%	4180	-4.4%
2017-2018	1390	-4.7%	2274	-4.1%	1869	-0.7%	4052	-3.1%
2018-2019	1325	-4.6%	2196	-3.4%	1866	-0.1%	3977	-1.9%
2019-2020	1290	-2.7%	2182	-0.6%	1875	0.5%	3924	-1.3%
2020-2021	1261	-2.3%	2142	-1.9%	1864	-0.5%	3857	-1.7%
2021-2022	1222	-3.0%	2104	-1.8%	1864	0.0%	3831	-0.7%
2022-2023	1207	-1.3%	2056	-2.3%	1859	-0.2%	3742	-2.3%
2023-2024	1189	-1.5%	2058	0.1%	1856	-0.2%	3696	-1.2%
2024-2025	1175	-1.2%	2042	-0.8%	1874	1.0%	3653	-1.2%
2025-2026	1166	-0.8%	2010	-1.6%	1875	0.0%	3608	-1.3%
2026-2027	1149	-1.5%	1993	-0.9%	1879	0.2%	3565	-1.2%

Source: New York State Education Department 2000-2016

Note: Projections represent the middle value of the 90% confidence level. October 2016 enrollment was used as a base and progression ratios and enrollment in kindergarten over the past five years was used to make assumptions. The projections do not take local trends into account, and assume that the next 10 years of enrollment will resemble the previous five.

11. COMMUNITY CHARACTER AND HISTORIC RESOURCES

Declining Enrollment in School Districts

All of the local school districts serving North Castle are showing declining enrollment statistics. While enrollment fluctuation is normal, the Town should consider how to continue to attract young families to the area, such as providing more variety of housing types, such as townhouses, which could allow for a more affordable entry point for this demographic (see Chapter 8). It should be noted that promotion of greater variety of housing types is not intended to address budgetary issues with any school district. District-specific finances, including per-pupil costs, are under the control of each district, and the Town has no jurisdiction. However, the Town acknowledges that much of the school infrastructure serving its residents was developed to serve a larger student population than presently exists. To the extent that encouraging more entry-level housing in North Castle can help to attract young couples and families that can remain in the Town long-term and be users of the public school systems without generating a cost burden on those systems, this Plan supports such a policy.

11.6 RECOMMENDATIONS

Historic Preservation

1. Continue to support local preservation advocates and the Bedford Historic District in North Castle, including the retention of historic homes and buildings.
2. Work with the Landmarks Preservation Committee to compile an official list of historic homes, as a way to increase public knowledge and understanding about North Castle's historic assets.

3. Work with Westchester County to implement planned improvements to the Elijah Miller House/Washington's Headquarters at its current location.

Arts and Culture

1. Promote North Castle's arts and cultural opportunities through marketing, outreach and special events.

Municipal and School Facilities and Services

1. Explore the potential for a Highways and Parks garage behind the Town Hall facility.
2. Pursue opportunities to improve the functionality of Town Hall through the expansion and reorganization of existing facilities and exploring the opportunity to acquire the American Legion building.
3. Consider ways to continue to attract young families to the area, including providing a greater variety of housing types, to address declining enrollment in the local school districts.

12. HAMLET AREAS

12. HAMLET AREAS

North Castle is comprised of three hamlet areas, each with a distinct character and unique issues and opportunities. Recognizing that an individualized approach was needed, the planning process included a public workshop for each hamlet, focusing on the distinct assets and challenges for each. This chapter summarizes the planning approach for each hamlet. Some recommendations are also discussed in other chapters. The intent is not to repeat concepts, but to take a holistic look at the hamlet centers, so that a reader interested in a particular hamlet can easily understand the key concepts for that area.

12.1 NORTH WHITE PLAINS

North White Plains is located in the southwestern portion of North Castle, separated from the rest of the Town by the Kensico Reservoir. The hamlet borders the City of White Plains to the south and west, and the Town/Village of Harrison to the east. North White Plains has significant transit and regional roadway access. Its major corridor, Route 22, connects to the Central Westchester Parkway, which intersects with I-287 to the south and the Taconic Parkway to the north. These roadways provide strong access to the region, but also present challenges due to traffic and congestion. The North White Plains Metro-North station is located just outside of the Town in White Plains, and has a new 1,182-space parking structure built in 2015.

As noted in Chapter 4, North White Plains has a lower median income than North Castle as a whole. Housing stock is relatively affordable and well-maintained. The hamlet's character is shaped by its compact single- and two-family neighborhoods, its

community assets such as the library and Clove Road Park, and the commercial spine of Route 22/North Broadway, as well as its unique topography. Figure 29 summarizes key assets and challenges for North White Plains.

Route 22: Traffic Congestion and Walkability

Route 22 in North White Plains experiences significant traffic during peak commuting periods, as a result of the lack of a direct connection between I-287 and the Bronx River and Taconic State Parkways. Traffic currently merges from Central Westchester Parkway to Route 22 and continues northwest on North Broadway to Kensico Circle. Thus, Route 22 functions as an arterial four-lane road through North White Plains, with average daily traffic volumes that exceed those on the Bronx River Parkway.

The inability of Route 22 to fully accommodate peak hour traffic in North White Plains is the single-most important transportation issue in North Castle. Traffic volume, congestion and high speeds along Route 22 have led to more fatal crashes in this hamlet than elsewhere in the Town. Residential neighborhoods have also seen increased traffic as cars and trucks attempt to avoid congested areas on Route 22 by cutting through neighborhoods on local roads. Based on feedback received from the North White Plains public workshop and the survey, members of the community expressed strong interest in improving Route 22 and in traffic calming measures to reduce the negative impacts of high traffic volumes and speeds.

Pedestrian access from neighborhoods to the train station and overall walkability were also noted as concerns by the North White Plains community. For Route 22 in particular, recognizing that there is insufficient space for both sidewalks and dedicated

12. HAMLET AREAS

bike lanes, residents clearly indicated a preference for the installation of sidewalks.

Although the issues surrounding Route 22 are complex, the Town has some options to explore to address the community's concerns. In the near-term, the Town should work with NYSDOT to implement planned roadway changes to mitigate the closing of the roadway over Kensico Dam. These plans include improvements at the intersection of North Broadway and Hillandale Avenue, including installing pedestrian crosswalks.

Longer-term, the Town should undertake a comprehensive study of Route 22 and the options to address traffic congestion along the roadway and improve conditions for drivers, as well as pedestrians and cyclists. At a minimum, the study should include the following:

1. Re-examining options for alleviating traffic alternatives on Route 22, specifically widening Cemetery Road between Exit 6 of I-287 in White Plains and the Bronx River Parkway, which would alleviate congestion on Route 22 in North White Plains.
2. Installing a demand-activated pedestrian crosswalk in one of two locations: 1) across from 845 North Broadway, between Washington Place East and Dunlap Way, or 2) at the offset intersection of Palmer Avenue and McDougal Drive (see Figure 30).
3. Working with NYSDOT to install sidewalks along Route 22 where they are missing and are appropriate given space and topography (see Figure 30).
4. Exploring an extension of the Bronx River Pathway to Armonk via Route 22. This proposed pathway link could

be implemented with a potential “road diet” of Route 22 north of Hillandale Avenue and Route 120 in Armonk, to potentially remove one lane of traffic in each direction. This road diet could provide room for dedicated bike lanes and an expanded divider median to prevent vehicles from crossing the center line.

5. Implementing improved lighting, landscaping, streetscaping and gateway signage along Route 22 to calm traffic, reduce speeding and create a stronger sense of place.

Funding for such a study could be available through the NYSDOT's Complete Streets initiative, which promotes safety, accessibility and mobility for motorists, pedestrians and bicyclists.

Parking in Residential Areas

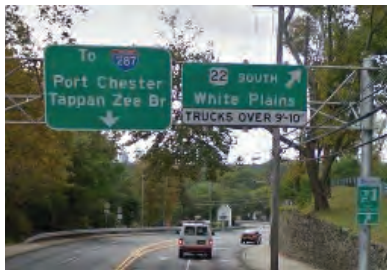
Non-compliance with R-2F zoning in North White Plains is believed to contribute to a lack of residential parking in the neighborhoods. Some homes in this zone have been converted into illegal apartments, and there is insufficient parking in cases where three or more families share a residence. This situation is a particular problem in winter months, when on-street parking is restricted by regulations and the need to provide snow storage. Informal shared parking of business lots on Route 22 has been used to resolve this issue. However, other solutions, including using lots at public facilities such as the Community Center/Library, as shared parking resources, might be explored.

The Town should work toward installing curbing along residential roadways to improve driving conditions and reduce on-street parking, as well as strengthen local stormwater management. Continued enforcement of illegal residential units in the R-2F zone should also be a priority.

Assets



Well-maintained, relatively affordable housing stock



Excellent access to regional road, transit network



Wealth of historic, cultural, civic and recreational resources

Challenges



Lack of connectivity to rest of North Castle and within North White Plains



Difficult environment for pedestrians and bicyclists



Narrow roads with insufficient or no curbs, lack of sufficient residential parking



