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Section 3

INVENTORY

DRAFT SUMMARY

The Canal Village Revitalization Project Boundaries

Canal Village area is located in the southeast corner of the City of Mount Vernon. This area lays along the eastern edge of the city limits that coincide with Hutchinson River and includes the industrial area in the southeast corner of the City.

This document was prepared with funding provided by the New York State Department of State under the Brownfield Opportunity Areas (BOA) Program, and the Local Waterfront Revitalization Program (LWRP). Each grant has a separate project boundary, however the two overlap along the Hutchinson River frontage.

As a part of this effort, urban conditions, environmental conditions, infrastructure, transit and transportation, and economic and market trends were studied to identify existing conditions within Canal Village. The consultant team collaborated with the city, residents, business owners, and property owners to determine concerns and the vision that the community has for Canal Village area. The consultant team then analyzed the existing conditions along with the community feedback to develop recommendations for Canal Village as Mount Vernon continues to progress.

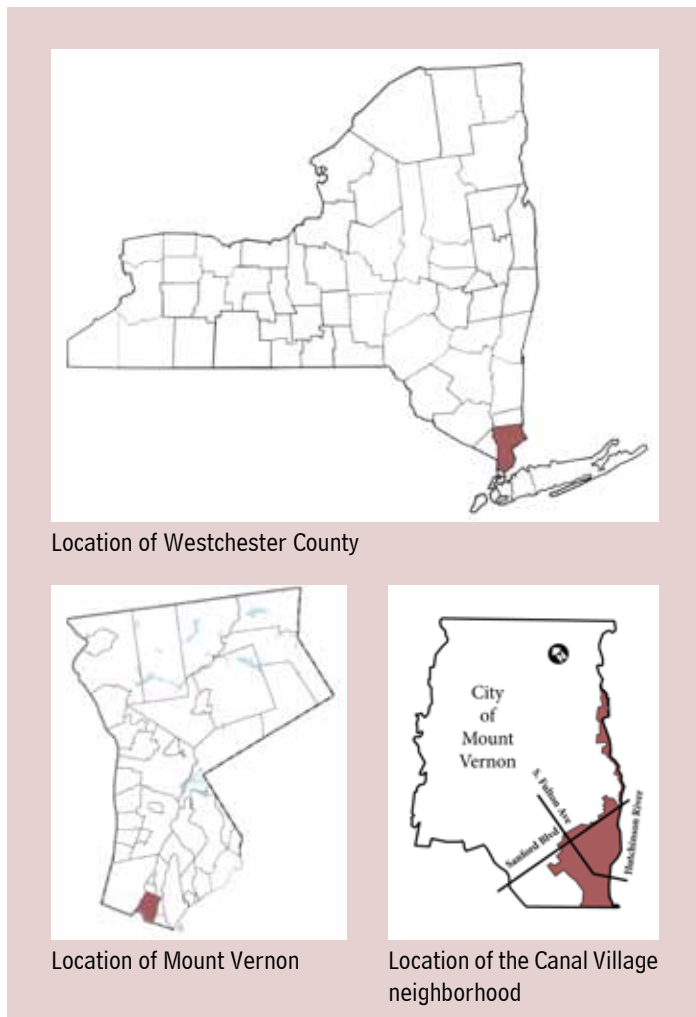
Location

The City of Mount Vernon is located in the south of Westchester County, between Yonkers on the west, and Pelham and Pelham Manor to the east, with Eastchester and Bronxville to the North. The New York City borough of the Bronx (the Eastchester Neighborhood) is located to the south of Mount Vernon. As a result, many residents commute to and from New York City each day.

Westchester County is situated in the Hudson River Valley, just north of New York City and occupies a central location for the New York Metro Area. The County is approximately 450 square miles and is home to 6 cities, 19 towns, and 23 villages. Rockland County and Bergen County, New Jersey are to the west, Fairfield County Connecticut is to the east, and Putnam County is located to the north of Westchester County. New York City, Suffolk, Nassau, Long Island, and Long Island Sound is to the south.

Brownfield Opportunity Area (BOA) Boundary

The BOA project area is bound on the north by the properties that face East Sanford Boulevard (on both sides) from Hutchinson River on the east to Union Avenue on the west. The southern boundary is the southern edge of the city limits next to the Bronx, from the Hutchinson River on the east to just past South Third Avenue on the west at the end of the industrial district. The eastern boundary is along the



Location of Westchester County

Location of Mount Vernon

Location of the Canal Village neighborhood

eastern city limit line adjacent to Huntington River from the southeast corner of the city north to East Sanford Boulevard. The western boundary is along South Third Avenue including all industrial and commercial properties (but no single family residential lots) from the City limits to the south up to just past Benjamin Middle School. From there the western boundary wiggles along the edges of the industrial properties back up to Sanford Boulevard and Union Avenue.

Local Waterfront Revitalization Program (LWRP) Boundary

The LWRP Project area includes all properties directly along Hutchinson River from the southern city limits to an area just past Lincoln Avenue. Wilson Woods Park is included within the northern portion of the project area. Since the neighboring municipalities of Pelham and Pelham Manor also have a stake in the conditions of the river, they have been included in this effort so that the project participants can examine and impact areas outside the boundaries that may affect the water body through drainage, view shed, and other similar factors.

Land Use Overview

Much of Canal Village area has historically been industrial with some commercial, and residential uses that have since been incorporated into the neighborhood. Today Canal Village area consists of approximately 251 acres, of which 202 acres are divided into parcels for private and public development. Land use zoning in the neighborhood includes: manufacturing / industrial / warehousing, commercial / retail, public parks / parkway lands, transportation / communications / utilities, cemeteries, residential, institutional / assembly, office and research, and mixed-uses.

In addition to land use regulations, Canal Village area also contains use-based regulations for each lot which comprises of: one family residences, two family residences, commercial business, neighborhood business, general industrial, and landscaped industrial. Within the zoning regulations that are outlined by the Mount Vernon Zoning Code, there are opportunities for revisions to encourage neighborhood improvements, develop a sense of pride in the area which could lead to making Canal Village attractive for more investment and job creation.

Of the land in Canal Village, 55% is privately owned with the remaining ownership being, 20% right-of-way, 14% owned by the city, 8% owned by the Mount Vernon Industrial Development Agency (IDA), 2% by the U.S. Department of the Interior, 1% by Westchester County, and less than 1% by New York State. Public lands include uses such as parks and recreation, and two schools.

Community Overview

Population Data

According to the 2010 US Census, the City of Mount Vernon recorded 67,292 residents — a 1.6% decrease from the 2000 Census. These residents were comprised of 36,717 females (54.6%) and 30,575 males (45.4%). The median age was 38.4 years. 22.9% of the population was under 18 years of age while 13.8% of the total population was 65 years and older.

Of the total population considered one race alone, 24.3% were White; 63.4% were Black or African American; 3.7% were Two or More Races; while 1.8% were Asian. American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander and Some Other Race combined comprised of approximately 6.8% of the total population. 14.3% of the City's total population were of Hispanic Origin.

The 2010 US Census records that 34% of the city's total population were foreign born while 66% were native

born. 55% of the total population of the City of Mount Vernon were born in New York State. According to the US Census 2008-2010 American Community Survey 3-year estimates, among the total population at least five years old or older, 24.1% spoke a language other than English at home. Of the 24.1% of the total population who speak a language other than English at home, 52.8% spoke Spanish and 47.2% spoke some other language.

Education

Resident workers in Canal Village area are relatively less educated than those in Mount Vernon, the County, and the Metro Area. Just 24.6% of Canal Village resident workers have a four-year college degree or more compared with 33.8% in Westchester County; 42.3% have earned a high school degree or less in the BOA, compared to 24.9% in the County.

Housing

As of the 2010 US Census, there were 26,260 households in the City of Mount Vernon with an average household size was 2.53 people. Families made up 62.2% of the households in the City of Mount Vernon comprising both Husband-Wife families (32%) and other families (30.2%). Nonfamily households consisted of 37.8% of all households in the City of Mount Vernon. Most of the nonfamily households were people living alone, but included some families composed of non-related people living in households.

Estimates for population growth in Mount Vernon indicate that the city could see growth of 9% through 2035. This number is less than half of the 23% estimated for Westchester County. Growth at this rate suggests that there will be an increased demand for 3,460 new residences by 2035. Of these, 1,300 would be for people over the age of 55.

Economic Overview

Unemployment

According to the NYSDOL, over the period from 2000 to 2008 the City of Mount Vernon had a residential unemployment rate more than one percentage point below that of New York City and one percentage point above Westchester County. Following the financial crisis, from 2009 to the present, Mount Vernon's average annual unemployment rate was 8.2 percent compared with 8.0 percent in New York City, 6.1 percent in Westchester County and 7.4 percent in the New York metropolitan area. In 2016, Mount Vernon's unemployment was considered at a healthy level at 5.5 percent, 1.3 percentage points higher than in Westchester County but just 0.2 percentage points more than New York City.

Average Income

Canal Village area has considerably more low wage earners (\$15K-\$39K) and less moderate and high wage earners (\$40K+) than the rest of Mount Vernon and Westchester County. Canal Village area has only a slightly higher share of workers earning less than \$15,000, below the poverty level for a family of two, compared with other areas.

Major Employers

According to InfoGroup and Empire State Development, the retail workforce is primarily employed by large national retailers such as Target, Super Stop & Shop, Best Buy, Bed Bath & Beyond, and TJ Maxx. Most construction firms are small operations although several large contractors are located in the area including Persico Contracting and Trucking, and Verde Electric. Today the largest manufacturers are American Christmas (a holiday decorations manufacturer and installer), Bridge Metal Industries (a sheet metal contractor), Dab-O-Matic (a plastic fabricator), and DCW Casings (a sausage casing producer). Among Transportation and Warehousing firms, the largest local employer is First Student Charter Bus Rental. Other industries accounted for 775 workers or roughly one-in-seven jobs and are primarily small to mid-size businesses with less than 70 workers.

Trends

Major gains in employment in Mount Vernon from 2002 to 2014 occurred in the Retail sector (adding 1,095 jobs), Real Estate services (adding 157 jobs), Management of Companies (adding 109 jobs), Healthcare and Social Assistance (adding 108 jobs), and Construction (adding 102 jobs).

Although most sectors added workers, the majority of job losses occurred in the Manufacturing sector (with a loss of 421 jobs) with the loss of major employers such as Capri Album Company, Magnetic Analysis Corporation and Gemini Manufacturing, with marginal losses in Utilities (with a loss of 28 jobs) and Educational Services (with a loss of 15 jobs). Since 2014, Canal Village area lost two major employers, We Recycle! (90 workers), a computer and technology hardware recycler, and TransCare New York (151 workers) an ambulance service provider.

In a comparison of retail and industrial wage data, it was revealed that the industrial wages from the sample area exceed retail wages by \$9,000, on average, for a 10-year observation period. Additionally, while the median industrial wage declined during the recession, it never dipped below the retail wage numbers.

Transportation Overview

Two main modes of transit include private vehicles and the Bee-Line Bus System. The Number 5 Line from the New York City Subway has its last station just to the south in the Bronx, and there is a Metro North commuter rail line that has two stops to the west and north in downtown Mount Vernon. The street infrastructure shows signs of wear and there are many locations where pot-holes are evident. An additional Metro North stop is located just outside of Mount Vernon at the Metro North Pelham Station.

A major traffic contributor are semi-trailers and other delivery vehicles within Canal Village area. During the work day, this mode of transportation is prevalent — especially along South Columbus Avenue, South Fulton Avenue, and East Sandford Boulevard. Some businesses along the Hutchinson River choose to make use of the waterway and employ shipping barges to transport their goods.

Sidewalks exist, however their condition and general design can increase the sense that they are not safe to use. There are several locations where the sidewalks are in need of repair, as well as too narrow.

Natural Features

Canal Village area features a prominent change in topography. Most of the industrial uses within the site are on relatively low ground with an increase in elevation as one approaches East Sandford Boulevard. This results in a relatively regular occurrence of flooding of businesses near the Hutchinson River.

Additionally, the Wilsons Woods Park, farther north, features the ponds and dams from the Hutchinson River as well as grade changes in topography. The park is wooded with playgrounds and a water park.

Infrastructure

The Mount Vernon Board of Water Supply manages and provides potable water to residents and businesses for the City of Mount Vernon. As of 2016, this encompassed 105 miles of water mains, and 1,140 fire hydrants. Water is sourced from the Catskill / Delaware reservoir system.

The Bureau of Sewers oversees sewer maintenance for 195 miles of sewer line. The City is currently working on a plan to address EPA mandates to curb illicit sanitary sewer discharges.

Gas and electrical services are provided by the conEdison utility company.

History

The municipality known as Mount Vernon was founded in 1664 when it was established as a farm village upstream from the spot where Anne Hutchinson was attacked and killed by Native Americans in 1643 after she was banished from the Massachusetts Bay Colony. It was originally called Southeast Mount Vernon in Eastchester township. The municipality known as Mount Vernon is also recognized as the location for the first victory in support of free speech after newspaper owner John Peter Zenger was found not guilty of seditious libel in 1733. In the early 1850's the Industrial Home Association bought land in Mount Vernon to provide people an escape from the increasing residential prices in New York City.

Based on a study of existing historic maps and other county records such as Geographic Information Systems (GIS), Canal Village area has maintained a history of industrial uses. One location of national significance is the Saint Paul's Church National Historic Site and Cemetery and its associated cemetery. Built in 1764, the church served as a hospital for British soldiers during the Revolutionary War. In 1978, the church was designated a National Historic Site and is currently maintained by the National Park Service.

Other locations such as an electric car factory and a cable car shed also still exist today. While their current use may not be their original use, they clearly show

their historic roots which contribute to the history and sense of place for the neighborhood.

Many of the roads still in use today are visible in historic maps. Connections to the Bronx, Pelham, and Pelham Manor are maintained today.

While some sites maintain their structures and uses, other uses and sites in Canal Village area have changed over time. Most evident is the removal of the two train stations and rails that used to exist in Canal Village area. One train station used to be located near the intersection of East Kingsbridge Road and South Columbus Avenue. The second station was located at the corner of Sandford Boulevard and South Fulton Avenue, at the location currently occupied by McDonald's. Today the train and it's rails have been removed from Mount Vernon. The remains of the old train station still exist, and land that was originally used for the train route has been sold long ago for industrial and commercial use.

Some lots along the Hutchinson River have also changed their uses. Some of these used to be for private residences on relatively large lots. Those parcels were subdivided and have been used for industrial, commercial, and public uses such as refuse distribution and park space.



Map of the Canal Village neighborhood circa 1910



Advertisement for Ward Electric Motor Company

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URBAN CONDITIONS

Existing Land Use & Zoning

Canal Village area is located in the southeast corner of the City of Mount Vernon and is bounded on the east by the Hutchinson River and the Villages of Pelham and Pelham Manor, and to the south by the Bronx's Eastchester neighborhood (NYC). Major thoroughfares through the area include East Sandford Boulevard, South Fulton Avenue, and South Columbus Avenue. Canal Village area contains 251 acres, of which approximately 202 acres contain public and private parcels. A variety of zoning districts have been designated by the City to organize the division of the land. This section of this report reviews and analyzes existing land use and zoning within the Canal Village.

Existing Conditions

Land Use

For an area that is known as an industrial area, Canal Village has a variety of land uses. This may indicate that the market demand for classic industrial buildings has been declining over the decades. Some are more prevalent than others, defining the characteristic of the neighborhood. These land uses include:

- Manufacturing/Industrial/Warehouse: approx. 93.7 acres
- Commercial/Retail: approx. 38.2 acres
- Public Parks, Parkway Lands: approx. 35.1 acres
- Transportation, Communications & Utilities: approx. 10.2 acres
- Cemeteries: approx. 5.2 acres
- Residential: approx. 4.2 acres
- Institutional/Public Assembly: approx. 2.8 acres
- Office & Research: approx. 1.27 acres
- Mixed use: approx. 1.1 acres

The map on the next page shows where these are located.



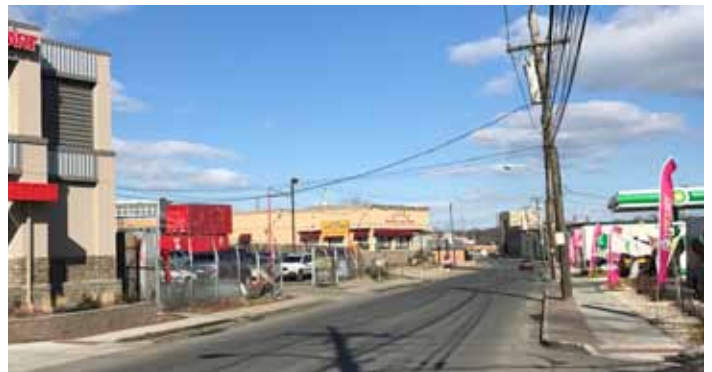
Older buildings used by industrial establishments dominate usage within the Canal Village.

Brownfield Sites

In addition to the land use designations, there are certain sites identified by the city as vacant, or underdeveloped within Canal Village project boundary. These lots amount to approximately 10 acres of land and mainly consist of large surface parking areas for school buses, cars, contractor vehicles, towing facilities and other large vehicles. Other additional sites that have been zoned for Manufacturing / Industrial / Warehouse are being utilized by their owners for construction material production, or storage.

Adjacent Uses

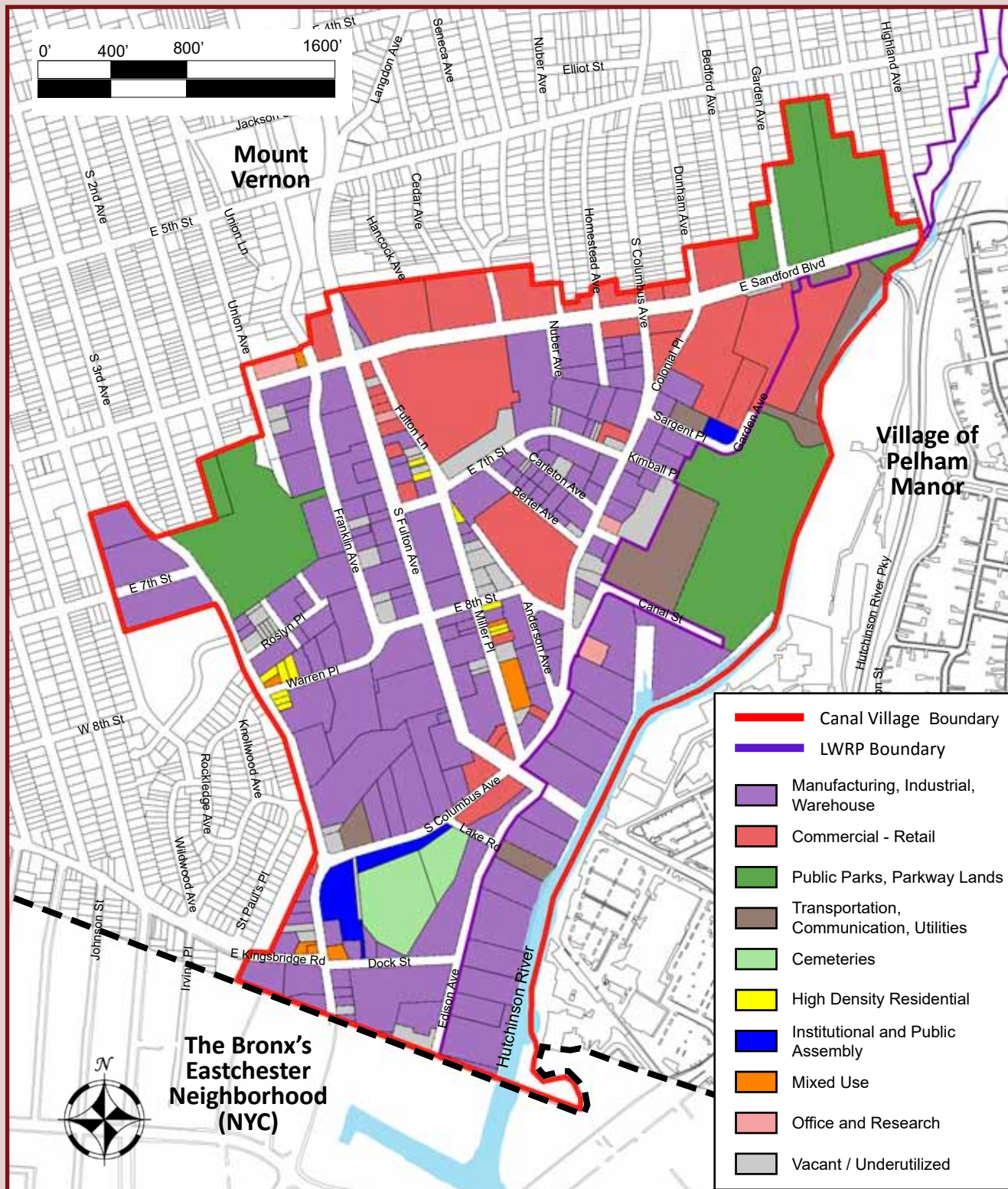
The land adjacent to Canal Village area hosts a variety of uses ranging from craftsmen, warehousing, materials manufacturing, single-family detached residences, banks, emergency response buildings, civic structures such as schools and libraries, the Hutchinson River, county parks and playing fields, restaurants and large commercial retail locations.



Within this view on Columbus, we can see Mini-storage, car repair, an independent dinner, T-shirt printers (in the distance), Gas Station and a national chain doughnut shop.



Commercial Retail activity within the Canal Village dominates Sandford Blvd, which originally had manufacturing plants.



Existing Land Use Map

There is a wide range of land uses dispersed throughout Canal Village. Under-developed sites are identified in grey and, along with public parks and parkway lands, provide potential locations for new development including public/private partnerships

and a variety of parks and open space. Whether redeveloped for public use or private service, these areas could establish amenities for the neighborhood that encourage others to invest in the neighborhood too.

Zoning

Zoning codes establish several restrictions of the use, size and placement within a property. These zones, as described in the Intent section of Mount Vernon’s zoning code, are:

- *One Family Residence* - to promote and encourage a suitable environment for family life where safe streets, wide yards and quiet neighborhoods are of paramount importance. To avoid, as far as possible, commercial traffic and through traffic of all kinds in residential areas. To encourage a balanced variety of housing types, sizes and densities, consistent with the character of existing neighborhoods and the provision of adequate open space, sunlight and air.
- *Two Family Residence* - intent is identical to the intent for a “One Family Residence” zoning.
- *Commercial Business* - to provide a wide variety of retail, office and service business uses in character and scale with existing and planned future development along some of the major arterial commercial streets of the City.
- *Neighborhood Business* - to serve the retail and service convenience shopping needs of residential areas and to provide the opportunity for the continuation of pedestrian-oriented retail and service business uses in the City’s residential neighborhoods. This zone is very small inside Canal Village boundary.
- *General Industrial* - designated to identify appropriate location and development standards for more intensive types of industrial development.
- *Landscaped Industrial* - to promote a combination of manufacturing, warehousing, wholesale storage and other industrial type uses in areas with good highway access and which have already developed an industrial character.

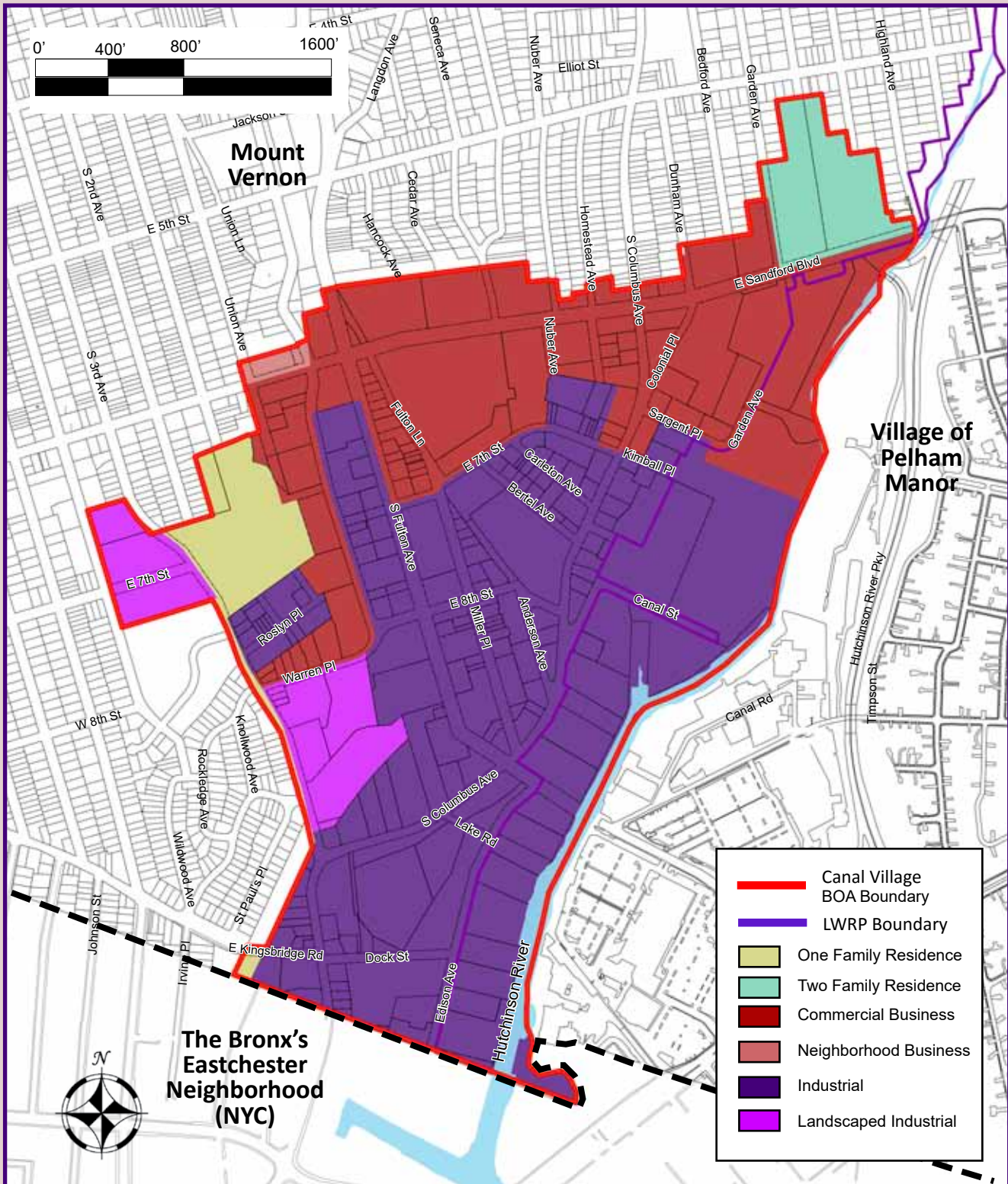
It is important to note that the only place that has *One-Family Residence* within Canal Village area boundary is Brush Park located between South 3rd Avenue and Union Avenue. Similarly, the only place that has *Two-family Residence* is where Memorial Field is located along Sandford Boulevard. These lots were part of the original plat of the city from long ago. Over time the City acquired them. Baring any strategic reason, the City could consider re-zoning these areas for public use.



Commercial Establishments in Canal Village



General Industrial Uses make up a Majority of the Zoning



Existing Zoning

The above map illustrates the different districts within Canal Village area. Lines identify the BOA and LWRP boundaries. Colors correspond with district designations that range from residential, to commercial, and industrial.

General Industrial and Commercial Business Districts comprise a majority of Canal Village area.

Land Ownership

Ownership Patterns

Land within Canal Village area is owned between local, regional, state, national organizations, and private organizations. Most publicly owned land is located in the Northeast corner fronts nearly half the length of the Hutchinson River waterfront in the BOA portion of Canal Village area.

The City of Mount Vernon

The City of Mount Vernon owns a series of three blocks of land within Canal Village. One to the west, one to the east, and one north of East Sanford Boulevard.

Brush Park:

- Brush Park consists of four baseball fields, a parking area, a paved playground, and a paved picnic area.

Adjacent to the Hutchinson River:

- Hutchinson Park consists of two baseball fields with a little league soccer field in the outfield. Portions of the park is leased to Sports Underdome, Ice Hutch and Home Run City. Sports Underdome is an indoor sports facility, with three fields (190 feet by 80 feet). The Ice Hutch is an indoor skating rink that features hockey leagues in the Spring, and Home Run City is a batting cage center. The city’s recycling center is also located next to the waterfront within Hutchinson Park.
- A Westchester County Refuse Distribution Center is located to the West of Hutchinson Park. It is spacious and has rows of trees, with the potential of becoming a visual extension to the green space although it is located up at a higher elevation than Hutchinson Park.
- Public facility and vehicle storage located to the south-west of Hutchinson Park on canal street.
- The Mount Vernon Animal Shelter is located at the corner of Sargent Place and Garden Ave.

North of East Sanford Boulevard:

- A three level parking structure houses parking for Best Buy.
- The east portion of Memorial Field, currently under renovation and abatement due to age and dumping that has occurred on the site.

