

## Overview

The Town/Village of Harrison is located in the east –central portion of Westchester County in New York State, approximately 23 miles north of New York City. Figure 4-1 shows Westchester County's location in the region. The Town is bordered to the west by the City of White Plains (the county seat and regional business center), to the north by the Town of North Castle, to the east by the Village of Rye Brook, and to the south by the City of Rye. The Town and Village of Mamaroneck are located to the south west of the Town. Figure 4-2 shows the Town's location and its geographic relationship to other municipalities in the County. The Town's latitude and longitude are: 40°58'8"N, 73°42'47"W (40.9688889, -73.7130556).

Figure 4-1 Regional Location



Source: Westchester County Data Book 2008

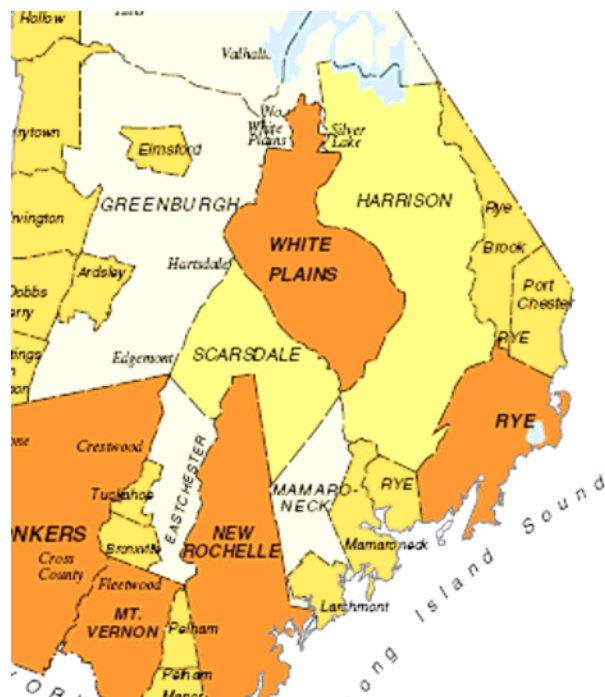
The Town is 17 square miles or approximately 11,000 acres in size. It is one of the largest in terms of land area in the central and south portions of the County and has one of the lowest population densities – 1340 people per square mile as compared to an average of 3,134 people/square mile in nearby communities. At the time of the last U. S. Census in 2000, the Town had a population of 24,154 which represented a 4% growth in the 10 years since the Census was conducted in 1990. Recently released Census Bureau figures, estimates the Town's 2007 population at 26,504, a 9.9% increase from 2000.

The Town has a suburban character and is known both for its high quality residential neighborhoods as well as major national companies and corporate office complexes. Located on opposite ends of the Town are two long time, established hamlet centers, downtown Harrison in the south and Silver Lake in the north. Areas of small lot single and two-family homes and a few low scale garden apartments adjoin these areas. In between these hamlet centers are expansive neighborhoods of primarily large lot and expensive single family homes. The estate area of Purchase has been the location of new subdivisions and luxury residences in recent years. This area is also the location of the corporate

headquarters of PepsiCo and Mastercard, the campuses of two major colleges, Manhattanville College and the State University of New York at Purchase, the Performing Arts Center and the Newburger Museum. Several country clubs and golf courses are located in this area as well as in other sections of the Town.

The Town's central location made it easily accessible to one of the northeast corridor's major regional transportation networks including state and federal highways and parkways (the New England Thruway/I-95, I-684, the Cross Westchester Expressway/I-287, and the Hutchinson River Parkway), the New Haven line of the Metro-North Railroad, and the Westchester County Airport. The combination of this transportation system and the demand, starting in the late 1960's-early 1970's, for more office space to house businesses that originally sought room to expand out of New York City, resulted in the development of large areas of corporate office complexes along the I-287/Cross Westchester Expressway along the Town's border with White Plains which became known as the Platinum Mile. These office complexes and accompanying service industries resulted in the development of new and expensive single family homes in the Purchase and southern Harrison neighborhoods.

Figure 4-2 Harrison and Surrounding Communities



Source: Westchester County Data Book, 2008

Water is a dominant topographic feature in the Town. Located in the upper reach of the Lower Long Island Sound drainage basin, there are approximately 36 miles of watercourses throughout the Town as well as lakes, ponds, and wetland systems. Areas adjacent to the Blind Brook, branches of the Mamaroneck River, Beaver Swamp Brook, and Brentwood Brook /Beaver Swamp Brook West are located within the 100 and 500 year floodplain. There are also many areas of steep slopes (15% or more) and rocky terrain located throughout the Town.

Historically in Westchester County, the location of the early rail lines, parkways, downtowns, neighborhoods and business areas were built on the flat, low lying floodplains and wetlands which adjoin local rivers, streams and watercourses. This is also true for the Town of Harrison where neighborhoods and businesses in these floodplains, particularly in downtown Harrison, have been subject to repeated, severe flooding as the result of storms during the past 50 years.

### **Environmental Setting**

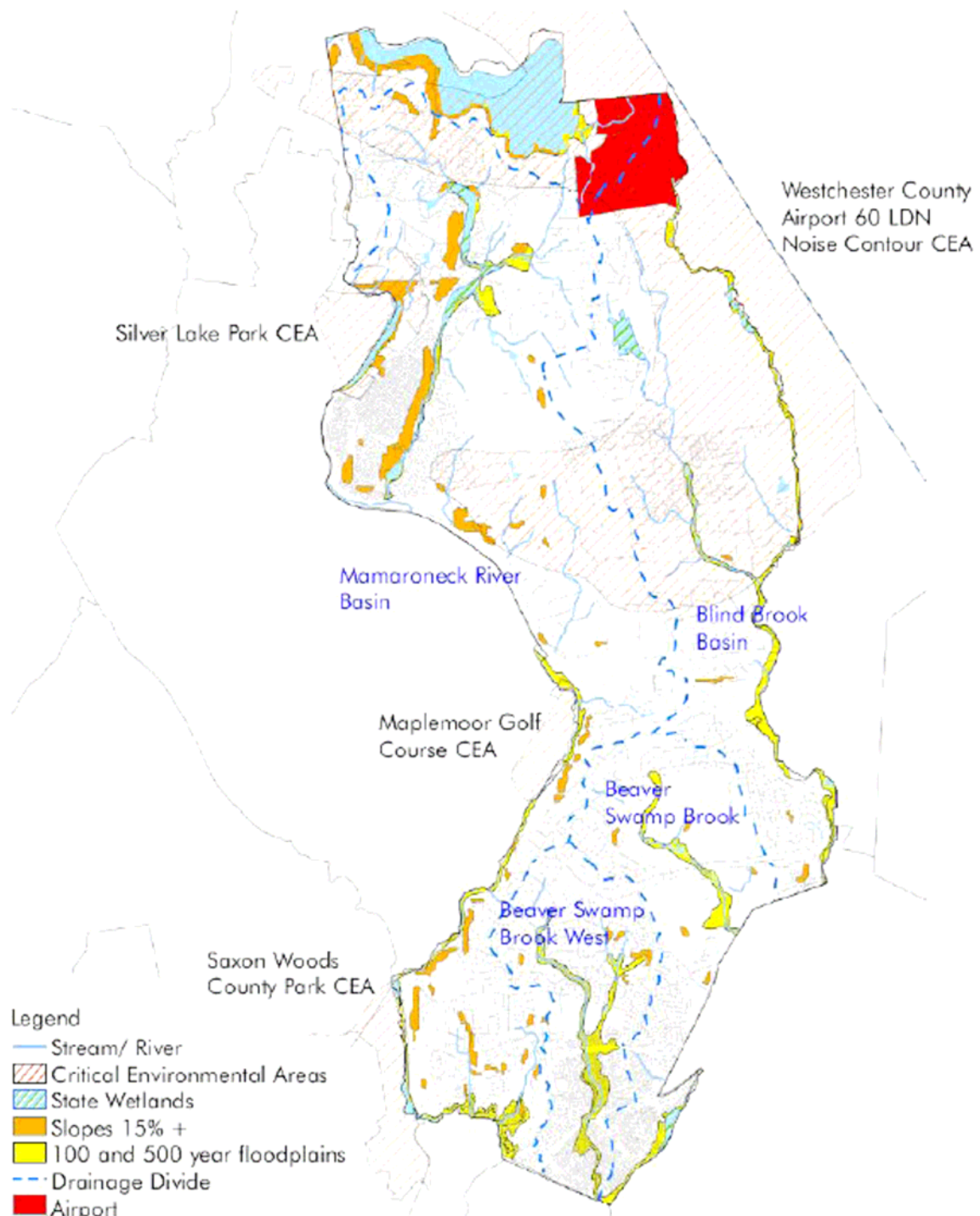
The Town is located in the Hudson Valley climate division of New York State. The seasonal temperature is typical of the northeastern United States with cold winters, mild springs, hot summers, and mild falls. The average temperature in January is about 31 degrees F. and 77 degrees F. in July. Average rainfall in Westchester County is 45-50 inches per year. Average county snow fall is 28-30 inches per year.

A major ridge line runs from Rye Lake in the north through downtown Harrison to the south that separates the Mamaroneck River drainage basin from the Blind Brook, Beaver Swamp, and Brentwood Brook watershed drainage basins. According to the Town's 2006 Comprehensive Plan Update Draft there are many areas of steep slopes (15% or more) located throughout the Town which have become subject to development. Many of these areas are located in the Purchase and Park Lane areas. Watercourses and waterbodies flow through and drain Harrison eventually making their way south through the City of Rye and Village of Mamaroneck to the Long Island Sound, a federally designated estuary of national significance. Within the Town/Village there are four major subwatersheds: the Mamaroneck River, Blind Brook, Beaver Swamp Brook, and Brentwood Brook/Beaver Swamp Brook West. A small portion of the northerly section of Town drains to the Kensico Reservoir, a New York City drinking water supply reservoir which serves Westchester County as well as New York City.

Areas within the FEMA designated 100 and 500 year flood plain for these four major drainage basins has been the location of severe and recurring flooding during storm events. Areas around the Beaver Swamp Brook and Brentwood Brook/Beaver Swamp Brook West have been especially hard hit in recent years. A number of studies have been initiated by the Town as well as other agencies in order to identify impediments and recommend structural and non-structural solutions. The Town has also undertaken several flood control projects in order to help alleviate problems along the Beaver Swamp Brook. Recent reports include an October, 2007 Reconnaissance Study Site Visit and Report by the US Army Corps of Engineers that focused on areas along Beaver Swamp Brook, Brentwood Brook and the Mamaroneck River impacted by the storms in the spring of 2007. In March 2008, a Beaver Swamp Brook Impact Analysis was prepared for the Town by Leonard Jackson Associates. That report is still under review and recommends several stream channel projects in Harrison as well as downstream in the Village of Mamaroneck.

Although the primary purpose was not flooding, the Town has participated in and endorsed two intermunicipal watershed plans for the Long Island Sound known as WAC #3 and WAC #4. These plans were coordinated by Westchester County in 1997-1998 with the objective of controlling non-point source water quality pollution through structural and non-structural means. This provided a good basis for the Town's preparation of a multi-faceted stormwater pollution prevention plan to comply with the federally mandated MS4 stormwater management regulations.

Figure 4-3 Environmental Features



Source: Town/Village of Harrison Comprehensive Plan 2006 Draft, BFJ Planning

All or a portion of five NYS designated wetlands (12.4 acre minimum) are located in the Town. Many smaller sized wetlands areas are also located throughout the Town and are regulated by a local wetlands ordinance. Many ponds and lakes of varying sizes are located throughout the town. The largest include Forrest Lake, Silver Lake, Spring Lake, and Croker Lake.

Figure 4-3 identifies major environmental features.

## Demographics

According to the 2000 U.S. Census, the Town had a total population of 24,154. This represented a 4% increase in population (846 people) from the 1990 census (23,308). In July, 2007, the Town's population was estimated to be 26,504 by the U.S. Census Bureau's American Community Survey (ACS). This would mean that in the 7 years since the last Census was conducted, the Town's population continued to increase, this time by 9.7% (+566 persons). By comparison Westchester County as a whole grew 6% between 1990 and 2000, and an additional 3% between 2000 and 2007.