Aesthetics and property/infrastructure maintenance and vacancies

Figure 29: North White Plains Assets and Challenges

ISSUES & OPPORTUNITIES

SIDEWALK PRESENT
 SIDEWALK EXPECTED
 SIDEWALK MISSING
 TRAFFIC LIGHT

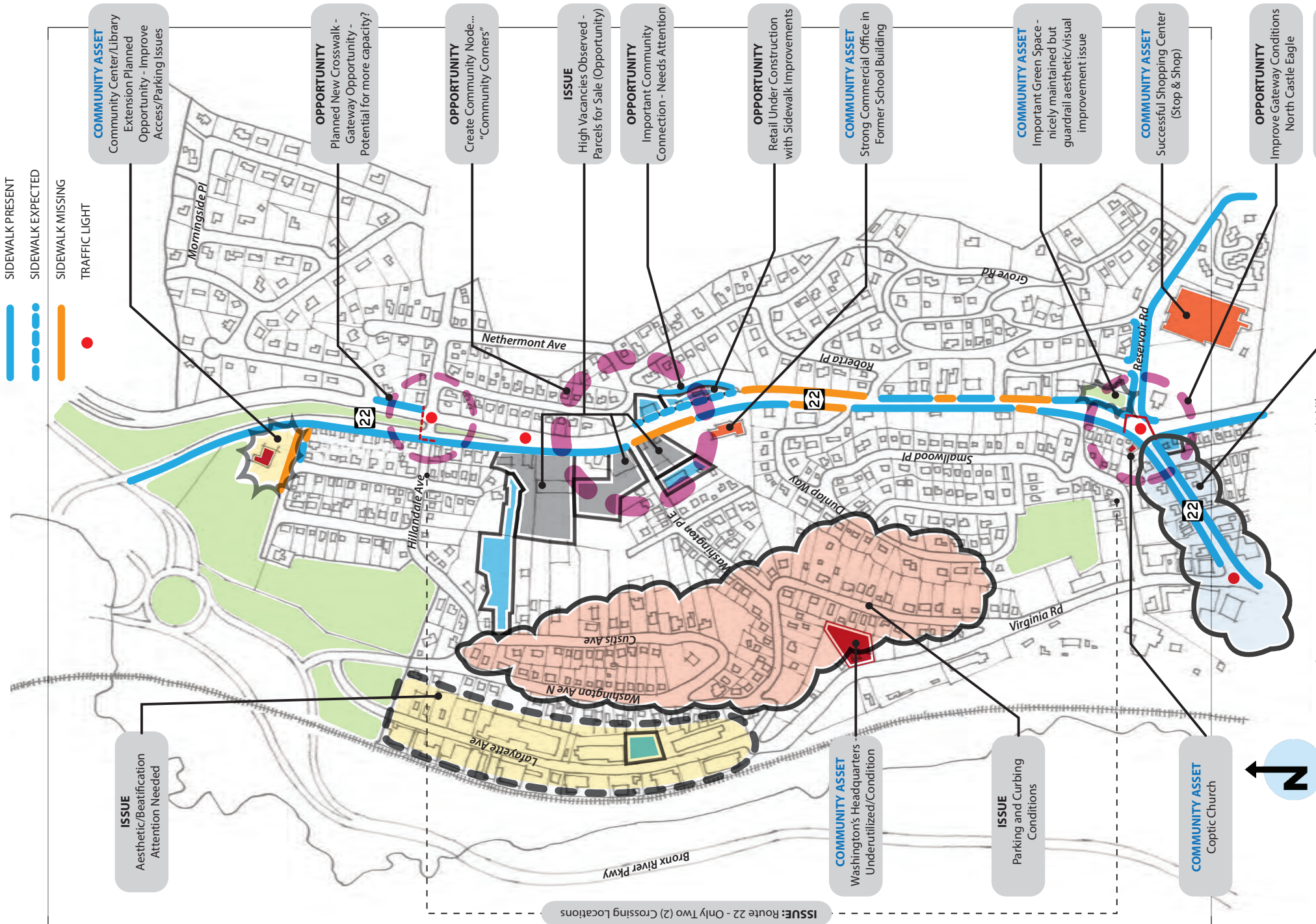


Figure 30: North White Plains Recommendations

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Aesthetics and Community Assets

Consistently vacant and underutilized sites in North White Plains, deteriorating infrastructure and a general lack of cohesion have created a negative image of the hamlet. Gateways to North White Plains are not well marked, and key assets, such as historic sites and parks, have gone untended.

The Town should consider marking gateway areas and implementing improvements to the library/community center. The hamlet's parks, in particular Clove Road and Fountain Park, are important resources for the community and should be improved as needed. In addition, Washington's Headquarters on Virginia Road is one of the Town's most significant historic assets, as well as Westchester County, New York State and the nation. The County has agreed to complete renovations to the building at its current location in order to preserve this valuable resource to the community and the region. The Town should work closely with the County to ensure the renovations are undertaken effectively, which may include coordination with adjacent property owners to improve area-wide conditions.

Other areas of North White Plains requiring attention are North Broadway (Route 22) between Virginia Road and the Central Westchester Parkway and Lafayette Avenue. The lower section of North Broadway already has a stronger sense of character than the rest of Route 22 in North White Plains, and simply requires beautification to build on its existing assets, such as the Coptic Church and the fire station. Lafayette Avenue is an important light industrial corridor, and is anticipated to remain so. However, the Town should explore opportunities to improve aesthetics in this area, potentially through amendments to the Industrial A (IND-A) zoning to add performance standards for landscaping and pedestrian improvements. The Town Code has general performance standards to control nuisances, as well as

specific provisions for asphalt/concrete plants. However, a set of standards should be developed for the IND-A district – which is only found in this area of North Castle and abuts a residential neighborhood – to improve overall conditions.

Land Use and Zoning

North White Plains has a distinct character from other areas of the Town, which is reflected in its higher-density residential zoning and industrial uses along Virginia Road and Lafayette Avenue. However, the zoning along Route 22 could be reconsidered to better reflect the distinct pattern of development north of Reservoir Road.

The current CB zoning, which is also mapped in downtown Armonk, is appropriate on Route 22 south of Reservoir Road, which is characterized by small lots and low-scale uses and has a walkable feel similar to Armonk. However, Route 22 north of Reservoir Road is more auto-centric and spread-out. There is less potential for a strong retail node there, and the addition of multi-family residential uses makes sense because of proximity to the train station. Multi-family could be in either a mixed-use or all-residential context, and could be as high as three stories.

Creating a new zone for Route 22 north of Reservoir Road will eliminate the need to create hamlet overlay zones as recommended in a previous study. Better design can be accomplished in each of the hamlets as part of design guidelines in the zoning that cover CB, CB-A, CB-B and a new zone specific to Route 22 in North White Plains.

Figure 30 summarizes the key recommendations for North White Plains.

12. HAMLET AREAS

12.2 ARMONK

Armonk is the central downtown of “village” area in North Castle and serves both the surrounding hamlet and the Town as a whole. Retail uses along North Main Street are active and create a vibrant atmosphere for shoppers. The area is compact and walkable, with amenities for pedestrians including attractive streetscaping, new light fixtures and pavers. Outside of this commercial center are office parks, including IBM, Swiss Re and the former site of MBIA; four of the Town’s schools; and the majority of the remaining municipal services. See Figure 31 for a summary of Armonk’s assets and challenges.

Connectivity: Streets, Sidewalks and Recreation

Street connectivity is a key issue for police, fire and ambulance services, as well as overall traffic circulation. The proposed extension of Maple Avenue to parallel Main Street (described in Chapter 6) is one such connection recommended in the 1996 Comprehensive Plan, and reaffirmed by the Town’s current Police Chief, to improve connectivity.

To further improve connectivity, the Town should consider improvements to roadways, crossings, bus service and parking. North Castle can improve access between the downtown and the business park by working with NYSDOT to add a crossing over Route 22 at Maple Avenue and Business Park Drive. As described in Chapter 6, this crossing would involve some reconfiguration of the vehicular intersection, which could also improve known congestion problems there. Figure 32 illustrates the overall concept for this potential improvement.

In terms of walkability, while the area surrounding Armonk Square, generally bounded by Bedford Road, Main Street and Whippoorwill Road East, is pedestrian-friendly, several

improvements could be made to improve walkability and encourage shoppers to spend time downtown.

As shown in Figure 33, sidewalks along North Main Street currently stop around Old Mount Kisco Road, before reaching Armonk Town Center, a small shopping center south of School Street. Continuing the sidewalk north of Old Mount Kisco Road would present an opportunity to better connect the hamlet’s retail areas. Within the core of downtown Armonk – generally the block bounded by Bedford Road, Maple Avenue and Main Street, the west side of Main Street, the south side of Bedford Road between Main Street and Maple Avenue, and Kent Place at its intersection with Main Street – a consistent sidewalk paver treatment should be used to mark the center of Armonk.

The Town could also consider improving connectivity for cyclists by adding bike lanes in the village. At the Armonk public workshop, residents indicated that there is interest in reviving prior studies of bike lanes in downtown Armonk as a share-the-road concept. A dedicated bike lane is not recommended due to the loss of on-street parking that would result.

Furthermore, improving access to public transportation could maximize Armonk’s connection to local and regional resources. Residents expressed interest in increased bus service between the hamlet center and the North White Plains train station, particularly for seniors interested in downsizing locally. Another concept to improve commutation and regional access is the addition of a park-and-ride facility at Community Park that could serve carpoolers or connect to a possible shuttle service to the train station. The Town could work with the County to increase and enhance bus service, and continue to explore rideshare access (see Chapter 6).