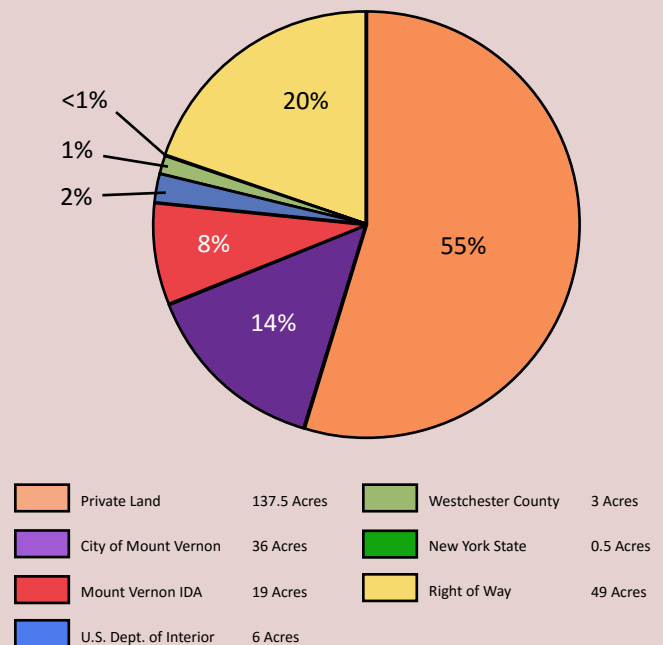


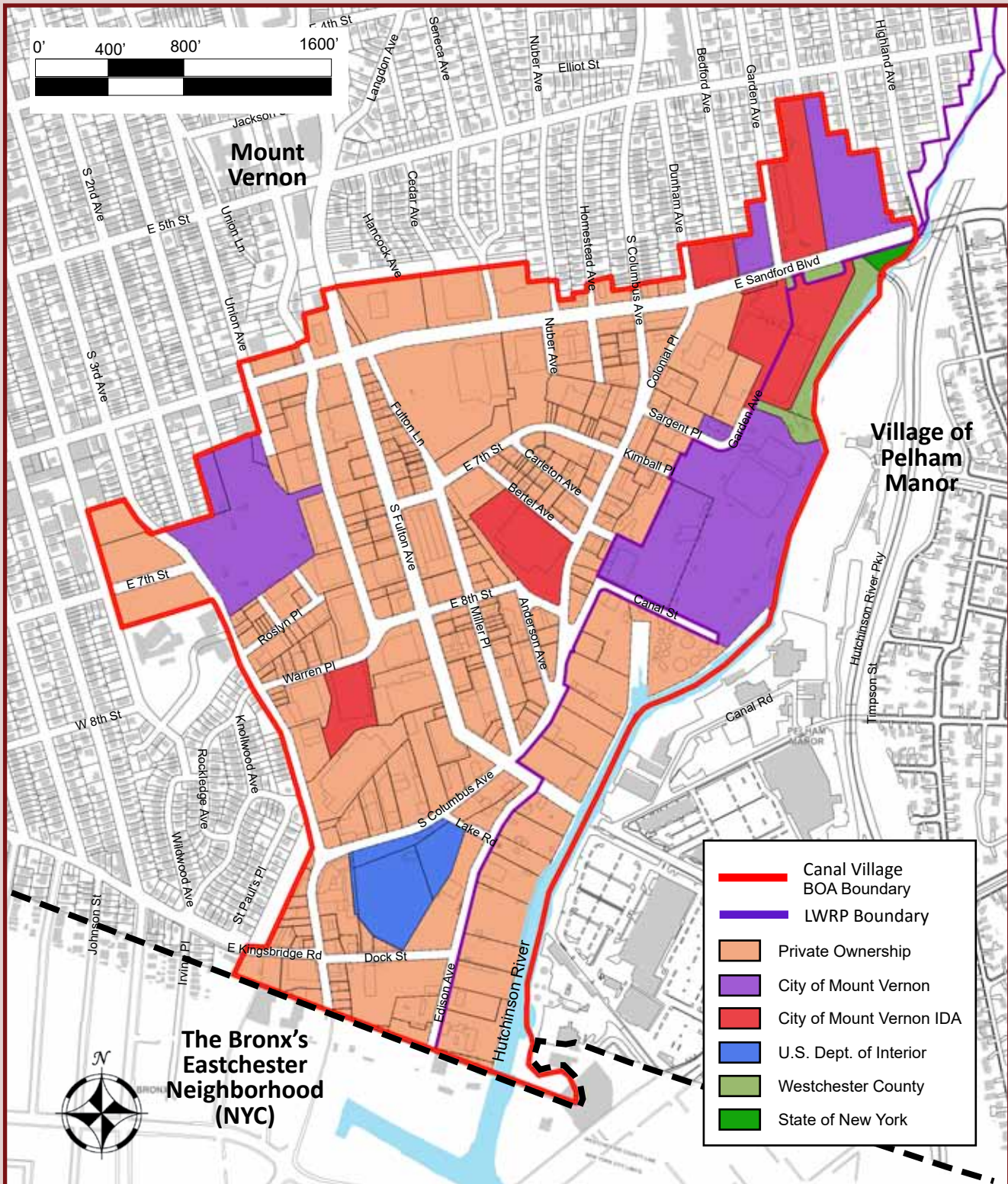
View of the Ice Hutch, Sports Underdome and Home Run City



View of Memorial Field

Land Ownership in Acres





Land Ownership Map

The above map illustrates ownership patterns within Canal Village area. Types of ownership are identified using colors that correspond to different designations. Most of the parcels are owned privately followed by Mount Vernon entities.

The City of Mount Vernon IDA

The City of Mount Vernon has established an Industrial Development Agency (IDA) to promote, develop, and assist businesses seeking medium- to long-term financial assistance for eligible projects. The IDA owns several parcels in the project area which include:

- A series of parcels west of the Hutchinson River and south of East Sanford Boulevard. This property houses big box retail such as Target, Bed, Bath & Beyond, CVS Pharmacy, Petco, Starbucks, and Famous Footwear along with a parking deck accommodating three levels of parking.
- One parcel north of East Sanford Boulevard, and between Garden and Dunham Avenues contains a Best Buy with three levels of parking provided on a parcel owned by the City directly to the east.
- The parcel fronting Bertel and South Columbus Avenues contains a Restaurant Depot. A leading food service supplier, Restaurant Depot is a national chain that serves as a wholesaler for the restaurant industry.
- American Christmas Inc. is located on an IDA parcel to the south of Warren Place. American Christmas Inc. provides holiday lighting design and installations for corporations.
- The west parcel of Memorial Field which is currently under renovation and abatement.

The IDA typically retains a ground lease from the businesses that are redeveloping the property. Often later, they will sell the property back to the businesses that occupy it. The list above may contain properties where that has already taken place, or is in the process of taking place.



Restaurant Depot

Westchester County & New York State

Westchester County currently has control over four parcels within the project area.

- A surface parking lot between the parking structure of the IDA big box retailers and the Hutchinson River which services Glover Field and Richie Bell Field just across the river in Pelham Manor.
- In a parcel immediately to the west of the Hutchinson River and north of Hutchinson Park is the Hutchinson Pump Station. Built in 1930, the structure has recently received upgrades to its infrastructure and pumps sewage directly to the Yonkers Joint Plant for treatment. The building, itself is listed for preservation by the State of New York and may soon be formally included on the National Historical Register.

New York State

- New York State owns the right of way with an entrance to the Hutchinson River Parkway.

Federal Land

Saint Paul's Church and Cemetery National Historic Site is owned and maintained by the US National Park Service. It is located at 897 South Columbus Avenue, near East 7th Street. Due to the nature of the land, there is opportunity for partnership in improving the local area by revitalizing the streets and properties that surround the historic site and increasing the number of tourist visits that can also patronize our local businesses.



Hutchinson Pump Station

Private Ownership

Most of the privately owned land is occupied by businesses. Some of the businesses lease the properties from the private owners. Incentives from the City might help motivate the owners to play a role in revitalizing the Canal Village neighborhood. The revitalization of some public land could act as a catalyst and example to private land owners resulting in their participation or partnership.

A portion of the private land on Canal Street, is owned by Sprague Energy, one of the largest suppliers of energy and materials handling services in the North East. There is potential to partner with them towards an eco-industrial park to help revitalize the area.



Although not allowed by code, the neighborhood does have a few residential buildings, constructed before the City adopted the current zoning regulations.



Sprague Energy



St. Paul's Church, National Historic Site, the birthplace of America's precedent for the Freedom of Speech.

Brownfield Sites

As part of the environmental assessment, the consultant team analyzed a Toxic Targeting Regulatory Agency Database Report (TTRADR) of Canal Village area. This information is current as of 2017. Due to the size of the area considered, boundary lines were established to divide the area into five sections for convenience and manageability (1 through 5; south to north respectively).

The following regulatory databases were chosen to be analyzed as indicators of real or perceived environmental concerns:

SPILL SITES

Every year in New York State, over 15,000 incidents of suspected and confirmed petroleum and chemical releases to the environment are reported to the New York State Department of Environmental Conservation (NYSDEC). These incidents range from the release of a few gallons of petroleum and/or other hazardous materials at a private home which may be cleaned up immediately to large-scale releases to the environment which take years of remediation efforts to resolve. The NYSDEC responds to reports of petroleum and other hazardous material releases through the Spill Response Program. Spill response staff throughout New York State investigate such spill reports and take action based on the type of material spilled, the potential environmental damage, and safety risks to the public.

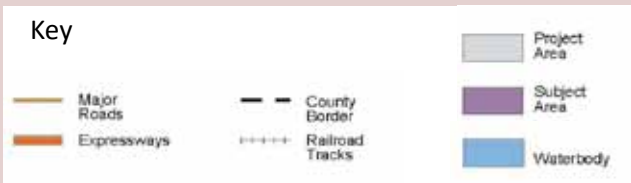
Federal and State law require the spiller, or responsible party, to notify government agencies and to contain, clean up, and dispose of any spilled/contaminated material in order to correct any environmental damage. NYSDEC maintains a database with records dating back to 1978 of properties which have reported a release of petroleum and other hazardous materials which is updated nightly. An active/open listing of a property on this database indicates a potential for unresolved environmental impact at the property.

BCP SITES

The NYSDEC Brownfield Cleanup Program (BCP) is a program which was created to enhance private-sector cleanups of Brownfields — any real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant — and to reduce development pressure on “greenfields,” defined as undeveloped land within the urban environment which may be intended to remain open space.



Section Boundary Map



The map above indicates the 5 sections that Canal Village has been divided into to simplify the study of environmental conditions in the area. The sections are numbered from south to north, with Section 1 being near the intersection of South Fulton Avenue and South Columbus Avenue, and Section 5 encompassing Wilson Woods Park. Larger maps of each section are included on page 3.18 through 3.29. An overview listing of toxic sites information accompanies each map. Additional, more detailed information for each site can be found in PDF format as a part of the appendix in the Toxic Targeting Regulatory Agency Database Reports.

The BCP was created to address the environmental, legal, and financial barriers that often hinder the redevelopment and reuse of contaminated properties, and is set forth in Title 14 of Article 27 of the New York State Environmental Conservation Law. The program is intended to “encourage persons to voluntarily remediate brownfield sites for reuse and redevelopment” as well as to “advance the policy of the State of New York to conserve, improve, and protect its natural resources and environment and control water, land and air pollution in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well-being.”

The BCP replaced NYSDEC’s Voluntary Cleanup Program (VCP) on October 7, 2003 and all properties which were undergoing remediation in that program were transferred to the BCP.

Once a property is entered into the BCP, a Brownfield Cleanup Agreement (BCA) is signed by both the applicant (the person whose request to participate in the BCP has been accepted by NYSDEC) and the NYSDEC. The applicant thus makes a commitment to undertake certain remedial activities under the oversight of the NYSDEC. A Remedial Investigation is then performed at the site which defines the nature and extent of contamination at the property, identifies potential sources of contamination, assesses the fate and transport of contamination at the property, and produces adequate data to develop a Remedial Investigation Work Plan (RIWP) or to determine that remediation is not necessary at the property.

A RIWP will then be implemented at the property which includes but is not limited to background information regarding historical site use and current conditions, a summary of the results of previous investigations, an outline of the strategies and methodologies that will be implemented during the investigation. An Remedial Investigation is then performed at the property. The results will then be used to determine the further need for additional remediation, institutional and/or engineering controls, and environmental easements at the property which include restrictions to the use and long-term protection of the property once remediation has ended. Once it is determined that remediation requirements have been achieved or will be achieved under an approved Work Plan, a Certificate of Completion (COC) is issued by the Commissioner of the NYSDEC and the property is released from specific environmental liabilities at the property.

Numerous sites in the BOA area may benefit from enrollment in the BCP in the future. Sites with known spills of hazardous materials or with current and/or historical

heavy industrial operations would benefit from enrollment in the BCP, as the presence of actual contamination will be assessed and if present, remediated. The sites which need remediation will be in a position to be redeveloped after undergoing the steps required by the BCP.

NYSDEC Inactive Hazardous Waste Disposal Site Program (State Superfund)

The Inactive Hazardous Waste Disposal Site (IHWDS) Program is the State’s program for identifying, investigating and cleaning up sites where consequential amounts of hazardous waste may exist. These sites go through a process of investigation, evaluation, cleanup and monitoring that has four distinct stages.

Stage 1

The first stage is Site Characterization (SC). The SC is an initial investigation of a site where hazardous waste has or may have been disposed of illegally or improperly. The goal of the SC is to determine whether a site meets the state’s definition of a hazardous waste site by confirming or denying the presence of hazardous waste and determining whether or not the site poses a significant threat to public health or the environment. The SC is performed by NYSDEC or the potentially responsible party (PRP) under the oversight of NYSDEC and includes but is not limited to a records search to review available historical information of the use and/or disposal of hazardous materials at a site; surveys of the site to determine underground storage potential; sampling of soil and surface water; and groundwater monitoring. The SC determines the classification of the site into one of the following three categories:

Class 1 – Imminent Danger – applies to a site at which contamination constitutes a significant threat to public health and the environment and the threat is causing, or presents an imminent danger of causing, either irreversible or irreparable damage to the environment.

Class 2 – Significant Threat – applies to a site at which the disposal of hazardous waste has been confirmed and the presence of such hazardous waste or its components or breakdown products represent a significant threat to the environment or to health as described above; or hazardous waste disposal has not been confirmed, but the site has been listed on the Federal National Priorities List (NPL).

Class 3 – No Significant Threat – applies to a site at which contamination does not presently constitute a significant threat to public health or the environment as described above.

Stage 2

The second stage is the Remedial Investigation (RI), Feasibility Study (FS). During a RI/FS, the full nature and extent of contamination is defined. Through extensive sampling and laboratory analyses, the RI identifies the length, depth and width of contamination, defines the pathways of migration and measures the degree of contamination in surface water, groundwater, soils, air, plants, and animals. Information gathered during the RI fully describes the hazardous waste problem at the site so that the appropriate remedy can be selected. The FS uses RI information to develop alternative remedies that will eliminate the site's threat to public health or the environment reduces or eliminates the contamination.

After the RI/FS is completed, NYSDEC and New York State Department of Health (NYSDOH) hold a public meeting to propose the remedial solution. The Proposed Remedial Action Plan (PRAP) summarizes the decision that led to the recommended remedial action by discussing each alternative and the reasons for choosing or rejecting it.

Stage 3

The third stage is the Record of Decision (ROD). The ROD presents the remedial action plan for an inactive hazardous waste disposal site and documents the information and rationale used to arrive at the decision. The ROD is the culmination of extensive investigations and a remedy selection that identifies a solution to remove significant threats to the public health and the environment. It serves as the definitive record of the remedy selection process for the site and a convenient reference to other documents that were developed during the remedy selection process. The final ROD is approved by the Department following public comment and review of the proposed remedial action plan.

Stage 4

The fourth stage is remedial design and construction. The remedial design details the size, scope and character of a site's remediation - the planned action that will, at a minimum, protect public health and the environment. It translates information from the RI/FS, the ROD and additional data gathered during design preparation into clear, precise facts and numbers.

NPL and Superfund

Superfund is the name of the United States Environmental Protection Agency (US EPA) environmental program which addresses abandoned hazardous waste sites. The program was enacted in response to the discovery of such places as Love Canal and Times Beach in the 1970's. The process

of remediating a Superfund site involves getting the site placed on the National Priorities List (NPL), and establishing and implementing the appropriate remediation efforts. The EPA has the authority to conduct removal actions when it is immediately necessary, enforce against responsible parties, ensure community involvement and state involvement, and ensure long-term protectiveness of a site. Sites are placed on the NPL after a Hazard Risk System (HRS) screening has been completed, members of the community have had a change to comment, and all comments have received a response. The HRS is a numerically based screening system which is based on an initial limited site assessment.

No NPL sites were depicted in the BOA area.

RCRA

The Resource Conservation and Recovery Act (RCRA) which was established in 1976, gives the United States Environmental Protection Agency (US EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Additional databases were analyzed as potential indicators of real or perceived environmental concerns, including the following:

- The Petroleum Bulk Storage (PBS) and Chemical Bulk Storage (CBS) Databases maintain the registrations of active and inactive bulk storage sites statewide. Since 1985, owners of petroleum and/or chemical storage tanks with a storage capacity of more than 1,100 gallons are required to register with the NYSDEC and reregister every five years to allow the NYSDEC to enforce standards for storage and handling of petroleum and chemical products and to regulate aboveground and underground tanks storing these products.
- The Major Oil Storage Facility (MOSF) Database maintains the registrations of oil terminals and transport vessels with a storage capacity of 400,000 gallons or more as well as the data associated with the requirements of MOSF licensing by the NYSDEC.

	National Priority List (NPL) Sites	NYS Inactive Hazardous Waste Disposal Site Registry	NYS Inactive Haz Waste Disposal Site Registry Qualifying	RCRA Corrective Action (CORRACTS) Sites	Delisted National Priority List (NPL) Sites	CERCLIS Superfund Non-NFRAP Sites	CERCLIS Superfund NFRAP Sites	Brownfields Sites	NYSDEC Solid Waste Facilities / Landfills	RCRA Hazardous Waste Treatment, Storage, Disposal Sites	NYS Toxic Spills ACTIVE	NYS Toxic Spills CLOSED	NYS Major Oil Storage Facilities	Local & State Petroleum Bulk Storage Sites	RCRA Hazardous Waste Generators & Transporters	NYS Chemical Bulk Storage Sites	Emergency Response Notification System (ERNS)	Institutional Controls / Engineering Controls (IC/EC)	Hazardous Substance Waste Disposal Sites	Toxic Release Inventory Sites (TRI)	Permit Compliance System (PCS) Toxic Wastewater Discharges	Air Discharges	Civil & Administrative Enforcement Docket Facilities	Section Total
Section 1		1		1		1					40		20	31	3					1	2	6	1	107
Section 2										6	102	6	17	26	3	5				3	5	10		188
Section 3		1	1			1	1	2	6	3	56		28	44	3	1				4		4	3	158
Section 4									3	5	58		11	29							1	2		95
Section 5											10			2	1									13
Total		2	1	1		2	1	2	9	14	266	6	76	132	10	6			8	8	22	4		561

Brownfield Database Summary Table

The Brownfield Database Summary Table provides a listing of the regulatory agency databases searched as well as the total number of properties within the BOA area which were identified in those databases:

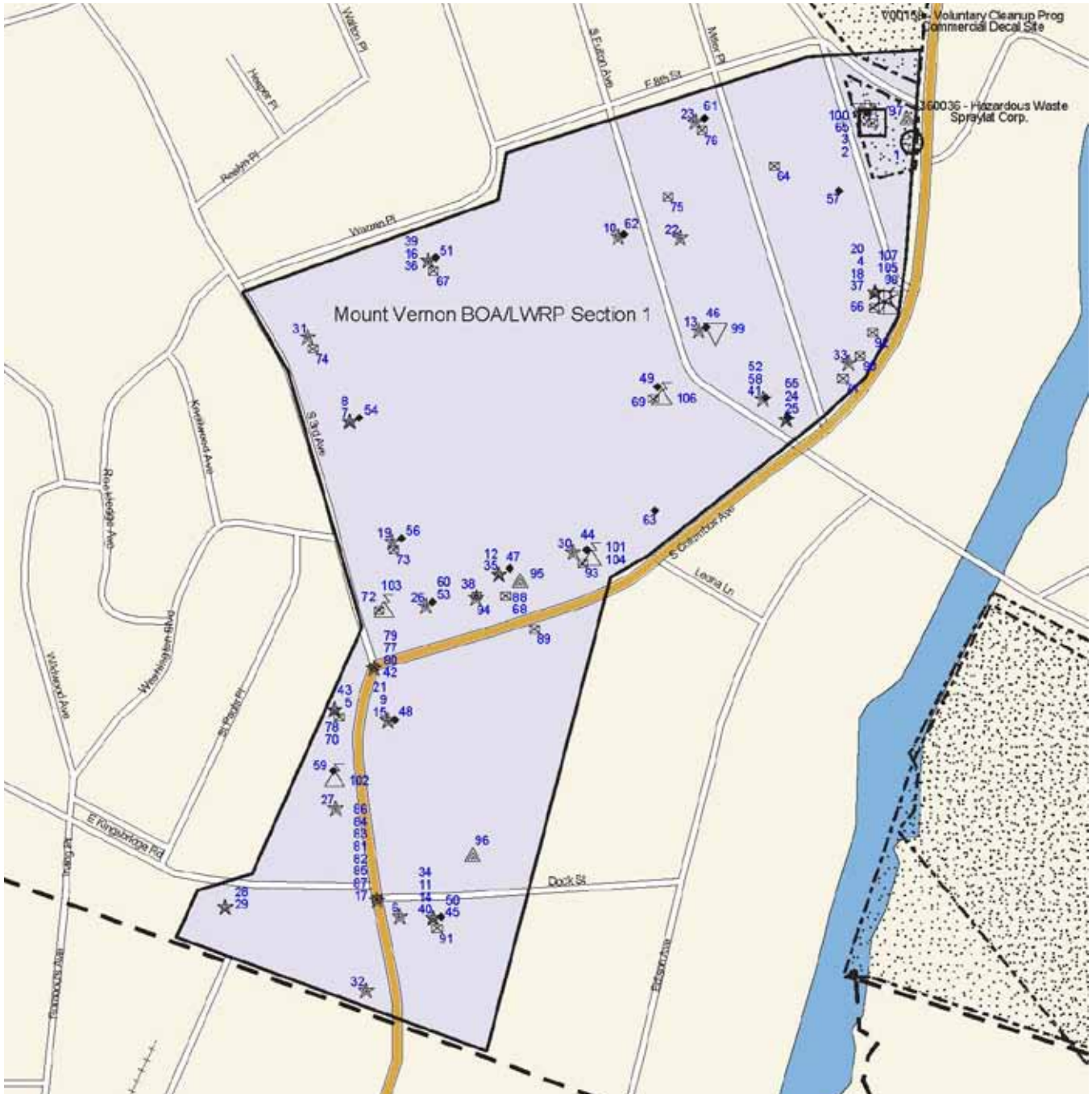
- The Solid Waste Database contains a list of solid waste management facilities such as transfer stations and land clearing debris landfills regulated by NYSDEC and its regional divisions.

These databases were not used alone to identify a property as a potential brownfield site; a combination of database listings, adjacent property use, and the 1918, 1932, 1932-1950 and 1967 Sanborn Maps were also used to make this determination. These maps provided history of site use of a particular property, and may indicate the presence of chemical storage tanks.

Refer to the following Toxic Targeting Regulatory Agency Database Report (TTRADR) On Site Area Maps (Sections 1-5) and corresponding listing of addresses by Map ID for potential Brownfield sites on the following pages. The sections are numbered from south to north, with Section 1 being near the intersection of South Fulton Avenue and South Columbus Avenue, and Section 5 encompassing Wilson Woods Park. An overview listing of toxic sites information accompanies each map. Additional, more detailed information for each site can be found in PDF format as a part of the appendix in the Toxic Targeting Regulatory Agency Database Reports.

To review the selection of Sanborn Maps that were utilized in the identification of potential Brownfield sites, see information included in the Appendix.

Toxic Sites - Section I



Toxic Targeting Section 1

Key

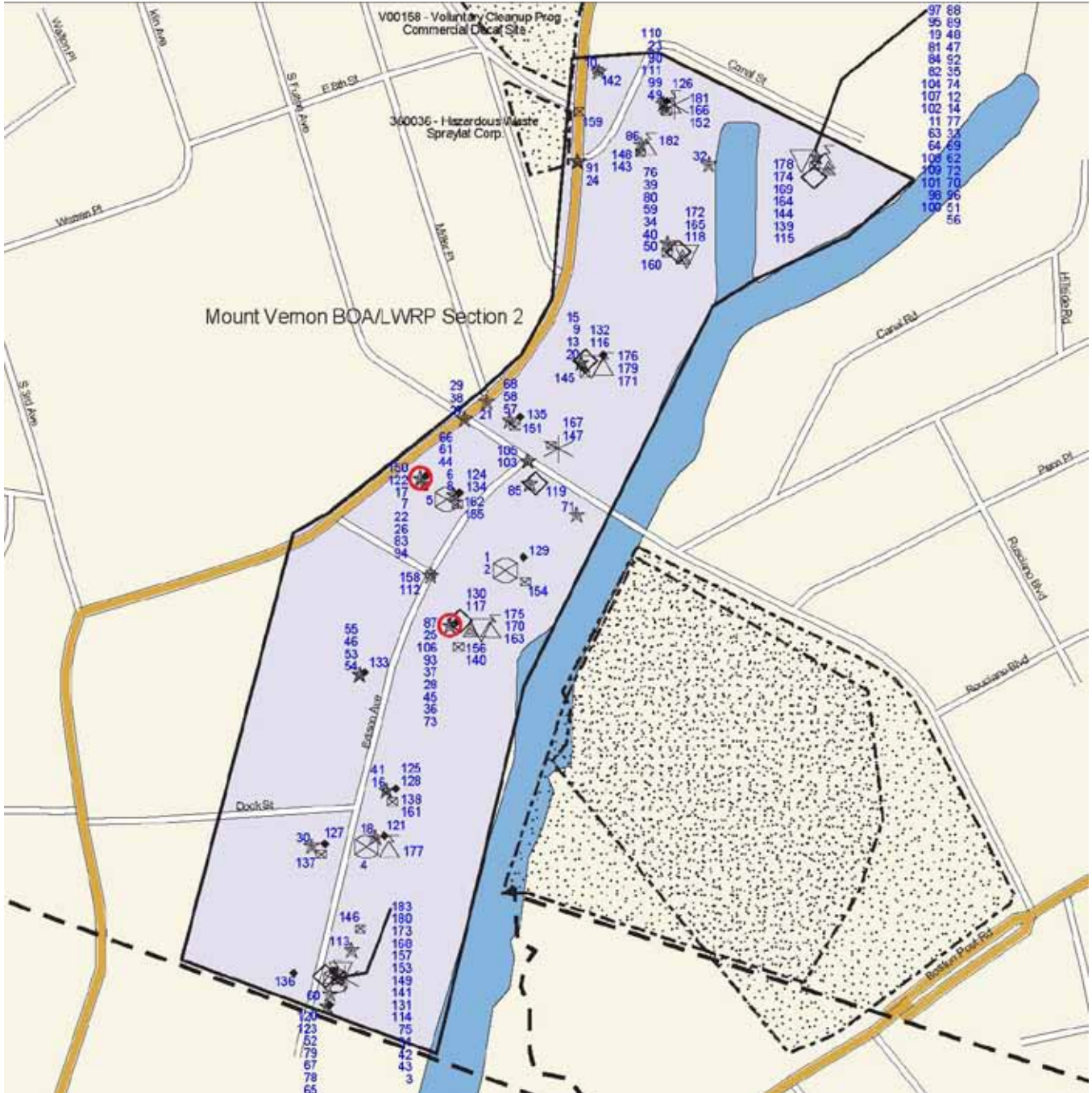


- | | | |
|--|--|--|
| <ul style="list-style-type: none"> National Priority List (NPL) CERCLIS Superfund Non-NPL Site Inactive Hazardous Waste Disposal Registry Site Hazardous Waste Transfer, Storage, Disposal Hazardous Substance Waste Disposal Site Major Oil Storage Facility Chemical Storage Facility Toxic Release Wastewater Discharge Enforcement Docket Facility | <ul style="list-style-type: none"> Deleted NPL Site CERCLIS Superfund NPL Site Inact. Haz Waste Disp. Registry Overlay RCRA Corrective Action Facility Solid Waste Facility Brownfields Site Hazardous Material Spill Petroleum Bulk Storage Facility Hazardous Waste Generator, Transporter Air Release | <ul style="list-style-type: none"> Subject Area County Border Waterbody Railroad Tracks Remediation Site Borders |
|--|--|--|

Identified Toxic Sites by Map Id
Mount Vernon BOA/LWRP Section 1, Mount Vernon, NY 10550