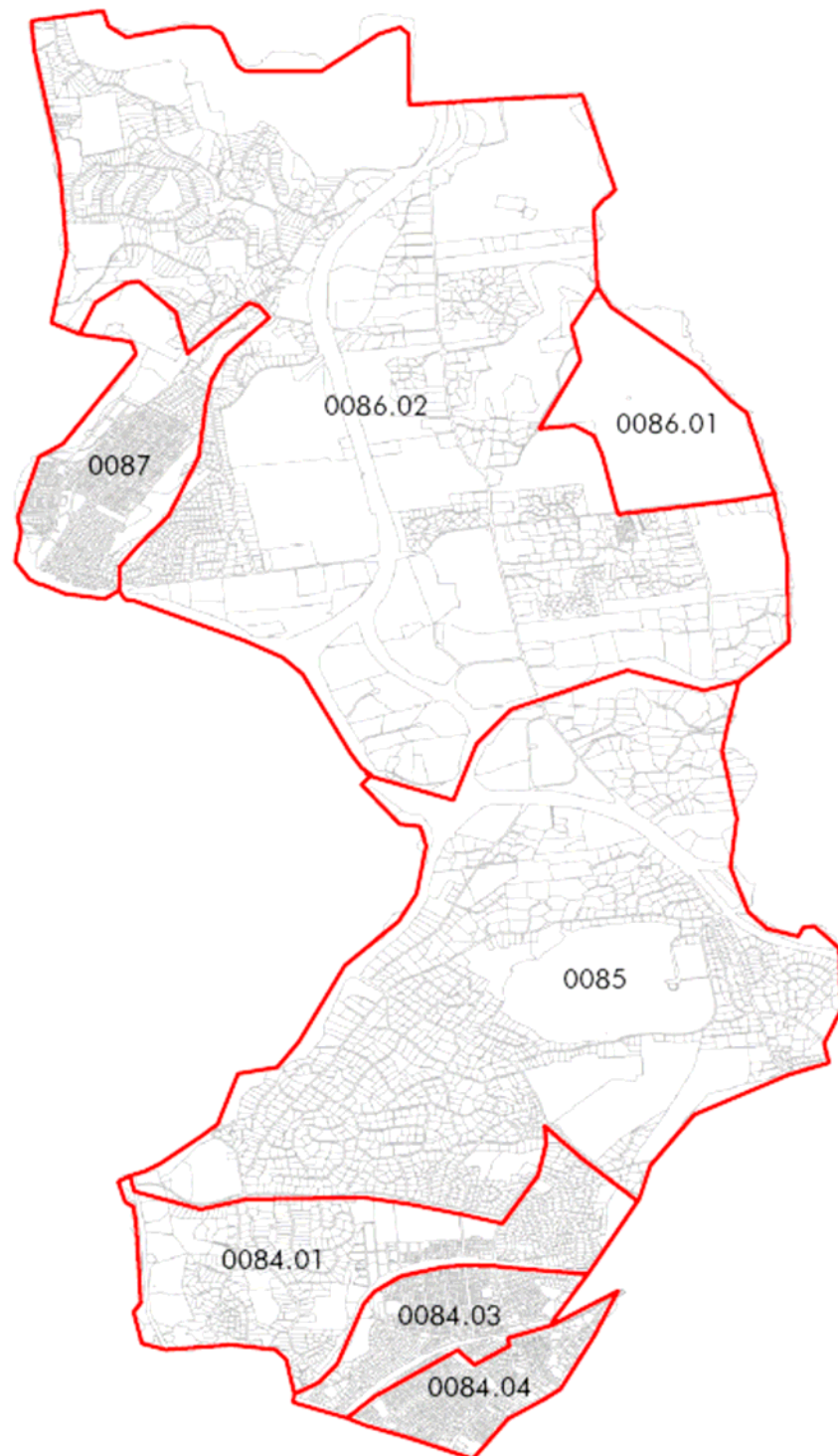
It should be noted that Harrison along with several other municipalities in Westchester have questioned the 2000 census population figures as well as the current estimate as being too high. This could be due, in part, to the fact that the sample data used by the Census Bureau's ACS uses a variety of factors on a national scale that may not be relevant at the county or local level. As a result there is a 10% chance that the true statistic lays outside the Bureau's margin of error. For the purposes of the Hazard Mitigation Plan (HMP), the Town is using FEMA's HAZUS-MH risk assessment software program which relies on 2000 Census data. During the course of the preparation of the risk assessment and its evaluation of the findings, the HMP planning committee determined that the use of 2000 Census figures did not result in any material differences in the magnitude and impact of the identified potential losses.

The Town's population is more affluent and better educated than the average for Westchester County. In 2000, the Town's median family income was \$98,167 as compared to \$79,881 for the County. Approximately 87% of Harrison residents graduated from high school or higher with 50.2% of those residents having a college degree. For all town residents 16 years of age and older, 61% were employed in 2000 with 78.4% working in private industry, 14.3% in government, and 6.2% self employed. The occupation of the town's labor force was as follows: 48.3% in management, professional and related; 12.8% in services; 27.5 in sales and office; 7% in construction, extraction, and maintenance; and 4.3% in production, transportation, and material moving.

Table 4-1 profiles selected demographic characteristics which provide useful information for the HMP. Because there are significant differences between areas of the Town due to historical settlement patterns and development trends, the profile provides a comparison of neighborhood planning areas and the Town as a whole. The neighborhood planning areas are those identified in the Town's 2006 Comprehensive Plan Update Draft: Downtown Harrison and Harrison Central Business District (CDB), Southern Harrison (the area south of the Hutchinson River Parkway and north of Downtown Harrison/CDB, Silver Lake-West Harrison and Park Lane, and Purchase. These areas generally correspond with six of the seven census tracts which cover the Town (note: Tract 86.01 is the State University at Purchase and no data is available from the 2000 Census). The location of these census tracts is shown in Figure 4-4.



Figure 4 – 4 Census Tracts and Neighborhood Planning Areas



Source: Town/Village of Harrison Comprehensive Plan 2006 Draft, BFJ Planning

**Table 4-1 Selected Demographic Characteristics by Census Tract  
Town of Harrison and Neighborhood Planning Areas  
Year 2000**

Data	Harrison Total	84.03 84.04 Downtown Harrison	84.01 85.00 Southern Harrison	86.02  Purchase	87.00 Silver Lake/W. Harrison & Park Lane
Population	24,154	8456	5658	4660	5380
% Population Change 1990-2000	4	6.4	6	39.5	5.6
Density (persons/sq.mile)	1388	9092	867	564	5868
% White alone	89.8	86.7	94.2	86.3	92.9
% Black or African American	1.4	0.6	0.9	4.7	0.5
% Asian Alone	5.4	9.5	3.3	4.6	2.0
% Hispanic (any race)	6.7	7.1	2.7	6.1	10.9
Median Age	37.2	37.8	41.1	23.8	37.6
% 1 Person Households	21.7	11.4	3.7	2.3	10.6
Median Family Income	\$98,167	\$78,615	\$179,752	\$166,492	\$69,375
% Making \$25,000 or less	14.4	18.3	7.6	6	18.7

Source: US Census Bureau

The Disaster Mitigation Act of 2000 (DMA 2000) requires that HMPs consider what are termed “socially vulnerable” populations. These populations can be more susceptible to hazard events, based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. This HMP considers three socially vulnerable population groups:

- seniors (persons over the age of 65);
- low-income (household annual income below \$25,000 a year); and
- language difficulties (limited or no ability to speak English).

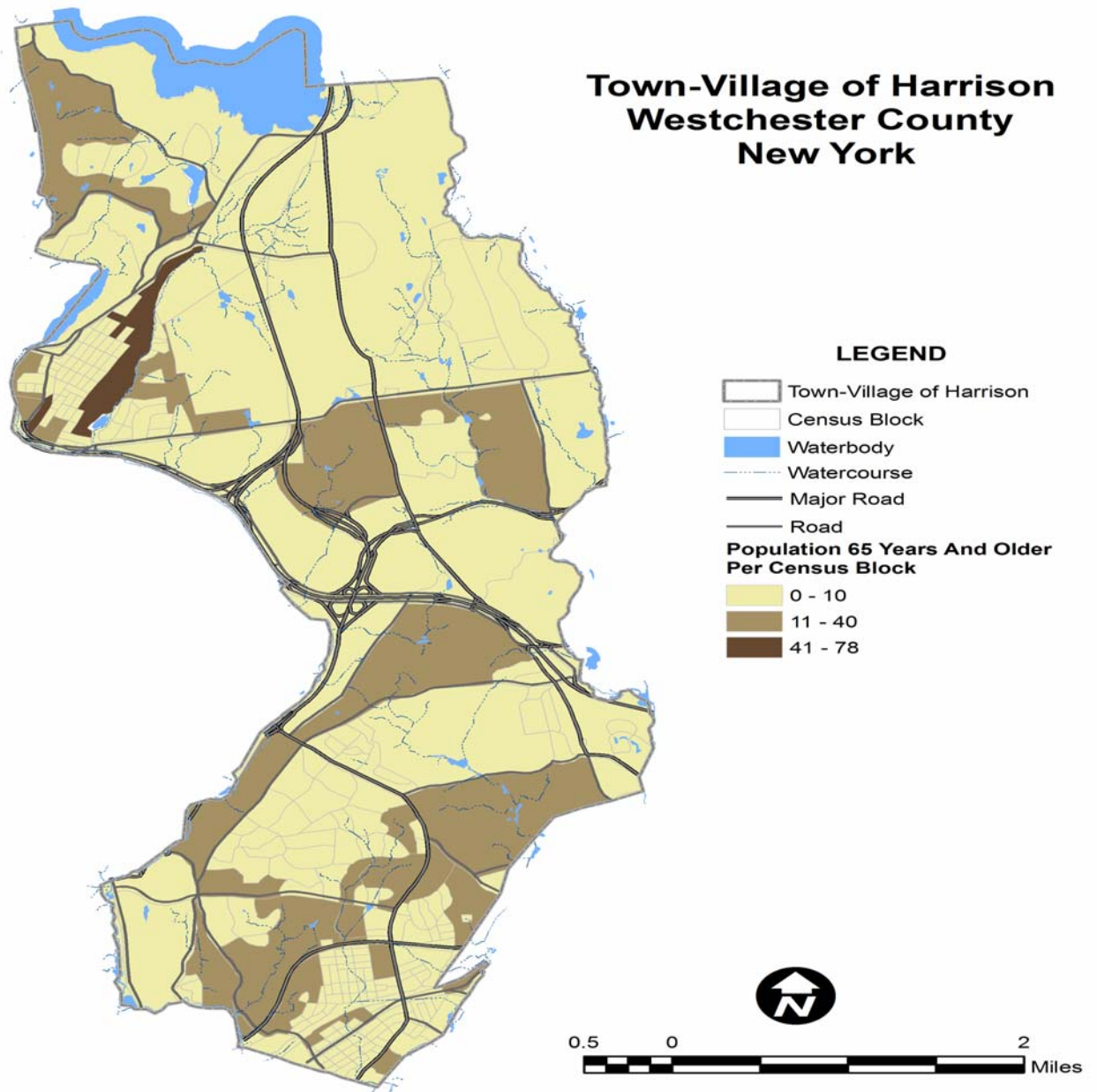
According to 2000 census, there were 3,537 Harrison residents age 65 years or older (14.6% of the total population). Of this number approximately 825 (9.8%) lived alone. The census estimated that 7.8% of these seniors had incomes below the poverty level in 1999.

The 2000 Census identified 1212 of the total 8389 households in Harrison or 14.4% as having an annual income of \$25,000 or less. The Census also found that 4.2% of family households had incomes below the 1999 Poverty Level.

The 2000 Census found that 11.3% (2545) of Harrison residents aged 5 years and over (22544) identified their ability to speak English as less than very well. Approximately 4.6% (1055) indicated that they spoke English “not well” or “not at all”. There were 1414 individuals or 6.7% of total population in households that defined as “linguistically isolated”. A linguistically isolated household is one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English “very well.” In other words, all members 14 years old and over have at least some difficulty with English.

Figure 4-4 shows the distribution of Harrison residents age 65 or older while Figure 4-5 shows the distribution of low income persons. Figure 4-6 shows the distribution of Harrison residents identified as speaking English less than very well.