Assets



Wealth of civic, cultural, historic and recreational resources



Employment center for North Castle and the region



Attractive housing stock representing a variety of types and styles



Walkable downtown area with many shopping and dining opportunities

Challenges



Uneven condition and presence of sidewalks



Downtown parking and traffic circulation



Vacant and underutilized commercial buildings

Figure 31: Armonk Assets and Challenges

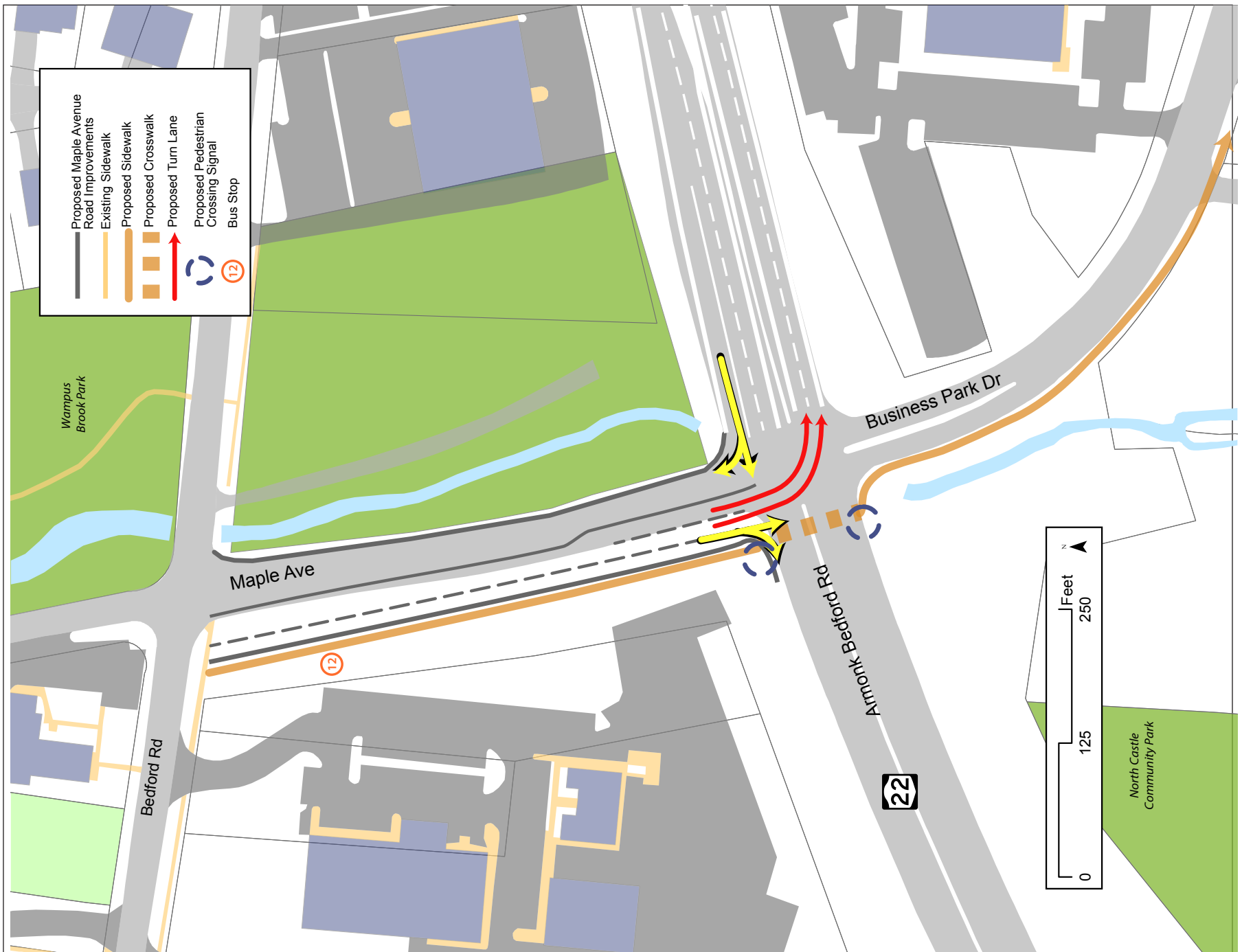


Figure 32: Maple Avenue/Route 22 Intersection Concept

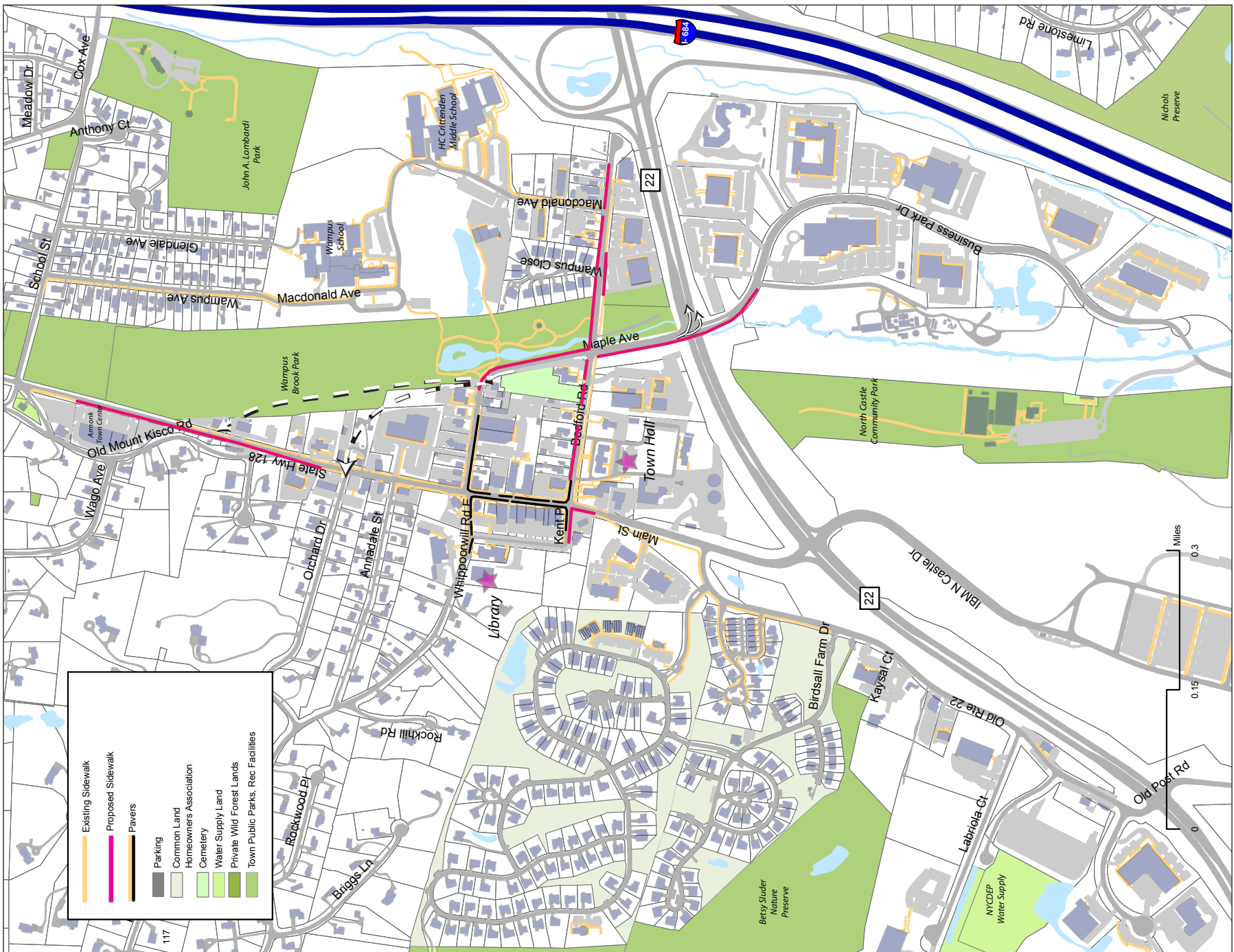


Figure 33: Downtown Armonk Recommendations

12. HAMLET AREAS

Armonk also serves as North Castle's center for recreation. Wampus Brook Park and Community Park are two of the Town's most significant resources for open space and active recreation. At the Armonk public workshop, residents expressed interest in additional amenities, including a volleyball court and ice rink at Community Park. At Wampus Brook Park, the dredging of the pond is a priority, and the Town should continue to explore opportunities for the portion of the park south of Bedford Road.

Previous plans for the land included walking paths and parking, but proved very expensive. The Town should consider scaled-back alternatives for Wampus Brook South that achieve some improvements in the short-term, with a focus on public parking, and offer the potential for implementation of additional improvements in the future.

Vitality of Office Parks

As many neighboring communities are experiencing, shifts in commercial and office uses that have affected demand for both downtown retail and large auto-oriented office parks. Armonk's Business Park provides an opportunity to explore forward-thinking ways to adapt to the evolving market. Retail is fragile in Armonk's downtown, and any use introduced in the Business Park should be complementary and avoid excessive competition with downtown. As a result, public workshop response and steering committee discussion revealed an interest in allowing multi-family housing as a permitted use in the business park (Planned Light Industry district) to enhance its viability and fill vacancies. While a mixed-use setting including retail and entertainment could be desirable, the community expressed concerns for cannibalizing downtown business.

Allowing retail, personal service and entertainment uses as accessory to a primary use of office or residential within the

Business Park can help achieve a more active environment in this area. In addition, the Town could adjust zoning to encourage location of another hotel in the business park. Any major development or redevelopment in this area would need to address critical infrastructure issues given the limited capacity of the local water district (see Chapter 7).

Parking

Parking in downtown Armonk is limited, especially in the retail area along North Main Street. The Town is in the process of implementing a parking expansion at the Hergenhan Recreation Center, which will add approximately 25 new spaces and may help ease parking demand in the vicinity of Armonk Square.

The parking lot to the rear along Kent Place is shared by shop owners, the library and the post office. The lot is not clearly marked and lacks signage and a clear traffic circulation method. Plans have been drafted to improve circulation and add a net of 108 spaces to this parking lot, potentially through creation of a public parking district. However, due to difficulty coming to a consensus with small shop owners, these plans have not moved forward. A key issue is that creating a parking district would likely require the currently free spaces to be converted to either permitted or metered paid spaces.

However, one aspect of the previous parking plans in the Kent Place area involved the creation of approximately 40 new parking spaces in the area south of the library and behind the Verizon facility. This scenario would also create dedicated, secure parking spaces for Verizon. The new public parking could be targeted to business owners and employees, to free up on-street and other parking closer to the stores for use by patrons.

The Town should continue seeking agreement with Verizon to implement this additional parking. The merchant parking could

12. HAMLET AREAS

be permitted at a modest fee to encourage shop and business owners to make the free parking available to their customers. In addition, having a new supply of parking in this area could provide the opportunity for phased improvements to future parking and streetscaping improvements along Kent Place.

Land Use and Zoning

In order to support local objectives to encourage compact mixed-use and a vibrant downtown, the Town could consider several changes to zoning. Overall, the zoning approach in the Armonk hamlet should be to maintain the existing retail area and limit its area to what already exists.

To preserve the character of the Bedford Road Historic District and surrounding area, the current Nursery Business (NB) zoning should be maintained on the south side of Bedford Road, and any change of use at that location should be consistent with the intent of the zone. However, the Town may consider modifying the NB zoning to allow for professional office uses; retail should not be allowed, in order to maintain the low-scale character of this transitional zone and avoid competition with existing shopping areas.

Further, the Town should support infill residential development in Armonk to provide a greater variety of housing types while growing the immediate area's customer base. Any new development must be carefully designed to be complementary to the existing historic building context (both within the historic district and for the Armonk hamlet overall). Building heights of up to three stories in the Armonk CB district may be considered, as appropriate to provide for more residential units to support the downtown while ensuring excellent design.

Moving out of the downtown Armonk core, the Town is in the process of implementing a series of roadway improvements

along Old Route 22 in coordination with the New York City Department of Environmental Protection (NYC DEP), which owns a large parcel just south of Kaysal Court. These improvements – together with the recently built Armonk Commons complex next to the Beehive restaurant and recent development on properties along Old Route 22 to the north – is transitioning the character of the corridor from a scattered commercial and light industrial area to a more cohesive center of activity. Much of Old Route 22 is walkable from the townhome communities of Cider Mill, Whippoorwill Ridge and Whippoorwill Hills, and the corridor is a short drive to downtown Armonk. At the same time, there are a number of vacancies in the existing industrial parks, which are zoned for Research, Electronic and Light Industry (RELIP). The Town may consider allowing multi-family as a permitted use, as well as for the introduction of limited retail, personal service and entertainment uses, in the RELIP zone to support the businesses along the Old Route 22 corridor. Similar to the approach in the PLI district in the Business Park, any retail or personal service use would need to be clearly accessory to the primary office, industrial or multi-family use, to ensure that the focus of shopping activity remains in downtown Armonk.