Map Id	Site Name	Site Street	Toxic Site Category
1	SPRAYLAT CORP.	716 SOUTH COLUMBUS AVENUE	NYSDEC Inactive Haz Waste Disposal Site
2	PPGSPRAYLAT CORPORATION	716 SOUTH COLUMBUS AVE	RCRA Corrective Action Site
3	SPRAYLAT CORPORATION	117 ANDERSON AVE	CERCLIS Superfund Non-NFRAP Site
4	SPRAY LAT CORP.	716 SOUTH COLUMBUS AVE	Closed Status Tank Failure
5	COMMERCIAL PROPERTY	736 SOUTH 3RD STREET	Closed Status Tank Failure
6	CRASH AUTO	4 DOCK ST	Closed Status Tank Failure
7	EXCEL LIMO SERVICE	685 SOUTH 3RD STREET	Closed Status Tank Test Failure
8	EXCEL LIMO SERVICE	685 SOUTH 3RD STREET	Closed Status Tank Test Failure
9	SALVATION ARMY	745 S. 3RD AVE	Closed Status Tank Test Failure
10	WAREHOUSE, BENEROFE	716 SOUTH FULTON AVE	Closed Status Tank Test Failure
11	YELLOW FREIGHT	12 BACK ST	Closed Status Tank Test Failure
12	SEMI-ALLOYS	886 S COLUMBIA ST	Closed Status Tank Test Failure
13	BALL CHAIN MANUFACTURING	741 SOUTH FULTON AVE	Closed Status Tank Test Failure
14	YELLOW TRANSPORTATION	12 DOCK ST	Closed Status Tank Test Failure
15	SALVATION ARMY	745 SOUTH 3RD AVE	Closed Status Tank Test Failure
16	WARREN PROPERTIES CORP.	30 WARREN PLACE	Closed Status Tank Test Failure
17	MANHOLE 1	3RD AND DOCK ST	Closed Status Spill (Unk/Other Cause)
18	SPRAYLAT	716 SOUTH COLUMBUS AVE	Closed Status Spill (Unk/Other Cause)
19	MICROBIO-NETICS INC	717 3RD AVE	Closed Status Spill (Unk/Other Cause)
20	SPRAYLOCK PAINT CO	716 SOUTH COLUMBUS AVE	Closed Status Spill (Unk/Other Cause)
21	UNKNOWN	745 3RD AVENUE	Closed Status Spill (Unk/Other Cause)
22	SHEEN ON ROADWAY	715-725 S FULTON AVE	Closed Status Spill (Unk/Other Cause)
23	PRIVATE HOME	106 MILLER PLACE	Closed Status Spill (Unk/Other Cause)
24	FORMER GAS STATION	769 SOUTH FULTON AVE	Closed Status Spill (Unk/Other Cause)
25	RAN CIL	769 SOUTH FULTON	Closed Status Spill (Unk/Other Cause)
26	AJ TRUCKING	900 SO COLUMBUS AVE	Closed Status Spill (Unk/Other Cause)
27	AMS ASPHALT MAINTENCE	762 SO. 3RD AVE	Closed Status Spill (Unk/Other Cause)
28	VAULT #693	144 EAST KINGSBRIDGE RD	Closed Status Spill (Unk/Other Cause)
29	MANHOLE #6612	144 EAST KINGSBRIDGE RD	Closed Status Spill (Unk/Other Cause)
30	DEFOE CONSTRUCTION	800 SOUTH COLUMBUS AVENUE	Closed Status Spill (Misc. Spill Cause)
31	FEDERAL EXPRESS	669 SOUTH 3RD AVE	Closed Status Spill (Misc. Spill Cause)
32	RELEY AUTO BODY	602 S 3RD AVE	Closed Status Spill (Misc. Spill Cause)
33	PARACO GAS	724-730 SOUTH COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
34	YELLOW FREIGHT PLANT	12 DOCK STREET	Closed Status Spill (Misc. Spill Cause)
35	SAMS ALLOY CORP	886 SOUTH COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
36	HANTSCHO	30 WARREN PLACE	Closed Status Spill (Misc. Spill Cause)
37	SPRAYLAT	716 SOUTH COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
38	STREET	886 COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
39	CON ED PADMOUNT	30 WARREN PLACE	Closed Status Spill (Misc. Spill Cause)
40	MOTOR LOADING DOCK	12 DOCK STREET	Closed Status Spill (Misc. Spill Cause)
41	SUNOCO GAS STATION	751 SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
42	POLE #700	SOUTH 3RD AVE & COLUMBUS	Closed Status Spill (Misc. Spill Cause)
43	BOBBY'S AUTO REPAIR	736 SOUTH 3RD AVE	Closed Status Spill (Misc. Spill Cause)
44	DEFOE CORP.	800 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
45	YELLOW FREIGHT	12 DOCK STREET	Petroleum Bulk Storage Site
46	BALL CHAIN MFG. CO. INC.	741 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
47	SEMI-ALLOYS INC	886 S COLUMBUS AVE	Petroleum Bulk Storage Site
48	THE SALVATION ARMY	745 SOUTH THIRD AVENUE	Petroleum Bulk Storage Site
49	LITTON SYSTEMS, INC	769 SOUTH FULTON AVE	Petroleum Bulk Storage Site
50	YELLOW FREIGHT SYSTEM INC	12 DOCK STREET	Petroleum Bulk Storage Site
51	WARREN PLACE, LLC	30 WARREN PLACE	Petroleum Bulk Storage Site
52	SUNOCO # 0860-8408	751 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
53	BALL CHAIN MFG. CO. INC	900 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
54	EXCELL LIMOUSINE CORP	885 SOUTH 3RD AVENUE	Petroleum Bulk Storage Site
55	SUNOCO SERVICE STATION	766 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
56	717 SOUTH THIRD AVENUE BUILDING	717 SOUTH THIRD AVENUE	Petroleum Bulk Storage Site
57	PPG INDUSTRIES INC.	130 ANDERSON AVENUE	Petroleum Bulk Storage Site
58	RAN SUNOCO	751 S FULTON AVENUE	Petroleum Bulk Storage Site
59	MT. VERNON AUTO	756 SOUTH THIRD AVENUE	Petroleum Bulk Storage Site
60	AJAY TRUCKING	900 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
61	WILLIAM RIEBLING	106 MILLER PLACE	Petroleum Bulk Storage Site
62	TRANSCARE NEW YORK INC.	716 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
63	JAPS AUTO CLINIC INC.	770 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
64	BARRIET BRONZE INC	115 MILLER PL	Hazardous Waste Generator/Transporter
65	PPGSPRAYLAT CORPORATION	716 SOUTH COLUMBUS AVE	Hazardous Waste Generator/Transporter
66	SPRAYLAT CORP	716 S COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
67	HANTSCHO INC	PLANT 2/30 WARREN PLACE	Hazardous Waste Generator/Transporter
68	SEMI-ALLOYS CO	886 S COLUMBUS AVE	Hazardous Waste Generator/Transporter
69	LITTON INDUSTRIES	750 SOUTH FULTON AVENUE	Hazardous Waste Generator/Transporter
70	DOUBLE SS MFG	736 S THIRD AVENUE	Hazardous Waste Generator/Transporter
71	VAN ROWLAND	730 SOUTH COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
72	NEWCO (ALLED) INC	721 SOUTH 3RD AVE	Hazardous Waste Generator/Transporter
73	SINTEX YARNS INC	717 S 3RD AVE	Hazardous Waste Generator/Transporter
74	FEDERAL EXPRESS	669 S THIRD AVE	Hazardous Waste Generator/Transporter
75	NED MOLD	711 SOUTH FULTON AVENUE	Hazardous Waste Generator/Transporter
76	ERIC RIEBLING COMPANY INC	106 MILLER PLACE	Hazardous Waste Generator/Transporter
77	CONSOLIDATED EDISON	V4705-S 3RD ST & S COLUMBUS	Hazardous Waste Generator/Transporter
78	CONSOLIDATED EDISON	736 SOUTH 3RD AVENUE	Hazardous Waste Generator/Transporter
79	CONSOLIDATED EDISON	THIRD AVENUE AND COLUMBUS AVEN	Hazardous Waste Generator/Transporter
80	CON EDISON	S COLUMBUS AVE & 3RD ST	Hazardous Waste Generator/Transporter
81	CON EDISON	3RD AVENUE & DOCK ST	Hazardous Waste Generator/Transporter
82	CON EDISON	3RD AVENUE & DOCK ST	Hazardous Waste Generator/Transporter
83	CON EDISON MANHOLE: 2	3RD AVE & DOCK ST MH-2	Hazardous Waste Generator/Transporter
84	CON EDISON	THIRD AVE & DOCK ST	Hazardous Waste Generator/Transporter
85	CON EDISON	802TH S AVE I&O DOCK ST	Hazardous Waste Generator/Transporter
86	CON EDISON	PROVOST PL & DOCK ST	Hazardous Waste Generator/Transporter
87	CON EDISON	S THIRD AVE & DOCK ST	Hazardous Waste Generator/Transporter
88	CON EDISON	886 S COLUMBUS AV	Hazardous Waste Generator/Transporter
89	CON EDISON	669 S COLUMBUS AVE	Hazardous Waste Generator/Transporter
90	T SHIRT WORKS	724 SOUTH COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
91	YELLOW FREIGHT SYSTEM INC	12 DOCK ST	Hazardous Waste Generator/Transporter
92	F & S MOTORS BMW	716 S COLUMBUS AVE	Hazardous Waste Generator/Transporter
93	DEFOE CORP	800 S COLUMBUS AVE	Hazardous Waste Generator/Transporter
94	DAB-O-MATIC	886 S COLUMBUS AVE	Hazardous Waste Generator/Transporter
95	SEMI-ALLOYS INC. - PLANT 1	886 S COLUMBUS AVENUE	Chemical Bulk Storage Facility
96	MT. VERNON SOAP & VENDING CO. INC.	15 DOCK ST	Chemical Bulk Storage Facility
97	SPRAYLAT CORPORATION	880 SOUTH COLUMBUS AVENUE	Toxic Release Inventory Site
98	SPRAYLAT CORP.	716 S. COLUMBUS AVE.	Toxic Release Inventory Site
99			Wastewater Discharge Facility

Toxic Sites - Section 2



Toxic Targeting Section 2

Key



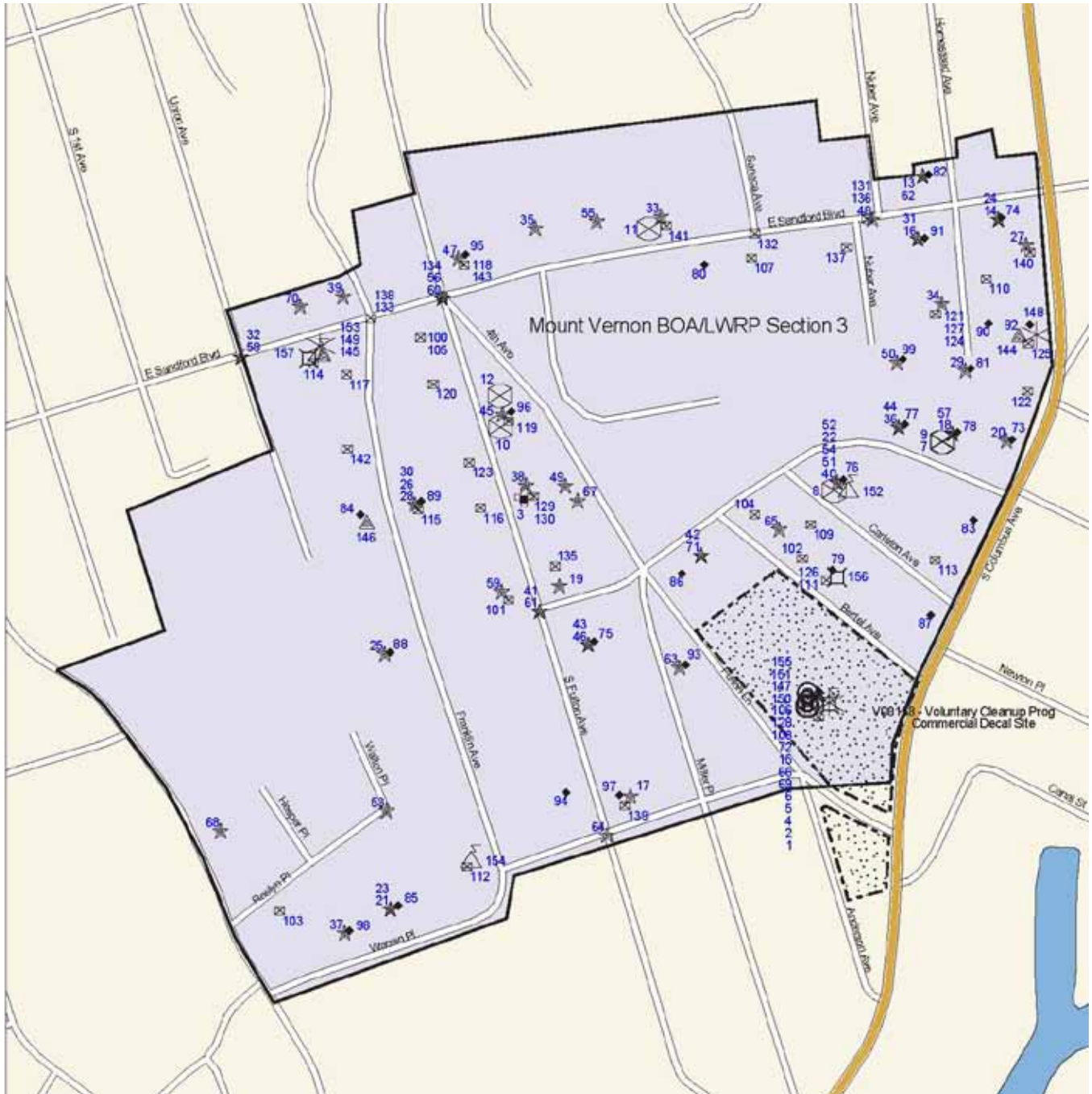
- | | | |
|---|--|--------------------------|
| National Priority List (NPL) | Deleted NPL Site | Remediation Site Borders |
| CERCLUS Superfund Non-NFRAP Site | CERCLUS Superfund NFRAP Site | Subject Area |
| Inactive Hazardous Waste Disposal Registry Site | Inact. Hac Waste Disp. Registry Qualifying | County Border |
| Hazardous Waste Treat. Store, Disposer | RCRA Corrective Action Facility | Waterbody |
| Hazardous Substance Waste Disposal Site | Solid Waste Facility | Railroad Tracks |
| Major Oil Storage Facility | Brownfields Site | |
| Chemical Storage Facility | Hazardous Material Spill | |
| Toxic Release | MTBE Gasoline Additive Spill | |
| Wastewater Discharge | Petroleum Bulk Storage Facility | |
| Enforcement Docking Facility | Hazardous Waste Generator, Transp. | |
| | Air Release | |

Identified Toxic Sites by Map Id
Mount Vernon BOA/LWRP Section 2, Mount Vernon, NY 10550

Map Id	Site Name	Site Street	Toxic Site Category
1	ROSSINI TRUCKING CORP	113 EDISON AVE	Solid Waste Facility
2	ROSSINI TRUCKING CORP	113 EDISON AVE	Solid Waste Facility
3	RCA ASPHALT	RCA ASPHALT LLC	Solid Waste Facility
4	EDISON AVENUE RECYCLE & MATERIALS SUPPLY CORP	41 EDISON AVENUE	Solid Waste Facility
5	FUTURE HEALTHCARE SYSTEMS INC	110 EDISON AVENUE	Solid Waste Facility
6	FEE OIL CO	110 EDISON AVE	Active Haz Spill (Unknown/Other Cause)
7	TEXACO	767 SOUTH COLUMBUS AVE	Active Haz Spill (Unknown/Other Cause)
8	DIPRITO - UST	110 EDISON AVE	Active Haz Spill (Unknown/Other Cause)
9	WEST VERNON TERMINAL	711-715 COLUMBUS AVE	Active Haz Spill (Unknown/Other Cause)
10	MONTCLAIR CLEANERS	661 SOUTH COLUMBUS NY	Active Haz Spill (Unknown/Other Cause)
11	SPRAGUE ENERGY	40 CANAL STREET	Active Haz Spill (Misc. Spill Cause)
12	AMOCO TERMINAL	40 CANAL STREET	Closed Status Tank Failure
13	CIBRO PETRO LANIMRET TERM	715 SOUTH COLUMBUS AVE	Closed Status Tank Failure
14	TANKO	40 CANAL STREET	Closed Status Tank Failure
15	COMMERCIAL PROPERTY	711 SOUTH COLUMBUS AVE	Closed Status Tank Failure
16	DEFOE CORP	49 EDISON AVE	Closed Status Tank Failure
17	TEXACO GAS STATION	767 SOUTH COLUMBUS AVENUE	Closed Status Tank Test Failure
18	URBAN BUILDERS	41 EDISON AVE	Closed Status Tank Test Failure
19	AMOCO TERMINAL MT VERNON	40 CANAL STREET	Closed Status Tank Test Failure
20	CIBRO TERMINAL	715 SOUTH COLUMBUS AVE	Closed Status Tank Test Failure
21	GETTY	S. FULTON & MILLER PLACE	Closed Status Tank Test Failure
22	TEXACO	767 S COLUMBIA AVE	Closed Status Tank Test Failure
23	CANAL ASPHALT	800 CANAL STREET	Closed Status Tank Test Failure
24	ROYAL ENVR SERVICES	CANAL ST/ COLUMBUS AVE	Closed Status Spill (Link/Other Cause)
25	FORMER MOBIL TERMINAL	EDISON AVE	Closed Status Spill (Link/Other Cause)
26	TEXACO STATION	767 COLUMBUS AVE	Closed Status Spill (Link/Other Cause)
27	FULTON AVE DRAIN	S COLUMBUS & S FULTON	Closed Status Spill (Link/Other Cause)
28	MOBIL TERMINAL	89 EDISON AVE	Closed Status Spill (Link/Other Cause)
29	MACCO AUTO BODY	COLUMBUS & FULTON AVE	Closed Status Spill (Link/Other Cause)
30	SEARS	EDISON AVE	Closed Status Spill (Link/Other Cause)
31	7 EDISON AVE	EDISON AVE	Closed Status Spill (Link/Other Cause)
32	HUTCHINSON RIVER	REAR OF NGRO ASPHALT	Closed Status Spill (Link/Other Cause)
33	AMOCO TERMINAL	40 CANAL STREET	Closed Status Spill (Link/Other Cause)
34	CIBRO TERMINAL	W. VERNON DOCK 701 S COLUM	Closed Status Spill (Link/Other Cause)
35	ARCO TERMINAL	EAST CHESTER CREEK	Closed Status Spill (Link/Other Cause)
36	EASTCHESTER CREEK	89 EDISON AVE	Closed Status Spill (Link/Other Cause)
37	MOBIL TERMINAL	89 EDISON AVE	Closed Status Spill (Link/Other Cause)
38	TEXACO GAS STATION	COLUMBUS AVE & FULTON ST	Closed Status Spill (Link/Other Cause)
39	WEST VERNON PETROLEUM	701 SOUTH COLUMBUS AVE	Closed Status Spill (Link/Other Cause)
40	HUTCHINSON RIVER	WEST VERNON TERMINAL	Closed Status Spill (Link/Other Cause)
41	WEST HUDSON FUEL OIL COMP	49 EDISON AVE	Closed Status Spill (Link/Other Cause)
42	WEST ENERGY TERM	7 EDISON AVE	Closed Status Spill (Link/Other Cause)
43	ENERGY / SHORELINE	7 EDISON AVE	Closed Status Spill (Link/Other Cause)
44	DUMPSTER AREA	110 EDISON AVE	Closed Status Spill (Link/Other Cause)
45	CON ED STREET EXCAVATION SITE	89 EDISON AVE	Closed Status Spill (Link/Other Cause)
46	CON ED EXCAVATION	89 EDISON AVE	Closed Status Spill (Link/Other Cause)
47	SPRAGUE ENERGY	40 CANAL ST	Closed Status Spill (Link/Other Cause)
48	SPRAGUE ENERGY	40 CANAL ST	Closed Status Spill (Link/Other Cause)
49	CANAL ASPHALT	800 CANAL ST	Closed Status Spill (Link/Other Cause)
50	WEST VERNON PETROLEUM	701 SOUTH COLUMBUS AVE	Closed Status Spill (Link/Other Cause)
51	SPRAGUE ENERGY	40 CANAL STREET	Closed Status Spill (Link/Other Cause)
52	EASTCHESTER CREEK	1 EDISON AVE	Closed Status Spill (Link/Other Cause)
53	CITY OF MT VERNON	80 EDISON AVE	Closed Status Spill (Link/Other Cause)
54	ON SIDE WALK	80 EDISON AVE	Closed Status Spill (Link/Other Cause)
55	EDISON AVE BETWEEN LAKE AND DOCK	80 EDISON AVE	Closed Status Spill (Link/Other Cause)
56	SPRAGUE ENERGY	40 CANAL ST	Closed Status Spill (Link/Other Cause)
57	AUTUMN PROPERTIES	801 SOUTH FULTON AVE	Closed Status Spill (Link/Other Cause)
58	WAREHOUSE	801 SOUTH FULTON AVE	Closed Status Spill (Link/Other Cause)
59	WEST VERNON TERMINAL	701 SOUTH COLUMBUS AVE	Closed Status Spill (Link/Other Cause)
60	ADJACENT TO	5 EDISON AVE	Closed Status Spill (Link/Other Cause)
61	NEXT TO TEXACO	110 EDISON AVE	Closed Status Spill (Link/Other Cause)
62	SPRAGUE MT VERNON	40 CANAL ST	Closed Status Spill (Link/Other Cause)
63	HUTCHINSON RIVER	40 CANAL STREET	Closed Status Spill (Link/Other Cause)
64	EASTCHESTER CREEK	40 CANAL STREET	Closed Status Spill (Link/Other Cause)
65	RCA ASPHALT	1 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
66	WESTMORE FUEL OVERFILL	110 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
67	BOURAS VENTURES LIMITED	1 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
68	MAACO AUTO BODY	801 SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
69	AMOCO MT VERNON TERMINAL	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
70	AMOCO	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
71	PALMER LANDSCAPING	820 SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
72	AMOCO OIL CO.	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
73	MOBIL TERMINAL	89 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
74	AMOCO TERMINAL	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
75	PATERNO CONTRACTING CORP.	7-10 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
76	WEST VERNON TERMINAL	701 SOUTH COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
77	AMOCO OIL	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
78	SPILL NUMBER 8801145	1 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
79	HUTCHINSON RIVER	1 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
80	WEST VERNON PETROLEUM	701 SOUTH COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
81	AMOCO TERMINAL MT VERNON	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
82	AMOCO	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
83	TEXACO	767 S COLUMBIA AVE	Closed Status Spill (Misc. Spill Cause)
84	AMOCO MT VERNON MOSF	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
85	WEST HUD	225 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
86	COLUMBUS AVE	687 S COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
87	MOBIL MOSF	YRD MT VERNON MOBIL TERML	Closed Status Spill (Misc. Spill Cause)
88	SPRAGUE TERMINAL	40 CANAL ST	Closed Status Spill (Misc. Spill Cause)
89	COMMERCIAL	40 CANAL ST	Closed Status Spill (Misc. Spill Cause)
90	CANAL ASPHALT	800 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
91	POLE W/1	S COLUMBUS AVE AND CANAL ST	Closed Status Spill (Misc. Spill Cause)
92	SPRAGUE ENERGY	40 CANAL ST	Closed Status Spill (Misc. Spill Cause)
93	VERDE ELECTRIC	89 EDISON AVENUE	Closed Status Spill (Misc. Spill Cause)
94	SOUTH COLUMBUS PETROLEUM	767 SOUTH COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
95	SPRAGUE ENERY TANK FARM	40 CANAL ST	Closed Status Spill (Misc. Spill Cause)
96	SPRAGUE ENERGY TANK FARM	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
97	TANK FARM	40 CANAL ST	Closed Status Spill (Misc. Spill Cause)
98	SPRAGUE MT VERNON TERMINAL	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
99	CANAL ASPHALT	800 CANAL STREET	Closed Status Spill (Misc. Spill Cause)

100	SPRAGUE MT VERNON TERMINAL	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
101	SPRAGUE MT VERNON TERMINAL	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
102	SPRAGUE ENERGY PLANT	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
103	EAST CHESTER SUBSTATION	EDISON/PELHAM AVE	Closed Status Spill (Misc. Spill Cause)
104	SPRAGUE	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
105	CON ED TRANSFORMER POLEW2	SOUTH FULTON & EDISON	Closed Status Spill (Misc. Spill Cause)
106	SPILL NUMBER 0308806	89 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
107	SPRAGUE OIL	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
108	SPRAGUE ENERGY	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
109	LOADING RACK	40 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
110	CANAL ASPHALT INC	800 CANAL ST	Closed Status Spill (Misc. Spill Cause)
111	CANAL ASPHALT	800 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
112	SPILL NUMBER 0101407	EDISON AVALEONA LN	Closed Status Spill (Misc. Spill Cause)
113	EDISON MATERIAL SUPPLY CO	25 EDISON AVE	Closed Status Spill (Misc. Spill Cause)
114	MT. VERNON ENERGY TERMINALS INC	7 EDISON AVENUE	Major Oil Storage Facility
115	SPRAGUE OPERATING RESOURCES LLC	40 CANAL STREET	Major Oil Storage Facility
116	WEST VERNON TERMINAL CORP.	711-715 SOUTH COLUMBUS AVENUE	Major Oil Storage Facility
117	MOBIL OIL CORPORATION MT. VERNON TERMINAL	89 EDISON AVENUE	Major Oil Storage Facility
118	WEST VERNON PETROLEUM CORP.	701 SOUTH COLUMBUS AVENUE	Major Oil Storage Facility
119	WESTCHESTER HUDSON PETROLEUM CORP	225 EDISON AVENUE	Major Oil Storage Facility
120	BOURAS VENTURES LTD.	1 EDISON AVENUE	Petroleum Bulk Storage Site
121	PETRILLO CONTRACTING, INC.	41 EDISON AVENUE	Petroleum Bulk Storage Site
122	SOCCO PETRO, LLC	767 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
123	PETRILLO BUILDERS SUPPLY CO.	1 EDISON AVENUE	Petroleum Bulk Storage Site
124	FEE OIL CO INC	110 EDISON AVENUE	Petroleum Bulk Storage Site
125	PATERNO CONTRACTING CORP	49 EDISON AVENUE	Petroleum Bulk Storage Site
126	CANAL ASPHALT INC.	800 CANAL STREET	Petroleum Bulk Storage Site
127	SEARS ROEBUCK & CO.	38 EDISON AVE.	Petroleum Bulk Storage Site
128	DEFOE CORP	49 EDISON AVENUE	Petroleum Bulk Storage Site
129	ROSSINI EXCAVATING CORP.	113 EDISON AVENUE	Petroleum Bulk Storage Site
130	MOBIL OIL CORP	89 EDISON AVE	Petroleum Bulk Storage Site
131	PATERNO ASPHALT CORP.	7 EDISON AVENUE	Petroleum Bulk Storage Site
132	WEST VERNON TERMINAL CORP.	711-715 SOUTH COLUMBUS AVE.	Petroleum Bulk Storage Site
133	J & R TOURS, LTD.	80 EDISON AVENUE	Petroleum Bulk Storage Site
134	FUTURE HEALTH CARE SYSTEMS, INC.	110 EDISON AVENUE	Petroleum Bulk Storage Site
135	AUTUMN PROPERTIES II LLC	801 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
136	YONKERS PROPERTY MANAGEMENT, INC.	2 EDISON AVENUE	Petroleum Bulk Storage Site
137	SEARS ROEBUCK	38 EDISON AVE	Hazardous Waste Generator/Transporter
138	DEFOE CORP	49 EDISON AVE	Hazardous Waste Generator/Transporter
139	AMOCO OIL	40 CANAL STREET	Hazardous Waste Generator/Transporter
140	MOBIL OIL MT VERNON TERMINAL	89 EDISON AVENUE	Hazardous Waste Generator/Transporter
141	MT VERNON ENERGY TERMINALS INC	7 EDISON AVE	Hazardous Waste Generator/Transporter
142	MONTCLAIR CLEANERS	661 SOUTH COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
143	AT TRUCKING CO-ROYAL TANK CLEANING COR	837 S COLUMBUS AVE.	Hazardous Waste Generator/Transporter
144	ROYAL TANK CLEANING CORP	40 CANAL ST	Hazardous Waste Generator/Transporter
145	LANMIRET TERMINAL INCORPORATED	715 SOUTH COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
146	SEMI ALLOYS INCORPORATED	29 EDISON AVENUE	Hazardous Waste Generator/Transporter
147	NORTHEAST FLATING	807 S FULTON AVE	Hazardous Waste Generator/Transporter
148	NIGRO BROTHERS	CANAL STREET	Hazardous Waste Generator/Transporter
149	MOUNT VERNON ENERGY TERMINAL	7 EDISON AVENUE	Hazardous Waste Generator/Transporter
150	STAR ENTERPRISE	TEXACO 767 COLUMBUS AV SOUTH	Hazardous Waste Generator/Transporter
151	MAACO AUTO PAINTING & BODYWORKS	801 SOUTH FULTON AVENUE	Hazardous Waste Generator/Transporter
152	CANAL ASPHALT	800 CANAL ST	Hazardous Waste Generator/Transporter
153	PATERNO ASPHALT	7 EDISON AVE	Hazardous Waste Generator/Transporter
154	ROSSINI CONTRACTING	113 EDISON AVENUE	Hazardous Waste Generator/Transporter
155	APPROVED STORAGE AND WASTE HAULING INC.	110 EDISON AVENUE	Hazardous Waste Generator/Transporter
156	MOBIL OIL CORPORATION	89 EDISON AVENUE	Hazardous Waste Generator/Transporter
157	SHORELINE OIL COMPANY	7 EDISON AVENUE	Hazardous Waste Generator/Transporter
158	CONSOLIDATED EDISON	EDISON AVE & LEONA AVE	Hazardous Waste Generator/Transporter
159	CON EDISON	6 COLUMBUS AVE & FULTON LN	Hazardous Waste Generator/Transporter
160	WEST VERNON PETROLEUM CORP	701 S COLUMBUS AVE.	Hazardous Waste Generator/Transporter
161	DEFOE CORP	49 EDISON	Hazardous Waste Generator/Transporter
162	APPROVED STORAGE & WASTE HAULING	110 EDISON AVE	Hazardous Waste Generator/Transporter
163	MOBIL OIL CORP. MT. VERNON TERMINAL	89 EDISON AVENUE	Chemical Bulk Storage Facility
164	SPRAGUE MT VERNON TERMINAL	40 CANAL ST	Chemical Bulk Storage Facility
165	WEST VERNON PETROLEUM CORP	701 SOUTH COLUMBUS AVE	Chemical Bulk Storage Facility
166	CANAL ASPHALT INC.	800 CANAL ST.	Toxic Release Inventory Site
167	NORTHEAST FLATING INC.	807 S FULTON AVE	Toxic Release Inventory Site
168	RCA ASPHALT L.L.C.	7 EDISON AVE.	Toxic Release Inventory Site
169	MT VERNON TERMINAL	40 CANAL STREET	Wastewater Discharge Facility
170	MT VERNON TERMINAL	89 EDISON AVENUE	Wastewater Discharge Facility
171	WEST VERNON - LANMIRET	711-715 SOUTH COLUMBUS AVE	Wastewater Discharge Facility
172	WEST VERNON PETROLEUM CORP	701 SOUTH COLUMBUS AVENUE	Wastewater Discharge Facility
173	MT VERNON TERMINAL	7 EDISON AVENUE	Wastewater Discharge Facility
174	AMOCO	40 CANAL ST	Air Discharge Site
175	MOBIL OIL TERMINAL	89 EDISON AVE	Air Discharge Site
176	CIRILLO/LANMIRET	SOUTH COLUMBUS AVENUE	Air Discharge Site
177	PETRILLO BUILDING SUPPL CO INC	41 EDISON AVENUE	Air Discharge Site
178	AMOCO OIL CO - MT VERNON OIL	40 CANAL ST	Air Discharge Site
179	LANMIRET TERMINAL INC	715 S COLUMBUS AVE.	Air Discharge Site
180	WESTCHESTER HUDSON OIL	7 EDISON AVE	Air Discharge Site
181	CANAL ASPHALT INC.	800 CANAL STREET	Air Discharge Site
182	NIGRO BROTHERS INC.	887 S COLUMBUS AVE.	Air Discharge Site