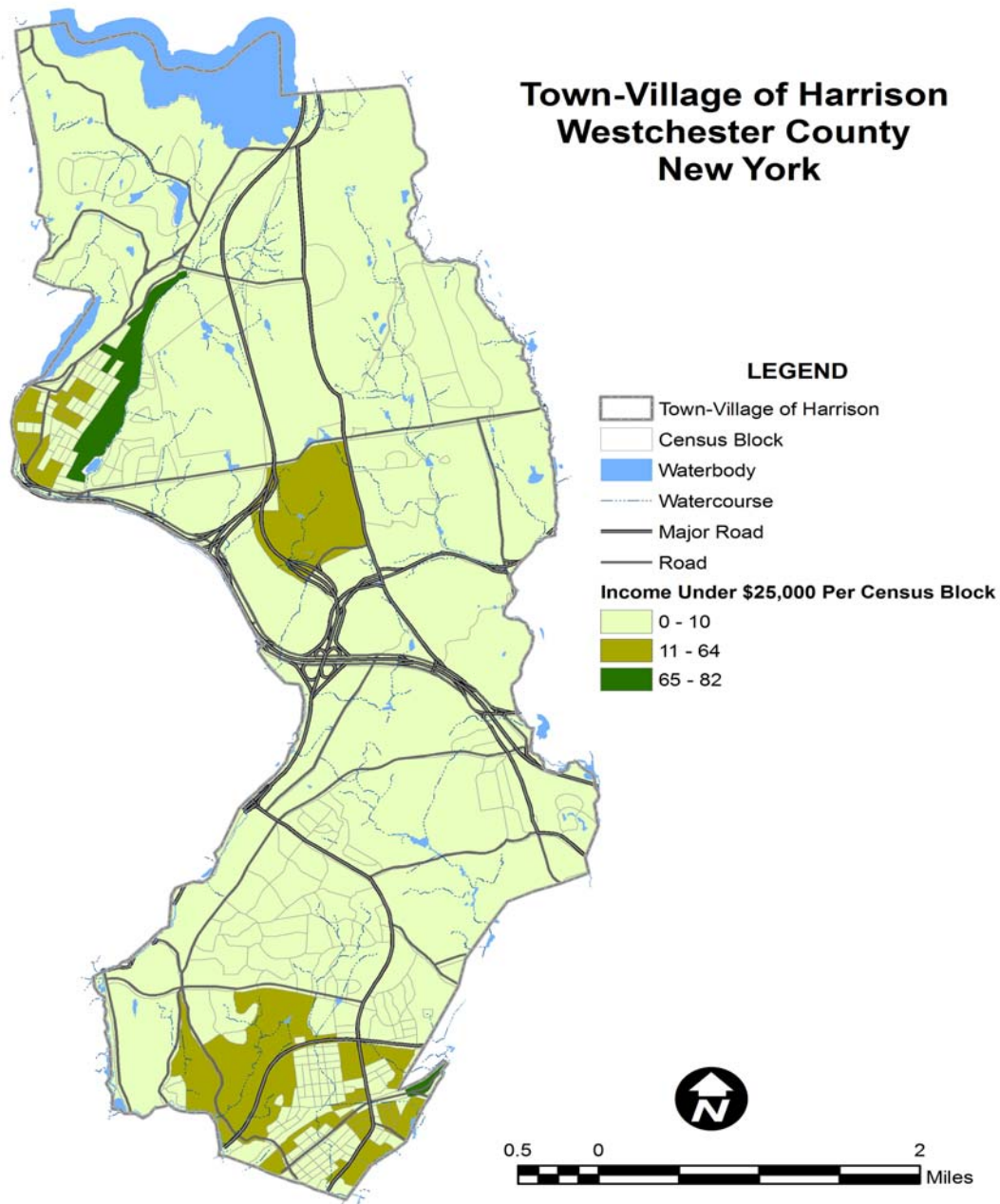
Figure 4-5 Distribution of Residents Age 65 or Older



Source: US Census 2000; HAZUS-MH

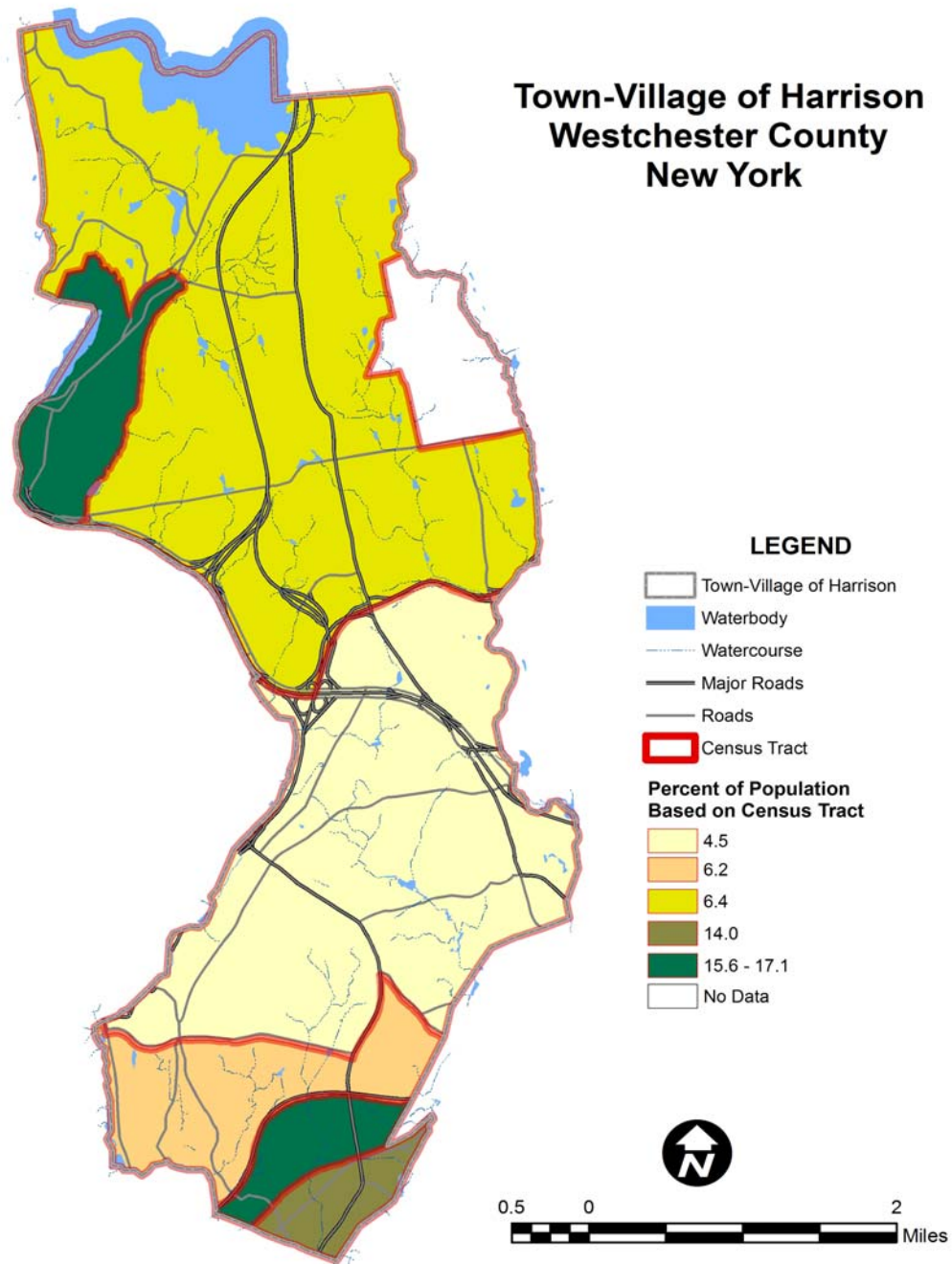


Figure 4.6 Distribution of Residents with Annual Incomes of \$25,000 or Less



Source: US Census 2000; HAZUS MH

Figure 4-7 Distribution of Residents Who Speak English Less Than Very Well



Source: US Census 2000 Summary File 3 (SF-3) Sample Data

## Housing

There were 8657 total housing units in the Town/Village in 2000 which represented an 8% increase (673 units) from 1990. Of these units 5,389 were owner occupied (64%) and 3,005 (36%) were occupied by renters. Approximately 56% of all housing units were single family (detached or attached).

Data provided by the US Census Bureau, New Residential Construction Statistics prepared by the Westchester County Department of Planning reveals that between 2000 and 2007, 564 residential building permits were issued in Harrison. A high of 117 permits were issued in 2002 followed by a steep drop off in succeeding years with 50 permits issued in 2007. This number may stay steady or decline further due to current local, regional and national economic conditions.

The age, type, value, and density of housing units can have important implications for hazard management planning. Table 4-2 highlights these characteristics.

**Table 4-2 Selected Housing Characteristics by Census Tracts  
Town of Harrison and Neighborhood Planning Areas**

Housing	Harrison Total	84.03 84.04 Downtown Harrison	84.01 85.00 Southern Harrison	86.02 Purchase	87.00 Silver Lake/W. Harrison & Park Lane
Total Units	8657	3483	1909	1135	2130
Single Family (Detached or Attached) (% of Total Units)	4859 (56.1)	1358 (39)	1724 (90.3)	1062 (93.6)	715
2 Family (% of Total Units)	2064 (23.8)	977 (28.1)	84 (4.4)	23 (2)	980 (46)
20 or more units (% of Total Units)	539 (6.2)	426 (12.2)	67 (3.5)	29 (2.6)	17 (0.8)
Year Built : 1939 or Earlier (% of Total Units)	2518 (29.1)	1128 (32.4)	630 (33)	193 (17)	567 (26.6)
Year Built: 1990-2000 (% of Total Units)	639 (7.4)	138 (4)	108 (5.7)	269 (23.7)	124 (5.8)
Median Value ( Owner Occupied)	\$578,000	\$369,000	\$900,000	\$711,500	\$360,600

Source: US Census Bureau 2000

## Business and Commercial Uses

In 2006, Harrison was the location of over 1500 business establishments employing approximately 34,000. While approximately 57% of these businesses were small in size employing 4 or fewer employees, Harrison is also the home of the largest number of private employers in Westchester County with 500 or more employees. Major corporate office complexes were drawn to the Town because of its central location in the county with ready access to major highways, rail lines and the

Westchester County Airport. Office parks are mainly found along the region's "Platinum Mile" (Cross Westchester Expressway/I-287). The Purchase area is the long-time home of PepsiCo's national headquarters off of Anderson Hill Road. A major office complex is also located south of Manhattanville College off of Purchase Street where Mastercard, Inc. has its headquarters. A cluster of office buildings are also located in the southwest corner of the Town along Mamaroneck Avenue just south of the City of White Plains between the Hutchinson River Parkway and the New England Thruway. Table 4-3 is an inventory of major businesses and employment sites with 500 or more employees.

**Table 4-3 Businesses & Employment Sites with 500 or More Employees, 2008**

<b>Company Name</b>	<b>Number of Employees</b>	<b>Specific Industry</b>
Morgan Stanley	1,800	Security Brokers
Pepsi Co, Inc.	1,500	Bottled & Canned Soft Drinks
Journal News	800	Newspapers
Mastercard, Inc.	800	Short-term business credit institutions
Harrison Central School District	678	Elementary & Secondary Schools
Dansk International Designs	600	Other Miscellaneous nondurable goods
Diversified Investment Advisor	555	Pension, health & welfare funds
Citigroup	500	Short-term business credit institutions
Purchase College SUNY	500	Colleges, Universities & Professional Schools

Source: Westchester County Data Book 2006 & 2008

Office development is not only a major economic asset to the Town but is also important to the regional, State, and in some instances national economy as a whole. Office development is also a major land use in the Town with twenty five sites have buildings 100,000 square feet or more in size

## **Land Use**

The Town/Village of Harrison prepared a Comprehensive Plan Draft that was released in 2006. The 2006Plan Draft is still in process but it provides an overview of generalized land use patterns that is still germane to the hazard mitigation planning process. Much of the data and analysis included in that section of the Plan has been summarized below.