12. HAMLET AREAS

12.3 BANKSVILLE

Banksville is the hamlet center of the Eastern District, which covers the portion of North Castle east of Armonk and is largely rural residential. Banksville is a small center for convenience retail and other low-scale commercial uses, and straddles the border of North Castle and Greenwich, Connecticut. One of Banksville's most prominent features is the Banksville Independent Fire Company, which provides an important community space. Residents of the North Castle portion of Banksville also indicated a close connection to Greenwich; the Banksville Community House on Banksville Avenue in Greenwich was noted by residents as a key community asset. See Figure 34 for key Banksville assets and challenges.

Sidewalks, Aesthetics and Beautification

Due to the Eastern District's rural character, its residents typically seek retail and convenience in neighboring communities, primarily Greenwich and Bedford. The commercial center of Banksville is auto-oriented and provides few pedestrian amenities. Sidewalks are found only in Greenwich, where there is a small shopping center and several mixed-use buildings. At the hamlet's public workshop, residents expressed that there was no need to extend sidewalks in Banksville as long as there is "nowhere to walk to." They felt that the non-residential uses presently in the North Castle portion of Banksville do not generate pedestrian activity, but if a greater concentration of commercial uses were present, they would support sidewalks.

In the near term, rather than add sidewalks, residents felt that improvements to roadways can be made in order to improve the area's aesthetics. Beautification and landscaping, as well as consistent garbage pickup along the roads, could improve the

area. Attendees of the public workshop reported litter along Bedford-Banksville Road, Round Hill Road and the circle in front of La Cremaillere. Sweeping and litter pick up, removing weeds and mowing would make the roads safer for bikers as well.

The Town should work with residents of Banksville and the Eastern District to coordinate litter cleanup and beautification along key roadways (including on the Town-wide cleanup day in April). For any new business location, consideration should be given to providing a sidewalk as appropriate to connect with any existing sidewalks. The Town should work closely with Greenwich to ensure current sidewalks are well maintained.

Businesses

The presence of businesses in Banksville is limited. In the past, the area was home to a number of dining and entertainment options, and provided additional convenience uses including a gas station and a farmers market. Today, most of the area's businesses are located on the Greenwich side of Banksville. However there is interest in having a gas station and grocery store in Banksville. The Town should look at adding gas stations as a permitted use in the CB-B district. A grocery store was formerly in the North Street Shopping Center in Greenwich. That space remains vacant, and Banksville residents have advocated for a replacement grocery store for several years. The Town should closely monitor potential development at this site and work with Greenwich to encourage location of a grocery store.

A farmer's market was formerly located at the long-vacant building at 27 Bedford-Banksville Road, and featured grocery options and local goods as well as a fishing vendor, yarn vendor and deli. Residents expressed interest in bringing back a farmer's market to this site or elsewhere in Banksville to serve the need for groceries and create a community space or garden.

12. HAMLET AREAS

Troy's Nursery at 97 Bedford-Banksville Road has recently sold. This site provides a potential opportunity for additional business use in the hamlet; however, due to its location at the headwaters of the Mianus River, it is mostly wetland and would be difficult to develop. The Town should ensure that any future development at this site respects the environmental constraints and is consistent with the low-scale, rural residential land-use pattern present in Banksville.

Parks and Community Assets

Banksville, and the Eastern District overall, is characterized by large areas of public and private open space. Yet many of these areas have limited public access. For example, Cat Rocks Park is the largest public park in the Eastern District, but is inaccessible except for residents in the immediate vicinity. However, large portions of the Mianus River Gorge Preserve are located in North Castle, along Mianus River Road, providing a substantial network of trails. Any future Town acquisition of open space in the Eastern District or Banksville hamlet should be focused on connecting to existing publicly accessible open space, or protection of significant environmental resources such as the headwaters of the Mianus River, wetlands and streams.

Banksville and the Eastern District contain several historic assets of local importance, including Middle Patent Church and Cemetery, St. Mary's in the Wood, the Octagon House on Round Hill Road and the Lyon House on Bedford-Banksville Road. Of these, only the Lyon House is designated as Town landmarks by the Landmarks Preservation Committee. The committee should reach out to private owners of these and other historic assets to gauge their interest in being designated as a local landmark.

Assets



Bucolic and historic setting at gateway to North Castle



Small commercial node serving key needs of surrounding area

Challenges



Weak condition of some buildings detracts from overall aesthetic environment, lack of water/sewer limits redevelopment possibilities



Lack of publicly accessible open space, community amenities

Figure 34: Banksville Assets and Challenges

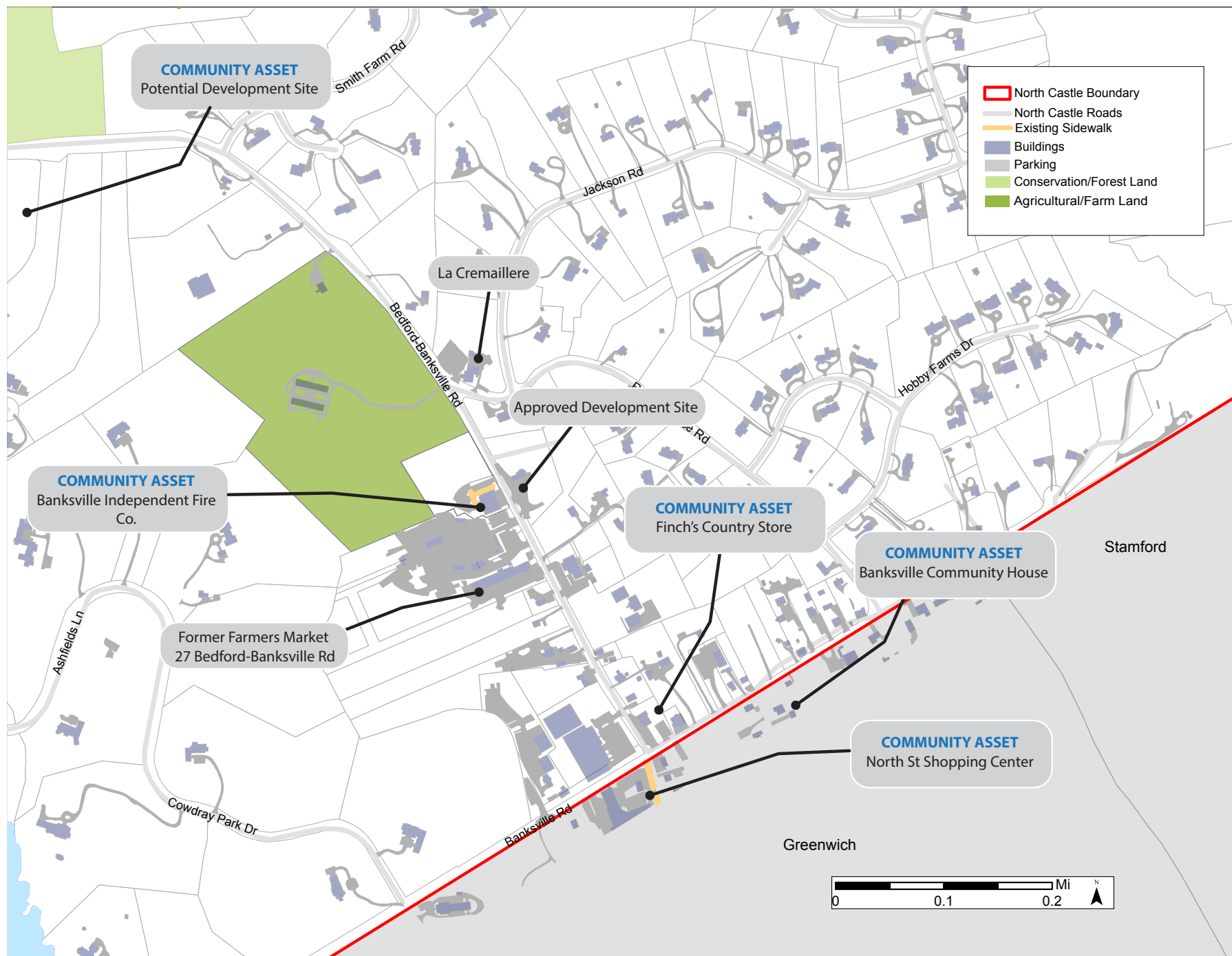


Figure 35: Banksville Recommendations

12. HAMLET AREAS

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

With the existing conditions and key issues identified in the previous chapters as a baseline, this chapter now turns to the future plan for North Castle. The Comprehensive Plan guides the Town in its achievement of key planning goals and objective, but the Plan does not, in itself, change zoning or assure implementation of recommendations. A community is developed over the years by countless individual and group decisions. This Plan is designed to educate those who seek to develop their property – and the various boards and committees that oversee such development – to ensure that future development in North Castle furthers the Town’s overall vision.

13.1 WHAT IS THE FUTURE LAND USE PLAN?

The Future Land Use Plan presented in this chapter describes the general future development patterns in North Castle, based on the recommendations made throughout this Comprehensive Plan. It provides an overview of preferred land use types and locations consistent with the Town’s overarching goals. While the Future Land Use Plan recognizes existing land uses and environmental resources and constraints, it also considers future potential development, economic trends and best planning practices.

The Future Land Use Plan is not meant to be parcel-specific; it shows broad land use patterns for geographic areas in North Castle. For example, an area designated low-density residential may contain individual sites with non-residential use. While the existing land use map may pick up these detailed uses, the Future Land Use Plan shows the overall land use for the area.

The Future Land Use Plan presents an overview of what kinds of uses should be located where, and generally indicates the preferred intensity of each use. For example, residential uses in the Future Land Use Plan specify four density classifications: rural low density, low density, moderate density, and multi-family. The categories give a conceptual understanding of desired residential densities across North Castle. In contrast, the Town’s zoning regulations are more specific; they include 11 residential zoning districts that are differentiated by one another by density and various other factors.

The nexus between the Future Land Use Plan and zoning is that the Future Land Use Plan provides a basis for potential future zoning changes. The Comprehensive Plan is the policy foundation for proposed revisions to the Town’s zoning code. As explained in New York State law, a zoning code must be based on a well-reasoned plan. Where any proposed use shown on the Future Land Use Plan is inconsistent with current zoning, a zoning change is warranted. The proposed land uses shown on the Future Land Use Plan are used as a guide for determining new zoning designations for those areas. Such zoning changes would be the next step in the planning process and can occur upon adoption of the Comprehensive Plan.