Toxic Sites - Section 3



Toxic Targeting Section 3

Key



Westchester County

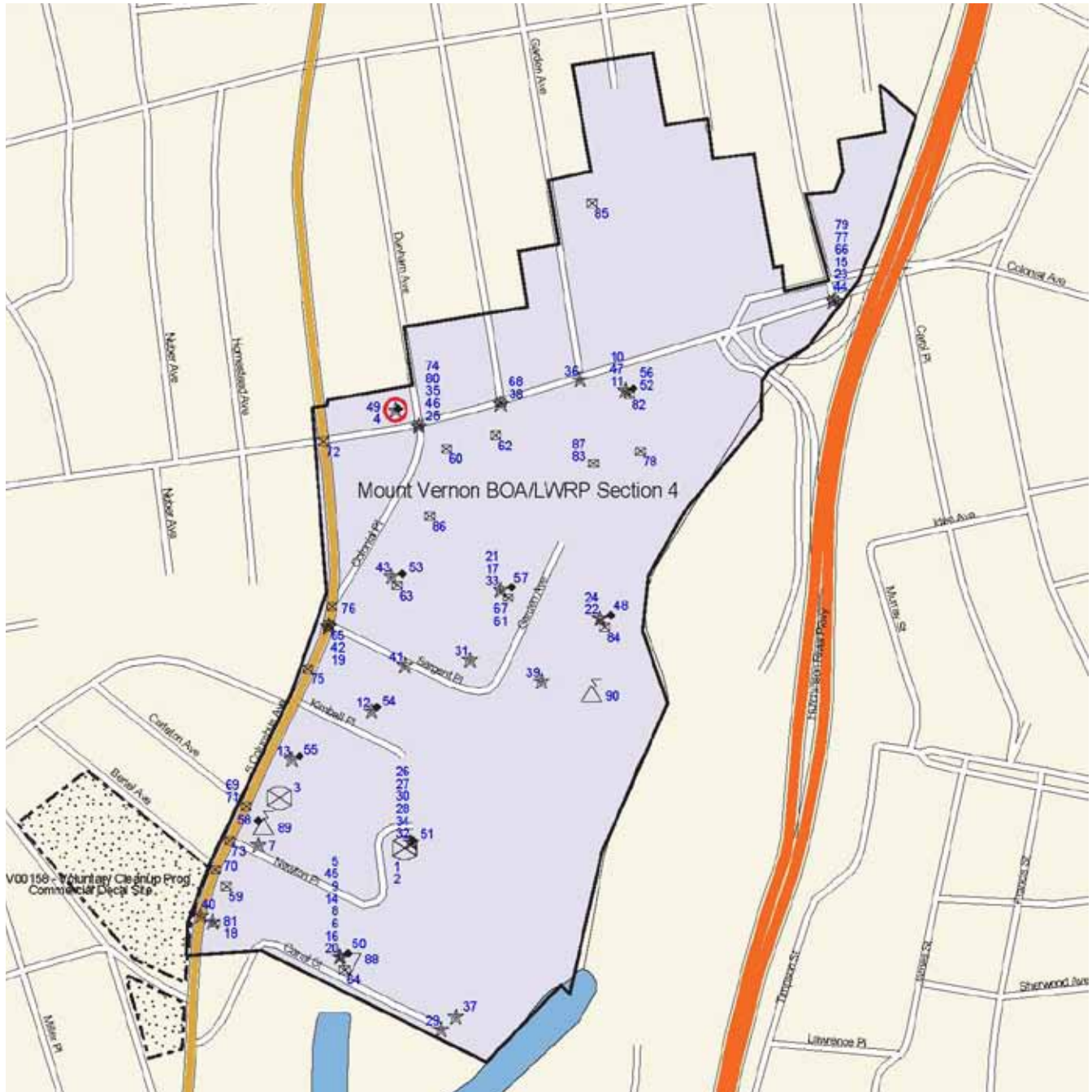
	National Priority List (NPL)		Deleted NPL Site		Remediation Site Borders
	CERCLA Superfund Non-NPL Site		CERCLA Superfund NPL Site		Subject Area
	Inactive Hazardous Waste Disposal Registry Site		Hazardous Waste Dip Registry Qualifying		County Border
	Hazardous Waste Transfer, Storage, Disposal		RCRA Corrective Action Facility		Waterbody
	Hazardous Substance Waste Disposal Site		Solid Waste Facility		Railroad Tracks
	Major Oil Storage Facility		Brownfields Site		
	Chemical Storage Facility		Hazardous Material Spill		
	Toxic Release		Petroleum Bulk Storage Facility		
	Wastewater Discharge		Hazardous Waste Generator, Transport		
	Enforcement Docket Facility		Air Release		

Identified Toxic Sites by Map Id
Mount Vernon BOA/LWRP Section 3, Mount Vernon, NY 10550

Map Id	Site Name	Site Street	Toxic Site Category
1	COMMERCIAL DECAL, INC.	850 SOUTH COLUMBUS AVE	NYSDEC Inactive Haz Waste Registry Oust
2	COMMERCIAL DECAL, INC.	850 COLUMBUS AVENUE	NYSDEC Inactive Haz Waste Discosal Site
3	KEM CHEMICAL CORP	545 S FULTON AVE	CERCLIS Superfund Non-NFRAP Site
4	COMMERCIAL DECAL	850 SOUTH COLUMBUS AVE	CERCLIS Superfund NFRAP Site
5	FORMERLY COMMERCIAL DECAL BUILDING	850 SOUTH COLUMBUS AVENUE	Brownfields Site
6	COMMERCIAL DECAL SITE	850 SOUTH COLUMBUS AVE	Brownfields Site
7	BRONX RIVER HAULAGE	280 EAST 7TH STREET	Solid Waste Facility
8	BASS DISPOSAL SERVICES	UNKNOWN	Solid Waste Facility
9	BRONX RIVER HAULAGE, INC	280 E 7TH STREET	Solid Waste Facility
10	MANCUSO AUTO BODY	527 SOUTH FULTON AVE	Solid Waste Facility
11	WRECYCLE LLC	249 EAST SANDFORD BOULEVARD	Solid Waste Facility
12	SACI AUTO SALES	528 SOUTH FULTON AVENUE	Solid Waste Facility
13	DEBASE BROS SEV CTR INC	296 EAST SANDFORD BLVD	Active Haz Spill (Unknown/Other Cause)
14	FORMER GAS STATION	302 EAST SANDFORD BLVD	Active Haz Spill (Unknown/Other Cause)
15	COMMERCIAL DECAL	850 SOUTH COLUMBUS AVENUE	Active Haz Spill (Misc. Spill Cause)
16	FR CHEMICAL	300 EAST SANDFORD BLVD	Closed Status Tank Failure
17	COMMERCIAL PROPERTY	633 SOUTH FULTON AVE	Closed Status Tank Failure
18	LIMTONE ENTERPRISES	283 EAST 7TH ST	Closed Status Tank Failure
19	CHAMPION ELECTRIC	561 S. FULTON AVE	Closed Status Tank Failure
20	BERENSOEN TMC PROPERTY	550 S COLUMBUS AVE	Closed Status Tank Failure
21	AGA GAS INC	21-25 WARREN PL	Closed Status Tank Failure
22	J BASS	911 CARLTON AVENUE	Closed Status Tank Test Failure
23	PAT SONS CO.	25 WARREN PLACE	Closed Status Tank Test Failure
24	MOBIL 55 06-GHE	302 EAST SANDFORD BLVD	Closed Status Tank Test Failure
25	UNDERGROUND	570-590 FRANKLIN AVE	Closed Status Tank Test Failure
26	COMMERCIAL BUILDING	545 FRANKLIN AVE	Closed Status Tank Test Failure
27	HARVEY RESIDENCE	510 SOUTH COLUMBUS AVE	Closed Status Tank Test Failure
28	MCDUGAL RESIDENCE	545 FRANKLIN AVE	Closed Status Tank Test Failure
29	COTT BEVERAGE CO	530 HOMESTEAD AVE	Closed Status Tank Test Failure
30	HERTLEIN SPECIALTY CO	545 FRANKLIN AVE	Closed Status Tank Test Failure
31	F R CHEMICAL	300 EAST SANDFORD BLVD	Closed Status Spill (Unk/Other Cause)
32	ALL TEX LAMINATING	UNION & EAST SANDFORD ST	Closed Status Spill (Unk/Other Cause)
33	RECYCLING FACILITY	249 EAST SANDFORD BOULEVARD	Closed Status Spill (Unk/Other Cause)
34	COMMERCIAL PROPERTY	520 HOMESTEAD AVE	Closed Status Spill (Unk/Other Cause)
35	FORMER QUALITY FORD	227 EAST SANDFORD BLVD	Closed Status Spill (Unk/Other Cause)
36	CURB	275 EAST 7TH ST	Closed Status Spill (Unk/Other Cause)
37	INDUSTRIAL SITE	19 WARREN PLACE	Closed Status Spill (Unk/Other Cause)
38	KEM CHEMICAL CORP	545 SOUTH FULTON AVE	Closed Status Spill (Unk/Other Cause)
39	MULTIPLE HOME	472 FRANKLIN AVE	Closed Status Spill (Unk/Other Cause)
40	J BASS & SON	9-11 CARLETON AVE	Closed Status Spill (Unk/Other Cause)
41	TM VAULT	SOUTH FULTON AVE & EAST 7TH AVE	Closed Status Spill (Unk/Other Cause)
42	VACANT LOT	230 EAST 7TH ST	Closed Status Spill (Unk/Other Cause)
43	CANADA DRY WAREHOUSE	601 SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
44	SPILL NUMBER 9812115	275 EAST 7TH ST	Closed Status Spill (Misc. Spill Cause)
45	MANCUSO AUTOBODY	527 SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
46	SPILL NUMBER 9810372	601 SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
47	QUALITY FORD	211 EAST SANDFORD BLVD	Closed Status Spill (Misc. Spill Cause)
48	NUBER AVENUE FACILITY	NUBER AVENUE & SANDFORD BL	Closed Status Spill (Misc. Spill Cause)
49	SPILL NUMBER 969982	56 FULTON LA	Closed Status Spill (Misc. Spill Cause)
50	CON ED NEWBURG CENTER	525 NUDEY AVE	Closed Status Spill (Misc. Spill Cause)
51	J BASS AND SON INC	9-11 CARLETON AVE	Closed Status Spill (Misc. Spill Cause)
52	BASS & SONS	9-11 CARLTON AVE	Closed Status Spill (Misc. Spill Cause)
53	OFF 3RD AVE.NR.SUNRISE BK	WALTON PLACE & ROSLYN PL	Closed Status Spill (Misc. Spill Cause)
54	ON LAND	911 CARLTON AVENUE	Closed Status Spill (Misc. Spill Cause)
55	MOBIL	243 EAST SANDFORD BLVD	Closed Status Spill (Misc. Spill Cause)
56	CON ED	SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
57	HYDRAULIC SPILL	283 EAST 7TH ST	Closed Status Spill (Misc. Spill Cause)
58	INTERSECTION ON POLE 14A	SANFORD BLVD AND UNION AVE	Closed Status Spill (Misc. Spill Cause)
59	POLE #W24	556 SOUTH FULTON AVE	Closed Status Spill (Misc. Spill Cause)
60	CON ED	SOUTH FULTON AVE AND SANDFORD BLVD	Closed Status Spill (Misc. Spill Cause)
61	POLE #W21	SOUTH FULTON AVE/EAST 7TH AVE	Closed Status Spill (Misc. Spill Cause)
62	DEBASE BROTHERS SERVICE STATION	296 EAST SANDFORD BLVD	Closed Status Spill (Misc. Spill Cause)
63	FIRST GROUP	325 MILLER PLACE	Closed Status Spill (Misc. Spill Cause)
64	POLE 18	S FULTON AVE/8TH ST	Closed Status Spill (Misc. Spill Cause)
65	ROADWAY	17 BERTEL AVE	Closed Status Spill (Misc. Spill Cause)
66	EXCAVATION	650 SOUTH COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
67	PETES TOWING	98 FULTON LANE	Closed Status Spill (Misc. Spill Cause)
68	PETES TOWING	631 SOUTH 3RD AVE	Closed Status Spill (Misc. Spill Cause)
69	COMMERCIAL DECAL SITE	850 COLUMBUS AVE	Closed Status Spill (Misc. Spill Cause)
70	SPILL NUMBER 9110303	111 EAST SANDFORD BL	Closed Status Spill (Misc. Spill Cause)
71	OPPOSITE 230 E7TH ST	230 EAST 7TH ST	Closed Status Spill (Misc. Spill Cause)
72	FORMERLY COMMERCIAL DECAL INC	850 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
73	BERENSOEN P/MC	550 SOUTH COLUMBUS AVE	Petroleum Bulk Storage Site
74	MOBIL 55 06-GHE	302 E SANDFORD BLVD	Petroleum Bulk Storage Site
75	PEPSI COLA BOTTLING CO. OF NY	601 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
76	J. BASS & SON, INC.	9-11 CARLETON AVENUE	Petroleum Bulk Storage Site
77	TOWN & COUNTRY OIL CORP	275 EAST 7TH ST	Petroleum Bulk Storage Site
78	BRONX RIVER HAULAGE, INC.	280 EAST SEVENTH STREET	Petroleum Bulk Storage Site
79	29 BERTEL AVENUE	29 BERTEL AVENUE	Petroleum Bulk Storage Site
80	U.S. POSTAL SERVICE	230 E. SANDFORD BLVD	Petroleum Bulk Storage Site
81	VINCENT COLARUSSO IRREVOCABLE TRUST	530 HOMESTEAD AVENUE	Petroleum Bulk Storage Site
82	DEBASE BROS. SERVICENTER, INC.	296 EAST SANDFORD BLVD.	Petroleum Bulk Storage Site
83	FELIX CONTRACTING CORP	602 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
84	J & L CONCRETE CONSTRUCTION	550 FRANKLIN AVENUE	Petroleum Bulk Storage Site
85	PATSONS INC.	25 WARREN PLACE	Petroleum Bulk Storage Site
86	COMMERCIAL DECAL, INC. ANNEX	228 EAST 7TH STREET	Petroleum Bulk Storage Site
87	TSI REALTY LLC	630 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
88	570-590 FRANKLIN AVENUE	570-590 FRANKLIN AVENUE	Petroleum Bulk Storage Site
89	FRANKLIN DEVELOPMENT CO., INC.	545 FRANKLIN AVENUE	Petroleum Bulk Storage Site
90	MICK REALTY LLC	521 HOMESTEAD AVENUE	Petroleum Bulk Storage Site
91	FR CHEMICAL	300 EAST SANDFORD BOULEVARD	Petroleum Bulk Storage Site
92	FR CHEMICAL	524 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
93	FIRST STUDENT, INC #11321	325 MILLER PLACE	Petroleum Bulk Storage Site
94	FIRST STUDENT, INC. #11321	630 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
95	QUALITY FORD	211 EAST SANDFORD BOULEVARD	Petroleum Bulk Storage Site
96	MANCUSO AUTO BODY CORP	327 S FULTON AVENUE	Petroleum Bulk Storage Site
97	CONSUMER PRODUCTIONS INTERNATIONAL	635 SOUTH FULTON AVENUE	Petroleum Bulk Storage Site
98	RBS PLASTICS	19 WARREN PLACE	Petroleum Bulk Storage Site
99	TOMCOM INDUSTRIES, INC	525 NUBER AVENUE	Petroleum Bulk Storage Site

100	CAPRI ALBUM CO INC	510 S FULTON AVENUE	Hazardous Waste Generator/Transporter
101	DIAMOND AUTO GLASS	556 S FULTON AVE	Hazardous Waste Generator/Transporter
102	PREMIERE PAPER	19-21 BERTEL AVE	Hazardous Waste Generator/Transporter
103	UNITED IRON	6 ROSLYN PLACE	Hazardous Waste Generator/Transporter
104	CASTOLEUM CORP	240 E 7TH ST	Hazardous Waste Generator/Transporter
105	CAPRI ALBUM CO	510 S FULLERTON AVE	Hazardous Waste Generator/Transporter
106	COMMERCIAL DECAL	650 S COLUMBUS AVE	Hazardous Waste Generator/Transporter
107	DEL ELECTRONICS CORP	250 EAST SANFORD BLVD	Hazardous Waste Generator/Transporter
108	650 COLUMBUS AVENUE LLC	650 SOUTH COLUMBUS AVE	Hazardous Waste Generator/Transporter
109	P J VERNEVIL ELECTROPLATING	10 CARLETON AVENUE	Hazardous Waste Generator/Transporter
110	LIMBACHER PAINT & COLOR WORKS	515-7 HOMESTEAD AVE	Hazardous Waste Generator/Transporter
111	PARKE HILL CHEM CORP	29 BERTEL AVE	Hazardous Waste Generator/Transporter
112	RICHARDS PARENTS & MURRAY INCORPORATED	606 FRANKLIN AVENUE	Hazardous Waste Generator/Transporter
113	FOREMOST PRECISION INSTRUMENT CORP	31 CARLETON AVENUE	Hazardous Waste Generator/Transporter
114	ALLTEX FABRIC FINISHERS	120 SANFORD BLVD	Hazardous Waste Generator/Transporter
115	HERTLEIN SPECIAL TOOL INCORPORATED	545 FRANKLIN AVENUE	Hazardous Waste Generator/Transporter
116	SINGER KEARFOTT	550 90 FULTON AVE	Hazardous Waste Generator/Transporter
117	VERNON LABS	506 FRANKLIN AVE	Hazardous Waste Generator/Transporter
118	EMPIRE FORD	211 EAST SANFORD BLVD	Hazardous Waste Generator/Transporter
119	MANCUSO AUTO BODY	527 SOUTH FULTON AVENUE	Hazardous Waste Generator/Transporter
120	KULKA WIRING DEVICES	520 SOUTH FULTON AVENUE	Hazardous Waste Generator/Transporter
121	SECS INC	520 HOMESTEAD AVE	Hazardous Waste Generator/Transporter
122	MALLS CLEANERS	532 S COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
123	SUNOCO	600 SOUTH FULTON AVENUE	Hazardous Waste Generator/Transporter
124	SECS INCORPORATED	520 HOMESTEAD AVENUE	Hazardous Waste Generator/Transporter
125	FR CHEMICAL INC	524 SOUTH COLUMBUS AVE	Hazardous Waste Generator/Transporter
126	PARKE-HILL CHEMICAL CORP	29 BERTEL AVE	Hazardous Waste Generator/Transporter
127	SECS INCORPORATED	520 HOMESTEAD AVENUE	Hazardous Waste Generator/Transporter
128	USEPA REG II - COMMERCIAL DEV SITE	650 SOUTH COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
129	NYSDEC - KEM CHEMICAL	545 SOUTH FULTON AVE	Hazardous Waste Generator/Transporter
130	NYSDEC - KEM CHEMICAL	545 SOUTH FULTON AVE	Hazardous Waste Generator/Transporter
131	CONSOLIDATED EDISON CO	85865 HUBEX AVE & SANFORD BLVD	Hazardous Waste Generator/Transporter
132	CONSOLIDATED EDISON	MH10615-E 6TH ST & SENECA AVE	Hazardous Waste Generator/Transporter
133	CONSOLIDATED EDISON	FRANKLIN & SANFORD	Hazardous Waste Generator/Transporter
134	CON EDISON MANHOLE 7137	SANFORD BLVD & FULTON AVE	Hazardous Waste Generator/Transporter
135	CONSOLIDATED EDISON	655 SOUTH FULTON STREET & EAST	Hazardous Waste Generator/Transporter
136	CON EDISON	NUBER AVE & E SANFORD BLVD	Hazardous Waste Generator/Transporter
137	CON EDISON	500 NUBER AVE	Hazardous Waste Generator/Transporter
138	CON ED	FRANKLIN AVE & SANFORD BLVD	Hazardous Waste Generator/Transporter
139	CONSUMER PROMOTIONS INTL	633 S FULTON AVE	Hazardous Waste Generator/Transporter
140	FURNITURE RESTORATION	510 SOUTH COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
141	HUGO NEU RECYCLING LLC - FORMALLY WERECYCLE	249 E SANFORD BLVD	Hazardous Waste Generator/Transporter
142	HUGO NEU RECYCLING LLC - FORMALLY WERECYCLE	516 FRANKLIN AVE	Hazardous Waste Generator/Transporter
143	CVS PHARMACY #2164	211 EAST SANFORD BLVD	Hazardous Waste Generator/Transporter
144	FR CHEMICAL INC	524 S COLUMBUS AVE	Chemical Bulk Storage Facility
145	ALLTEX LAMINATING CORP.	120 E SANFORD BLVD	Chemical Bulk Storage Facility
146	INSITUFORM TECHNOLOGIES USA INC	550 FRANKLIN AVENUE	Chemical Bulk Storage Facility
147	COMMERCIAL DECAL	650 S COLUMBUS AVE	Toxic Release Inventory Site
148	FR CHEMICAL INC	524 S COLUMBUS AVE	Toxic Release Inventory Site
149	ALLTEX LAMINATING CORP.	120 SANFORD BLVD, E	Toxic Release Inventory Site
150	COMMERCIAL DECAL	650 S COLUMBUS AVENUE	Toxic Release Inventory Site
151	COMMERCIAL DECAL	650 S COLUMBUS AVE	Air Discharge Site
152	J BASS AND SON	9 CARLETON AVENUE	Air Discharge Site

Toxic Sites - Section 4



Toxic Targeting Section 4

Key

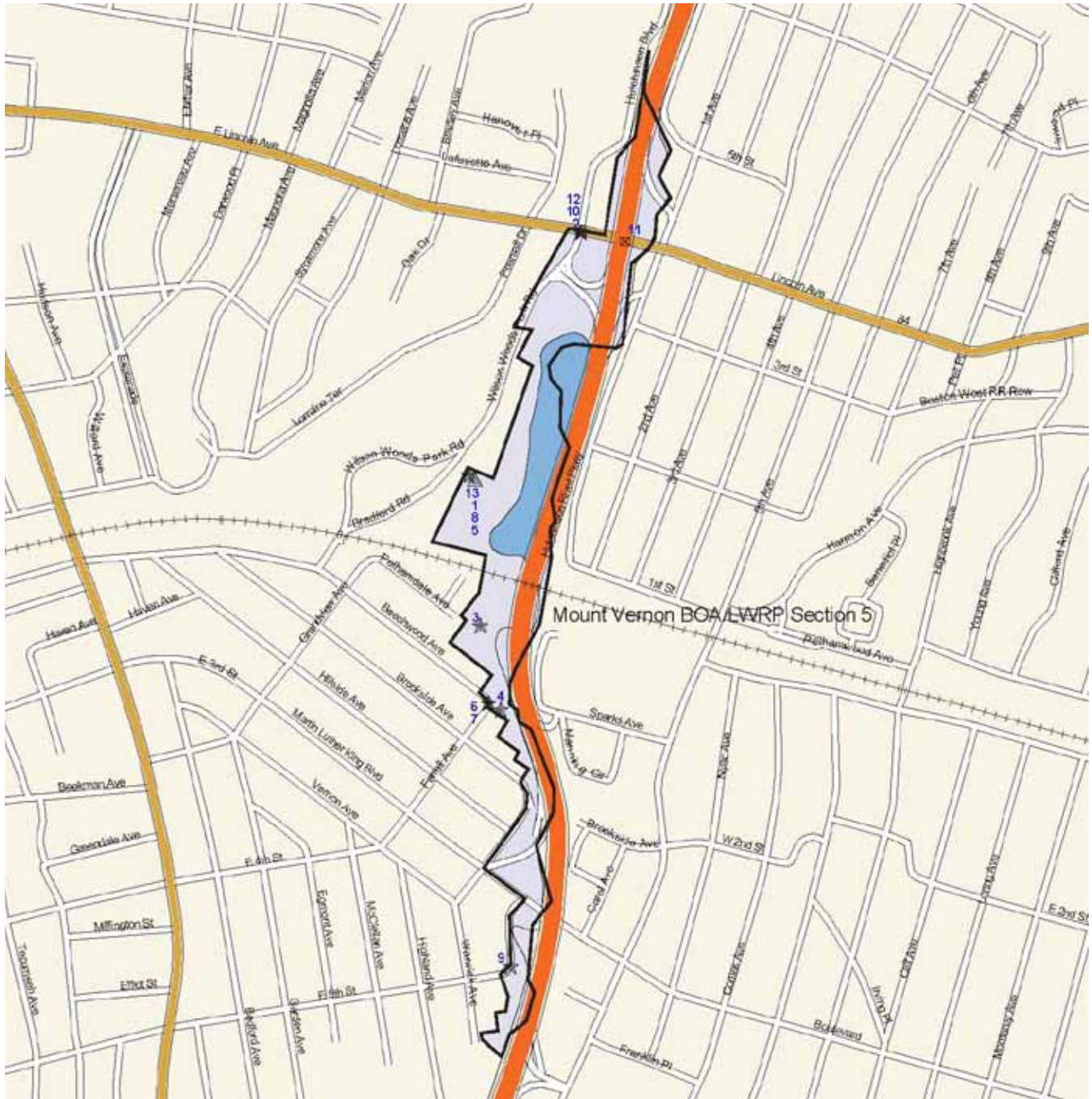


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|--|--|--|
| <ul style="list-style-type: none"> National Priority List (NPL) CERCLIS Superfund Non-TRI/RAIP Site Inactive Hazardous Waste Disposal Registry Site Hazardous Waste Transfer, Store, or Disposal Hazardous Substance Waste Disposal Site Major Oil Storage Facility Chemical Storage Facility Toxic Release Wastewater Discharge Enforcement Docket Facility | <ul style="list-style-type: none"> Deleted NPL Site CERCLIS Superfund TRI/RAIP Site Inact. Haz Waste Disposal Registry Qualifying RCRA Corrective Action Facility Solid Waste Facility Brownfields Site Hazardous Material Spill MTBE Gasoline Additive Spill Petroleum Bulk Storage Facility Hazardous Waste Generator, Transp. Air Release | <ul style="list-style-type: none"> Subject Area County Border Waterbody Railroad Tracks Remediation Site Borders |
|--|--|--|

Identified Toxic Sites by Map Id
Mount Vernon BOA/LWRP Section 4, Mount Vernon, NY 10550

Map Id	Site Name	Site Street	Toxic Site Category
1	SOUTH COLUMBUS T.S	P.O. BOX 364	Solid Waste Facility
2	WESTCHESTER COUNTY SOUTH COLUMBUS AVE T.S	10 KIMBALL PLACE	Solid Waste Facility
3	JOE S AUTO WRECKERS INC	825 SOUTH COLUMBUS AVE	Solid Waste Facility
4	SUPERIOR EXXON	415 EAST SANFORD BLVD	Active Haz Spill (Unknown/Other Cause)
5	MT VERNON DPW	CANAL ST	Active Haz Spill (Misc. Spill Cause)
6	MOUNT VERNON DPW	130 CANAL ST	Active Haz Spill (Misc. Spill Cause)
7	CITY OF MOUNT VERNON DPW	11 NEWTON PLACE	Active Haz Spill (Misc. Spill Cause)
8	HAZ MAT DRUMS AT MT VERNON DPW	CANAL STREET	Active Haz Spill (Misc. Spill Cause)
9	MT VERNON DPW	CANAL STREET	Closed Status Tank Failure
10	PEPSI COLA	470 SANFORD BLVD	Closed Status Tank Test Failure
11	PEPSI COLA DEPOT	470 SANFORD BLVD	Closed Status Tank Test Failure
12	EVERY SUPPLY CO	11 KIMBLE PLACE	Closed Status Tank Test Failure
13	TRI-STATE PARTY RENTALS	815 SOUTH COLUMBUS AVE	Closed Status Tank Test Failure
14	MT VERNON DPW	CANAL STREET	Closed Status Spill (Link/Other Cause)
15	SPILL NUMBER 9011956	HIGHLAND AVE & SANFORD BL	Closed Status Spill (Link/Other Cause)
16	MT VERNON DPW	33 CANAL ST	Closed Status Spill (Link/Other Cause)
17	STORM DRAIN	518 GARDEN AVE	Closed Status Spill (Link/Other Cause)
18	QUALITY BODY WORKS	657 S. COLUMBUS AVE	Closed Status Spill (Link/Other Cause)
19	SPILL NUMBER 905114	SERGEANT PLUS COLUMBUS	Closed Status Spill (Link/Other Cause)
20	MT VERNON RECYCLING YARD	33 CANAL ST	Closed Status Spill (Link/Other Cause)
21	UNITED REBUILDERS	550 GARDEN AVE	Closed Status Spill (Link/Other Cause)
22	HUTCHINSON R.PUMP STATION	GARDEN AVE EXT	Closed Status Spill (Link/Other Cause)
23	213757, SANFORD BLVD AND COLONIAL AVE	SANFORD BLVD AND COLONIAL AVE	Closed Status Spill (Link/Other Cause)
24	HUTCHINSON PUMP STATION	601 GARDEN AVE	Closed Status Spill (Link/Other Cause)
25	POLE W6	DURHAM AVE/SANFORD BLVD	Closed Status Spill (Link/Other Cause)
26	MOUNT VERNON SAND TRUCK	KIMBALL AVE	Closed Status Spill (Link/Other Cause)
27	TRANSFER STATION	KIMBLE AVE	Closed Status Spill (Link/Other Cause)
28	MOUNT VERNON TRANSFER	1 KIMBEL PLACE	Closed Status Spill (Link/Other Cause)
29	EASTCHESTER CREEK	CANAL STREET	Closed Status Spill (Link/Other Cause)
30	GARBAGE TRUCK AT MOUNT VE	KIMBEL ST	Closed Status Spill (Link/Other Cause)
31	BHATT	600 GARDEN AVE	Closed Status Spill (Link/Other Cause)
32	COUNTY TRANSFER STATION	1 KIMBALL AVE	Closed Status Spill (Link/Other Cause)
33		510 - 570 GARDEN AVE	Closed Status Spill (Link/Other Cause)
34	KIMBALL PLACE TRANSFER	KIMBALL PLACE	Closed Status Spill (Link/Other Cause)
35	EAST SANFORD BLVD AND	DURHAM ST	Closed Status Spill (Link/Other Cause)
36	CATCH BASIN	GARDEN ST/SANFORD BLVD	Closed Status Spill (Link/Other Cause)
37	COLUMBUS CONSTRUCTION	1 CANAL ST	Closed Status Spill (Link/Other Cause)
38	POLE #20	BEDFORD AVE & E SANFORD A	Closed Status Spill (Misc. Spill Cause)
39	HOME RUN CITY	655 GARDEN AVE	Closed Status Spill (Misc. Spill Cause)
40	VAULT 2317	110 650 SOUTH COLUMBUS	Closed Status Spill (Misc. Spill Cause)
41	SPILL NUMBER 9011788	536 SARGENTS PL	Closed Status Spill (Misc. Spill Cause)
42	SERGEANT PL SUB STATION	SERGEANT PLUS COLUMBUS	Closed Status Spill (Misc. Spill Cause)
43	35 COLONIAL PLACE	35 COLONIAL PLACE	Closed Status Spill (Misc. Spill Cause)
44	STREET	SANFORD BLVD AND HIGHLAND AVE	Closed Status Spill (Misc. Spill Cause)
45	DPW WORK YARD	33 CANAL STREET	Closed Status Spill (Misc. Spill Cause)
46	POLE W42	SANFORD BLVD & E DURHAM S	Closed Status Spill (Misc. Spill Cause)
47	BLANKTOP	470 EAST SANFORD BL	Closed Status Spill (Misc. Spill Cause)
48	HUTCHINSON PUMPING STATION-WCDEF	0 GARDEN AVENUE EXTENSION	Petroleum Bulk Storage Site
49	SUPERIOR SERVICE CENTER OF MOUNT VERNON	415 EAST SANFORD BOULEVARD	Petroleum Bulk Storage Site
50	DPW COLUMBUS AVENUE GARAGE	11 NEWTON PLACE	Petroleum Bulk Storage Site
51	SOUTH COLUMBUS AVENUE TRANSFER STATION	KIMBALL PLACE	Petroleum Bulk Storage Site
52	PEPSI-COLA BOTTLING CO. OF NY, INC.	470 EAST SANFORD BOULEVARD	Petroleum Bulk Storage Site
53	GESSIE & ARMANDO TASSONE	35 COLONIAL PLACE	Petroleum Bulk Storage Site
54	CHALGO PAINT CO., INC.	11 KIMBALL PLACE	Petroleum Bulk Storage Site
55	TRISTATE TOP-NOTCH PARTY RENTALS INC.	815 SOUTH COLUMBUS AVE.	Petroleum Bulk Storage Site
56	PEPSI MT. VERNON	470 EAST SANFORD BLVD.	Petroleum Bulk Storage Site
57	Q & S MT. VERNON, LLC	510-570 GARDEN AVENUE	Petroleum Bulk Storage Site
58	JOE S AUTO WRECKERB. INC.	527 SOUTH COLUMBUS AVENUE	Petroleum Bulk Storage Site
59	COLUMBUS AUTO BODY	635 SOUTH COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
60	RITZ CLEANERS	436 EAST SANFORD BLVD	Hazardous Waste Generator/Transporter
61	LIBERTY WASTE MANAGEMENT	516 GARDEN AVE	Hazardous Waste Generator/Transporter
62	UNITED REBUILDERS	450 E SANFORD BLVD	Hazardous Waste Generator/Transporter
63	ROMAN LANDSCAPE CONTRACTING	35 COLONIAL PLACE	Hazardous Waste Generator/Transporter
64	NYSDEC REGION 3	33 CANAL STREET	Hazardous Waste Generator/Transporter
65	CONSOLIDATED EDISON CO UNIT 61	SARBENT PLACE COLUMBUS AVENUE	Hazardous Waste Generator/Transporter
66	CONSOLIDATED EDISON	MH11152--SANFORD & HIGHLAND	Hazardous Waste Generator/Transporter
67	CONSOLIDATED EDISON	10323--550 GARDEN AVE	Hazardous Waste Generator/Transporter
68	CONSOLIDATED EDISON	E SANFORD BLVD & BEDFORD	Hazardous Waste Generator/Transporter
69	CONSOLIDATED EDISON - MH 13	SOUTH COLUMBUS AVENUE & CARLET	Hazardous Waste Generator/Transporter
70	CONSOLIDATED EDISON - MH 12	SOUTH COLUMBUS AVENUE AND BERT	Hazardous Waste Generator/Transporter
71	CONSOLIDATED EDISON	50 COLUMBUS & CARLTON	Hazardous Waste Generator/Transporter
72	CONSOLIDATED EDISON	S COLUMBUS AVE & SANFORD BLVD	Hazardous Waste Generator/Transporter
73	CON EDISON	645 NEWTON PL	Hazardous Waste Generator/Transporter
74	CON EDISON	DURHAM & SANFORD BLVD	Hazardous Waste Generator/Transporter
75	CON EDISON	" S COLUMBUS AVE"	Hazardous Waste Generator/Transporter
76	CON EDISON	8 COLUMBUS AVE & COLONIAL PL	Hazardous Waste Generator/Transporter
77	CON EDISON	" HIGHLAND AVENUE & SANFORD BLV"	Hazardous Waste Generator/Transporter
78	CON ED	600 EAST STANDFORD BLVD	Hazardous Waste Generator/Transporter
79	CON EDISON	HIGHLAND AVE & SANFORD	Hazardous Waste Generator/Transporter
80	CON EDISON	COLONIAL PL & SANFORD BLVD	Hazardous Waste Generator/Transporter
81	QUALITY BODY WORKS INC	657 S COLUMBUS AVE	Hazardous Waste Generator/Transporter
82	PEPSI COLA BOTTLING CO OF NY	470 E SANFORD BLVD	Hazardous Waste Generator/Transporter
83	TARGET STORE #1867	500 EAST SANFORD BLVD	Hazardous Waste Generator/Transporter
84	WESTCHESTER ENVIRONMENTAL FACILITIES CO OF HUTCHINSON PUMP ST 001	001 GARDEN AVE HUTCHINSON PUMP STATION	Hazardous Waste Generator/Transporter
85	MOUNT VERNON CITY OF - MEMORIAL FIELD	169 GARDEN AVE	Hazardous Waste Generator/Transporter
86	CVS PHARMACY #2164	15 COLONIAL PL	Hazardous Waste Generator/Transporter
87	PETCO STORE #1781	500 E SANFORD BLVD STE 570	Hazardous Waste Generator/Transporter
88	DPW CITY YARD	33 CANAL STREET	Wastewater Discharge Facility
89	NIGRO BROS ASPHALT CO	627 S COLUMBUS AVENUE	Air Discharge Site
90	ICE HUTCH	655 GARDEN AVE	Air Discharge Site