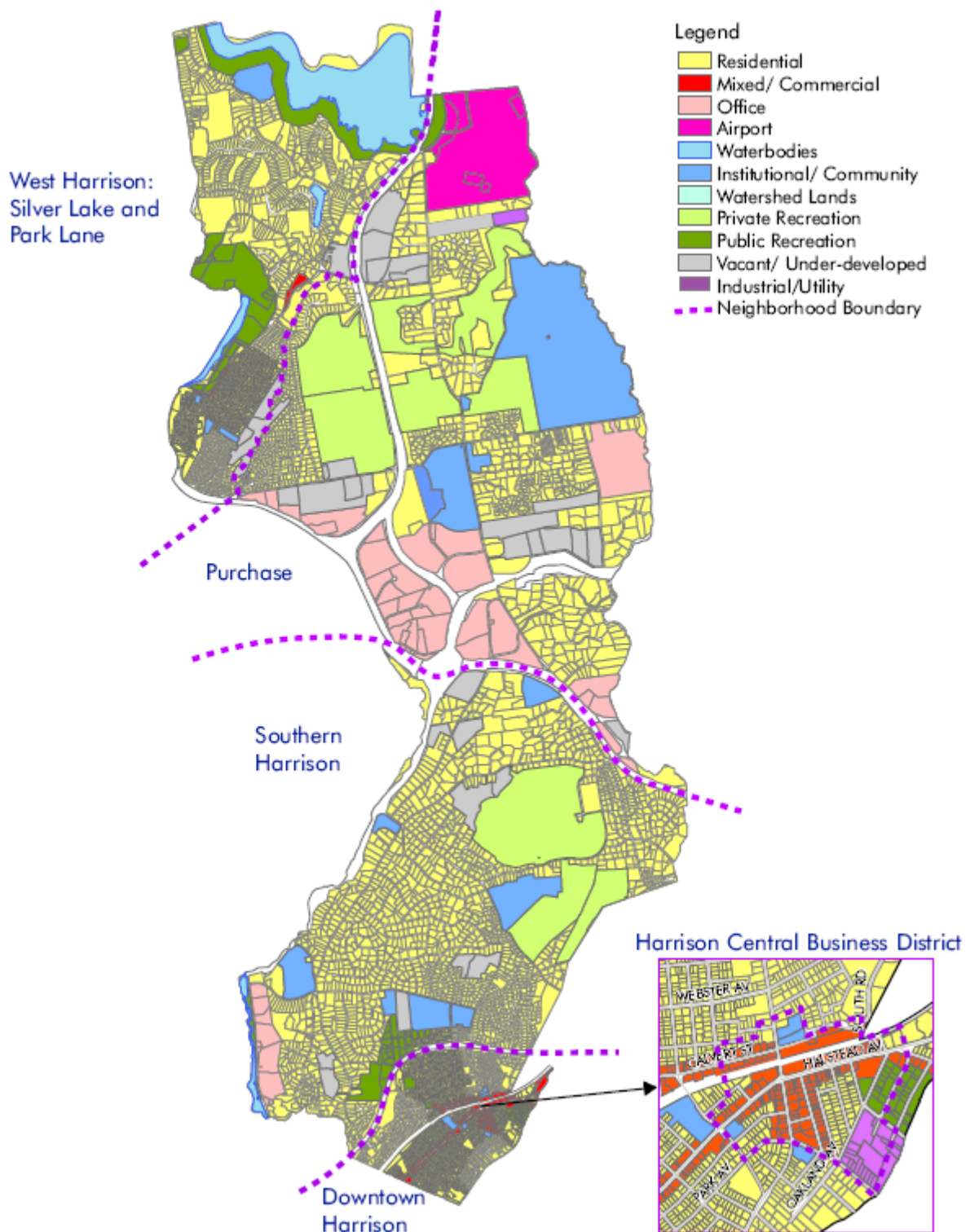
The Town contains approximately 11,136 acres. Generalized land uses fall into one of 9 categories as shown on Figure 4-7.

### *Residential*

Residential land uses account for approximately 45% of all land in the Town. Of this amount, approximately 56% are single family dwellings although there is a range of housing types within that category. Most residential uses are predominately low density, with two or less dwelling units per acre comprising about 70% of the residential area. In recent years luxury large lot houses have been constructed in Purchase. What the Comprehensive Plan Update Draft 2006 terms "large lot suburban" is found throughout the town but predominates in southern Harrison. These homes were built generally in the 1950s. Smaller lot single family homes from the 1960s and 1970s are found throughout the



Figure 4-8 Land Use and Neighborhoods



Source: Town/Village of Harrison Comprehensive Plan 2006 Draft, BFJ Planning



Town but concentrated in the downtown Harrison and West Harrison-Silver Lake areas. Two family homes are also found mainly in downtown Harrison and West Harrison-Silver Lake. Residences over retail shops can be found in downtown Harrison and to a less extent in West Harrison-Silver Lake. Low scale garden apartments built in the 1960's can be found in West Harrison and downtown Harrison. Higher density (4-6 stories) multi-family family apartments are located in downtown Harrison. The small lot residential and higher density housing found in downtown Harrison and the central business district have been impacted by frequent natural hazard storm events and the severe flooding that often accompanies it.

#### *Retail*

Small scale retail centers primarily serving local residents are situated in downtown Harrison in the central business district and along Halstead Avenue, and in West Harrison-Silver Lake. A few isolated retail establishments can also be found on Anderson Hill Road. Some of the retail establishments in downtown Harrison have been subject to repeated flooding from storm events.

#### *Office*

In addition to the belt of commercial offices and office parks along Westchester's "Platinum Mile" north of the Cross Westchester Expressway/I-287, areas of office development are located on Mamaroneck Avenue just south of White Plains. Pepsico has its headquarters off Anderson Hill Road in Purchase. Some smaller office buildings are located in the downtown Harrison central business district as well as professional offices converted from residences around the CBD's perimeter.

#### *Open Space and Recreation*

Approximately 1604 acres are devoted to public or private open space and recreational uses. There are almost 82 acres of Town owned parks with Passidomo Park and pool in West Harrison-Silver Lake (48 acres), Veterans Memorial Park in southern Harrison (23 acres) and Bernie Guagnini Brentwood Park (3 acres) in downtown Harrison being the largest. There are six other smaller public parks and playgrounds scattered throughout the Town. The Sollazzo Recreation Center and Veterans Memorial Building in downtown Harrison, and Leo Mintzer Community Center in West Harrison-Silver Lake provide a variety of recreational activities for residents. Seven private country clubs comprising approximately 1200 acres are located in whole or part in the Town.

#### *Institutional*

Institutional uses include six public and three private elementary and secondary schools; St. Vincent's, a 43 acre private psychiatric hospital; two colleges, Manhattanville and the State University of New York at Purchase; and the Newburger Museum and Performing Arts Center, both on the SUNY campus.

#### *Vacant*

Vacant land accounts for almost 6% of all land uses. Vacant land is primarily situated in northern Harrison and includes the remains of large estates in the Purchase area, and areas with severe natural constraints in West Harrison.

A breakdown of the approximate 11,136 acres of the major land use categories is shown in Table 4-4.

**Table 4-4 – Generalized Land Use 2006**

Use	Approximate Acres	Percent
Residential	4,989	44.8
Commercial, Retail & Office	809	7.3
Institutional/Recreation & Open Space	2,338	21.0
Airport	327	2.9
Vacant	637	5.7
Circulation	1,479	13.3
Water Supply	164	1.5
Cemetery	20	0.2
Waterbodies	373	3.3
<b>Total</b>	<b>11,136</b>	<b>100.0</b>

*Source:* Town/Village of Harrison Comprehensive Plan 2006 Draft, BFJ Planning

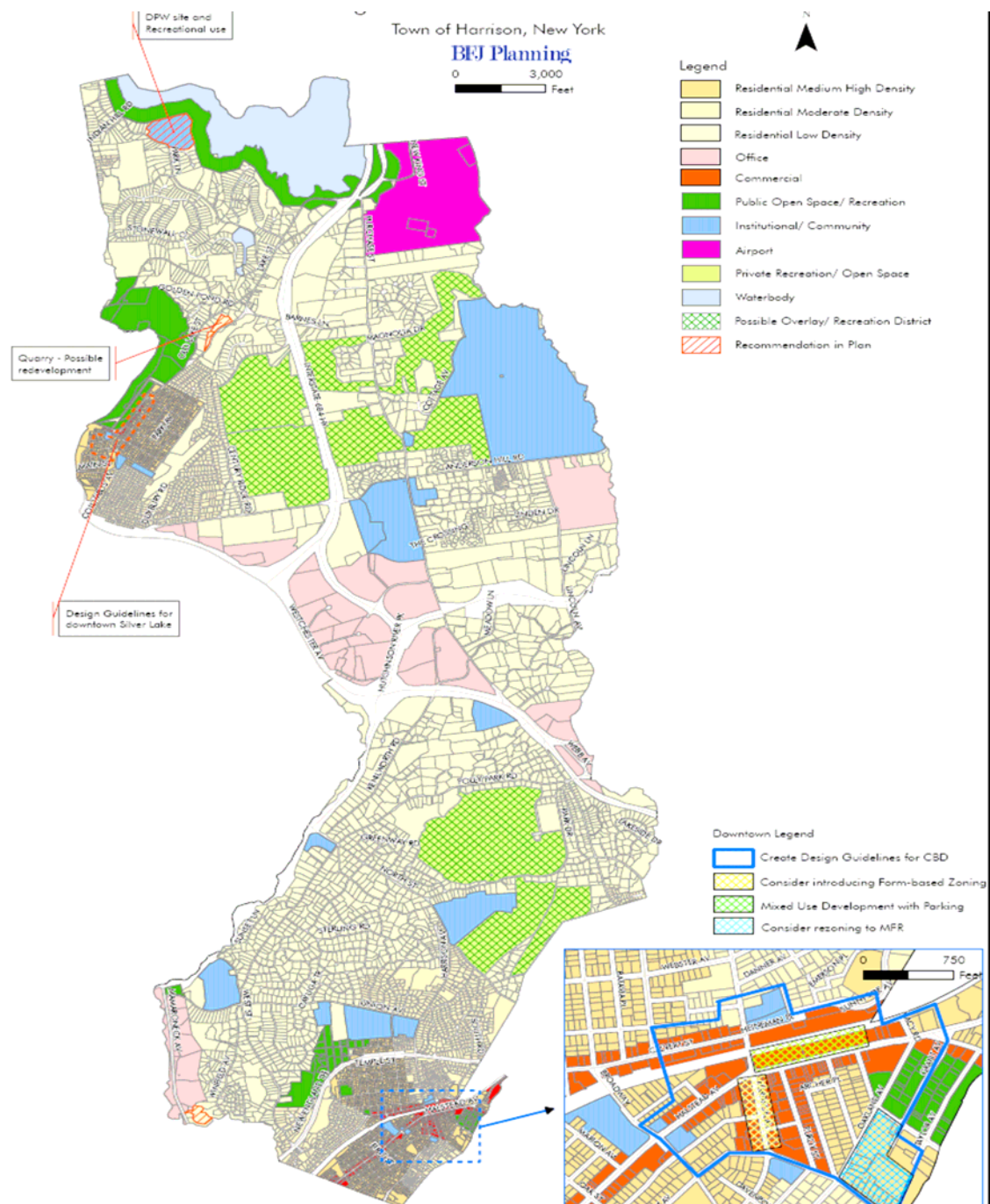
## **Zoning**

There are 19 zoning districts in the Town. These include seven single family residence districts ranging from in size from 5000 square foot minimum lot size to large lot estates with a minimum 2.5 acre lot size; one two family residence district; one garden apartment zone; and two multi-family districts. There are eight commercial districts including four SB zones for commercial and corporate offices (5-100 acre minimum lot size), and four zones with no minimum lot size for neighborhood, central business district and professional business uses.

## **Future Development**

The Town/Village's 2006 Comprehensive Plan 2006 Draft examined land use trends and identified properties and areas with future development potential. A copy of the future land use plan prepared as part of the plan is shown in Figure 4-8.