13.2 NORTH CASTLE’S FUTURE LAND USE PLAN

The Future Land Use Plan presented in this chapter is both a map and accompanying text describing the Town’s general land use categories and areas of specific recommendations. The plan recognizes the established development pattern, transportation infrastructure, natural features and opportunities for new development. The following criteria were used in creating the Future Land Use Plan:

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Land Uses

The Future Land Use Plan is generally consistent with existing development. Dramatic changes in existing land uses are not proposed, as the overall settlement pattern is one that North Castle's residents are generally satisfied with and wish to see continued. Also, there is no public interest served in increasing the number of houses or businesses that are non-conforming under zoning. Thus, areas that are stable or not in need of change are preserved.

Zoning and Development Pressures

This Comprehensive Plan seeks to consider zoning changes only where a reasonable argument for change, supported by the overarching planning goals and analysis, can be made. The Plan supports most of North Castle's existing zoning, as it allows homes where people want to live and at varying densities, and businesses where they are best located. However, there are three areas where the Plan recommends that zoning districts be revised to accommodate a broader range of uses:

- The Westchester Business Park off Route 22 in Armonk, currently zoned Planned Light Industry (PLI).
- The former MBIA headquarters property off King Street in Armonk, currently zoned Designed Office Business 20A (DOB-20A).
- The Mariani Gardens site on Bedford Road, which is currently zoned Nursery Business (NB) and is on the market for sale.

For the two office areas, which are designated mixed use, it is recommended that the Town consider changes to the zoning to allow a modest introduction of residential uses, at an appropriately low scale (i.e. low-rise multi-family buildings or townhouses). New housing in these areas should complement adjacent office uses,

with amenities such as landscape buffers and sidewalks. Any retail should be limited to uses clearly accessory to the main principal uses (office or residential).

For the Mariani Gardens site, which is also designated mixed use, it is recommended that uses currently permitted under the NB zoning be permitted, as well as municipal, recreational, residential and office uses. Retail should not be allowed in the NB district, to avoid competition with the established Armonk retail areas and to maintain the low-scale context that serves to buffer the Bedford Road Historic District.

Environmental Considerations

Natural resources requiring protection include watershed areas, wetlands, floodplains and steep slopes. North Castle already controls development that might harm these resources, as does the State Environmental Quality Review Act (SEQRA). The Future Land Use Plan assumes continued enforcement of these regulations. Many environmentally sensitive areas, including New York City watershed areas, are designated as open space.

Infrastructure

Access from adequate roads and proximity to existing or potential water and sewer utilities are two factors defining the capacity of land to accommodate different types and densities of development. Two significant improvements to existing roadways in North Castle are shown on the Future Land Use Map: 1) extension of Maple Avenue to the north to connect to Route 128 in Armonk ("Main Street Bypass"), and 2) creation of an additional left-turn lane for Maple Avenue at Route 22, enabling creation of a pedestrian crosswalk and extension of sidewalks along Maple Avenue and into the Business Park.

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

13.3 FUTURE LAND USE PLAN ELEMENTS

The Future Land Use Plan is shown in Figures 36 and 37. There are six basic elements to this map:

- Underlying lots and road network;
- Residential land uses;
- Commercial (retail and office) uses;
- Mixed uses (commercial in combination with residential);
- Institutional/municipal uses; and
- Open space (public and private).

The generalized land uses are shown using traditional land use colors. Lighter shades of each color indicate less development intensity; as the shade darkens, density increases. This map is not a substitute for, and does not supersede, North Castle's official zoning map.

Land Use	Color
Residential (four categories)	Yellow/Orange/Brown
Commercial	Red
Mixed Use	Pink
Industrial	Purple
Institutional/municipal	Blue
Open Space	Green

Residential

The Future Land Use Plan shows a range of densities for housing, North Castle's primary land use. In general respects, this map is based on existing zoning and settlement. Residential development is grouped into four levels of density. It should be noted that this classification is related to the use of the land, not ownership. The Town has several townhome or condominium developments that

are single-family in terms of ownership and occupancy, but are grouped in a higher-density category because they are attached.

In addition, the residential land use category does not exclude uses that are typically found embedded in residential neighborhoods, such as schools, places of worship, municipal uses and occasional small businesses. These other uses are normally seen as compatible with dwellings in overwhelmingly residential areas, and even as necessary to the proper functioning of neighborhoods. While the Future Land Use Plan shows current institutional and community uses, such as places of worship and governmental facilities, a residential designation is not intended to preclude future location of such uses, as may be appropriate.

Rural Low Density: This category generally corresponds to the single-family residential zones of 2 acres or greater (R-2A and R-4A). This designation encompasses the majority of North Castle's land area, including most of the Eastern District and large portions of Armonk.

Low Density: This category corresponds to the single-family zones requiring between a half-acre and 1.5 acres of land area (R-1.5, R-1A, R-3/4A and R-1/2A). The designation is found in most remaining portions of Armonk and in small pockets in Quarry Heights, North White Plains and the Banksville hamlet.

Moderate Density: This category corresponds to the single-family residential zones requiring a minimum of 5,000 square feet of land area (R-5 and R-10) and to North Castle's two-family zone (R-2F). It encompasses most of North White Plains and portions of the Armonk hamlet.

Multi-Family: This category corresponds to the Town's multi-family zones – R-MF and R-MFA – and is designated for Armonk's townhouse/gated communities of Cider Mill and Whippoorwill Ridge and the new Armonk Commons apartments on Old Route 22.