Toxic Sites - Section 5



Toxic Targeting Section 5

Key



- | | | |
|---|--------------------------------------|--------------------------|
| National Priority List (NPL) | Deleted NPL Site | Remediation Site Borders |
| CERCLA Superfund Non-RII/RII Site | CERCLA Superfund RI/RII Site | Subject Area |
| Inactive Hazardous Waste Disposal Registry Site | Hazardous Waste Disposal Facility | Waterbody |
| Hazardous Waste Transfer, Storage, Disposal | RCRA Corrective Action Facility | Railroad Tracks |
| Hazardous Substance Waste Disposal Site | Solid Waste Facility | |
| Major Oil Storage Facility | Brownfields Site | |
| Chemical Storage Facility | Hazardous Material Spill | |
| Toxic Release | Petroleum Bulk Storage Facility | |
| Wastewater Discharge | Hazardous Waste Generator, Transport | |
| Enforcement Docket Facility | Air Release | |

Identified Toxic Sites by Map Id
Mount Vernon BOA/LWRP Section 5, Mount Vernon, NY 10553

Map Id#	Site Name	Site Street	Toxic Site Category
1	WILSON WOODS LAKE	HUTCHINSON R @WILSON WOODS	Closed Status Spill (Unk/Other Cause)
3	HUTCHINSON RIVER	GRANDVIEW OFF EAST 3RD ST	Closed Status Spill (Misc. Spill Cause)
4	HUTCHINSON RIVER	FARRELL AVE	Closed Status Spill (Misc. Spill Cause)
5	WILSON WOOD PARK	WILSON WOOD PARK	Closed Status Spill (Misc. Spill Cause)
6	HUTCHINSON RIVER	BEECHWOOD AVE	Closed Status Spill (Misc. Spill Cause)
7	CON ED	FARRELL AVE/BEECHWOOD AVE	Closed Status Spill (Misc. Spill Cause)
8	WILSON RIDGE PARK	8 BRANFORD PLACE	Closed Status Spill (Misc. Spill Cause)
9	HOME	EAST 5TH ST/HUTCHINSON AVE	Closed Status Spill (Misc. Spill Cause)
11	NYSDOT BIN 5500100	LINCOLN AVE OVER HUTCHINSON	Hazardous Waste Generator/Transporter
13	WILLSON'S WOODS PARK	8 BRADFORD RD	Chemical Bulk Storage Facility
2	EASTCHESTER CREEK	LINCOLN AVE/BRADFORD RD	Closed Status Spill (Unk/Other Cause)
10	AT EXCAVATION SITE	E. LINCOLN AVE/BRADFORD P	Closed Status Spill (Misc. Spill Cause)
12	CONSOLIDATED EDISON	BRADFORD AVE & LINCOLN AVE	Hazardous Waste Generator/Transporter

Identified Toxic Sites by Category
Mount Vernon BOA/LWRP Section 5
Mount Vernon, NY 10553

Closed Status Spills (Unknown Causes & Other Causes) -- Total Sites - 2			Database searched Onsite only
MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET
1	8901408	WILSON WOODS LAKE	HUTCHINSON R @WILSON WOODS
2	9800338	EASTCHESTER CREEK	LINCOLN AVE/BRADFORD RD
Closed Status Spills (Miscellaneous Spill Causes) -- Total Sites - 8			Database searched Onsite only
MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET
3	9409399	HUTCHINSON RIVER	GRANDVIEW OFF EAST 3RD ST
4	8909490	HUTCHINSON RIVER	FARRELL AVE
5	8605414	WILSON WOOD PARK	WILSON WOOD PARK
6	1405115	HUTCHINSON RIVER	BEECHWOOD AVE
7	0604217	CON ED	FARRELL AVE/BEECHWOOD AVE
8	0501362	WILSON RIDGE PARK	8 BRANFORD PLACE
9	0400262	HOME	EAST 5TH ST/HUTCHINSON AVE
10	0613364	AT EXCAVATION SITE	E. LINCOLN AVE/BRADFORD P
Hazardous Waste Generators, Transporters -- Total Sites - 2			Database searched Onsite only
MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET
11	NYD986998292	NYSDOT BIN 5500100	LINCOLN AVE OVER HUTCHINSON
12	NYP004150330	CONSOLIDATED EDISON	BRADFORD AVE & LINCOLN AVE
Chemical Bulk Storage Facilities -- Total Sites - 1			Database searched Onsite only
MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET
13	3-000210	WILLSON'S WOODS PARK	8 BRADFORD RD

Underutilized Sites

Due to the nature of an industrial area, some sites may be identified as underutilized, even though they are active sites and are providing a benefit to the city and surrounding community. These sites may not be pretty, or enclosed in a building, but are employing workers and are an active part of the industrial life of Canal Village area. Not all lots identified as underutilized present an opportunity for development and could remain operating as they are today. To improve the appearance of the neighborhood, the City can maintain the public realm of the streets to make sure they remain inviting and in good condition. This sends a signal to visitors and business owners that the City cares for the neighborhood, and it conveys the image of a safe place to be.

Definition

The New York State Department of Environmental Conservation’s Brownfield Redevelopment Toolbox has defined a brownfield site to mean:

“...abandoned or underused properties, including but not limited to industrial and commercial facilities, where redevelopment or expansion may be complicated by possible environmental contamination (real or perceived).”

While abandoned property is easily identifiable from on-site visits, underused (or underutilized) sites require a definition. New York State has defined an underutilized site to mean:

“as of the date of application, real property on which no more than fifty percent of the permissible floor area of the building or buildings is certified by the applicant to have been used under the applicable base zoning for at least three years prior to the application, which zoning has been in effect for at least three years; and

- (1) the proposed use is at least seventy-five percent for industrial uses; or
- (2) at which:
 - (i) the proposed use is at least seventy-five percent for commercial or commercial and industrial uses;
 - (ii) the proposed development could not take place without substantial government assistance, as certified by the municipality in which the site is located; and
 - (iii) one or more of the following conditions exists, as certified by the applicant:

- (a) property tax payments have been in arrears for at least five years immediately prior to the application;
- (b) a building is presently condemned, or presently exhibits documented structural deficiencies, as certified by a professional engineer, which present a public health or safety hazard; or
- (c) there are no structures.

“Substantial government assistance” shall mean a substantial loan, grant, land purchase subsidy, land purchase cost exemption or waiver, or tax credit, or some combination thereof, from a governmental entity.”¹

Methodology

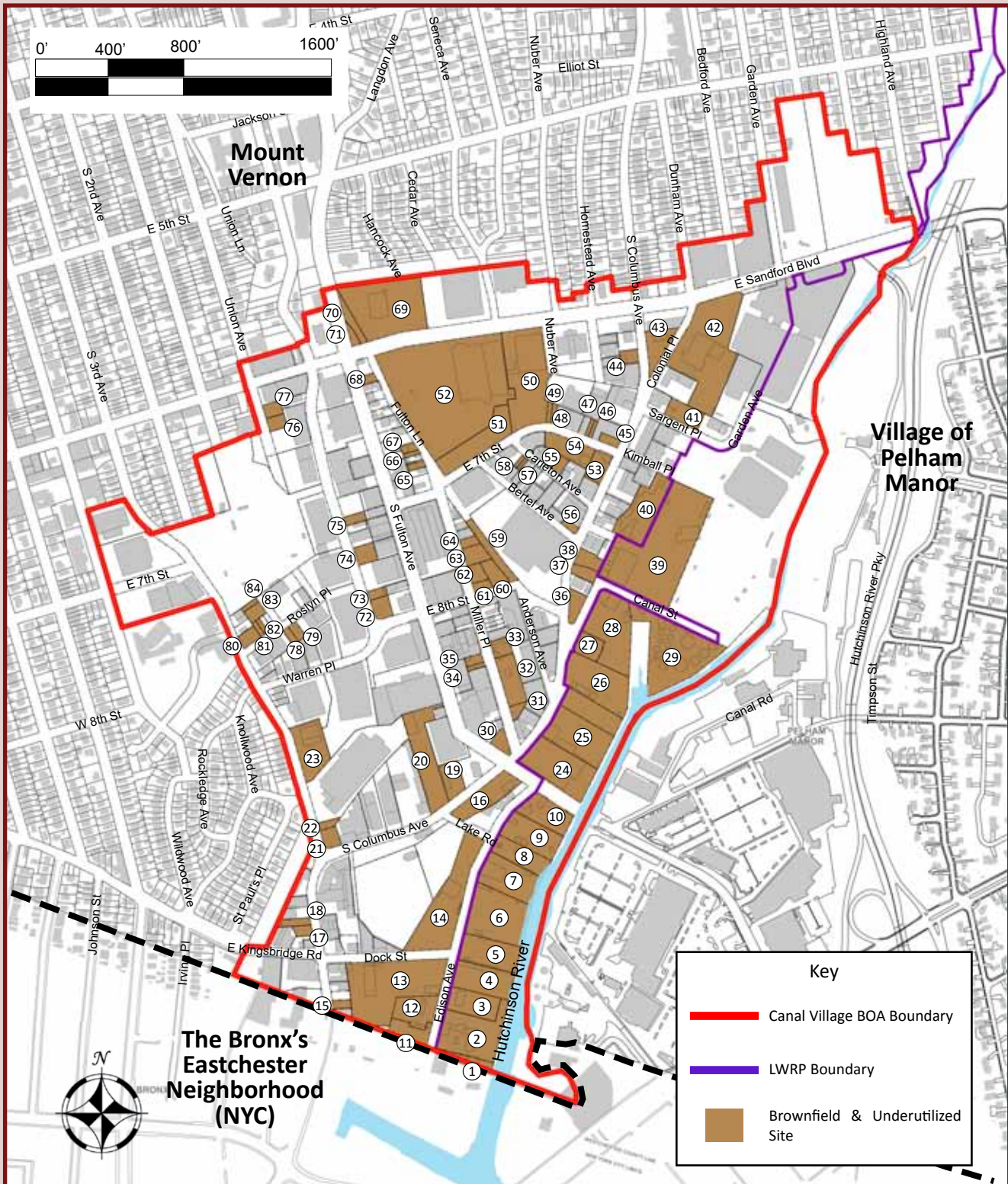
Using information from the city in the form of geographic information systems (GIS), a map of the area was created that included parcels, rights-of-way, as well as building footprints. This map was then cross-referenced with on site investigations and observations, along with aerial digital imagery from mapping resources such as Google Maps and other publicly available data.

Public and private lots were examined and each location was measured against the definition of “brownfield” and “underutilized” as defined by New York State. Park lands as well as National Historic Sites were not included as a part of this survey due to their nature as a public amenity and importance to the identify of the neighborhood. After a review of the parcels within Canal Village area, a set of 84 sites out of 282 identified parcels were identified as underutilized. These 84 sites total to approximately 61 acres out of a possible 202 acres of property within Canal Village — 30% of the available land for development.

Information on each parcel that was identified as underutilized can be found the Appendix to this report. This information includes: the parcel’s address, ownership, current use, current zoning, adjacent uses, acres, access to the site, and potential future uses.

Potential future uses can be found in Section 4 — Analysis and Recommendations, under Strategic Sites in table Strategic Brownfield Opportunities. This table includes: address, ownership, current use, historic use, current zoning, adjacent uses, acres, access, regulatory agency database status, environmental narrative, and potential uses.

1. Per Revised Express Terms - 6 NYCRR Part 375, Amendments to 6 NYCRR Part 375, Environmental Remediation Programs - Revisions to BCP Regulations



Brownfield & Underutilized Sites Map

The above map illustrates brownfield and underutilized sites identified in Canal Village area. These sites are shown in brown. The sites are numbered and correspond to information found in the Appendix to this report. Information includes: the parcel's address, ownership, current use, current zoning, adjacent uses, acres, access to the site, and potential future uses.

Strategic Sites

Development and investment in a neighborhood can help to improve the appearance of a place, leading to pride in the neighborhood and making it a desirable place to work. Some lots can achieve this more easily than others, and can be considered strategic in creating more investment. This section identifies a set of criteria through which to identify and prioritize lots that have the potential to be strategic in Canal Village area.

Criteria

It is assumed that some properties will meet more than just one of the criteria below:

Publicly Owned Lots:

- The nature of this report lends itself to identifying lots where the city can have a direct impact on improving the neighborhood and encourage investment. Improving existing public lands can have the affect of making adjacent properties more attractive for investment and job creation.

Underutilized Lots:

- By getting commerce back on the underutilized properties, the City can improve the tax base, maximize economic potential, and the appearance of the neighborhood will improve with the increase of activity and new buildings.

Underutilized Lots that are Adjacent to other Underutilized Lots:

- The description sounds confusing, but the idea here is that there can be a positive spillover effect that happens after one property redevelops, the neighbor decides to join the effort if their own property does not look as attractive.
- Also because some of the parcels in the neighborhood are small, a combining of smaller lots could can lead to a larger opportunity.

Lots at Key Intersections:

- Key intersections include intersections that are highly visible for visitors as well as locations that can serve as focus points for commercial activity. Improving the lots at these locations make destinations that further improve the appeal of the neighborhood, increasing the sense of place and pride and encouraging investment.

Contiguous Underutilized Sites with the Same Owner:

- In a similar manner to publicly owned sites, multiple adjacent sites that have the same owner have the potential for quicker development, or investment. The larger developments can accommodate their own parking demands more efficiently than two or three smaller ones.

Other locations that were determined important to consider as strategic were:

Publicly Owned Land that is Planed for Improvements:

- While the city can directly invest in improving all public lands, locations that already have plans for improvement have a larger public profile, and as a result, have an increased likelihood of improvement.

Major Rights-of-Way:

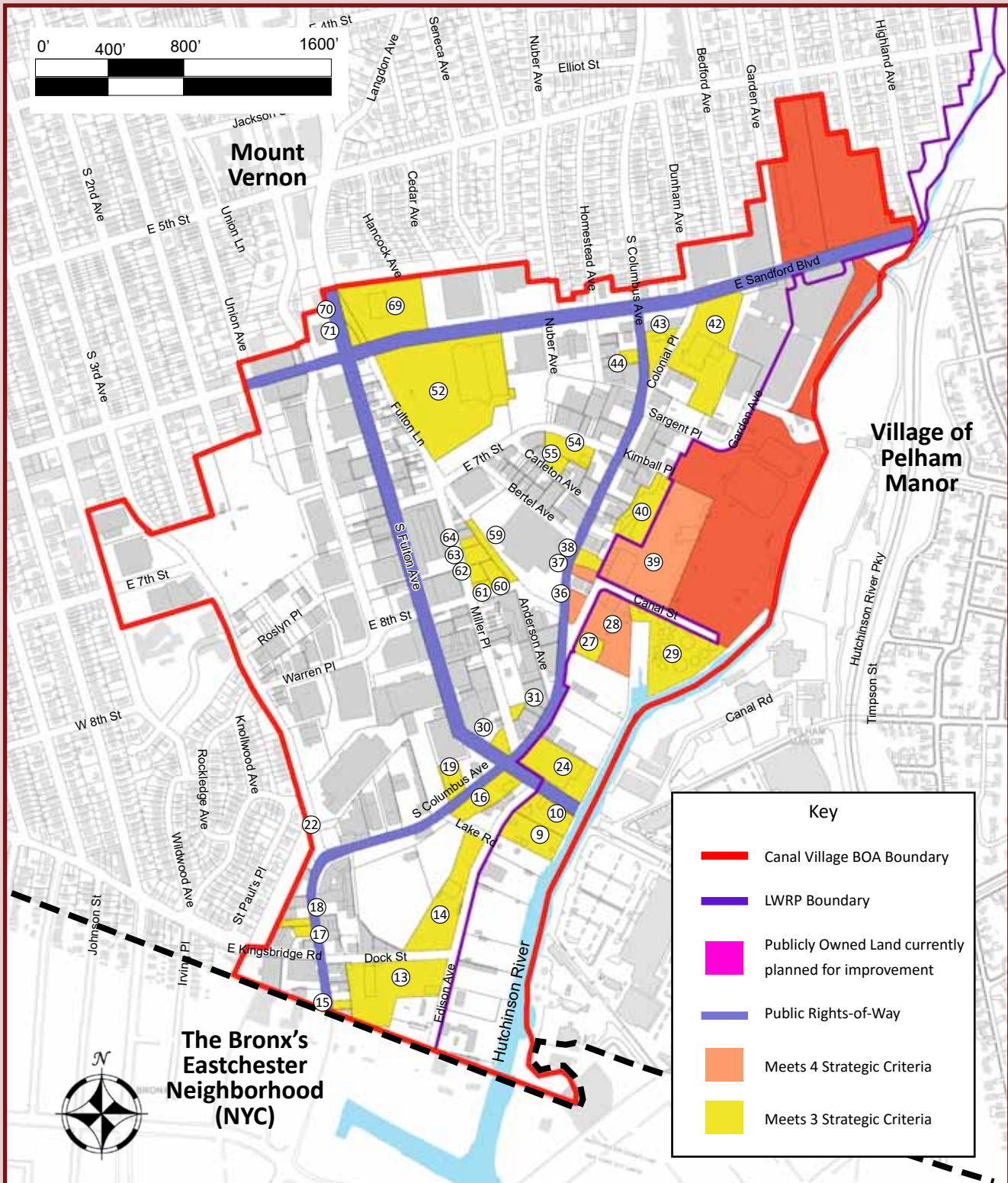
- Streets also play a large role in the perception of a neighborhood. Improving street pavement, increasing sidewalks where possible, and including street trees and multi-modal systems such as bike lanes increase the appeal of an area. Street improvements should be considered throughout the Canal Village, however major thoroughfares were identified as the place with the greatest potential to have a positive affect due to their high visibility.

Methodology

Each underutilized site was analyzed using the criteria outlined above, and each lot was assigned a number that corresponded to the number of criteria that the lot met. In order to prioritize lots and identify strategic locations, all lots that scored a 3 or higher were determined to be strategic. A higher number indicated a more strategic site. This has been shown graphically in the “Strategic Sites Map.”

Additionally, lots that were publicly owned and planned for improvements were automatically included as strategic due to their high public profile and with the understanding that the city and public are interested in investing and improving these locations.

Major thoroughfares have also been identified as being strategic for Canal Village area as well, since they make up a significant part of the Public Realm that can be affected by the City.



Strategic Sites Map

The above map depicts strategic sites based on the 6 criteria outlined to the left. Three categories of strategic sites have been identified following these criteria and include, publicly owned land currently planned for improvement, lots that meet 4 strategic

criteria, and lots that meet 3 strategic criteria. None of the lots within Canal Village area met all of the criteria outlined and, therefore, this category has not been incorporated in this map.

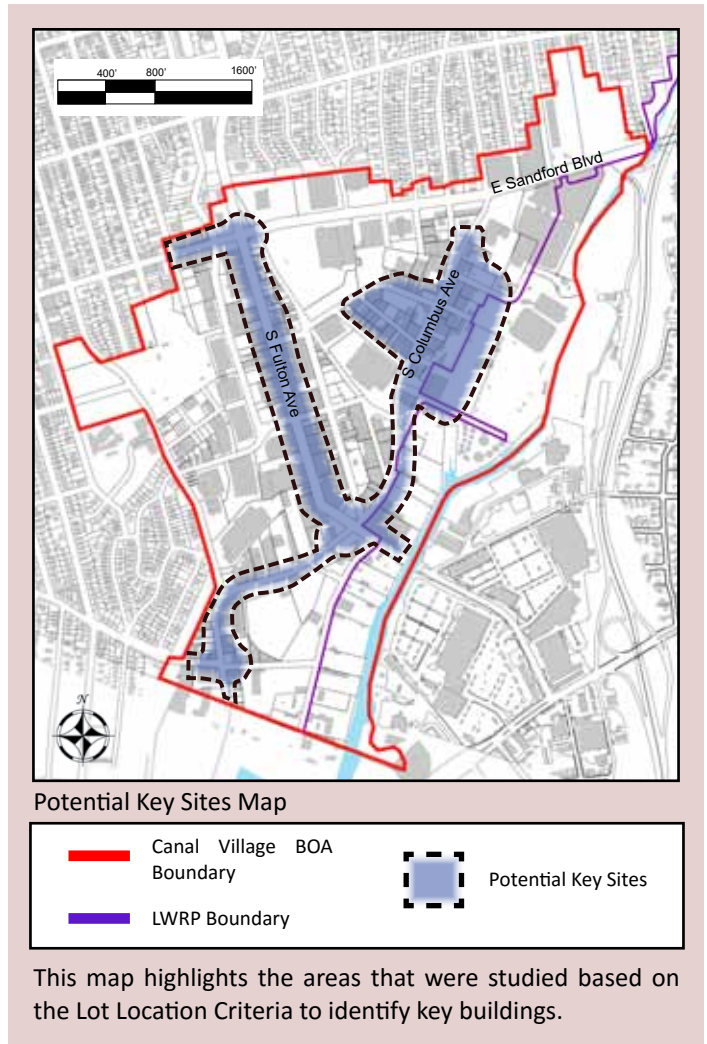
Building Inventory

Key buildings in Canal Village area were identified by measuring the structures based on a series of criteria. A priority was placed on emphasizing good urban form, and encouraging local small business and entrepreneurship. It is important to note that key building identification does not reflect, or intend to comment on the businesses contained within the structures of Canal Village area. This survey is based on the physical form and location of the buildings themselves, independent from the businesses contained within the structures.

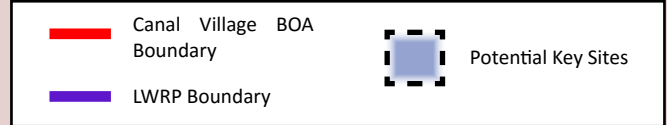
Methodology

In order to identify key buildings within Canal Village area, three components were investigated. These included:

- **Lot Location:** In order to identify potential key sites, primary and secondary thoroughfares within the neighborhood were identified. Intersections of the major thoroughfares were included, due to the high level of public exposure. Scenic resources were also considered for key locations, because proximity to parks, or water features can provide good opportunities to both enhance the natural surroundings and increase the attractiveness of the area.
- **Lot Size:** A vibrant industrial neighborhood provides opportunities for both large-scale and small business. Smaller lots present opportunities for small businesses as well as entrepreneurs by providing a location that has a lower cost of entry and, thus, a lower amount of investment required. These blocks can function as incubation space for start-up industries as well as locations for small, local industries to thrive.
- **Building Placement and Form:** Once key sites were identified, the existing structures were evaluated in terms of placement, form, and character. As a result, buildings were placed into one of three categories:
 1. **Good Street Relationship, Contributing:** buildings with a close relationship to the street, and interesting facades including windows, doors, and few blank walls. This creates an engaging environment for pedestrians and encourages walking.



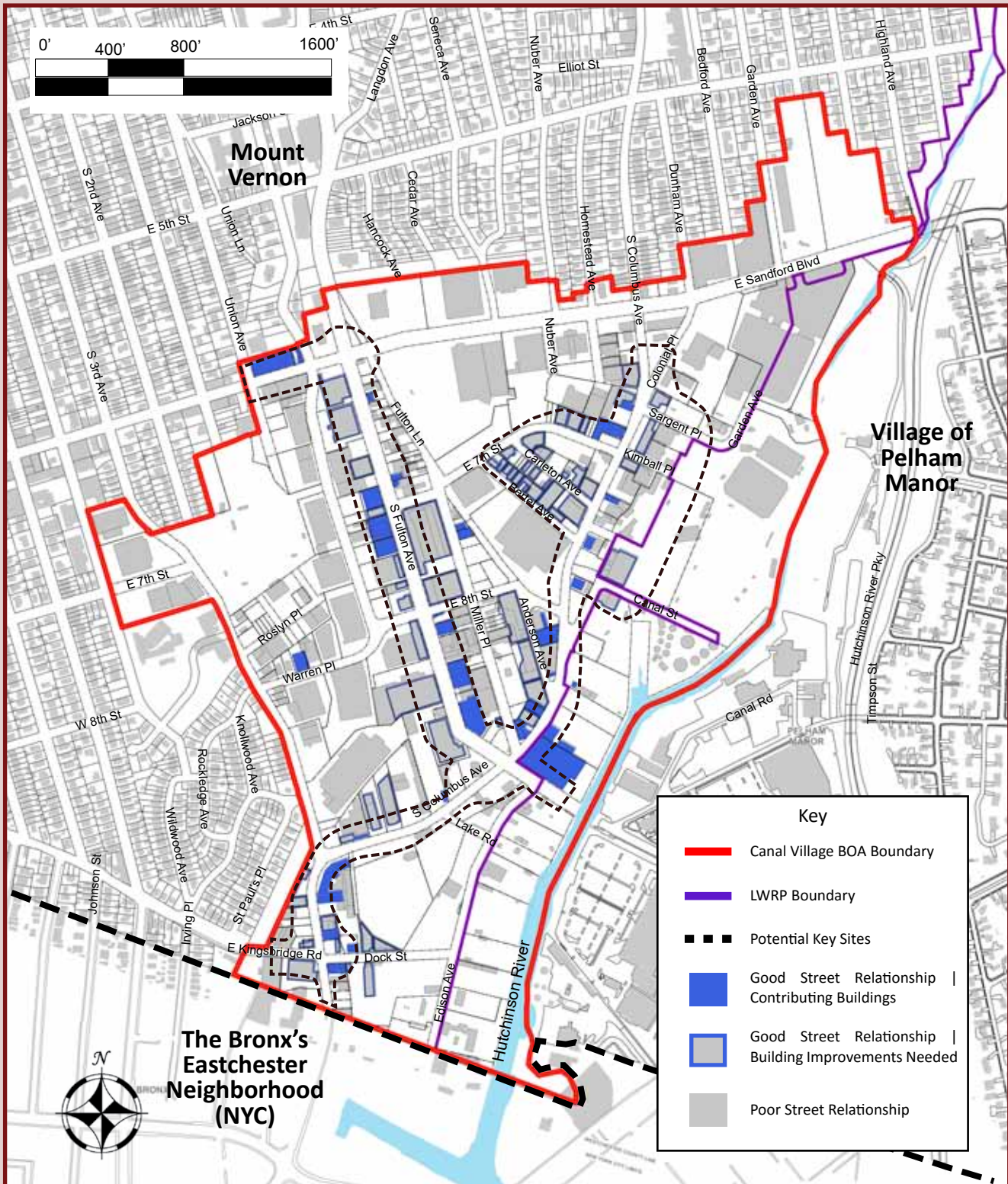
Potential Key Sites Map



This map highlights the areas that were studied based on the Lot Location Criteria to identify key buildings.

2. **Good Street Relationship, Improvements Needed:** buildings that are placed close to the street, but that could use some improvement in how well they engage the pedestrian realm and make the street interesting. Small improvements could be made that would enhance the industrial character of Canal Village area such as large doors for circulation, smaller windows at street level, and large windows above to maximize the amount of uninterrupted light into the interior.
3. **Poor Street Relationship:** buildings that are located far from the street on the site. These buildings don't contribute to the sense of place and are representative of an auto-oriented environment.

The appendix at the end of this document has a list of key sites and information including addresses, or building names, number of levels, approximate sizes, use histories, current uses, condition of the structures, key sites designations, and ownership.