Figure 4-9 Future Land Use



Source: Town/Village of Harrison Comprehensive Plan 2006 Draft, BFJ Planning

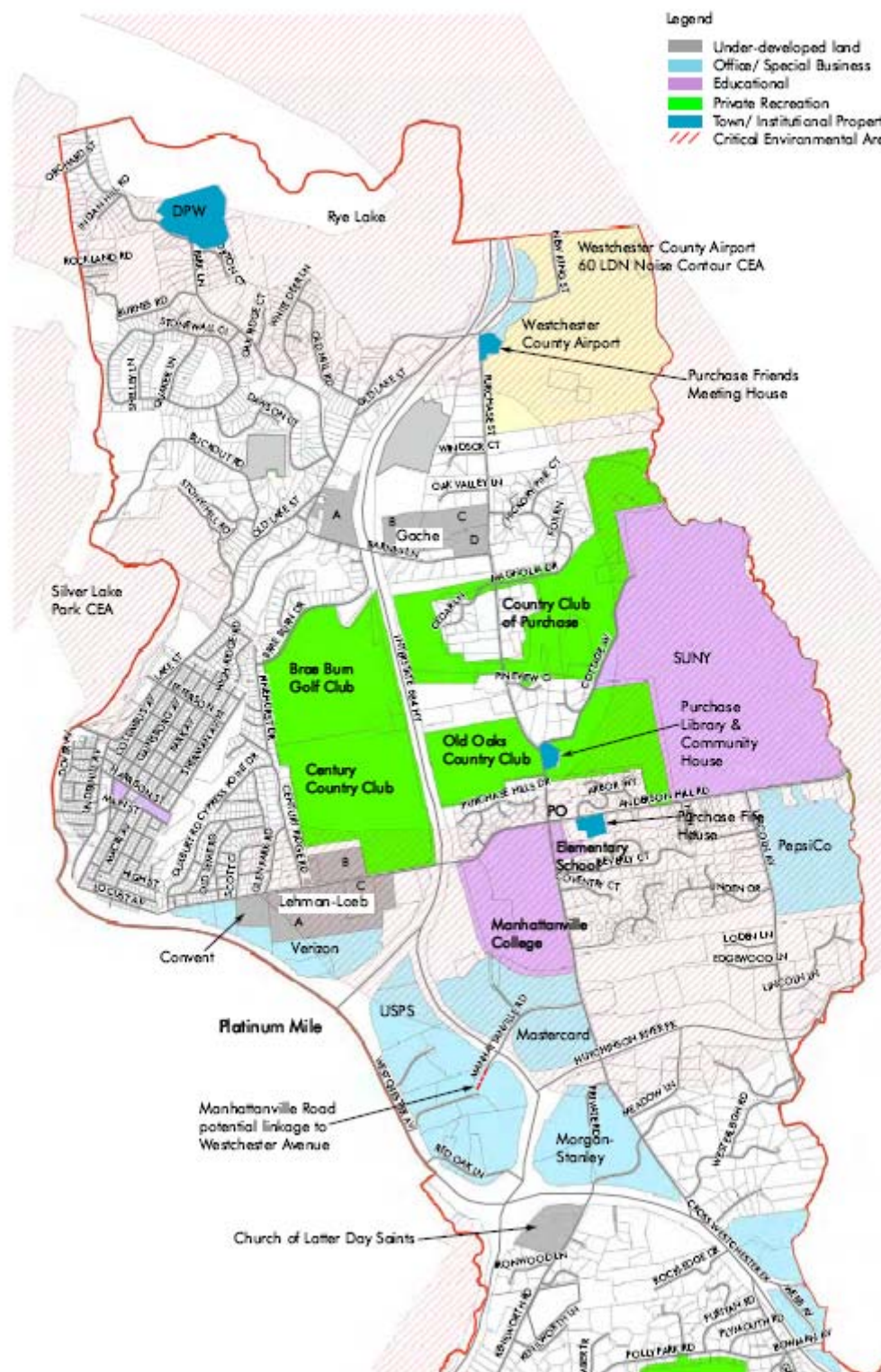
This information was reviewed with the Town Planner and the Planning Committee. The following are some of the future areas that could be the subject of new or redevelopment proposals.

1. Lake Street Quarry and stoneyard is located on Lake Street south of Barnes Lane just north of the Silver Lake business area. It has been in operation since the 1920's but is a non-conforming use in a one-acre single family residential zone. In recent years there has been talk of the owner selling the property or proposing a new use. The Comprehensive Plan Update Draft recommends that any new use be in keeping with the low density residential character of the surrounding area although the barren and exposed condition of the site might not make it attractive for a residential use.
2. The 33 acre former Nike Base is located in the northwest corner of the Town off of Park Lane. It is Town owned. Future plans call for 11 acres of the site to continue to be used for Town DPW facilities including the water supply facilities now operated by the Westchester Joint Water Works, and a fire training center. The remaining 22 acres will be reserved for Town recreational uses which are yet to be determined.
3. There are seven private golf clubs located throughout the town which if ever developed under existing single family zoning could have a major impact on surrounding neighborhoods and infrastructure. The Comprehensive Plan Update Draft recommends the possibility of a recreation overlay zone in order to protect the low density and open space uses of these properties.
4. Some estates and large tracts of land remain in the Purchase area. These properties have significant development potential, covering almost 189 acres which could result in the construction of approximately 161 homes under the current single family residential zoning (see Figure 4-9).
5. Manhattanville College has plans to construct its first new major academic building in 40 years, the 30,586 square foot Student Center for Creative Arts. A Campus Master Plan is almost complete and will soon be submitted to the Town for review. In recent years, SUNY Purchase has been making improvements to its campus. A Space Utilization Study Draft for Review was released in March 2008. The Plan calls for a major reorientation, renovation, and expansion of several existing buildings throughout the campus. As a state facility, SUNY has not submitted its plans to the Town for review as it is exempt from Town zoning and does not need building permits. In July, 2008, the Governor vetoed a bill that would have permitted SUNY Purchase to lease 64 acres of unused property to an operator of retirement communities for the construction of a "senior learning center." The College's President has urged the Governor to reconsider. In addition to housing for retirees, the proposal included housing for staff and faculty as well as a hotel and conference center.
6. Several areas of the CBD/downtown could be redeveloped. A joint MTA-Town concept plan has been released which proposes the construction of a new retail-residential complex adjacent to the railroad station on Halstead Avenue on the current 3.3 acre on-grade commuter parking lots. The proposal calls for the construction of a commuter parking garage, retail facilities and 39 apartments. It is anticipated that an RFP will be released in 2009.

Property on the easterly side of Oakland Avenue is industrial-commercial in nature and is the location of several nonconforming uses. The Comprehensive Plan Update Draft recommends that the area be instead redeveloped with higher density, multi-family residential uses.



Figure 4-10 Significant Properties in the Purchase Area



Source: Town/Village of Harrison Comprehensive Plan 2006 Draft, BFJ Planning



The former train station adjacent to Town Hall on Heineman Place was acquired by the Town in 2004. The Town proposes to convert it to a Town Justice Center – a new court and meeting facilities as well as a parking deck expansion for 85 cars. Until the general economic climate improves, the project is on hold.

The construction of a new DPW facility at Gleason Place is also planned and has been submitted for federal economic stimulus funding.

### **Critical Facilities**

HAZUS separates critical buildings and facilities into five categories based on their loss potential as follows:

*Essential Facilities* are crucial to the health and welfare of the whole population and are especially important following hazard events. Essential facilities commonly include police, fire and EMS stations, hospitals & other medical facilities, emergency operation centers, evacuation shelters, and schools which serve as shelters or feeding stations in an emergency.

*Transportation Systems* include airports, major roadways, bridges and tunnels, railways and waterways.

*Lifeline Utility Systems* such as potable supply systems, sewerage treatment facilities, oil, natural gas, electric power and communication systems.

*High Potential Loss Facilities* would have a high loss associated with them and include nuclear power plants, dams, and military installations.

*Hazardous Waste Facilities* house industrial or hazardous materials such as corrosives, explosives, flammable materials, radioactive materials, & toxins.

### **Emergency Facilities**

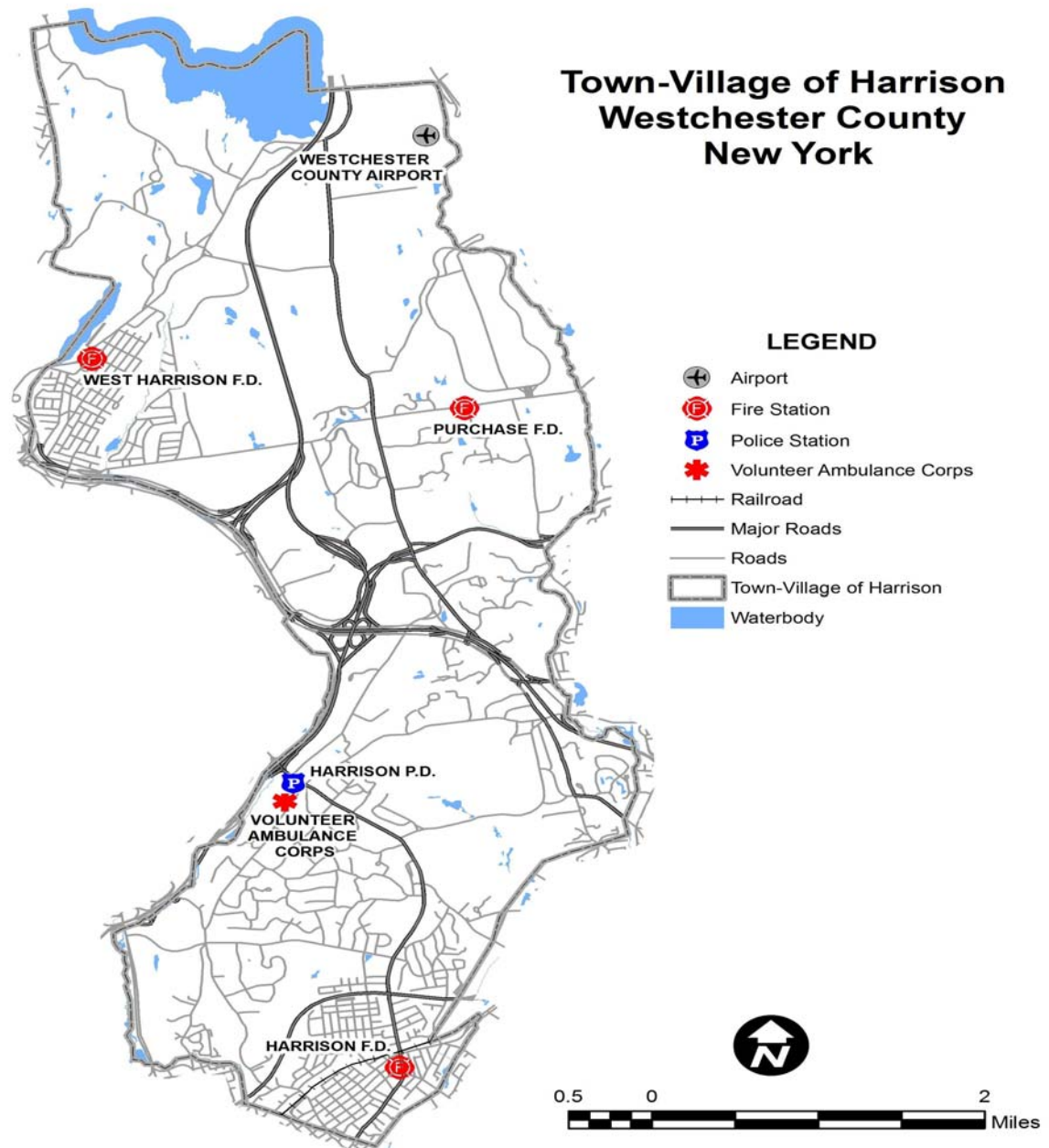
The Harrison Police Department serves the entire Town. The police station is located at the corner of North Street and Pleasant Ridge near an entrance/exit to the Hutchinson River Parkway. A K-9 facility and garages are also on site. The Department is staffed by 80 career professionals.

The Town is covered by one of five fire districts, manned mostly by volunteers and supplemented by career firefighters in the Downtown district only. Three fire houses are located in the Town:

West Harrison (Fire District #1)  
Downtown (Fire District #2)  
Purchase (Fire District #4)

A small section of the Town close to the City of Rye is serviced by the Rye City Fire District (Fire District #3). The West Harrison Fire Department provides fire protection to Fire District #5 which covers the North Castle border.