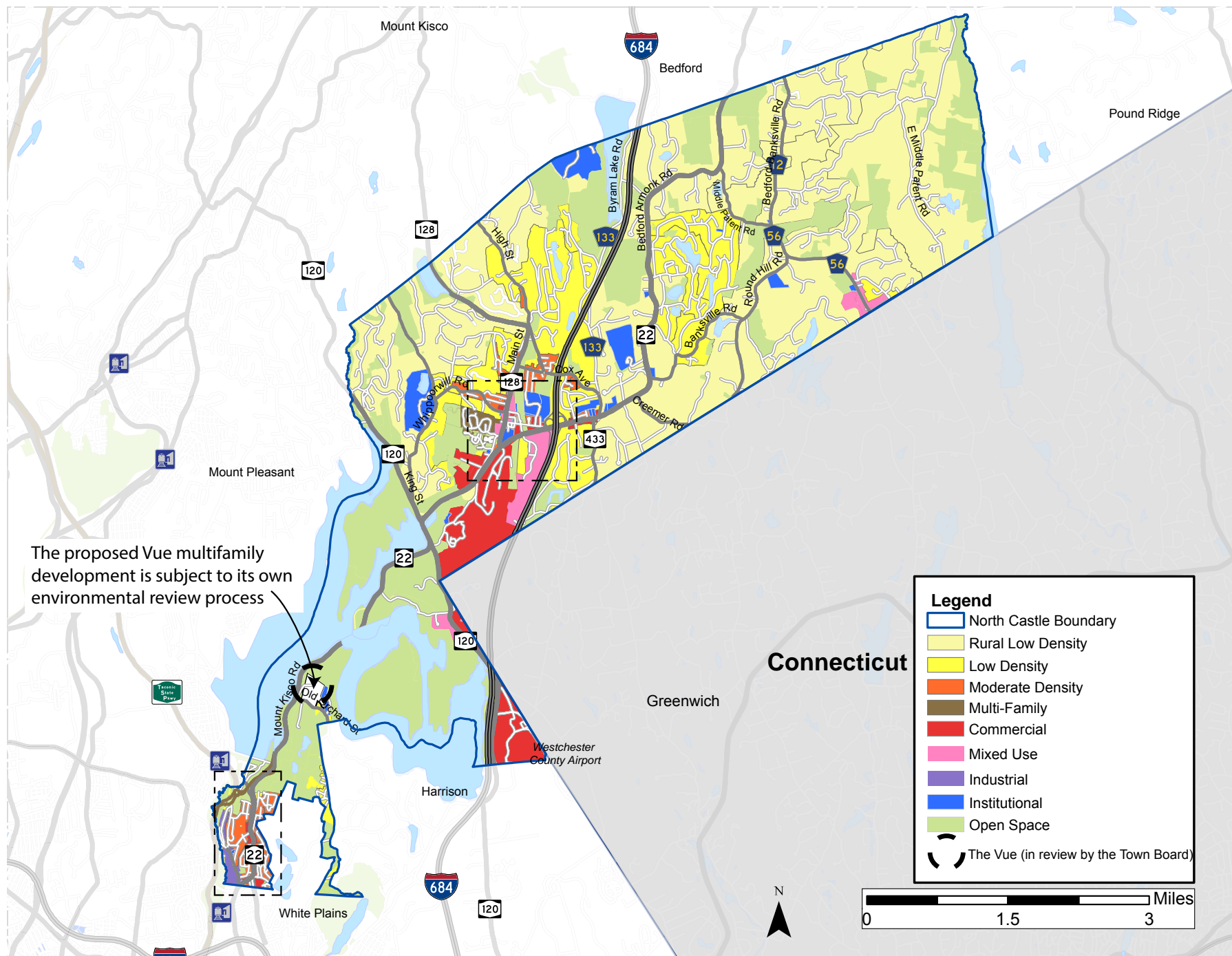


Figure 36: North Castle Future Land Use Plan

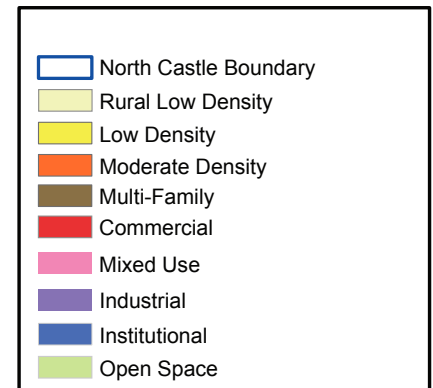
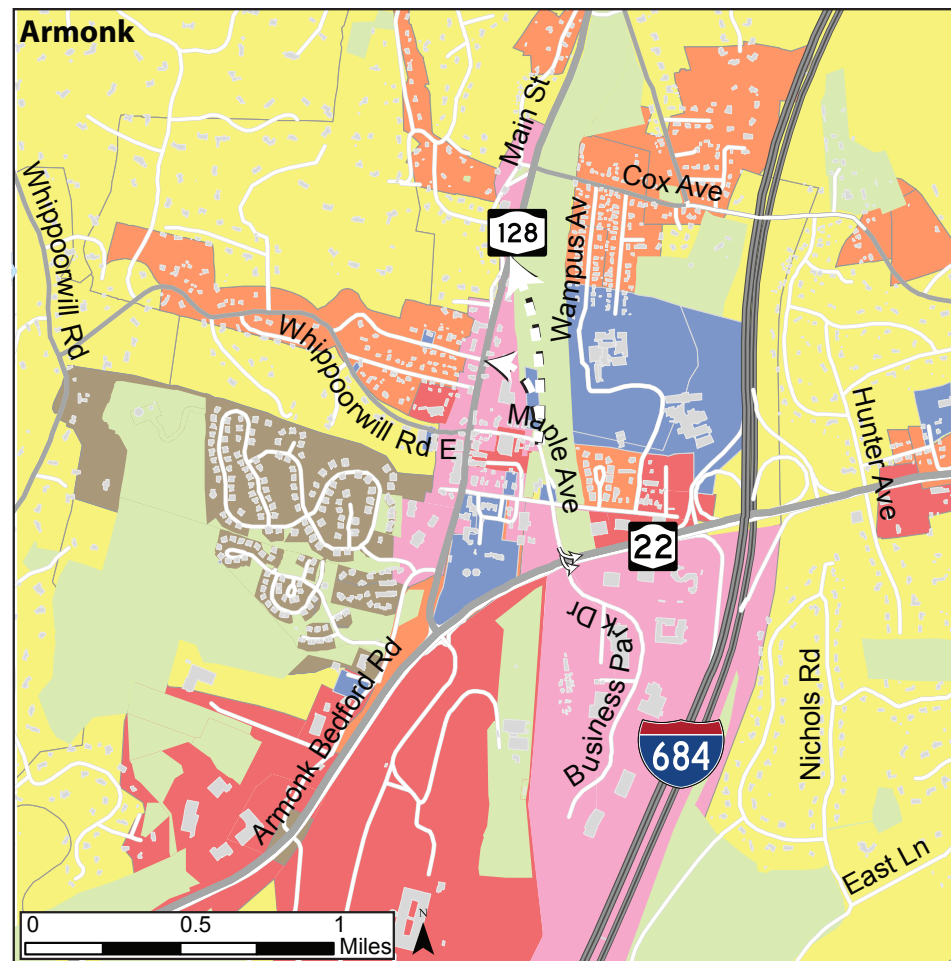
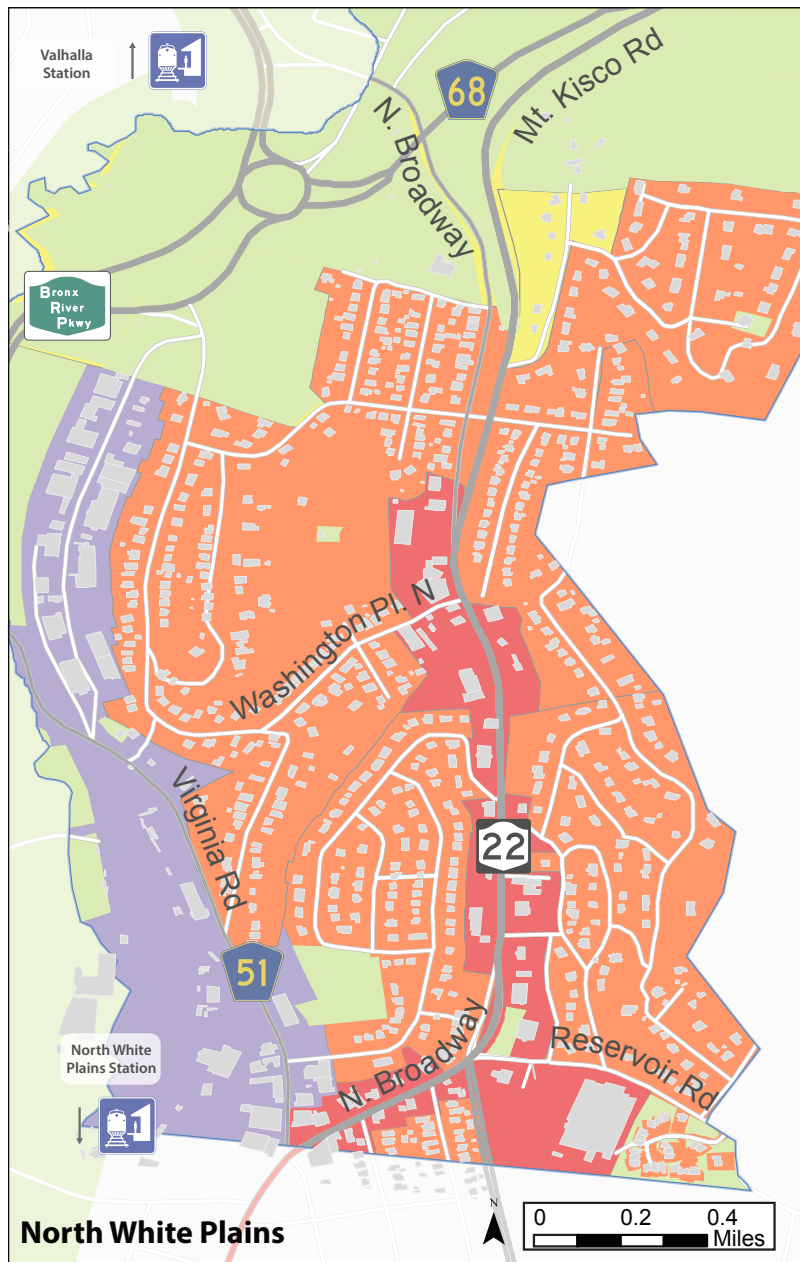


Figure 37: Future Land Use Plan: Armonk/N. White Plains

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

This Comprehensive Plan does not propose any zoning map changes for the residential districts. The overall Plan approach is one of preservation and maintenance of established residential neighborhoods.

The Vue. It is noted that an area zoned R-1A and R-2A on Old Orchard Street (including a portion of the Jennie Clarkson campus) is the subject of a rezoning and development proposal for multifamily housing (“The Vue”). This proposal is undergoing an environmental review process under SEQRA.

Commercial

These areas correspond to North Castle’s retail and office zones: General Business (GB); Nursery Business (NB); Roadside Business (RB); Office Business (OB); Office Business Hotel (OBH); Shopping Center (SC); Professional Business Office (PBO); Professional Business Office 2 (PBO-2A); Industrial AA (IND-AA); and Research, Electronic and Light Industry (RELIP). The designation also covers portions of the Central Business (CB) zone in North White Plains, Armonk and Banksville.

In areas identified as commercial, it is anticipated that the primary land uses will be retail and office. Although these uses are oriented toward the automobile, the Town should continue to take advantage of opportunities to improve conditions for pedestrians through strong site design, sidewalks and streetscaping. This is especially true of commercially designated areas adjacent to single-family neighborhoods, schools or historic assets, such as the NB and RO areas on Bedford Road. Any new uses or redevelopment in these areas should be consistent with existing zoning and should respect adjacent low-intensity uses.

Mixed Use

This Plan recognizes that mixed-use development incorporating residential, retail, restaurant, office and cultural uses is an important part of North Castle’s character, as well as its economic base. In addition, allowing for residential uses to occur in mixed-use areas, in either a stand-alone context or above non-residential uses, provides for greater diversity in housing options.

In hamlet areas, the mixed-use designation is meant to foster a lifestyle typical of thriving downtown areas, where residences and related commercial and entertainment uses support one another and are in turn supported by strong pedestrian activity. This designation also provides flexibility for areas where redevelopment may occur, but its exact nature is not known. In such cases, a mixed-use designation gives parameters for investment, while allowing for market conditions to drive the details. Where such potential areas of redevelopment are outside of the traditional hamlet areas, it is anticipated that the primary uses would be office, residential and entertainment, with any retail or restaurants as accessory uses, so as not to create competition with the Town’s established retail areas.

Industrial

This designation recognizes existing industrial areas along Virginia Road and Lafayette Avenue in North White Plains. Industrial uses are anticipated to remain in these areas, but the Town should encourage aesthetic and environmental improvements through the addition of sidewalks and landscaping and through strong site planning, as redevelopment opportunities arise. Historic assets in industrial areas, such as Washington’s Headquarters and Miller Hill, are in particular need of protection and attention.

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Institutional

These areas, shown in blue on the Future Land Use Map, correspond to existing land uses: schools, houses of worship and municipal or publicly owned facilities (including Town parking lots). Except for proposed improvements to the Town Hall building, no changes to these uses are anticipated or proposed. If any such changes were to occur in these areas, it is expected that the future use would be consistent with the surrounding land use designation.

Open Space

The Future Land Use Plan shows existing parcels in North Castle dedicated to public park and open space use (i.e., Town parks), as well as privately owned space (such as nature preserves and golf courses). Specific for North Castle, the open space designation also encompasses the regulated New York City watershed areas. Open space areas are envisioned as remaining in that current use. Where existing open space areas are private and potentially subject to redevelopment, such development should be contemplated in a manner that preserves as much of the property as possible, as was done in the Brynwood Golf Club redevelopment.

13.4 PLAN RECOMMENDATIONS AND IMPLEMENTATION

This section is a summary of all recommendations in this Plan, organized by chapter and timeframe, prioritizing these recommendations and identifying appropriate steps for putting them into action.

Implementation Tools

Having an adopted Comprehensive Plan is a critical public policy tool, but it is not sufficient on its own to make change or preservation happen – the Plan must be realized. There are

seven critical methods that North Castle will follow to ensure that this Plan is implemented. It is recognized that, given financial constraints that may affect the Town as well as other municipalities, implementation of this Plan is dependent on availability of funding and other economic factors.

Legislation: Zoning is the most familiar tool used to implement a plan. The Town would need to amend certain elements of its zoning code to implement Plan recommendations.

Regional Advocacy: Some recommendations in this Plan extend beyond North Castle's borders, but are critical to address issues within the Town, such as issues involving transportation and utilities (water/sewer). These will involve advocating and coordinating with other municipalities and regional agencies.

Capital Programming: Another key tool is incorporation of the Plan recommendations into the Town's capital improvement program (CIP). The ways that North Castle spends public revenue for public improvements – road construction and repair, major equipment purchases, a new public works/parks garage, water utilities and upgrades to parks and recreational facilities – and the standards to which they are built have a major effect on the Town's function and image.