Key	
—	Canal Village BOA Boundary
—	LWRP Boundary
- - -	Potential Key Sites
■	Good Street Relationship Contributing Buildings
■	Good Street Relationship Building Improvements Needed
■	Poor Street Relationship

Key Buildings

This map identifies key buildings within Canal Village area based on criteria of good urban form, and encouraging small business and entrepreneurship.

Historic Resources

Just as knowing your own family history gives you a sense of pride and identity, the same holds true for a city or a neighborhood. The older buildings have details that perhaps are no longer made, like a brickwork pattern, the top edge of a parapet wall, and the proportioning of a window. Canal Village area has a lot of history and that means its buildings and places have stories to talk about. Making those stories available are one of the means to keep people interested in owning a business here, patronizing a business here, and using the parks. The character of Canal Village area, by blending the old with the new, is unique among other areas within the region. For this analysis, the consultants reviewed every building in the neighborhood looking for those with unique detailing and character. Today's revitalization of the neighborhood will add to the stories of tomorrow, and it would be a shame to lose the first part of the story.

Methodology

Buildings that contribute to the sense of place in Canal Village were identified through of process of reviewing each structure and measuring them against a series of criteria. This criteria is intended to be a general overview of the structure and to point out buildings that are worth considering when discussing the character of Canal Village area. Further discussion and study is needed when determining what should be maintained and preserved.

The criteria used in evaluating each building is similar to the Nation Park Service's definition of integrity and include:

- *Historic Significance*: the link to an important historic event, or person of local or national interest.
- *Quality of Design*: the combination of elements that create the form, plan, space, structure, and style of a property, and the level at which the design expresses the ideals of a particular aesthetic.
- *Quality of Workmanship*: physical evidence of the crafts of a particular time period and the level at which the evidence is executed.

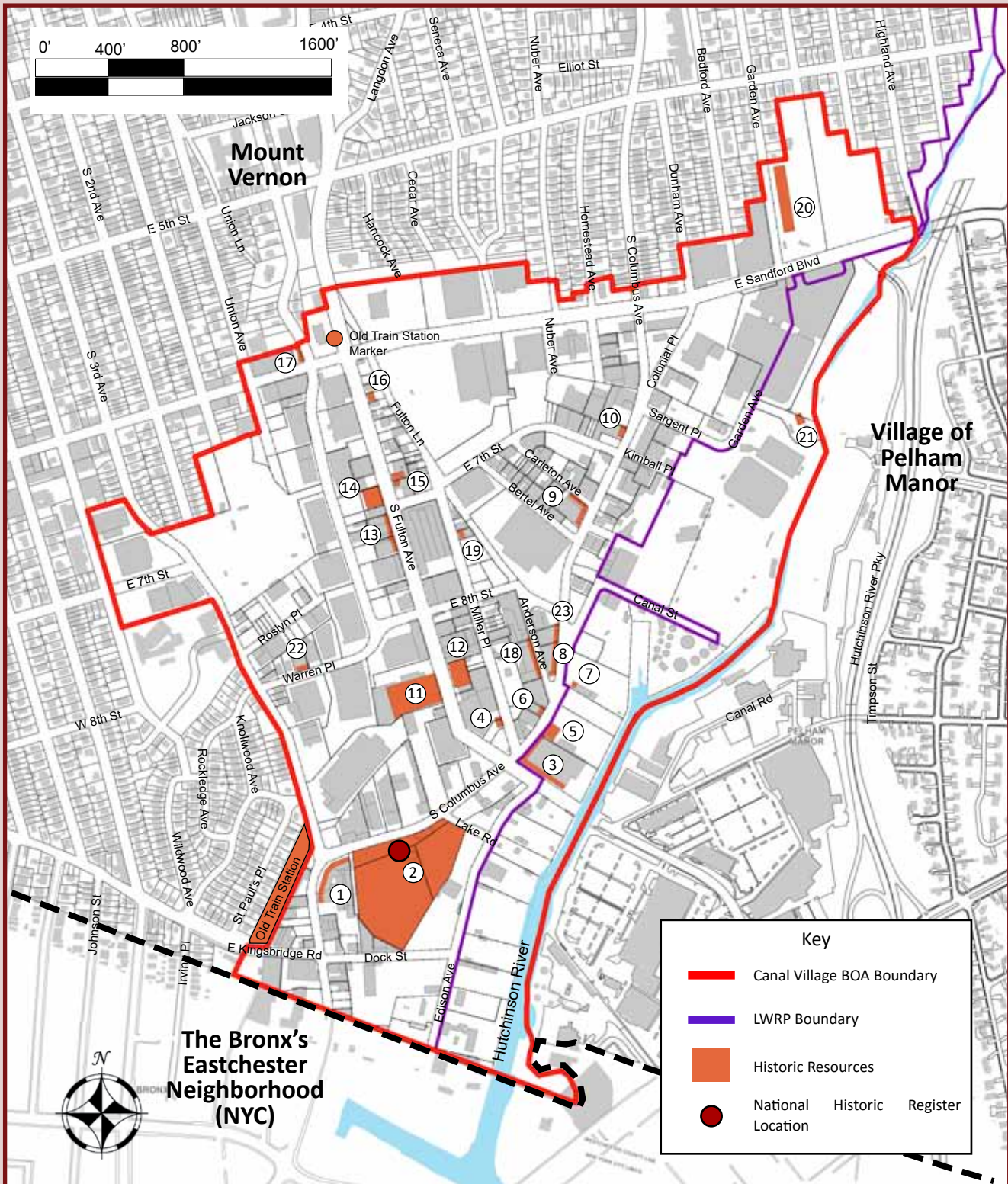
- *Expressiveness of Industrial Character*: how well the structure creates a connection to the industrial history of Canal Village area. Industrial architecture tends to rely on some economies of design. These ideas include simple volumes with little elaboration to reduce cost, large doors for ease of access into and out of the building, and large clerestory windows in order to provide, or allow uninterrupted natural light inside. Often times brickwork is incorporated into the aesthetic of an industrial building as a method to compensate for a lack of expensive ornamentation.
- *Age*: Buildings determined to be over 50 years old were examined. This criteria is based on criteria outlined by the National Register of Historic Places.

Buildings were reviewed, examining how well they address the criteria outlined. As a result, 23 locations have been identified as being historic contributors to Canal Village. In some cases, the entire building was determined to be historic, while in others, only the facade was recommended for preservation.

Many of the identified structures were built in the late 1800's and early 1900's, however, there are also good examples from more recent times.

More information about these historic resources have been included in an appendix and are arranged by address.

The identified buildings can also serve as examples for future development. Lessons in local scale, materials, volume, opening sizes and proportions, details, and the way the buildings address the street are visible through these structures. By being sensitive to these lessons and applying them appropriately, new development can contribute to the character and history of Canal Village area and continue to foster a sense of pride in the community for both residents and business owners.



Historic Resources Map

This maps identifies key buildings within Canal Village area based on criteria of good urban form, and encouraging small business and entrepreneurship. Only St. Paul’s Church is on the National Historic Register. The remainders on the map above are not

protected. In most cases, these are architectural elements and facades (not whole buildings) that could be preserved or restored as part of a larger redevelopment effort on the same site.

ENVIRONMENTAL CONDITIONS

Water Quality

The New York State Department of Environmental Conservation (NYSDEC) Division of Water has established best usage classifications for all water bodies in New York State, and each classification has been assigned a discharge water quality standard. Within Canal Village area, the Hutchinson River stream segment located south of East Sanford Boulevard / East Colonial Avenue is considered tidally influenced and is classified as SB. Above this junction, Hutchinson River is considered a freshwater stream and is classified as B. These classifications are defined below and brief descriptions are provided to characterize the water quality conditions.

Hutchinson River South segment:

NYSDEC defines the best usage of Class SB saline surface waters as primary and secondary contact recreation, and sets the water quality standards as suitable for propagation and survival of fish, shellfish and wildlife. Primary contact recreation refers to activities where the body comes in direct contact with, or is submerged in water, such as swimming, diving, water skiing or surfing. Secondary contact recreation activities include boating or fishing, where the contact with water is minimal and ingestion is not likely.

Based on NYSDEC data from March 2017, the water quality of this river segment is considered moderately to severely impacted due to sewage pollution. Low dissolved oxygen, the presence of PCB contaminated sediments, high pathogen and nutrient levels, and floatable debris impairs most recreational activities, and the NYS Department of Health has issued health advisories limiting fish consumption.

At the intersection of Hutchinson Avenue and East 5th Street there is a road-end stone and masonry pedestrian overlook above the Hutchinson River. At this location, an 8-inch flex hose was observed lying on the ground out of sight at the base of the pedestrian overlook that ran the length of the hill to its terminus at the edge of the Hutchinson River. Such flex hoses are typically associated with vacuum truck use, and could represent an illicit discharge to the river. Visual observation of the water directly downstream at the bridge / bus stop on Colonial Avenue and East Sanford Boulevard appeared to be greyish, which is generally indicative of septic waste. The flex hose that enters the lake approximately 1,000 feet upriver is a likely transport mechanism for such septic wastes that would cause this discoloration.

The City of Mount Vernon owns a strip of land on the east side of Hutchinson Field that is used as a transfer station.

There is a boat ramp located in this area that was observed to be debris-filled, and the majority of the piles were open to the air. The river is exposed to the transfer station for approximately 400 feet starting at the boat ramp and heading south. North of the boat ramp there was an earthen berm that separates the transfer operations and the river.

Hutchinson River North Segment:

NYSDEC defines the best usage of Class B fresh surface waters as primary and secondary contact recreation and fishing; and sets the water quality standards as suitable for propagation and survival of fish, shellfish and wildlife. However, these waters are not considered as suitable for drinking.

This more northern segment of Hutchinson River is also considered impaired for bathing and other recreational uses due to high bacterial and pathogen levels, floatable debris occasional spills. NYSDEC reported that urban stormwater runoff and sanitary overflows were primary pollutants as of March 2017.

Water runoff by means of overland flow or below grade drainage basins has created large sediment deposits on the northern half of Pelham Lake. The Lake should be dredged of accumulated sediments to reduce biological oxygen demand, restore wetland functions and values including nutrient removal via natural filtration, improve flood flow storage, improve the ecological food web and enhance fish and wildlife habitat.



An 8-inch flex hose was observed at the intersection of Hutchinson Avenue and East 5th Street. This is indicative of septic waste disposal.

Fish & Wildlife Habitation

Urban and suburban habitats characterize the Mount Vernon BOA LWRP study area. Ecological communities consist largely of urban structural exteriors (i.e., retaining walls, tanks, homes, commercial centers and other built structures), mowed lawns with trees, and southern successional woodlands. Horticultural plants including street trees (i.e., honey locust, London plane tree, little leaf linden) shrubs and lawns dominate the manicured open spaces. Narrow strips between built lots, and other open spaces are predominantly covered by weeds, invasive trees (e.g., Norway maples, tree-of-heaven, and mulberry), vines and non-native escaped ornamental plants. Occasional wooded patches occur supporting native oak trees that reflect an earlier pre-disturbance community.

Several invasive plant species were observed bordering the river banks, as well surrounding Pelham Lake. The invasive plants were identified as Japanese knotweed (*Fallopia japonica*), porcelain berry (*Ampelopsis glandulosa* var. *brevipedunculata*), dodder (*Cuscuta* spp.), common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*). All of these invasive plants were found on the north and west sides of Pelham Lake. Water chestnut (*Trapa natans*) resembles a water lily in growth habit, with floating leaves a bulb on its stem and roots into the lake sediments. Water chestnut was identified on the southern edge of the lake. This is a very invasive species, which multiplies quickly, and can over take large areas at a time outcompeting desirable native plants. Decaying masses of aquatic weeds such as water chestnut can deplete dissolved oxygen levels and cause fish kills. The locations of invasive plants should be mapped, and plans developed to eradicate or control the spread of these species, along with scheduled replacements by native trees, shrubs and groundcovers.

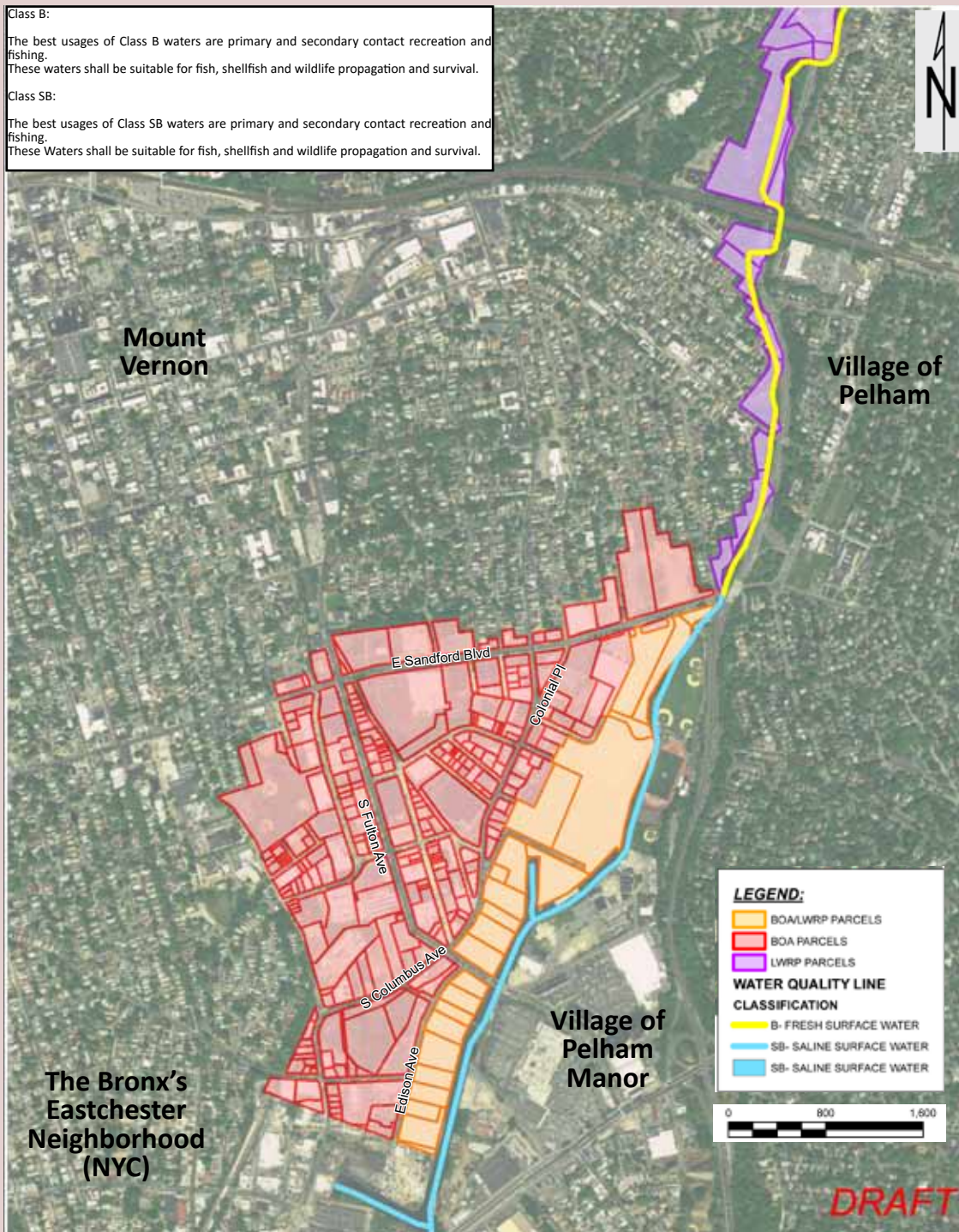
Vegetation in the urban parks function as habitat islands, providing limited food and protective cover to birds, squirrels and other wildlife that could either live entirely within the park environs, or move readily down streetscapes to other green islands. In contrast, the open spaces bordering the Hutchinson River provide a connected urban corridor that could support a more diverse wildlife population, including water and wading birds, herpetofauna (reptiles and amphibians) and small mammals. Based on the NYSDEC water quality reports, aquatic life in the River is extremely stressed and limited due to septic wastes, floatables and other non-point and point source pollutant discharges.



Water chestnuts (*trapa natans*) is an invasive species that were observed on the southern edge of Pelham Lake.



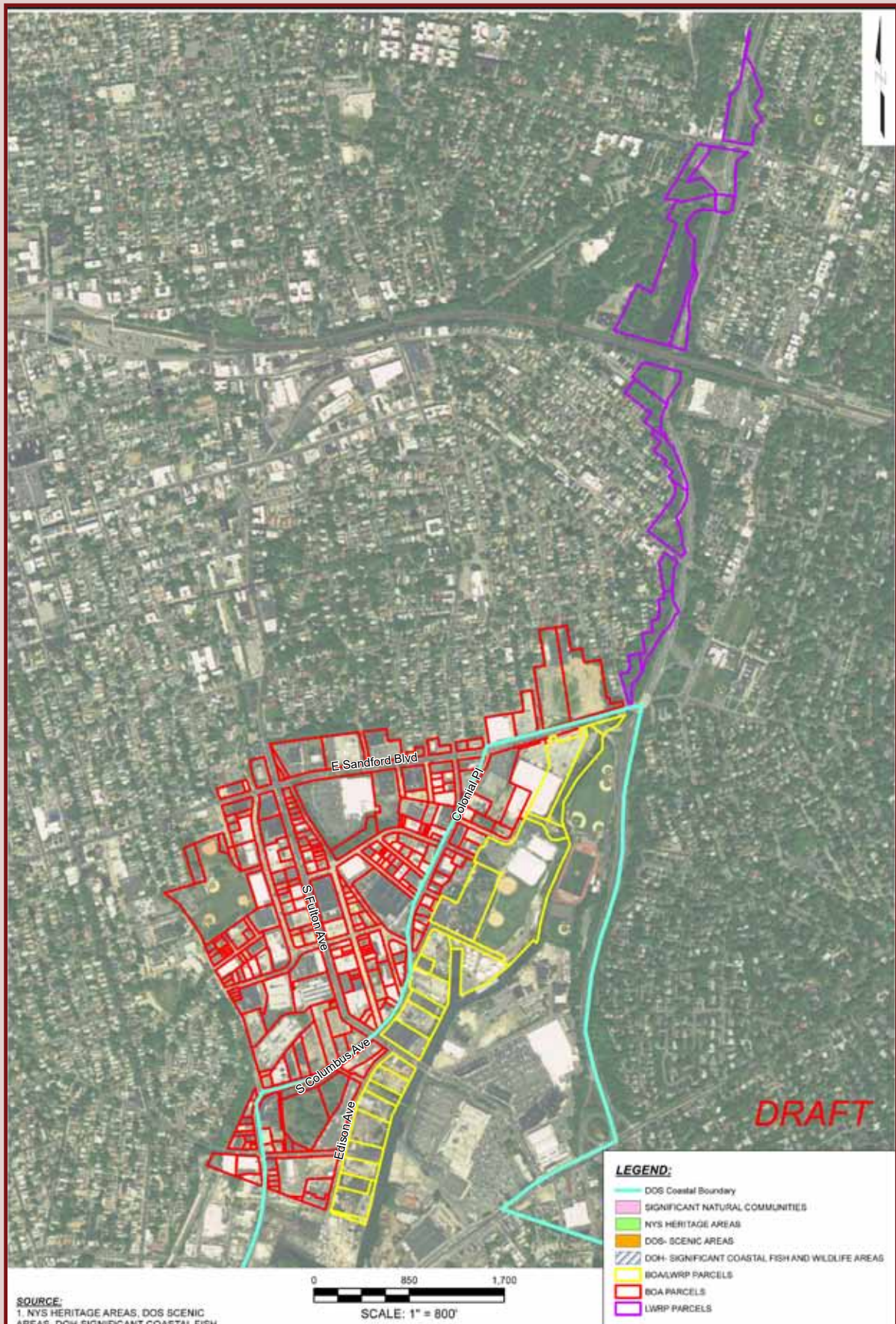
Geese frequent the shore of the Canal. This one is on the Pelham Manor side of the shore gazing upon Mount Vernon.



Water Quality and Water Use

The map above indicates New York State Department of Environmental Conservation's classifications of water and identifies Class B and Class SB.

The yellow line on the map indicates water that is Class B, and the blue areas on the map identify water that is Class SB.



Fish and Wildlife Map

Flooding & Erosion

Much of the Canal Village is above the floodplain of the Hutchinson River, however all of the properties south of Canal Street that are between Columbus Street and the Canal are not. North of Canal street it is only the park lands that are in the flood plain.

According to property owners, it is not uncommon after a major rain event combined with a high tide, to find a few inches of salt water infiltrating the floor of their buildings.

If the flooding does continue to happen, the streets will need to be raised over time, and property owners will need to be adding fill. Any new construction will have to follow the minimum first floor heights as set by FEMA.

Environmental Issues

With a long history of industrial uses in this neighborhood, there is bound to be contamination in various places. Good news perhaps is that most of the industrial activity is 100 years old or less. Maps from 1910 show only a little bit of industrial uses, but by the late 1920s and early 1930s there were quite a few. According to the old Sanborn Fire Insurance Maps, most of the properties along the Canal had gas storage structures.

Some of the businesses have complied with State and Federal regulations and have storage tanks for hazardous materials. This practice is referred to as “Bulk Storage of chemicals, Petroleum, and Liquefied Natural Gas.” The DEC has programs in place to accept registrations. A public data base is provided by DEC showing the current locations for Bulk Storage. There is a map of these locations in Canal Village and surroundings on page 3.44, Environmental Conditions.

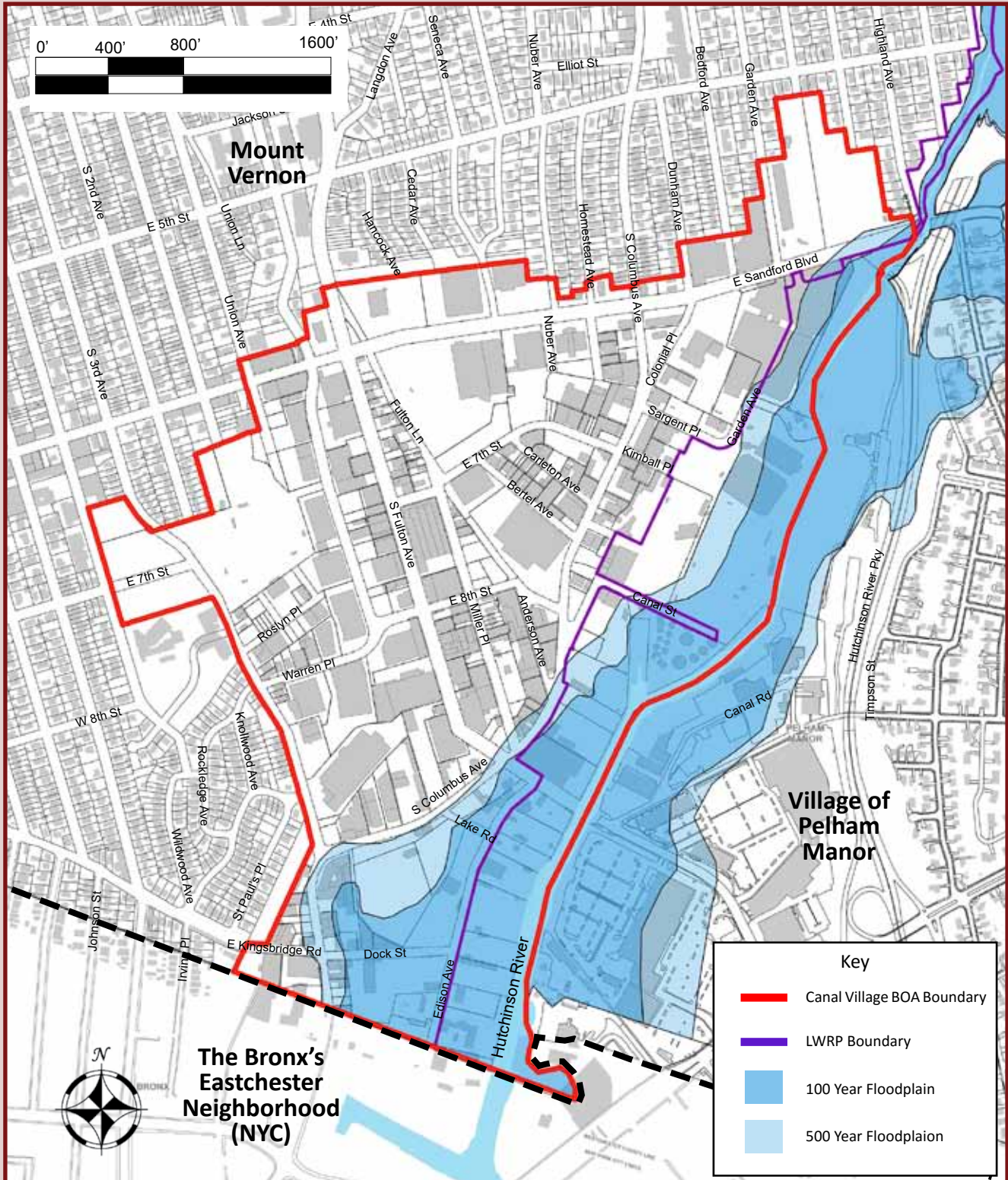
More recent reinvestments in the neighborhood have resulted in two areas of clean up or removal of bulk storage. These are also shown on that map.



The City will be modernizing its recycling sorting center and moving it off this site.



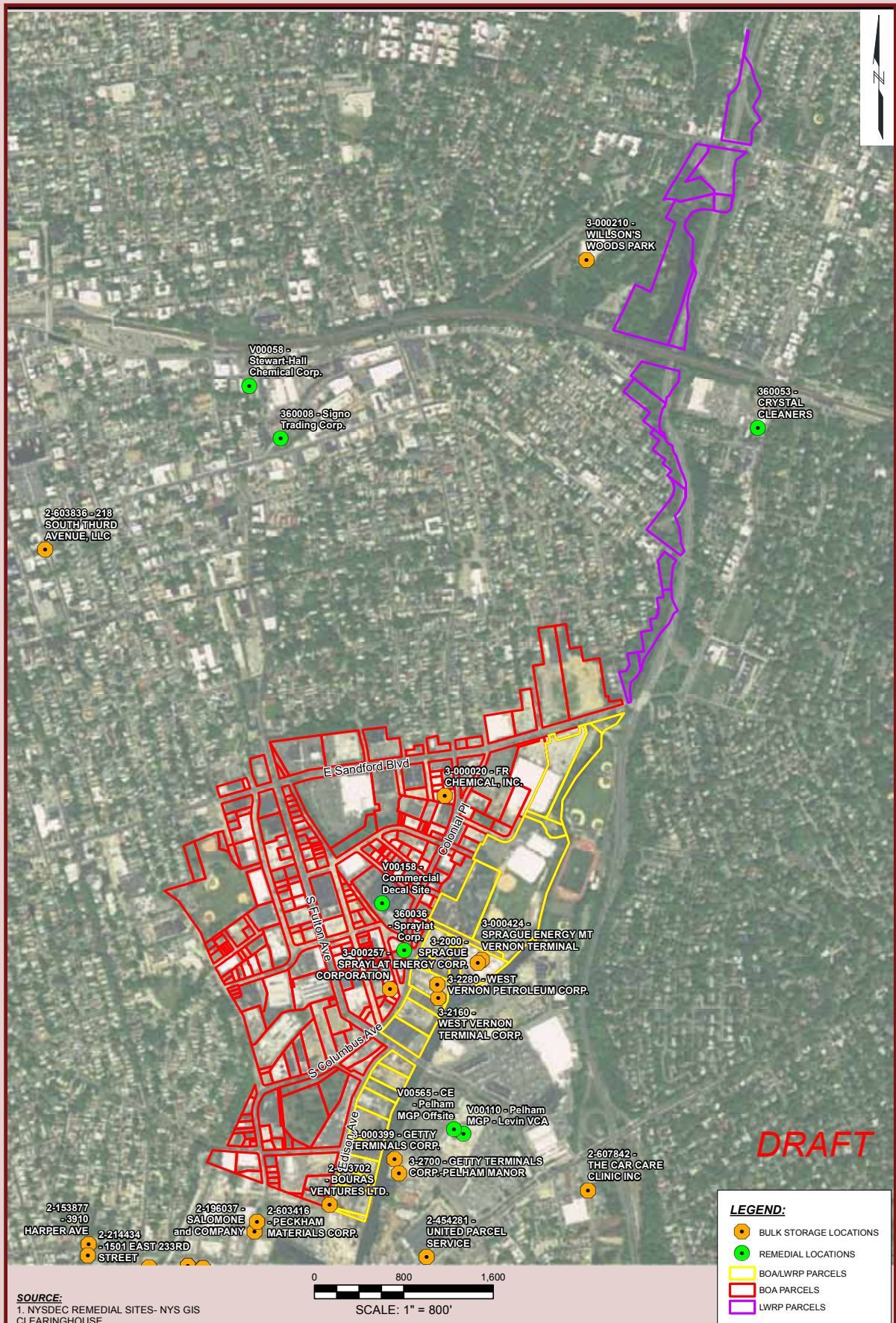
This pile of rubble that includes an old boat, broken concrete, construction debris, clothing, bedding, plastics of all kinds and many other items of unknown origins dumped here on government owned land. The trees behind are on the bank of the Hutchinson River.



Floodplain Map

By comparing this map to the historical map it is possible to see that in 1910 there were almost no structures within the 100 year flood plain. This was the last area development during the 20th Century. Existing property owners have stated that their

properties do indeed flood from time to time and that intervals between flood seem to be increasing.



Environmental Conditions

Natural Resources & Environmental Features

Waterbodies

Hutchinson River and Pelham Lake are federally mapped under the National Wetlands Inventory (NWI) by the US Department of Interior, Fish and Wildlife Service. Any planned modifications to these water bodies, such as excavation, filling, culverts or crossings, would require review by the US Army Corps of Engineers (USACE) and an environmental permit from the USACE, as well as a Consistency Determination from the New York State Department of State (NYSDOS).

According to the Environmental Resources Mapper, NYSDEC's on-line natural resources data base, the Mount Vernon BOA LWRP study area does not contain any state regulated wetlands or significant natural communities. Also, there are no state-documented records of any rare plants or wildlife. However, the connected open space along the Hutchinson River, planted parks and streetscapes do provide limited wildlife habitat and a corridor for urban species that are more tolerant of human activities. The fish and wildlife species characteristic of the study area are discussed in the subsection below.

While no State-regulated wetlands occur within the study area, Hutchinson River is a state regulated stream, and any disturbances the streambed or banks would be subject to a NYSDEC Permit under Article 15.



Looking South towards Pelham Lake at Wilson Woods Park

Geology & Topography

Soils

The USDA Natural Resources Conservation Service (NRCS) has mapped the soil types within the study area, as shown on map "Soil Types and Locations." Typical soil profiles and characteristics are listed in "Soil Profiles."