Figure 4-11 Emergency Facilities in the Town/Village of Harrison



Source: HAZUS-MH; WC GIS

The Harrison Volunteer Ambulance Corps (HVAC) facility is on the same site as the Harrison Police Department. Its volunteers serve the entire Town. HVAC is a basic and advanced life support provider.

Table 4-6 is an inventory of the Town’s emergency facilities and Figure 4-10 shows their location.

**Table 4-5 Emergency Facilities Inventory**

Facility Name	Address	Structural Value	Contents	Building Type	Occupancy/ Capacity	Backup Power (Y/N)
Police Station	650 North Street	\$1,698,842	\$312,120	TBD	70	Y
Fire District #1- West Harrison	95 Lake Street	\$1,193,577	186,177	TBD	TBD	Y
Fire District #2 - Downtown	202 & 206 Harrison Avenue	\$1,415,718	310,293	TBD	70	Y
Fire District #4 - Purchase	Anderson Hill Road	TBD	TBD	TBD	50	TBD
Volunteer Ambulance Corps	2 Pleasant Ridge Road	\$406,719	\$58,495	TBD	TBD	Y

Source: Town of Harrison, Westchester County GIS, HAZUS-MH

The Westchester County Department of Emergency Services, located in Valhalla, New York provides comprehensive training for Town personnel in the operation of the Hazardous Material Response Team (HAZMAT).

The Town’s Police, Fire, and HVAC share communication channels during emergencies.

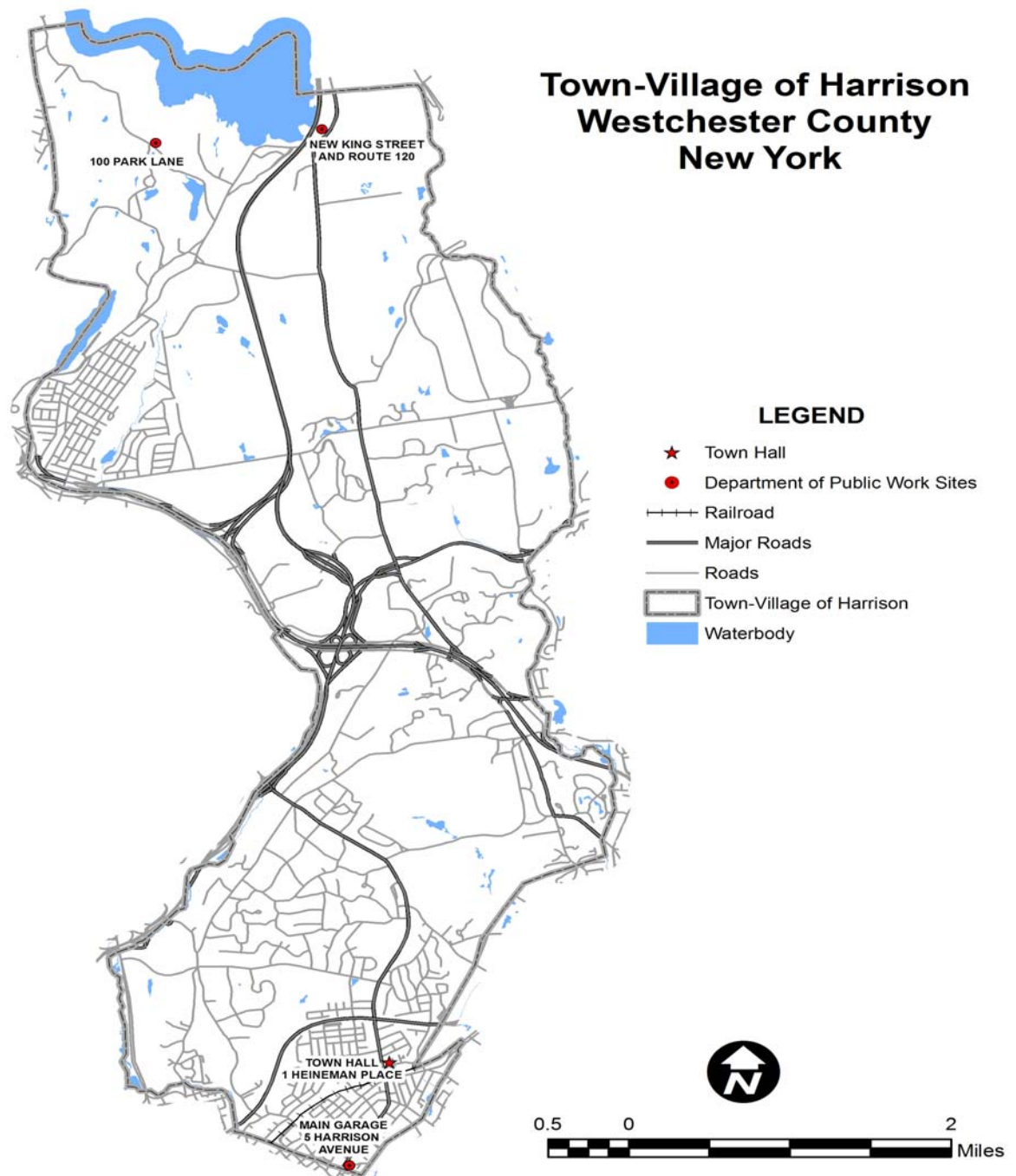
During the course of many natural hazard events, the Town’s Department of Public Works is called upon to play an important role in assisting emergency responders. As a result, the Planning Committee determined that Public Works facilities should also be included in this category as “Other Emergency Response Related Facilities.” An emergency command center is located in the basement of Town Hall. Table 4-7 is an inventory of those facilities and Figure 4-11 shows their location.

**Table 4-6-Other Important Emergency Response Related Facilities**

Facility Name	Address	Structural Value	Contents	Building Type	Occupancy/ Capacity	Backup Power (Y/N)
DPW Garage	New King Street & Route 120	\$1,716,535	\$496,470	TBD	TBD	TBD
Gleason Place Garage	5 Harrison Avenue	TBD	TBD	TBD	TBD	TBD
Former Nike Base	100 Park Lane	TBD	TBD	TBD	TBD	TBD
Town Hall	1 Heineman Place	\$3,087,098	\$467,971	TBD	TBD	Y

Source: Town/Village of Harrison DPW & Comptroller’s Office

Figure 4-12 Other Important Emergency Response Related Facilities



Source: Local Data; WC GIS

## **Hospitals and Medical Centers**

There is no general care hospital located within the Town of Harrison. The closest hospitals are White Plains Hospital Center (292 beds-community general), Greenwich (174 beds – community general), Sound Shore Medical Center (471 beds – comprehensive care), and Westchester Medical Center (635 beds – acute care and level 1 trauma center).

## **Shelters**

There are no American Red Cross shelters in the Town. The Neuberger Museum at the SUNY Purchase campus is a designated Stay Cool Center.

## **Schools**

The Town is served by the Harrison Central School District. There are six schools in the district: Harrison High School, Louis M. Klein Middle School, and the four elementary schools Harrison Avenue, Parsons Memorial, Purchase and Samuel J. Preston. The Keio Academy is a private regional high school for Japanese speaking student and is located off of Purchase Street. There are two parochial schools in Harrison; St Anthony's in Silver Lake and the School of the Holy Child on Westchester Avenue. The campuses of two major colleges are located in the Town, Manhattanville College and the State University of New York (SUNY) at Purchase. In addition Fordham University and Long Island University have area branches in the Town.

Table 4-7 is an inventory of educational facilities in the Town and Figure 4-13 shows their location.

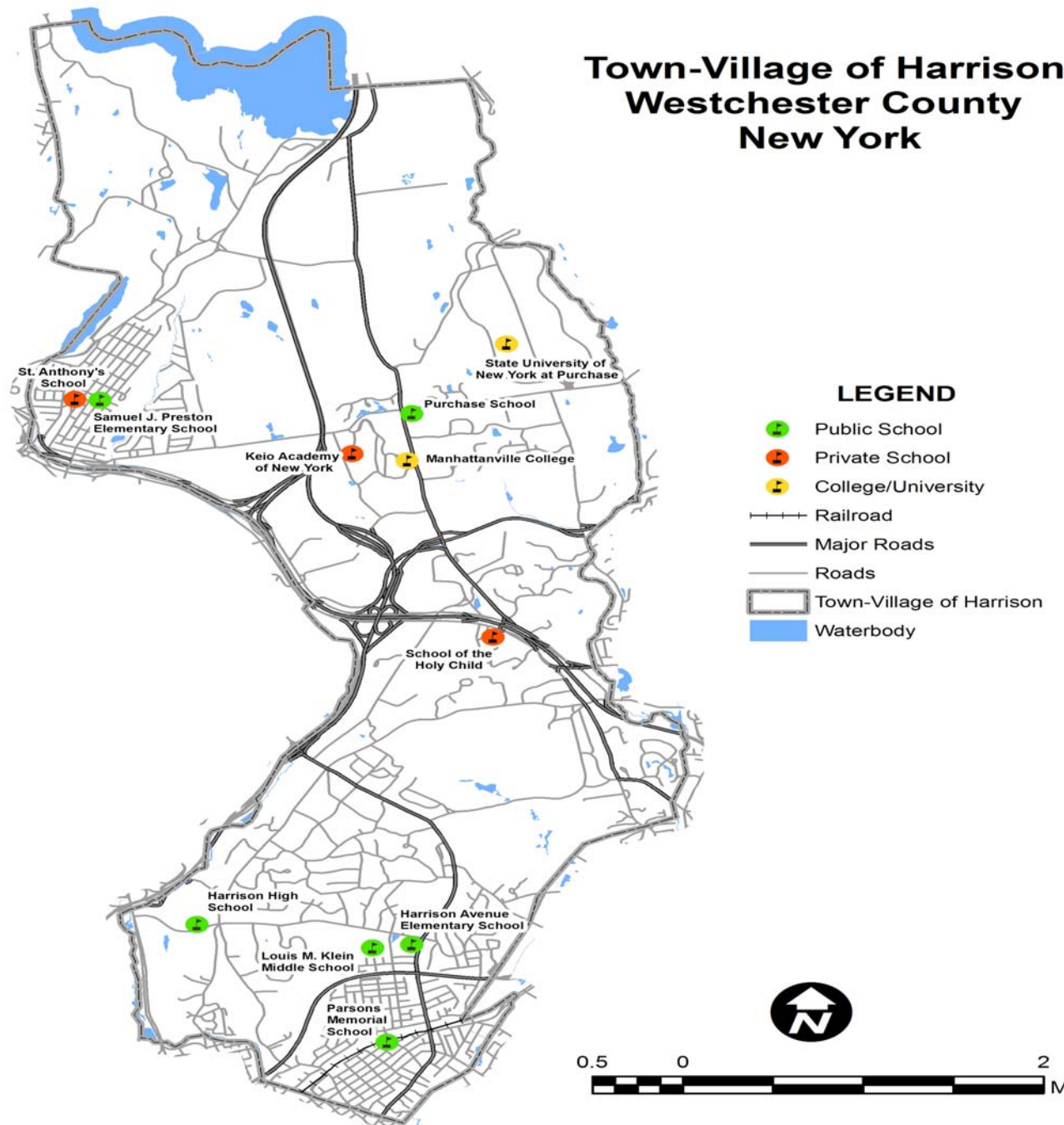


**Table 4-7 Educational Facilities in the Town of Harrison**

Facility Name	Address	Type of Facility/Grade Range	Enrollment	Designated Shelter (Y/N)	Shelter Capacity	Structural Value	Content Value	Bldg. Type	Backup Power (Y/N)
Harrison High School	255 Union Avenue	Public 9-12	957	Y	2000	95,000,000	20,000,000	M	Y
Louis M. Klein Middle School	50 Union Avenue	Public 6-8	808	Y	1500	75,000,000	15,000,000	M	N
Parsons Memorial School	200 Halstead Avenue	Public K-5	439	Y	500	45,000,000	10,000,000	M	N
Harrison Avenue	480 Harrison Avenue	Public K-5	522	Y	500	45,000,000	10,000,000	M	N
Samuel J. Preston	50 Taylor Avenue	Public K-5	312	Y	500	45,000,000	10,000,000	M	N
Purchase School	2995 Purchase Street	Public K-5	456	Y	500	45,000,000	10,000,000	M	N
Keio Academy	3 College Road	Private 9-12	TBD	TBD	TBD	TBD	TBD	TBD	TBD
St. Anthony's School	45 E. Gainsborg Avenue	Private K-8	TBD	TBD	TBD	TBD	TBD	TBD	TBD
School of the Holy Child	2225 Westchester Avenue	Private 5-12	TBD	TBD	TBD	TBD	TBD	TBD	TBD
SUNY at Purchase	2900 Purchase Street	Public 4 Year	4251 Total 4092 Undergraduate	TBD	TBD	TBD	TBD	TBD	TBD
Manhattanville	Purchase Street	Private 4 Year	3023 Total 1842 Undergraduate	TBD	TBD	TBD	TBD	TBD	TBD