North Castle's CIP is a management and fiscal planning tool. Capital projects are scheduled on a multi-year basis, with each succeeding year seeing the completion of a project, or a phase of a long-term project, as a future year is added. New projects are proposed as others earlier in the cycle reach completion. This rolling approach enables Town government to plan for and remain current with necessary infrastructure improvements and other large, non-operational needs, so that long-range planning aspects can be achieved with predictable steps over time. The Town knows its capital commitments for at least five years into

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

the future. It can thus plan financing in an orderly way and stabilize the tax rate structure by spreading improvement costs systematically over a period of years. In addition, public input into the planning process continues, past the Plan's adoption, as capital budgets are heard publicly. The organized public expenditures on improvements sends a positive signal to private businesses and property owners, allowing them to plan their investment knowing that the Town is also planning responsibly.

Official Map: An official map is provided for under New York State law (Town Law Section 233) to depict the layout of new streets, drainage systems or parks. The Town Board could consider the two street proposals discussed above, extension of Maple Avenue to the north, and creation of an additional left-turn lane for Maple Avenue at Route 22.

Grants and Third-Party Partnerships: North Castle has been successful in recent years in obtaining State grants for major projects, such as the planned parking lot expansion at the Hergenhan Recreation Center. The Town will continue seeking grant funding for planning and capital projects and will also engage in third-party nonprofit organizations and corporate partners, to meet its long-term objectives in a fiscally prudent way. This additional funding can supplement the Town's capital budget, lessening the financial burden on taxpayers.

Future Studies: Certain Plan recommendations require more analysis. Detailed implementation measures can only be crafted through this additional study. For example, the Plan recommends that the Town pursue a comprehensive study of the Route 22 corridor in North White Plains. Such a study would need to be undertaken in cooperation with the New York State Department of Transportation (NYS DOT), neighborhood representatives and potentially neighboring jurisdictions with an

interest such as Metro-North and the City of White Plains. The study would likely entail formation of a special committee with representatives from each of these entities, and an application for grant funding to engage a consultant.

Continuing Planning: There are two key aspects to continuing planning. The first is the Town government's sustained work with regional agencies, authorities and other municipalities on issues that extend across borders. These groups include NYS DOT, Westchester County agencies and adjacent municipalities. As these entities plan, North Castle makes clear its concerns and preferences. With an adopted Comprehensive Plan, the Town's position is on record and must be taken into account.

The second aspect concerns development applications before the Planning Board and the Town Board. In all likelihood, most site plan and subdivision applications conform to existing land development regulations. For these, either the Planning Board or the Town Board exercises careful oversight to ensure the best possible outcome for the Town, but they are not required to make a policy decision. In other cases, a requested zoning change may necessitate a policy choice. The boards look to the Comprehensive Plan for guidance: does the Plan anticipate a zoning change, or open space preservation, or the creation of a new municipal facility? While the Plan cannot contemplate every potential policy decision and may be silent on some issues, its overall vision and policy directives can provide helpful guidance to the Planning Board or Town Board in making these decisions.

Action Agenda

In order to implement the various recommendations contained in this Comprehensive Plan, the following Action Agenda is proposed, which outlines key actions, the lead agencies required for implementation, and the priority for action.

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

The lead agency is the entity, which by the nature of its mission and authority, is the logical party to oversee implementation of a particular proposal. Many proposals will involve multiple agencies, including State agencies. The nature of activity required of a lead agency will vary depending on the type of recommendation. Some activities involve budget commitments and capital expenses, while others entail advocacy and promotion, and some call for administrative action.

Priorities are classified as immediate (one-two years), mid-term three-six years) and long-term (seven-10 years). Immediate actions generally involve changes to local laws and the highest-priority infrastructure projects or additional studies, or may be activities or policies already in place that should be continued.

Mid-term actions likely involve the Town's CIP. Some of these items may already be identified, or may be recommendations that have developed as part of this planning process.

Long-term activities are those that are important, but are placed "down the road" because of limited available resources, both in terms of time and money, to implement them. They may also require further study or planning and design.

The implementation schedule is presented as a "To Do" list, to help the Town review progress on a regular basis. It also allows for convenient updating of the list as items are completed, priorities change or new items are proposed.

Among the action items, the following were determined to be the highest priority items for the Town Board to advance:

1. Advocate with NYS DOT to undertake a comprehensive study of Route 22 in North White Plains to improve conditions for drivers, pedestrians and cyclists.

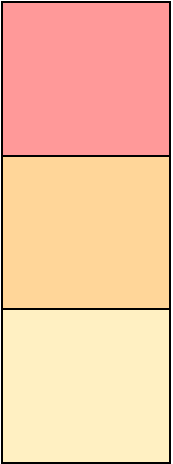
2. Address critical water supply issues in Water District 4, focusing on several site options.
3. Replace the School Street culvert to address flooding and sinking of the road.
4. Dredge Wampus Pond/Brook.

Action Agenda

Immediate Action

Mid-Term Action

Long-Term Action



13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Immediate Actions	Town	Inter-Governmental/ Private
Land Use and Zoning		
Hamlet Zoning <ul style="list-style-type: none"> Consider zoning revisions that limit the introduction of “formula businesses” (chain stores). Retain the existing special permit requirements for ground-floor residential uses in the CB and CB-A zones. 	√ √	
Commercial and Office Zoning <ul style="list-style-type: none"> Consider adjusting the PLI and DOB-20A zones (Business Park and former MBIA campus) to allow for a modest introduction of residential uses, at a low scale to reflect existing land-use patterns. Retail, personal-service, entertainment and ancillary higher-education uses may also be considered for these zones, but should be limited to uses that are clearly accessory to the principal uses (office and residential) to avoid competition with downtown Armonk. The Town may consider a similar approach to the RELIP zone on Old Route 22. Limit future uses in the NB district to those current permitted, as well as municipal, recreational, residential, or professional offices, but not retail. This district should continue to contain low-impact uses that serve as a buffer for the historic district. 	√ √	
Parking <ul style="list-style-type: none"> Permit fee-in-lieu payments for off-street parking to facilitate new uses and redevelopment. Fees could be used to fund construction of public off-street parking, such as along Kent Place in Armonk. 	√	
Neighborhood Scale <ul style="list-style-type: none"> Continue to take neighborhood context into account in approving new single-family homes. 	√	

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Natural Resources		
Stormwater Management		
<ul style="list-style-type: none"> Explore ways to encourage property owners to voluntarily install stormwater management facilities on their properties, including education initiatives and possible incentives. 	√	
<ul style="list-style-type: none"> Continue strong protection of tree cover through the tree removal permitting process. 	√	
Transportation		
Vehicular Circulation		
<ul style="list-style-type: none"> Advocate with the NYS DOT to undertake a comprehensive study of Route 22 in North White Plains to improve conditions for drivers, pedestrians and cyclists. The study should include: <ul style="list-style-type: none"> Re-Examining options for alleviating traffic congestion on Route 22, specifically widening Cemetery Road between I-287 and the Bronx River Parkway. Installing a demand-activated pedestrian crosswalk on Route 22 either 1) across from the former school at 845 North Broadway, between Washington Place East and Dunlap Way, or 2) at the offset intersection of Palmer Avenue and McDougal Drive. Working with NYS DOT to install sidewalks along Route 22 where they are missing and are appropriate given space and topography. Exploring an extension of the Bronx River Pathway to Armonk via Route 22. This could be implemented with a potential road diet of Route 22 north of Hillandale Avenue and Route 120 in Armonk to potentially remove one lane of traffic in each direction, which could provide space for dedicated bike lanes and an expanded driver median. Implementing improved lighting, landscaping, streetscaping and gateway signage along Route 22 to calm traffic, reduce speeding and create a stronger sense of place. Continue to work with NYS DOT to implement planned measures to mitigate the closing of the roadway over Kensico Dam. These plans encompass improvements at the intersection of North Broadway and Hillandale Avenue, including installation of pedestrian crosswalks. 	√	√
Pedestrian and Bicycle Circulation		
<ul style="list-style-type: none"> Proceed with planned sidewalk additions along Washington Avenue North and Virginia Road to facilitate pedestrian access to the North White Plains train station. 	√	√

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Infrastructure and Utilities		
Water Supply <ul style="list-style-type: none"> ▪ Address critical water supply issues in Water District 4, focusing on several alternative site options. ▪ Undertake a modeling analysis of the entire Water District 1 system to identify weak points. Based on this analysis, implement improvements to the district's distribution system to replace undersized components. ▪ Locate a secondary tank site for Water District 4. ▪ Provide cisterns in neighborhoods not served by public water, with such infrastructure to be maintained by the applicable fire department. 	√ √	 √
Stormwater Management and Flooding <ul style="list-style-type: none"> ▪ Replace the School Street culvert to address flooding and sinking of the road. 	√	
<ul style="list-style-type: none"> ▪ Dredge the Wampus Brook and implement stormwater improvements throughout the Wampus River Valley. 	√	
<ul style="list-style-type: none"> ▪ Replace the School Street culvert to address flooding and sinking of the road. ▪ Identify locations in the Mianus and Middle Patent areas that need upgrading to address flooding during major storms. ▪ Facilitate the use of green infrastructure techniques in new development and redevelopment. 	√ √ √	
Telecommunications <ul style="list-style-type: none"> ▪ Address inadequate cellular service outside of the hamlet centers by facilitating the location of cellular infrastructure in appropriate locations. 	√	√

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Housing		
Growth, Development and Housing		
<ul style="list-style-type: none"> Preserve existing North Castle neighborhoods and ensure that new development responds to environmental constraints, especially for preservation of the New York City watershed. 	√	√
<ul style="list-style-type: none"> Maintain good relationships with homeowner associations, major property owners and landlords. 	√	
<ul style="list-style-type: none"> Continue to be diligent in enforcement of State and Town regulations and the conditions of approved site plans, subdivisions and other land-use approvals. In addition, consider instituting a program to provide neighborhood enhancements such as trees, sidewalks, streetlights and other infrastructure improvements. 	√	
<ul style="list-style-type: none"> Guide multi-family housing toward the most walkable areas and places where public water and sewer are already available. The highest residential density should continue to be located in hamlet areas with the necessary supporting infrastructure: Armonk and North White Plains. 	√	
<ul style="list-style-type: none"> Increase housing opportunities that respond to the Town's changing population, including seniors and younger adults, through infill development and strategic locations with available infrastructure, such as the Armonk and North White Plains business areas. 	√	
<ul style="list-style-type: none"> Explore potential rezoning of business and office parks to create opportunities for mixed-use residential development where office uses have or could become obsolete. Examples include the Business Park, former MBIA site, Old Route 22 and Mariani Gardens site. 	√	
<ul style="list-style-type: none"> Consider potential revisions to the regulations for accessory housing units to make them more user-friendly and remove disincentives for legalizing existing but un-approved units. 	√	
<ul style="list-style-type: none"> Continue to identify and work toward eliminating illegal apartments, particularly in North White Plains where they have caused safety hazards and parking problems for residents. 	√	
<ul style="list-style-type: none"> Revise the home occupation regulations to properly regulate 21st century home-based businesses. 	√	
<ul style="list-style-type: none"> Spend set-aside budgeted amounts for neighborhood improvement projects and beautification. 	√	