The vast majority of the study area located south of Sandford Boulevard is covered by one to two foot deep, well drained, loamy soils over rock (e.g., Chatfield, Charlton). Chatfield and Charlton soils (CrC, CsD) are not prone to flooding, but they are vulnerable to soil erosion, especially when exposed on steeper slopes. Map "Steep Slopes" depicts the steep slopes (greater than 15%) within the study area that are most likely to create erosion problems when disturbed. While CrC and CsD soils are generally well suited for site development and landscaping, they are poorly rated for sanitary facilities, due to their propensity for seepage.

The more densely developed portions of the study area that are dominated by impermeable surfaces or backfilled with a mixture of imported soils are mapped as urban land complexes or Urban fill (Uf).

Soils within the study area located north of Sandford Boulevard include Paxton soil complexes (e.g., UpB, UpC), which are deeper and sandier than Charlton and Chatfield. Paxton soils are slow to percolate, and often experience perched water conditions during late winter to early spring at depths of 1-1/2 to 2-1/2 feet. Perched water refers to a condition where water is in the soil, but unable to sink further down to the naturally existing water table. Disturbed Paxton soils are moderately prone to erosion.

The soils mapped along the Hutchinson River streambank consist primarily of Udorthents (Ub, Uc) and Fluvaquents (Ff), which are typically deep and gravelly to sandy fill-type soils. 'Wet substratum' indicates that the soils are moist or saturated at lower depths. Fluvaquent soils are frequently flooded, and are characterized by a high water table that occurs one to 1-1/2 feet below the surface.

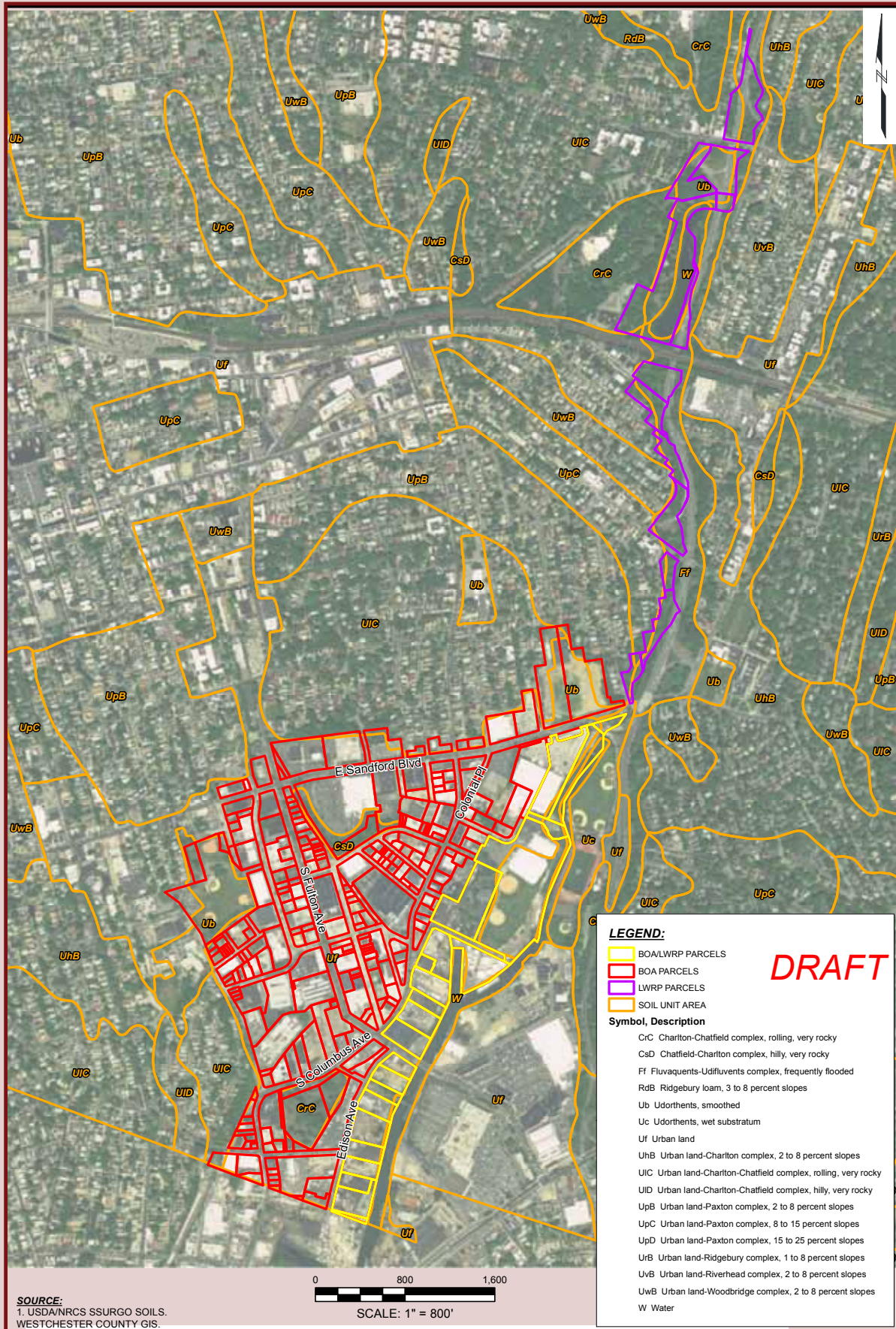


There are beautiful places along the Hutchinson River Parkway

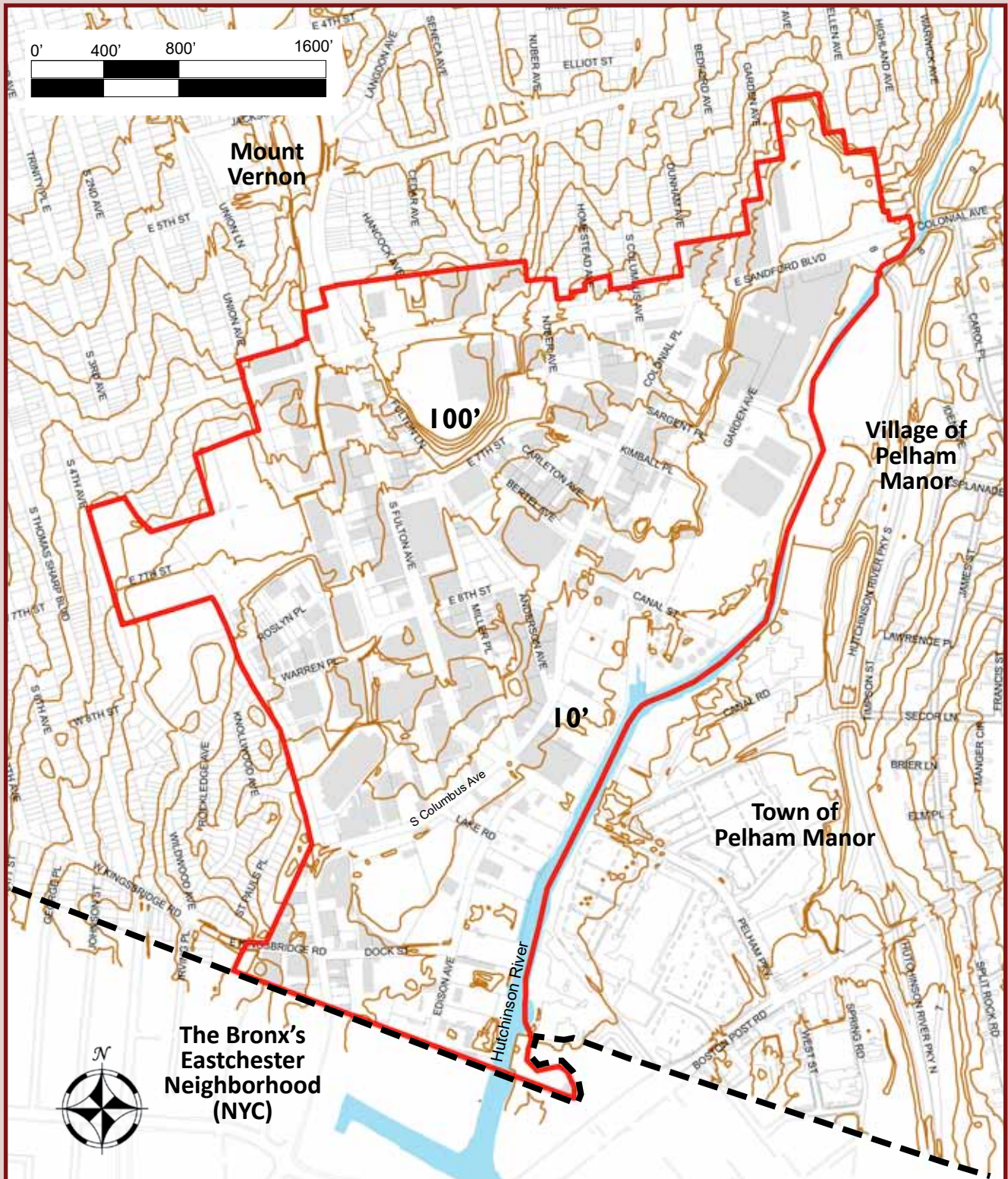
Soil Classification	Slopes	Typical Profile
Charlton-Chatfield complex, rolling, very rocky (CrC)	2-15%	Charlton-0-8 inches: Loam 8-24 inches: Sandy loam 24-60 inches: Sandy loam Chatfield-0-7 inches: Loam 7-24 inches: Flaggy silt loam 24-28 inches: Unweathered bedrock
Chatfield-Charlton complex, hilly, very rocky (CsD)	15-35%	Chatfield-0-7 inches: Loam 7-24 inches: Flaggy silt loam 24-28 inches: Unweathered bedrock Charlton-0-8 inches: Loam 8-24 inches: Sandy loam 24-60 inches: Sandy loam
Fluvaquents-Udifluvents complex, frequently flooded (Ff)	0-3%	Fluvaquents-0-8 inches: very gravelly sand to silty clay loam 8-60 inches: sandy loam to silty clay loam Udifluvents-0-12 inches: very gravelly sand to silty clay loam 12-60 inches: coarse sandy loam to silty clay loam
Udorthents, Smoothed (Ub)	0-8%	0-4 inches: Gravelly loam 0-70 inches: Very gravelly loam
Udorthents, wet substratum (Uc)	0-5%	0-4 inches: Gravelly loam 0-72 inches: Very gravelly loam
Urban Land-Fill (Uf)	0-8%	Variable
Urban Land-Charlton-Chatfield complex, rolling, very rocky (UIC)	2-15%	Charlton-0-8 inches: Loam 8-24 inches: Sandy loam 24-60 inches: Sandy loam Chatfield-0-7 inches: Loam 7-24 inches: Flaggy silt loam 24-28 inches: Unweathered bedrock
Urban Land-Paxton complex (UpB)	2-8%	0-10 inches: Fine sandy loam 10-17 inches: Loam 17-20 inches: Sandy loam 20-25 inches: Firm sandy loam 25-60 inches: Very firm gravelly sandy loam
Urban Land-Paxton complex (UpC)	8-15 %	0-10 inches: Fine sandy loam 10-17 inches: Loam 17-20 inches: Sandy loam 20-25 inches: Firm sandy loam 25-60 inches: Very firm gravelly sandy loam
Water (W)	N/A	Permanently inundated open water (Pelham Lake)

Soil Profiles

The chart above outlines the characteristics of the variety of soil types in Canal Village area.

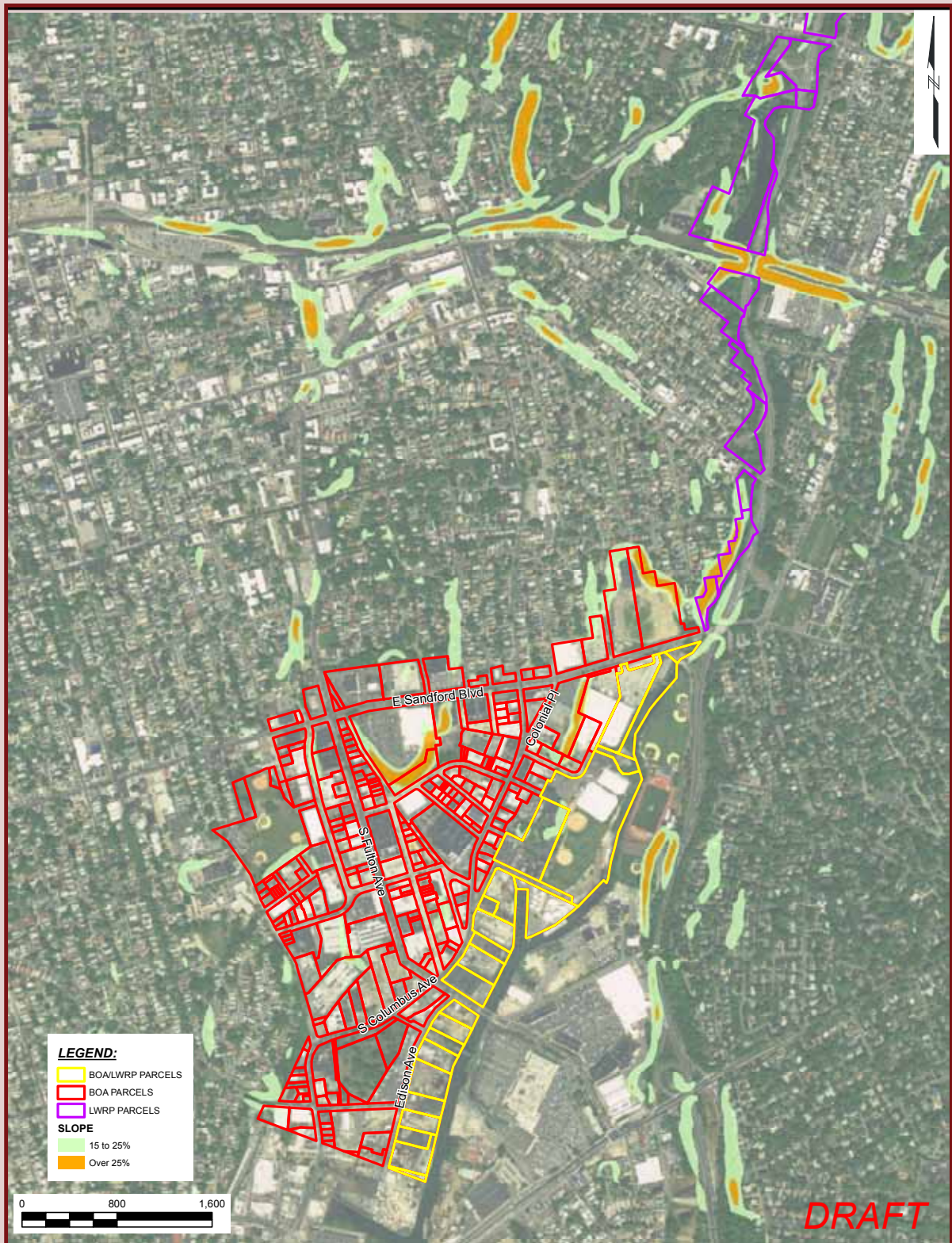


Soil Types and Locations

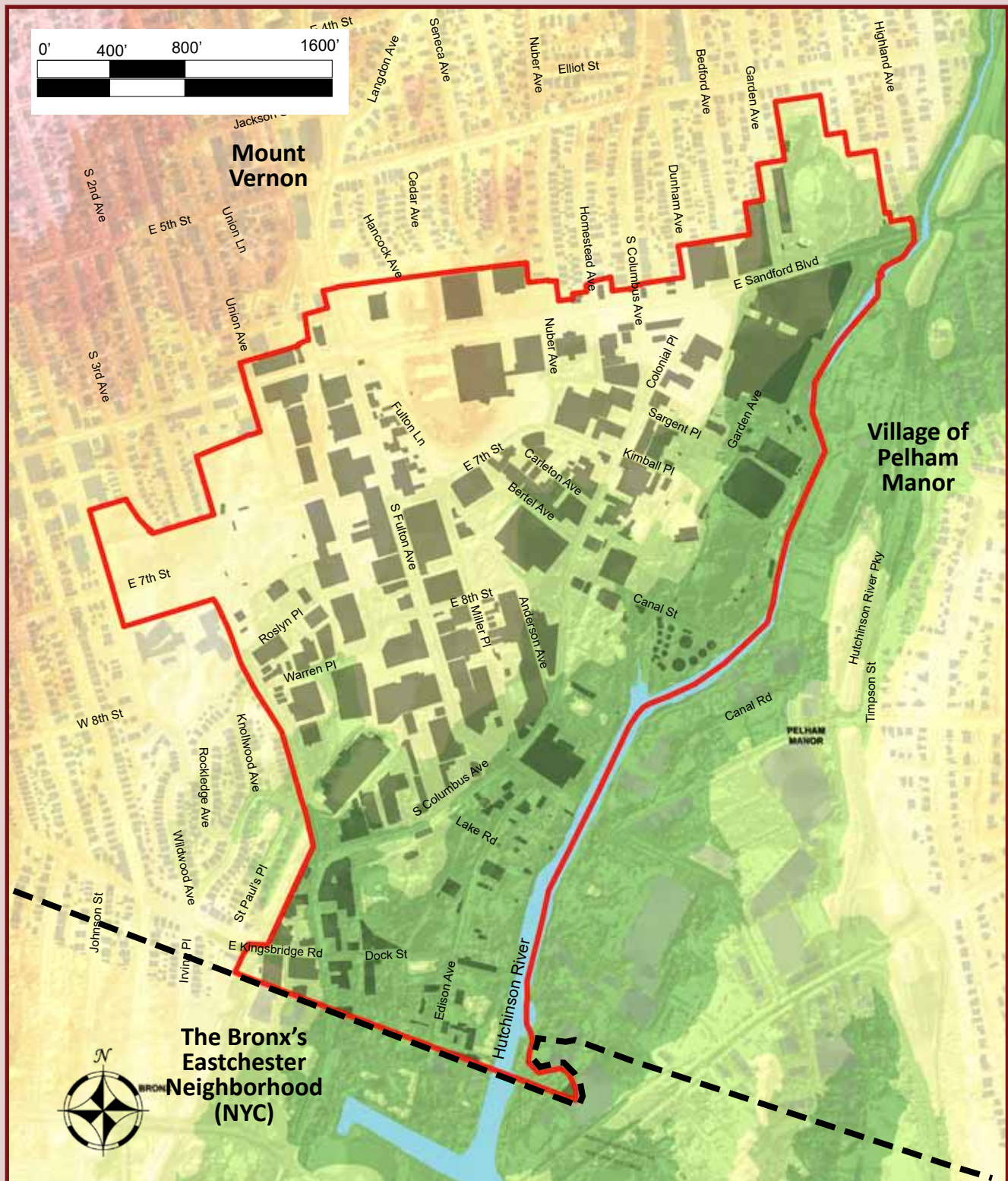


Topographic Contour Map

This map shows changes in topographic elevation using lines that represent 10 feet in elevation above sea level. The first topo line nearest the river is 10 feet, the second 20 feet, etc.



Steep Slopes



Shaded Topography Map

This map depicts variations in topographic elevation using color changes. Green is the lowest elevation next to the Hutchinson River and a red-white color is the highest. This can be seen in the northeast of Canal Village area.

Parks & Open Space

Parks and Open Space provide locations for the community to relax and gather for entertainment - from performances, to festivals, to local sporting events and everyday recreation. Parks and Open Space can also celebrate local and national history, creating a connection to a collective past narrative and enhance a sense of place and pride for the community. This section reviews the parks and open spaces within Canal Village.

Nearby Parks

There are six spaces in and near to the BOA project boundaries that contribute to the parks and open space component of a city. These locations include: Brush Park; St. Paul's Church National Historic Site; Hutchinson Park; Memorial Field; Pelham Lake Scenic Byway and Wilson's Woods Park; Glover Field and Richie Bell Field. An examination of these sites and their relationships to the city reveal challenges and opportunities for the continued development of Mount Vernon and the quality of life for workers, visitors and residents.

Brush Park

Brush Park is bounded on the West by South Third Avenue, Roslyn Place on the South, and Union and Franklin Avenue on the East. The Park is accessible to the public through gates located off of Sout Third Avenue as well as South First Avenue. It contains four ball fields, a small facilities building, a paved playground, paved picnic area and a parking lot. The ball fields have lighting for night games and a mix of young and mature trees are located throughout the park. Brush park is fronted by back-of-house functions of industrial uses on most sides with some residential frontage on the North and Northwest portions of the park. A fence separates the park from adjacent industrial and residential uses. The Southwest corner of Brush park has a connection to Benjamin Turner Middle School and Rebecca Turner Elementary School.

St. Paul's Church National Historic Site

St. Paul's Church National Historic Site is located between South Columbus and Edison Avenue and is under the jurisdiction of the National Park Service. Built between 1763 and 1788, the church was a site of religious worship until the 1970's when it was gifted to the Federal Government from the Episcopal Diocese. The site also hosts a cemetery and holds tours from Tuesday through Saturday. The site is fronted by a Salvation Army, industrial occupancies and South Columbus Ave. The site is accessible via a driveway located off of South Columbus Ave.



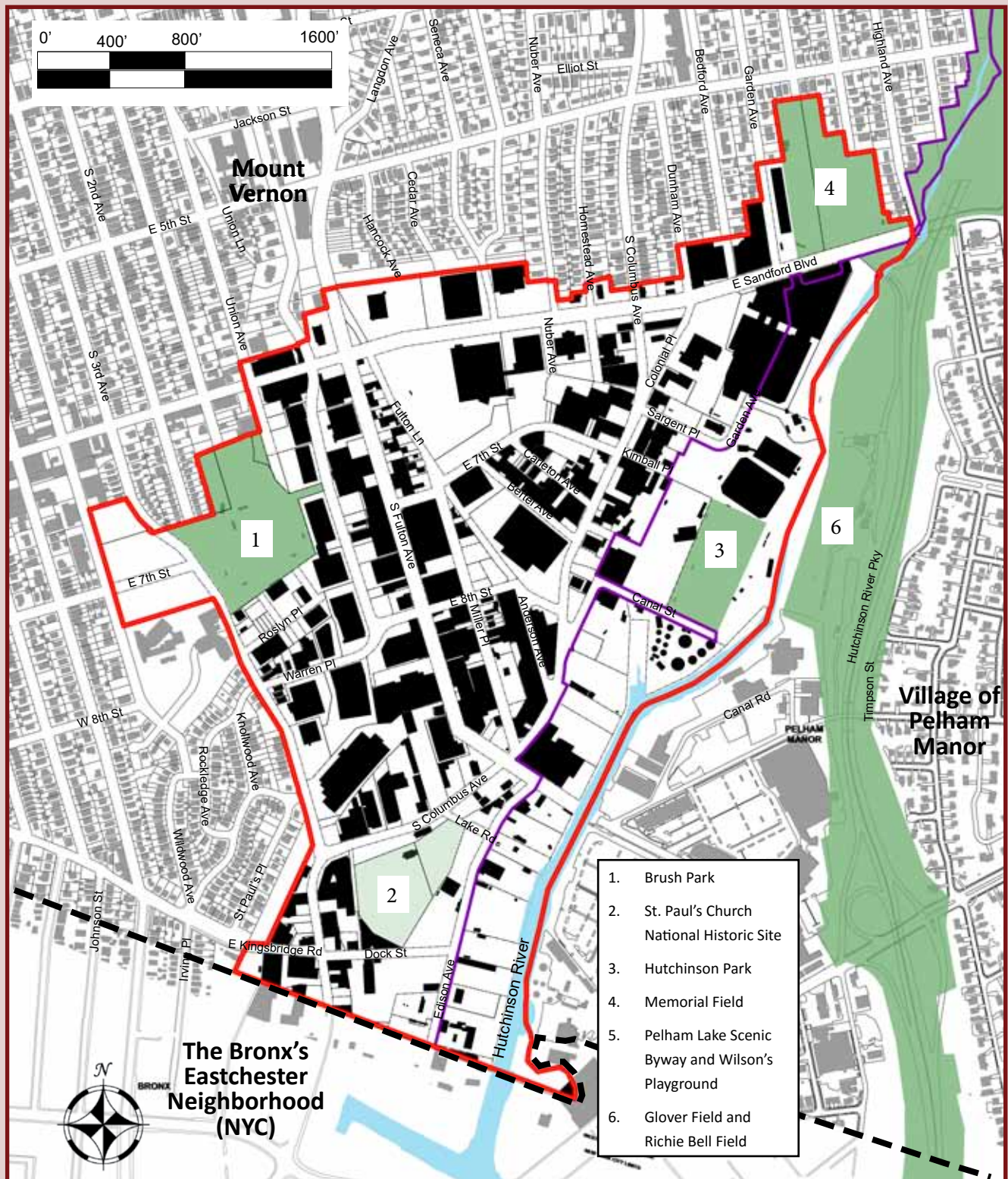
View of Brush Park from South Third Ave.



View of St. Paul's Church



View of Memorial Field



Park Lands and Building Footprints

Parks are identified in green. Dark green spaces are city, or county designated park spaces and the faded green identifies Federal park space. It is important to note that while there appears to be a linear greenway to the East of the project area, a significant portion of this is for the Hutchinson River Parkway and is a paved, four lane thoroughfare with on and off ramps.

Existing building footprints are identified on the map and are in grey and black. Grey footprints are for structures outside of the project area while the black footprints identify buildings within the BOA border.

Hutchinson Field

Hutchinson Field is located along the East side of the project site with Canal Street along the south of the park. It is accessible where Sergeant Place becomes Garden Avenue through a gate opening to a parking lot. The park consists of two ball fields that have lighting for night events. The east and west sides of the park house governmental facilities including a refuse distribution center, a parking facility, and plastic sorting location. A gas and oil storage center is located to the south and the north side of the park holds several indoor sports facilities and a parking lot. The park is separated from the industrial uses by a chain-link and corrugated metal fence and has direct access to the parking lot and sports facilities to the north. There is no direct access to the Hutchinson River from the Park. There is a chain link fence between the Field and a narrow strip of upland shore that it used by public works.

Memorial Field

Memorial Field is located North of East Sandford Boulevard and is along the East side of the project area. It originally housed a football field that was built in the 1930's and has hosted football games, the Jackson 5 as well as the filming of the "Mean Joe Green" Coca-Cola commercial. It has been closed for the past six years and has been the subject of controversy due to scuttled reconstruction plans as well as being cited by the State for illegal construction waste dumping that is in need of remediation. Memorial Field is fronted by residential land on most sides, with East Sandford Boulevard to the South and a parking deck for Best Buy adjacent to the Southwest corner.



Above: View of Wilson's Woods Pool

Pelham Lake Scenic Byway and Wilson's Woods Park

The Pelham Lake Scenic Byway and Wilson's Woods Park are located along the Hutchinson River Parkway and are related to the Hutchinson River within Mount Vernon and Pelham. It is accessible at multiple points along the trail from parks and streets. The Scenic Byway has some dirt trails, however the trails are not continuous throughout the park. Wilson's Woods Park is located within the Northern most point of the LWRP boundary and contains Wilson's Playground and Wilson's Wood Swimming Pool as well as the now defunct Landauer Metropolitan medical supply company building. Wilson's Woods Park is readily accessible to the public and accommodates through traffic. Gates control the hours of public amenities such as the pool and some playgrounds. The Pelham Lake Scenic Byway is bordered by the Hutchinson River Parkway to the East and mainly residences to the West and is bisected by an elevated rail and bridge. Wilson's Woods Park is bordered by the elevated rail to the South and the Hutchinson River Parkway to the West with residences adjacent elsewhere.

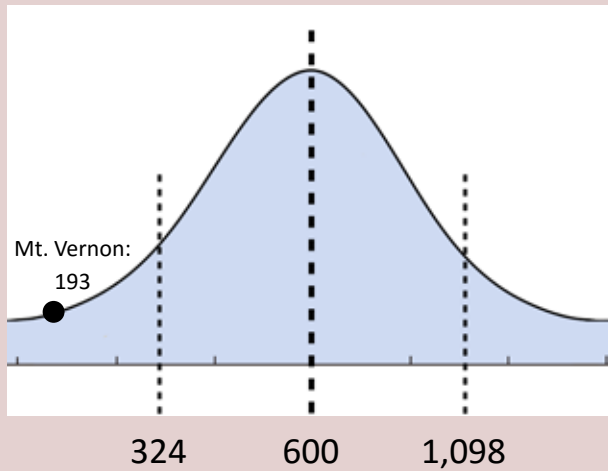
Glover Field and Richie Bell Field

Glover Field and Richie Bell Field are park spaces located in neighboring Pelham Manor. They are just to the East of the Hutchinson Field and contain five ball fields, a football and track stadium, tennis courts, a park facility and a small parking lot. These facilities are used by the Pelham Memorial High School and Pelham Middle School just to the North and are available to the general public as well. These fields also have lighting for night events. A pedestrian bridge connects a parking lot on Westchester County land (in Mount Vernon) across the Hutchinson River from the park. The Hutchinson River Parkway forms the East and North border of the park while the Hutchinson River creates the West border and a school bus parking lot is situated at the south edge of the park.