Source: School Districts, Westchester County Data Book and GIS, HAZUS-MH

Figure 4-13 Educational Facilities in the Town/Village of Harrison

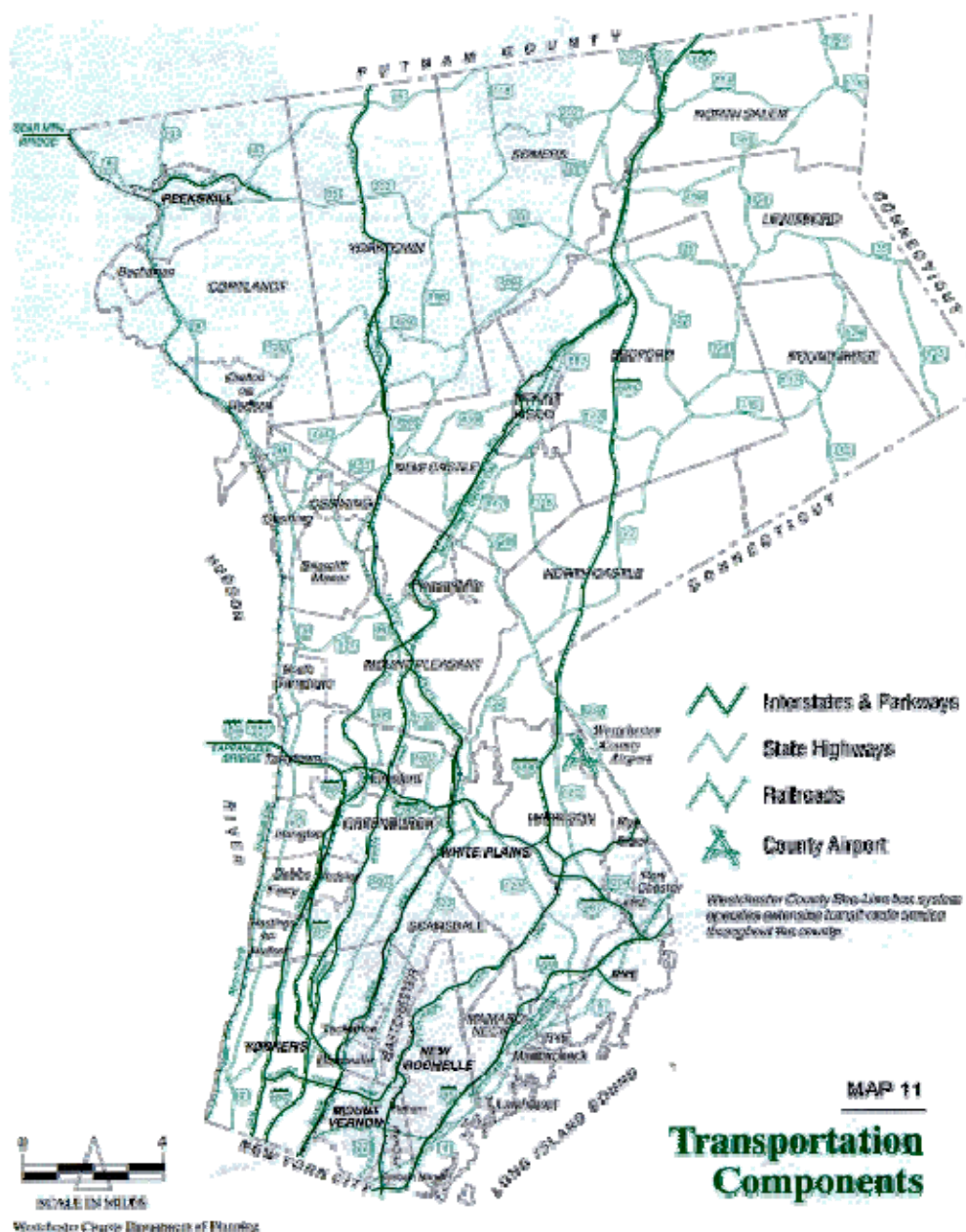


Source: Westchester County GIS; HAZUS-MH

## Transportation Systems

The transportation network located within the Town's boundaries is composed of limited access, arterial and local roads, a rail line and station, and the Westchester County Airport. Figure 4-14 shows the regional transportation network in Westchester County.

Figure 4-14 Westchester County Transportation Network



Source: Westchester County Department of Planning (<http://co.westchester.ny.us/patterns/MAP/maps.htm>)

There are approximately 130 miles of roads in the Town. According to 2005 New York State Department of Transportation (NYSDOT) centerline highway mileage jurisdiction for Westchester County approximately 81.5 miles fall under the jurisdiction of the Town, 23.5 miles are owned by NYSDOT, 18.4 miles are Westchester County's and 6.2 miles are described as "other." The Town Department of Public Works maintains the town's roads, including street light maintenance, and cleaning of gutters, catch basins, and the storm sewer system. The annual road-paving program includes paving approximately x to x miles of roads and the winter snow removal program addresses x miles of roadways.

Portions of four major limited access highways travel through the Town and surrounding communities: The New England Thruway (I-95), the Cross Westchester Expressway (I-287), I-684, and the Hutchinson River Parkway. These highways serve not only the New York metropolitan area but also the northeast U.S. According to data NYS DOT data, volume on three of these highways exceeds 95,000 vehicles a day.

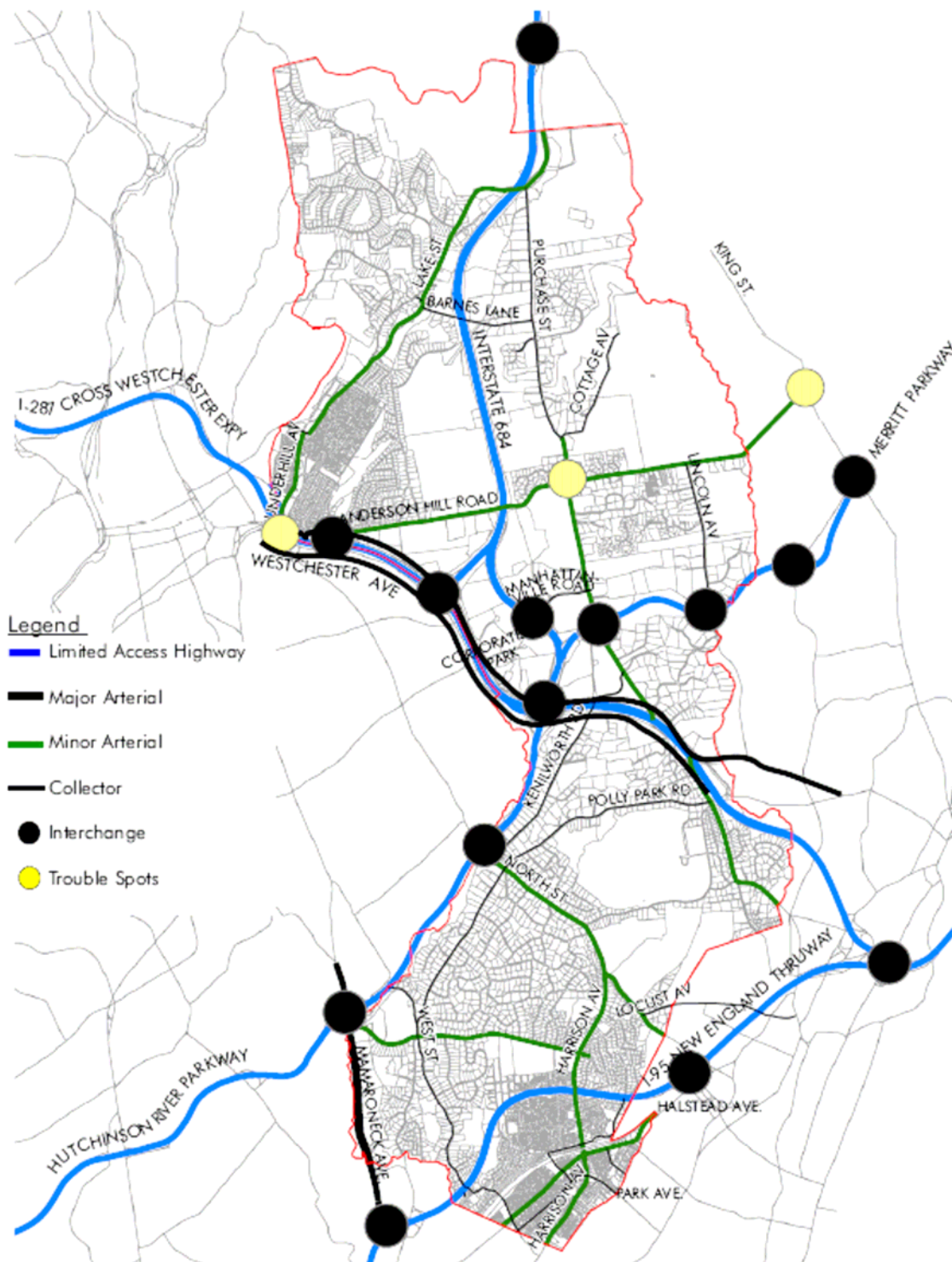
Arterials are designed to carry traffic between Harrison and surrounding communities. Mamaroneck Avenue (County Road #8A& #8B), a 4 lane road just south of the City of White Plains in Harrison generally situated between the Hutchinson River Parkway interchange and New England Thruway entrance in Mamaroneck, and Westchester Avenue ( County Road #62,the I-287 east-west service road) are the two major arterials in the Town. There are a number of minor arterials and collector streets including Anderson Hill Road (County Road #18), Purchase Street (NYS Route 120), Barnes Lane and Lincoln Avenue in the Purchase area, North Street (County Road #73), Union Avenue (County Road #94), and Polly Park Road (County Road #104) in the South Harrison section, and Harrison Avenue (NYS Route 127), Halstead Avenue (County Road #80A) and Park Avenue (County Road #38) in downtown Harrison. Figure 4-14 identifies the road hierarchy in the Town.

Downtown Harrison is served by the Metro-North commuter railroad, New Haven Line, with frequent service to Grand Central Station in New York City. According to the 2000 Census, almost 17% of the Town's workforce commutes by train. The average shortest peak morning commute time to New York Grand Central Station is 36 minutes. Commuter parking is available adjacent to the station. According to Metro North data, the average daily weekday peak period ridership from Harrison was 2,338 with 4,988 boarding during the AM and PM peak in both directions. Harrison is served by the Westchester County Beeline bus line. Most routes through Harrison come from or travel to the City of White Plains and service within the community is limited.

The Westchester County Airport is a county-owned light general aviation airport which serves commercial, corporate, and private aircraft. The airport handled over 176,550 flight operations in 2007, of which 49% were corporate, 24% were commercial, and 27% were general aviation. There are 9 commercial airlines which fly out of the airport. A number of commercial flights have been cut back recently due in large part to fuel costs. Since 1985 commercial traffic at the airport has been restrained by operation of a Terminal Capacity Agreement. These restrictions were further extended and signed into Westchester County law in 2004 into what is known as the Terminal Use Regulation. This limits the number of passengers and the number of flights to four flights per half hour (either arriving or departing). A Voluntary Restraint from Flight (VRFF) agreement is also in place, which applied to the hours between 12 midnight and 6:30 pm. The total number of passenger that passed through the terminal in 2007 was 1,650,000, an increase of over 500,000 from 2006. The airport operates light



Figure 4-15 Road Hierarchy in the Town/Village of Harrison



Source: Town/Village of Harrison Comprehensive Plan 2006 Draft, BFJ Planning



general aviation and corporate aviation with over 400 corporate jets based there. According to the Westchester County Data Book 2008, the airport serves more corporate fleets than any airport in the world with 550 corporate flights a day. The Airport covers approximately 373 acres in the Town. The airport is an important economic asset to the county and the region.