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Affordable and Middle-Income Housing		
<ul style="list-style-type: none"> ▪ Look at simplifying the current calculation for defining middle-income families to conform to the current Westchester County affordable housing requirements, or 80% of area median income for middle-income rentals and 100% of area median income for middle-income sales. 	√	
<ul style="list-style-type: none"> ▪ Consider zoning incentives to encourage developers to contribute to the Town's affordable and middle-income housing stock, such as density bonuses. 	√	
Subdivisions		
<ul style="list-style-type: none"> ▪ Promote strong design of new subdivisions that provides for: <ul style="list-style-type: none"> ○ Internal roadway access that encourages safe and efficient traffic flow while protecting aesthetic character. ○ Road connectivity between adjoining residential developments, to facilitate good circulation and provide easy access for Town services and emergency vehicles. ○ Set-asides of open space such as wetlands, steep slopes, hillsides, ridgelines and other scenic or environmental resources. ○ Continued protection of environmental, scenic and aesthetic resources through Section 278 of the Town Law. 	√	
Commercial and Industrial Development		
<ul style="list-style-type: none"> ▪ Avoid expansion of the existing retail areas in Town, focusing on enhancing them through transportation improvements, landscaping and beautification, strong site design and targeted infill housing as appropriate. 	√	
<ul style="list-style-type: none"> ▪ Explore adjusting the PLI zoning to facilitate the location of a modern hotel with amenities and entertainment/cultural or ancillary higher-education uses. 	√	
Parks, Recreation and Open Space		
<ul style="list-style-type: none"> ▪ Create maps of all Town parks and open space areas to educate residents about the amenities available to them. 	√	

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Community Character and Historic Resources		
Historic Preservation <ul style="list-style-type: none"> Continue to support local preservation advocates and the Bedford Road Historic District, including the retention of historic homes and buildings. Work with the Landmarks Preservation Committee to compile an official list of historic homes, as a way to increase public knowledge and understanding about North Castle's historic assets. Work with Westchester County to implement improvements to the Elijah Miller House/Washington's Headquarters at its current location. 	√ √ √	√ √ √
Arts and Culture <ul style="list-style-type: none"> Promote North Castle's arts and cultural opportunities through marketing, outreach and special events. 	√	√
Municipal and School Facilities and Services <ul style="list-style-type: none"> Consider the replacement of the Parks Department and Highway Department garages with a combined facility behind Town Hall. Consider ways to continue to attract young families to the area, including providing a greater variety of housing types, to address declining enrollment in the local school districts. 	√ √	
Hamlet Areas		
North White Plains <ul style="list-style-type: none"> Continue to enforce zoning violations in the R-2F zone, including illegal residential units. Consider amendments to the IND-A district to incorporate standards for landscaping and sidewalks, to improve conditions along Virginia Road and Lafayette Avenue. 	√ √	
Armonk <ul style="list-style-type: none"> Implement the planned parking expansion at the Hergenhan Recreation Center and pursue creation of additional public parking off Kent Place. 	√	√

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Banksville <ul style="list-style-type: none">▪ Work with residents of Banksville and the Eastern District to coordinate litter cleanup and beautification along key roadways. Coordinate with the Town of Greenwich to ensure existing sidewalks in Banksville are well-maintained.▪ Consider permitting gas stations in the CB-B district.▪ Monitor development at the North Street shopping center and work with Greenwich to encourage location of a grocery store.▪ Ensure that any future development at the Troy's Nursery site respects the environmental constraints and is consistent with the existing low-scale land-use pattern.▪ Reach out to private owners of historic assets in the Eastern District to gauge interest in being designated as local landmarks.	√ √ √ √ √	√ √ √
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13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Mid-Term Actions	Town	Inter-Governmental/ Private
Land Use and Zoning		
Hamlet Zoning <ul style="list-style-type: none"> Consider rezoning the commercial area along Route 22 in North White Plains, between Reservoir Road and Hillandale Avenue, to a new zone that better reflects the existing development pattern. This could include allowing multi-family residential, either in a mixed-use or all-residential context, up to three stories in height. Explore potential design guidelines for commercial uses in the hamlets. These could be applied to the CB-A zone, the CB-B zone, the CB zone and a potential new business zone in North White Plains. 	 	
Commercial and Office Zoning <ul style="list-style-type: none"> Undertake a full analysis of office and commercial zones to streamline and clarify their regulation, potentially including consolidating zones with similar area/bulk provisions. 	 	
Natural Resources		
Sustainability <ul style="list-style-type: none"> Undertake a comprehensive sustainability plan, working with Sustainable North Castle, including action measures such as: <ul style="list-style-type: none"> Revising zoning and subdivision regulations to include incentives/provisions for green buildings and infrastructure. Retrofitting municipal facilities to incorporate green building measures. Passing legislation to facilitate green residential projects. Exploring long-term environmental and financial benefits of LED street lighting. Providing regulations for residential lighting and revising commercial lighting standards to be in line with Dark Sky recommendations. Gradually replacing cars and trucks in the Town's fleet with energy-efficiency vehicles. Exploring ways to address the impacts of road sale and fertilizer on ground water. 	 	

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Hazard Mitigation <ul style="list-style-type: none"> Implement priority action items for the Town in the County Hazard Mitigation Plan. 	√	√
Transportation		
Vehicular Circulation <ul style="list-style-type: none"> Work with NYS DOT on the potential creation of two left-turn lanes from Maple Avenue onto the eastbound lanes of Route 22. This would require the widening of Maple Avenue as it approaches Route 22, and would allow for the installation of a pedestrian crosswalk on the western side of the intersection, with connecting sidewalks along Maple Avenue and Business Park Drive. Implement the recommended roadway and intersection improvements contained in Tables 12 and 13. 	√	√
Public Transportation <ul style="list-style-type: none"> Explore the potential for a park-and-ride and/or carpool facility for residents commuting via the North White Plains train station. The facility should be located in an existing and underutilized parking lot that is centrally located and easily accessible from major roadways, such as Community Park. 	√	√
Pedestrian and Bicycle Circulation <ul style="list-style-type: none"> Extend sidewalks along the east side of Main Street (Route 128) to School Street, and along School Street to Wampus Avenue, to improve pedestrian circulation to the Armonk business area and the schools. Revisit bike lane plans identified in a 2013 study in Armonk, focusing on a share-the-road approach, rather than dedicated bike lanes, to preserve on-street parking. 	√	√
Airport <ul style="list-style-type: none"> Support potential ancillary uses along New King Street that support the existing Westchester County Airport. Such uses can be considered by special permit from the Town Board. 	√	√

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Infrastructure and Utilities		
Water Supply <ul style="list-style-type: none"> Explore the potential to combine Water Districts 4 and 7 once the bonds issued by the school district for District 7 mature. 	√	√
Sanitary Sewer <ul style="list-style-type: none"> Expand the capacity of Sewer District 2 to allow for future development. Upgrade Sewer District 1 to address infill and infiltration issues and implement re-lining. 	√ √	
Parks, Recreation and Open Space		
<ul style="list-style-type: none"> Do not focus on funding additional parks, but rather focus on upgrading existing facilities: <ul style="list-style-type: none"> Build permanent bathroom facilities at Community Park. Longer-term, consider the construction of a new recreation facility to complement the existing recreational amenities at the park. Continue to explore options to enhance Wampus Brook South, focusing in the near-term on adding parking to serve the existing park and nearby shopping. Explore other improvements to Wampus Brook Park South based on available funding. Implement improvements as needed to playgrounds in existing parks, such as Clove Road Park and Quarry Park. Plans for Wampus Brook Park South should also consider installing a playground facility. Replace the Parks Department Garage at a combined new facility shared with the Highway Department at the current highway garage site behind Town Hall. Relocation of the Parks Department garage could free up space at Lombardi Park for additional recreational uses. Undertake improvements to the Town Pool including resurfacing the pool deck and refinishing the pool's interior. The Town should also pursue plans to construct a facility at the pool that could be rented for events and provide storage space. Work with North White Plains residents to improve Fountain Park for passive recreation. Explore possibilities to permit additional passive recreational access to water resources, such as the area south of the Business Park where the Wampus and Byram Rivers converge which could provide trails to connect to Community Park and the Business Park. 	√ √ √	√ √

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Community Character and Historic Resources		
Municipal and School Facilities and Services <ul style="list-style-type: none"> Implement improvements to Town Hall to accommodate additional police and court uses. Longer-term, consider the potential to purchase the American Legion property at 17 Bedford Road for additional administrative space for Town Hall functions. 	√	
Hamlet Areas		
North White Plains <ul style="list-style-type: none"> Work to install curbing along residential roadways in North White Plains to improve driving conditions and reduce on-street parking. Consider marking North White Plains gateway areas through expanded signage and landscaping along North Broadway. 	√	
Armonk <ul style="list-style-type: none"> Extend sidewalk pavers to encompass the core of downtown Armonk: the block bounded by Bedford Road, Maple Avenue and Main Street; the west side of Main Street; the south side of Bedford Road between Main Street and Maple Avenue; and Kent Place at its intersection with Main Street. 	√	√
Banksville <ul style="list-style-type: none"> Focus any future open space acquisition in the Eastern District on opportunities to connect to existing, publicly accessible open space, or to protect environmental resources such as the headwaters of the Mianus River, wetlands and streams. 	√	

13. FUTURE LAND USE PLAN AND IMPLEMENTATION

Long Term Actions	Town	Inter-Governmental/ Private
Transportation		
Vehicular Circulation <ul style="list-style-type: none"> Consider extending Maple Avenue parallel to Main Street northward to either the CVS or beyond, to create an alternative to Main Street. 	√	√
Public Transportation <ul style="list-style-type: none"> Advocate with Westchester County to extend the Bee-line's Loop H of the Commuter Shuttle or Route 12 to connect with the North White Plains station. 	√	√
Parks, Recreation and Open Space		
<ul style="list-style-type: none"> Monitor the status of large, privately held open spaces and take advantage of opportunities to preserve them when possible. 	√	√