### Lifeline Utility Systems

The Westchester Joint Water Works provided data for potable water tanks and pumping stations and the Harrison Department of Public Works provided information on sanitary sewer systems.

#### *Potable Water Supply*

The Town is served by one water district which is operated by the Westchester Joint Water Works (WJWW) in conjunction with the Town and Village of Mamaroneck and parts of the City of New Rochelle and City of Rye. WJWW serves approximately 6000 domestic customers in Harrison primarily in downtown Harrison, Purchase and Silver Lake. WJWW also provides service to the fire fighting facilities (e.g. fire hydrants) of the Town's four fire districts. The water is purchased from the New York City water supply system and pumped from the Kensico Reservoir. WJWW operates four storage tanks, and two pump stations in the Town. There is also one source, the Silver Lake Well which is rated at 0.4 MGD, which is not operational. WJWW is also responsible for maintaining the water distribution system. Table 4-8 is an inventory of the water tanks and pump stations owned and operated by WJWW in the Town and Figure 4-16 shows their location.

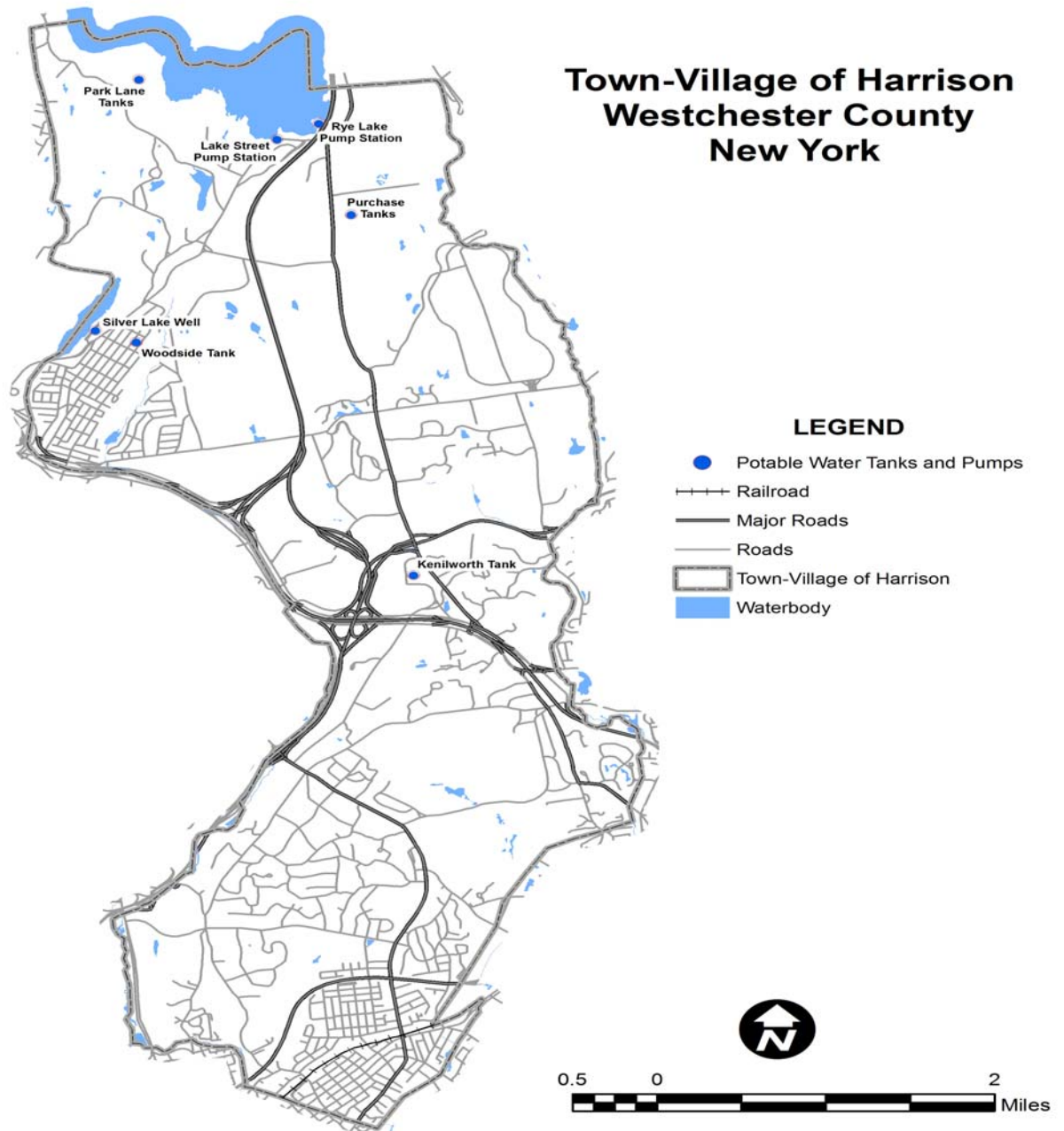
**Table 4-8 WJWW Potable Water Tanks & Pumps - Town of Harrison**

Facility	Capacity	Supply Capacity (gallons)	Structural Value	Backup Power (Y/N)
Woodside Tank	NA	815,000	\$1,000,000+	NA
Park Lane Tanks(2)	NA	815,000 each	\$1,000,000+ each	Y
Kenilworth Tank	NA	450,000	\$1,000,000+	NA
Purchase Tanks (2)	NA	1,000,000 each	\$1,000,000+	Y
Rye Lake Pump Station	20 mgd	NA	\$10,000,000+	Y
Lake Street Pump Station (emergency supply source)	3.3 mgd	NA	TBD	TBD
Silver Lake Well (not operational)	0.40 mgd	NA	TBD	TBD

MGD = Million Gallons per day

Source: Westchester Joint Water Works

Figure 4-16 Potable Water Tanks & Pumps Town/Village of Harrison



Source: Westchester Joint Water Works

### Wastewater Facilities

Harrison is served by four county sewer districts: Mamaroneck, Blind Brook, Bronx Valley, and Upper Bronx. Most of the Town is located in either the Mamaroneck or Blind Brook sewer districts. Portions of the northern portion of Town including the West Harrison neighborhood are served by the Upper Bronx and Bronx Valley sewer districts. A large portion of the Purchase area north of Anderson Hill Road is not sewered. The Harrison Department of Public Works maintains the sanitary sewer system including the repair and cleaning of the collection system and seven pump stations. Table 4-10 provides an inventory of the Town's pump stations and Figure 4-17 shows their location.

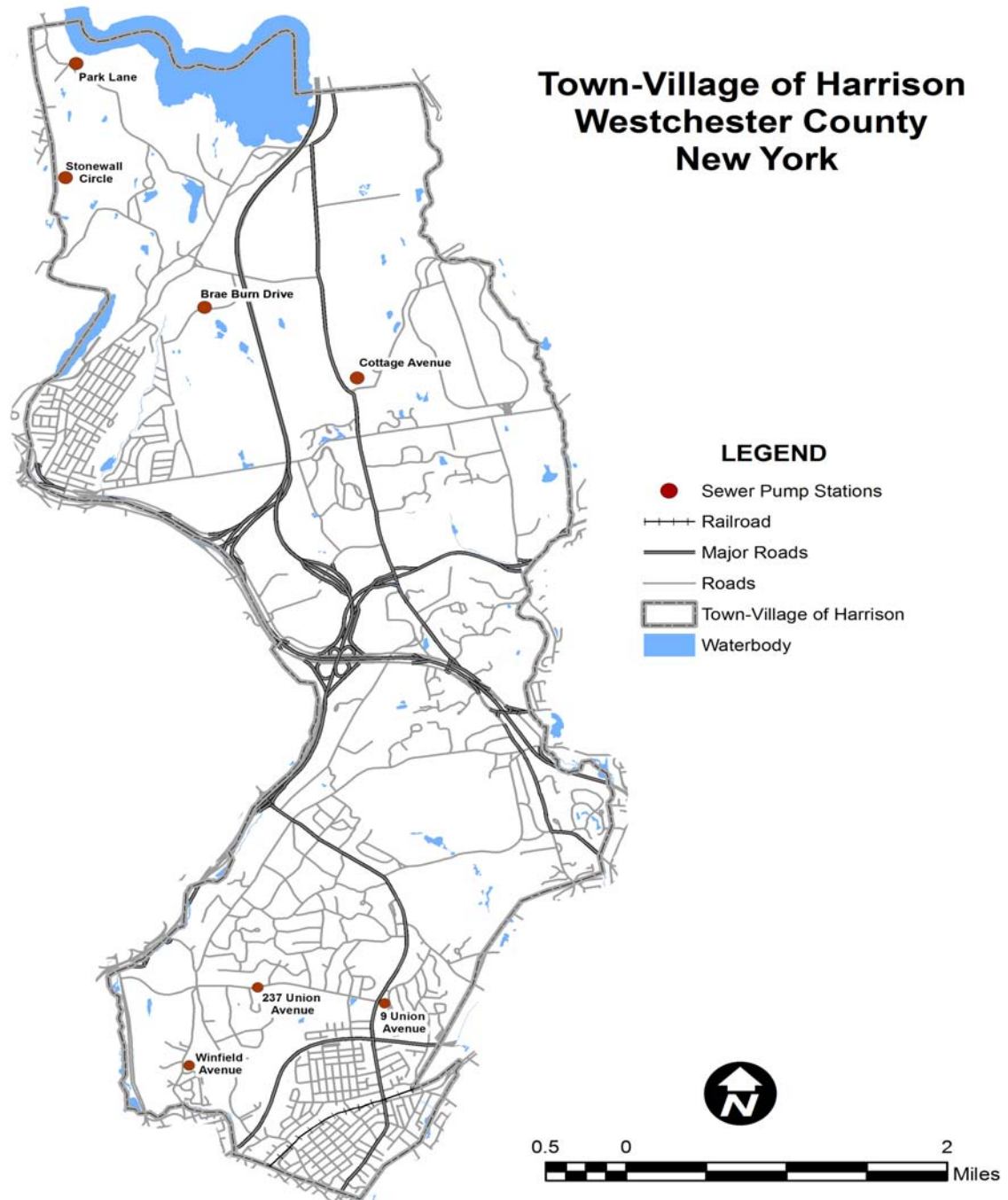
Table 4-9 Town of Harrison Sewer Pump Stations

Name	Service Area	Structural Value	Rate (GPM)	Average Daily Flow (GPD)	Backup Power (Y/N)
237 Union Avenue	F.A. Area #5 (?)	TBD	TBD	2880	N
Park Lane	Park Lane	TBD	400	90,000	Y
9 Union Avenue	Individual House (?)	TBD	TBD	3,000	N
Brae Burn Drive	Brae Burn Drive from Pinehurst Dr. to Barnes Lane	7,500	TBD	38,400	Y
Cottage Avenue	Cottage Avenue	TBD	63	26,000	Y
Winfield Avenue	FA #1a & 2 (?)	TBD	100	34,560	Y
Stonewall Circle	North end of Stonewall Circle, Shelley Lane & Jamison Court	TBD	100	24,500	Y

GPM = Gallons per minute; GPD = gallons per day

Source: Town of Harrison Annual Pump Station Report, 2007; Harrison Public Works Department

Figure 4-17 Sewer Pump Stations in the Town/Village of Harrison



Source: Town/Village of Harrison Engineering & DPW Departments

### *Electrical Power Facilities*

Electrical power is transmitted and distributed by Consolidated Edison (Con Ed) throughout most of Westchester County and the entire Town. The HAZUS-MH provided data identifies no electric substations in the Town and there are no electrical power generating facilities in the Town/Village.

### *Fuel and Natural Gas Pipeline*

Natural gas is supplied to the Town by Con Ed. The HAZUS-MH provided data identified no fuel or natural gas pipeline infrastructure in the Town.

**High Potential Loss Facilities** are defined by FEMA as having a high loss associated with them such as nuclear power plants, dams, and military installations. None of these types of facilities are located in Harrison.

**Hazardous Waste Facilities** house industrial/hazardous materials such as corrosives, explosives, flammable materials, radioactive materials, & toxins. There are none of these types of facilities located in the Town.