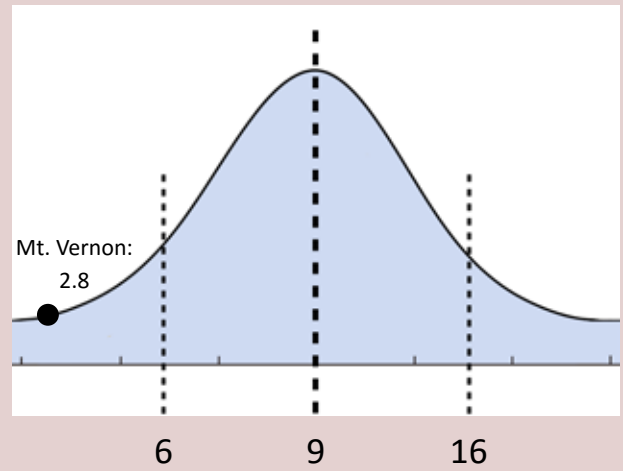


Above: Aerial View of Glover Field and Richie Bell Field

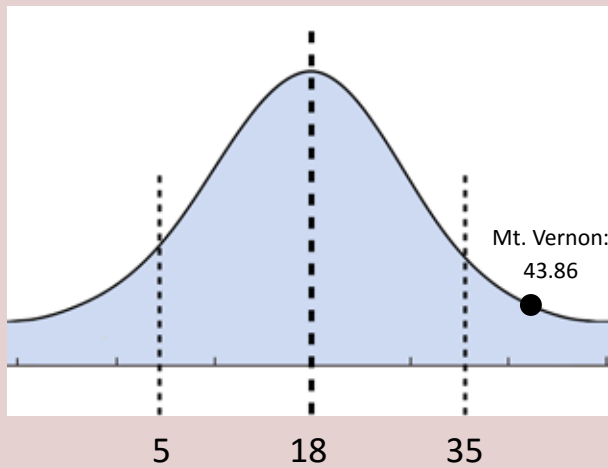
Acres of Park or Open Space Lands



Acres of Land Managed or Maintained per 1,000 Population

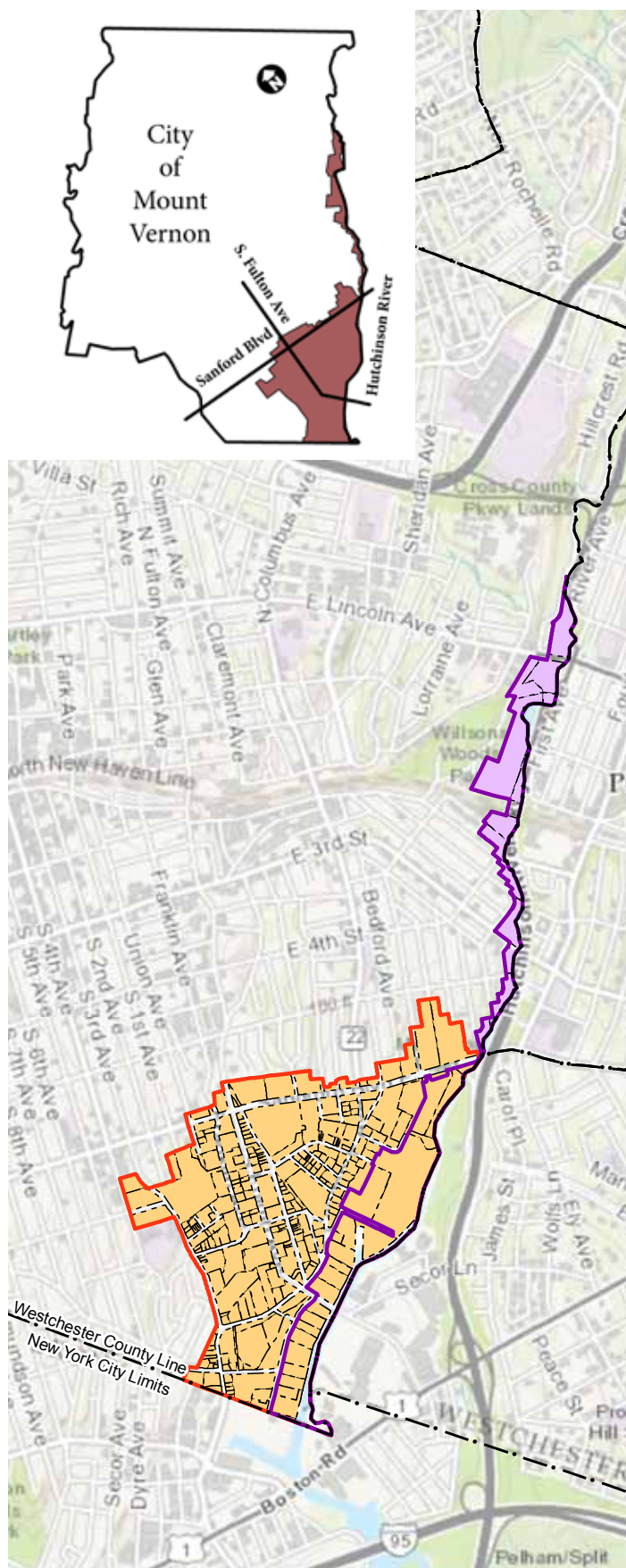


Acres of Land Managed or Maintained per Jurisdiction Square Mile



According to a survey conducted by the National Recreation and Parks Association in 2010, Mount Vernon is in a unique position relative to other cities. While it ranks in the bottom twenty-fifth percentile in land set aside for parks and open space as well as acres per 1,000 people, it's proportion of open space to the overall political jurisdiction is quite large. This reveals the potential to identify key points in the project area that could creatively incorporate park and open space in a way that improves overall acreage while also diversifying the types of parks and open space integrated within the neighborhood.

TRANSPORTATION & INFRASTRUCTURE



Street Network

Street Connections to/from the Neighborhood

Primary vehicular access into and through Canal Village occurs along Sanford Boulevard, South Fulton Avenue, and South Columbus Avenue. The latter two facilities form the north/south spine through Canal Village area. These roads also connect Canal Village with Pelham and the Bronx.

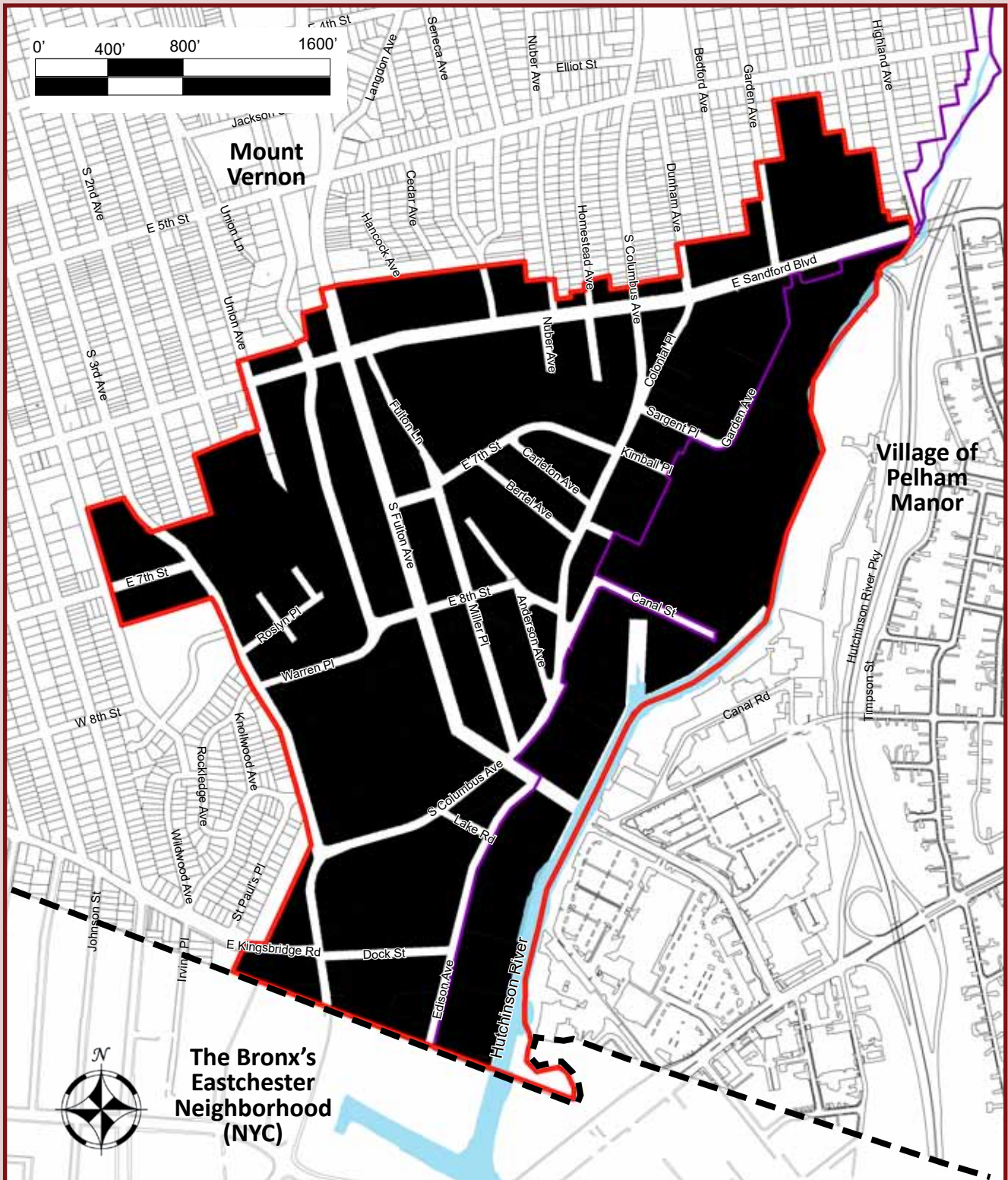
Access from the Hutchinson River Parkway southbound is provided via the use of signalized ramps directly to Sanford Boulevard. Access from the Hutchinson River Parkway northbound to the canal area is also via Sanford Boulevard, however, it requires passing over Sanford Boulevard and exiting at a signalized ramp at Wolfs Lane in Pelham, proceeding south on Wolfs Lane to the signalized intersection with Colonial Avenue (Sanford Boulevard) and turning right passing under the Parkway to enter Canal Village area. Because of the substantial commercial establishments to the west, this is a heavily traveled route.

Sanford Boulevard continues westward from the Hutchinson River Parkway to the City of Mt. Vernon/Bronx city limits where Sanford Boulevard (known as Sanford Boulevard west of this point) becomes Pitman Avenue in the Bronx.

South of Canal Village area, Columbus Avenue (Route 22) connects to Boston Post Road (US Hwy 1) and to Interstate 95 at Connor Street (southbound) and Tillotson Avenue (northbound). Access to/from Interstate 95 both northbound and southbound is provided approximately 0.5 miles southeast of Canal Village area southern limit.

Columbus Avenue (Route 22) is designated as a “Qualifying and Access Highway” in New York State from South Fulton Avenue/Pelham Parkway (C.R. 70) to the New York City line. A Qualifying Highway is one designated as part of the Surface Transportation Assistance Act (STAA) of 1982 which allows certain types of truck trailers, including 53-foot trailers, to use that designated highway and any other highway within one linear mile of the Qualifying Highway. An Access Highway is one designated for use by STAA vehicles and 53-foot trailers, however, the vehicles may not travel off the Access Highway for any distance.

Columbus Avenue is a former Westchester County Road that currently has referral jurisdiction. This is, certain local planning and zoning actions on or near these local roads are subject to referral to the Westchester County Planning Board as if still a County Road.



Canal Village Street Network Map

Streets are shown in white and the blocks are shaded black. In a modern industrial park, the parcels are uniformly larger and the street are wide throughout to handle the large trucks.

South Fulton Avenue to the south is designated as Pelham Parkway as it crosses the Hutchinson River into Pelham Manor via a drawbridge that connects to US Hwy 1. As a result of maintenance, the drawbridge has been closed to all traffic for the last year. This requires Columbus Avenue traffic and Fulton Avenue traffic to use Columbus Avenue (known as Provost Avenue after crossing into the Bronx) to access U.S. Route 1 (Boston Post Road) northbound and southbound. South Fulton Avenue northbound continues toward downtown Mount Vernon and the Mount Vernon East train station.

Street Pattern within the Neighborhood

It's important to remember that the streets and properties within the canal district were laid out before the invention of the automobile, before zoning, and before parking requirements. The neighborhood was served by a train station that no longer exists (on Kingsbridge Road near South Columbus Ave). In days past, there was more pedestrian activity on the streets than there is today as pedestrians felt comfortable walking farther distances because there was no other option. The waterway was used more for transporting goods than it is today. As truck transportation became more prevalent, this platform was much shorter in length and could negotiate tighter corners. This helps explain why the street segments are small and the streets are narrow.

Street Network Design

Transportation planners will tell you that an interconnected network of streets performs better than the “trunk” system. The “trunk” system is called this because all streets lead to one road — similar to how limbs lead to branches, and then to the trunk on a tree. When this idea is applied to street layouts, it can cause congestion, because nearly every vehicle is directed to one main route with little to no other alternatives. The disadvantage to this layout is most evident during rush hour, or when there is an accident on the road. Without alternate routes for people to take to avoid backups or accidents, traffic or gridlock will be inevitable. Widening these roads is an option, but historical trends show that this encourages more people to take the main road, leading to more congestion.

As an alternative to the “trunk” system, an interconnected system of streets, with many intersections. While the “trunk” system narrows down choices to one or two sole options, an interconnected system provides many. Having an array of alternate routes provides flexibility to those driving in cases of traffic or an accident in one area, and leads to less congestion as a result. More options also means that the streets can be narrower than one large

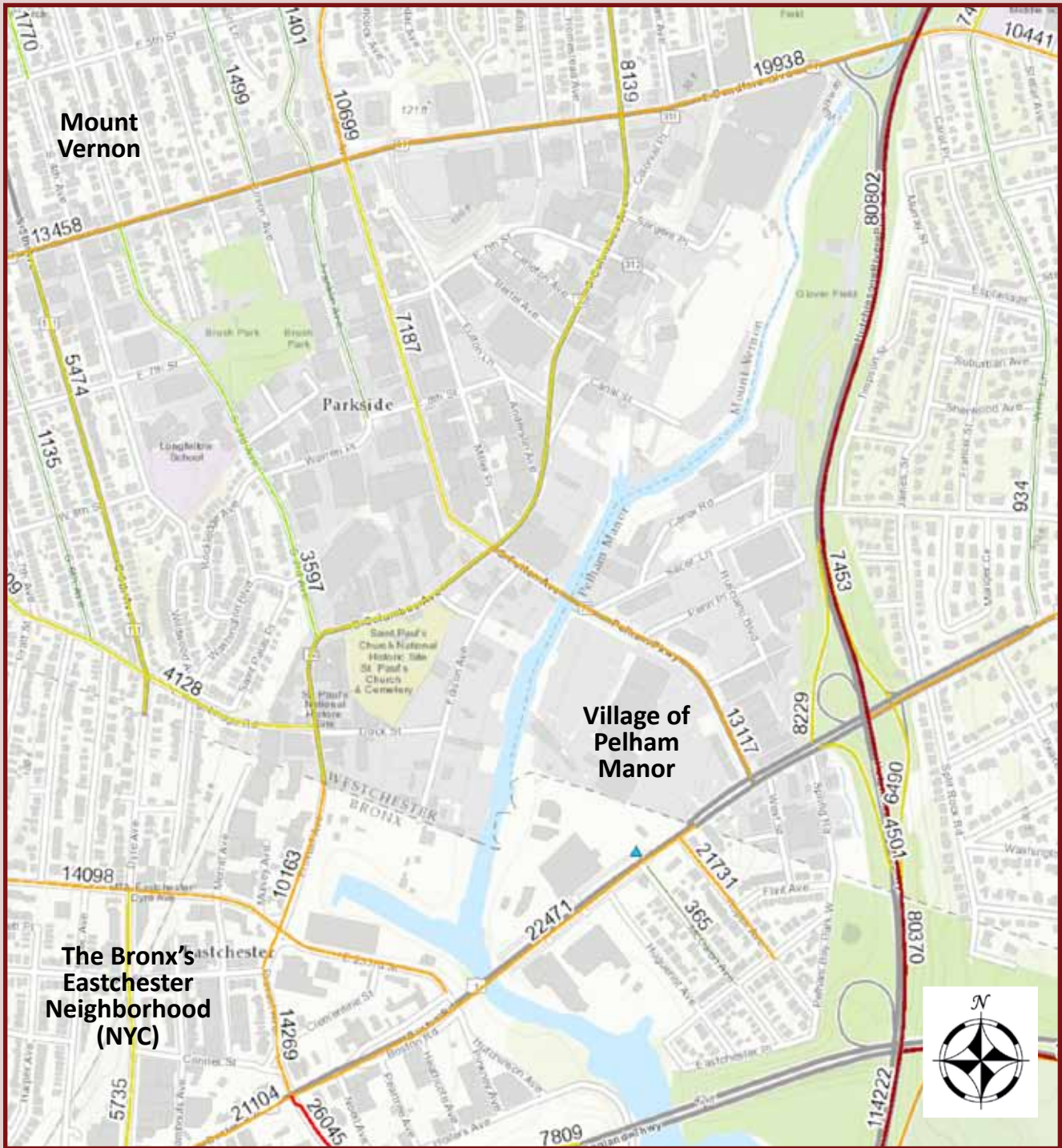


Southbound Hutchinson River Parkway traffic can exit directly onto East Sanford Boulevard and eastbound Sanford traffic has easy access to southbound parkway to head south.

main road, because there are fewer vehicles on each street. With many options, the traffic gets divided so each thoroughfare can be designed for fewer vehicles. Narrower streets means that there is more room for nicer sidewalks, street trees, and bike lanes. Narrower streets also tend to be safer because they are easier to cross and have lower vehicle speeds.

Existing Dead-Ends

The Street Pattern map shows that Canal Village area does have a well-connected network, however due to topography and/or the former rail line that acted as a barrier, there are a few dead-end streets such as at Union Avenue, Roslyn Place, Garden Avenue, Kimball Place, Homestead Avenue, Nuber Avenue, and Edison Avenue. Property owners have indicated that there is a problem with illegal dumping at the end of some of those streets. A review should be undertaken to see if any of these facilities can be re-connected to other streets in the future. Currently, South Fulton Avenue at the Hutchinson River is dead-ended because of construction on the draw bridge that leads to Pelham Manor. It is anticipated that this work will be completed by November 22, 2017.



Average Daily Traffic

The data shown on the map above was collected in 2015. Below is a listing of some of the primary streets in the area with the average number of daily car trips:

- Sandford Blvd (between Hutchinson River Parkway & Columbus) about 20,000
- Sandford Blvd (west of Columbus) about 13,500
- Columbus Ave, Hwy 22, about 10,160
- Fulton Avenue: 7,200
- Hutchinson River Parkway, 80,000
- 3rd Avenue between Columbus and Sandford, 3,600

It is important to note that these counts were tabulated before the **Fulton Avenue / Pelham Parkway** drawbridge was closed for repair. The bridge is scheduled to be closed until November 2017. Some of those 8 to 10 thousand trips are now using Sandford or Columbus via the Bronx, and some are simply going elsewhere.

Source: NY State Traffic Viewer found at <https://gis3.dot.ny.gov/html5viewer/?viewer=tdv>

Traffic

Vehicle and Truck Traffic

Connectivity and Traffic

Go to any successful business area, and there will always be some who complain about traffic. Traffic and “the place to be” almost always go hand-in-hand. Canal Village area district is no different. The narrow right-of-way (between 50 and 60 feet), the lack of off-street parking spaces, a large inventory of active buildings constructed at the sidewalks, and the numerous curb cuts for access drive ways means that managing traffic will always be a challenge for the area.

Traffic tends to flow like water, along the course of least resistance, because people are trying to avoid congestion and get to their destination as quickly as possible. For vehicular traffic, the resistance comes from:

1. Cars slowing to turn into a parking space, driveway, or parking lot
2. Limited number and width of travel lanes
3. A limited network of connected streets
4. Popular destinations that attract patrons from a greater distance than normal.

One example is the segment of East Sandford Boulevard in the vicinity of the Hutchinson Parkway. The parkway overpass restricts the available travel lanes on Sandford Boulevard to two (2) lanes in each direction. This combined with limited number of street connections intended to keep outside motorists away from the residential streets north of Sandford Boulevard, results in significant congestion along this section of Sandford Boulevard that is lined with various large retail establishments. This occurs without the Memorial Field’s potentially generated traffic that will have to share the same section or roadway.

To preserve and enhance the character of the neighborhood and to preserve existing businesses, tearing down existing buildings to widen streets is not a solution nor is tearing down buildings to create larger parking lots. And furthermore, removing vehicular access to the businesses in the neighborhood by limiting turning cars and trucks is not recommended either. So, there is a “tension” between the aforementioned need for access and the desire for mobility. Perhaps the only way to begin managing the situation is to promote the use of transit and non-vehicular transportation means. This can be accomplished by modifying certain physical features of the streets, and by creating a comprehensive approach to parking.

Traffic Counts

Some of today’s traffic congestion is a result of the closure of the Fulton Ave / Pelham Parkway drawbridge for repairs. This work commenced in January 2017, and as previously mentioned it is expected to reopen in November, 2017. The closure of the bridge is reducing the access to commercial businesses in both Mount Vernon and Pelham Manner.

Traffic volume, speed and classification data was collected for traffic in Canal Village area. Automatic Traffic Recorder (ATR) machines were placed on East Sandford Boulevard, South Columbus Avenue, South Fulton Avenue and South 3rd Avenue to collect data from Friday, August 11, 2017 to Wednesday, August 16, 2017. The traffic volume, speed and classification data for all 4 locations is attached in the appendix.

The roadway that experiences the most traffic in this area is the Hutchinson River Parkway with an average of about 80,000 vehicles per day (as of 2015). The large national retail stores located along Sandford Boulevard are situated along Sandford Boulevard because of the access points to the Parkway. The traffic volume data indicates that Sandford Boulevard experiences 15,667 Average Annual Daily Traffic (AADT) where the Saturday peak hour volumes represented approximately 7.2% of the daily volume or 1,135 vehicles with the weekday AM and PM peak hour volumes representing 7.0% and 7.5% of the daily volume or 938 and 1,172, respectively. Trucks represent approximately 19.5% of the daily volume. The 85th% interval speeds were recorded at 35 mile per hour (MPH) with the average speed recorded at 30 MPH.

An 85th% interval speed of 35 MPH means that 85% of traffic was travelling at 35 MPH or less, while 15% of traffic was travelling at speeds greater than 35 MPH. The 85th% interval speed is utilized to determine a suggested posted speed limit on an existing road. If 85% of people are going 32 MPH, then the suggested posted limit would be 35 MPH.

Columbus Avenue is the main spine of Canal Village area. Its 10,000 average daily trips is not high enough to attract major national retail stores. During Peak Hours, particularly PM Peak Hour and Saturday Peak Hour, between the parkway and Fulton Avenue, experiences congestion and significant delays. South Columbus Avenue data indicated an AADT of 7,830 where the Saturday peak hour volumes represented approximately 8.0% of the daily volume or 548 vehicles with the weekday AM and PM peak hour volumes representing 7.4% and 8.6% of the daily volume or 576 and 674, respectively. Trucks represent approximately 30.4% of the daily volume. The 85th% interval speeds were recorded at 33 MPH with the average speed recorded at 27 MPH.

South Fulton Avenue data indicated an AADT of 3,005 where the Saturday peak hour volumes represented approximately 8.9% of the daily volume or 266 vehicles with the weekday AM and PM peak hour volumes representing 7.1% and 8.7% of the daily volume or 212 and 262, respectively. Trucks represent approximately 32.9% of the daily volume. The 85th% interval speeds were recorded at 34 MPH with the average speed recorded at 28 MPH.

South 3rd Avenue data indicated an AADT of 3,176 where the Saturday peak hour volumes represented approximately 8.2% of the daily volume or 259 vehicles with the weekday AM and PM peak hour volumes representing 6.8% and 8.8% of the daily volume or 216 and 280, respectively. Trucks represent approximately 24.6% of the daily volume. The 85th% interval speeds were recorded at 29 MPH with the average speed recorded at 23 MPH.

Graphical representations of the traffic volumes hour by hour, by direction, for a Saturday, Sunday, Monday and Tuesday including cars and trucks are shown in the appendix.

Recent data provided by the New York State Department of Transportation for South Fulton Avenue, Columbus Avenue, Sanford Boulevard, and South 3rd Avenue indicate that Sanford Boulevard west of Columbus Avenue experienced 14,054 AADT, where the peak hour volumes represented approximately 8% of the daily volume or 1,124 vehicles. East of South Columbus Avenue some 20,820 vehicles AADT were recorded in 2009 with the peak hour volume equal to approximately 7% of the daily volume or 1,457 vehicles. No data were available related to vehicle mix or speed.

Columbus Avenue data from 2009 indicated an AADT of 8,270 where the peak hour volume represented approximately 8.5% of the daily volume or 703 vehicles. Trucks represented approximately 25% of the daily volume. The 85th interval speeds were recorded at 30.6 MPH, with the average speed recorded at 21.5 MPH.

South Fulton Avenue data from 2007 indicated an AADT of 8,508 where the peak hour volume represented approximately 10% of the daily volume or 850 vehicles. Trucks represented approximately 22.5% of the daily traffic. The 85th speed was recorded at approximately 34 MPH, with the average speed recorded at 25 MPH.

Only volume data was collected for South 3rd Avenue by the State in 2014. The AADT was found to be 3,619 vehicles. The peak hour volumes representing approximately 9% of the daily northbound volume at 325 vehicles and 13.3% southbound volume at 481 vehicles.



Common situation at many intersections. Streets were not designed to accommodate large semi tractor trailers. Cars at the front of line are forced to back away from the stop bar.



Typical conditions in Canal Village include truck parking, or idling on curbs and sidewalks.

The Fulton Avenue Bridge, when operating in 2009, had an AADT of 13,693 vehicles. The peak hour volume represented approximately 8% of the daily volume at 1,095 vehicles. Trucks represented 25.5% of the daily volume, and the 85th speed was recorded at 28 MPH eastbound and 35 MPH westbound. The average speeds were 18 MPH and 22 MPH, respectively.

Comparing the recently collected data with the NYSDOT record data indicated no real change in truck usage on a percent of overall traffic whether the bridge crossing the Hutchinson River Parkway was functional or not.

Truck Access

Given that the neighborhood is industrial in character and the businesses have materials arriving and goods departing by truck, every street supports truck traffic to one degree or another. Attempting to reduce truck traffic or volume would not be advisable as doing so will likely reduce commerce. Based on the recently collected data mentioned above, going forward with improvements to roadway pavement, curbs, sidewalks, street trees, etc., will need to consider that all streets within Canal Village area will need to continue to accommodate trucks.

The main entry and exit routes for trucks are along Sandford Boulevard on the east and west, South Columbus Avenue to the south from the Bronx, and South Fulton Avenue from the north and south. In recent interviews with local business owners, they have indicated that Pelham Manor has restrictions outlined in Pelham Manor's code, in Article XIII, section 202-23, "All Trucks Excluded," prohibiting trucks from entering their village with the exception of Pelhamdale Avenue, Boston Post Road (U.S. Route 1), Wolfs Lane, and streets west of the Hutchinson River Parkway. Notwithstanding, business owners reported that truck drivers were sometimes ticketed by Pelham Manor police for using the bridge at South Fulton Avenue to access the Hutchinson River Parkway. This causes truck drivers to avoid the South Fulton Bridge and use East Sandford Boulevard at the sole access point to the Parkway, leading to more congestion along this thoroughfare, and decreasing the efficiency of the street network.

There is currently no restriction for the use of Pelham Parkway to access the Hutchinson River Parkway from Mount Vernon, given it is a street located "...west of Hutchinson River Parkway."¹ Efforts should be made to clarify this issue with Pelham Manor and avoid confusion in the future.

1. § 202-23. All trucks excluded. All trucks are hereby excluded from all streets within the limits of the Village with the exception of Pelhamdale Avenue, Boston Post Road, Wolfs Lane and streets west of the Hutchinson River Parkway.

Parking

Typically, the zoning code requirements mandate that owners of lots or businesses must provide parking on their site to accommodate private vehicles. Because Canal Village area was established before vehicular traffic was the norm, there are likely exceptions in the historical areas of the neighborhood. This is not a bad thing, because it helps to preserve the historic character of the area. Unfortunately, this can cause problems when it comes to parking. On-site observations show that there is a parking issue for cars and trucks. A creative solution is needed, perhaps established by the City or an association of property owners.

The existing parking restrictions in Canal Village area were collected along with a count of the number of vehicles/trucks parked. Based on the data collected on South Fulton Avenue the majority of the existing parking restrictions are "No Parking or Standing, 4 a.m. – 7 a.m., Mon-Sun." South Columbus Avenue was found to not allow parking at all in Canal Village area. South 3rd Avenue's parking restrictions were found to be mostly "No Parking, Tuesday, 8 a.m. – 12 Noon" with "1 Hour Parking 8 a.m. – 6 p.m."

A full summary of the existing parking restrictions in Canal Village is shown in Table 1: Parking Restrictions and PM Count in the appendix, along with a key map (Figure No. 1: Parking Segment Identification) showing the location of these restrictions.

One possible option to accommodate additional parking in Canal Village area would be converting certain streets to include angled parking. Changes to the existing on-street parking geometry on the existing one-way streets (Anderson Avenue, Bertel Avenue, and Carleton Avenue) should be considered as a means to increase the number of on-street spaces available. Eliminating parking on either side of the street as well as removing a portion of the sidewalk to widen the roadway and converting the parking spaces on the other side of the street from parallel spaces to angled spaces (work with a one-way system), additional spaces could be provided. On Anderson Avenue, with spaces angled at 60°, approximately 4 spaces will be added, while if the spaces were angled at 70°, approximately 8 spaces will be added. On Bertel Avenue, if the spaces are angled at 60°, approximately 6 spaces could be added, while if the spaces are angled at 70°, approximately 11 spaces will be added. On Carlton Avenue, if the spaces are angled at 60°, approximately 5 spaces will be added, while if the spaces were angled at 70°, approximately 9 spaces will be added.

While considering this option, it is important to note that the trade-off for achieving more parking spaces will be a decrease in the usability of the sidewalk, which would also decrease the ability for pedestrians to effectively use the

sidewalk. Additionally, loading and unloading challenges on these streets could be exasperated, or at least remain unresolved unless some of the parking spots are devoted to loading and unloading zones which would decrease the number of parking spaces. The City should hold open meetings and discussions with the community, as well as local property and business owners to discuss available options and determine a course of action.

Vehicular Trips and Parking Required

Given the information of existing and potential land uses in Canal Village area, the following table displays the average vehicular trips per 1,000 sq. ft. as well as the average parking spaces required per 1,000 sq. ft. The information in this table are based on data published by the Institute of Transportation Engineers (ITE) as contained in the Trip Generation Handbook, 9th Edition, 2012 and Parking Generation Handbook, 4th Edition, 2011. The following land use codes were considered when analyzing the vehicular trips and parking spaces required:

- Light Industry – Land Use Code 110
- Manufacturing – Land Use Code 140
- Warehouse – Land Use Code 150
- Arena – Land Use Code 460
- General Office Building – Land Use Code 710
- Specialty Retail Center – Land Use Code 826

No matter the case, the mix currently in place or one that may develop going forward, is worth recognizing the impacts each use type may have on area traffic operations and parking requirements. This will be particularly important should the City decide to rezone within Canal Village.

The use that generates the lightest traffic would be the warehouse use where during the PM peak hour 0.32 trips (total in and out) per 1,000 square feet could be expected. Manufacturing is approximately twice the rate at about 0.73 trips per 1,000 square feet; followed by light industry at about three times the rate at about 0.97 trips per 1,000 square feet.

An office use would generate nearly five times the traffic per 1,000 square feet as would a warehouse at 1.49 trips per 1,000 square feet and retail at nearly twenty-one times the rate of warehouses at 6.84 trips per 1,000 square feet.

An arena with seating for 20,000 patrons could be expected to generate nearly 5,000 trips (assuming no use of mass transit).

Parking is another matter. Again, reviewing the table, the parking requirement for warehousing is about 70% than required for Light Industrial use, which itself is about 25% of that required for a manufacturing use. An office use would require approximately five times the parking required for a warehouse (on a per 1,000 square feet basis), while a retail use would require about seven times that required for warehousing.

An Arena parking is nearly directly related to seating availability where one space is required for every 0.27 seats. So a 20,000 seat arena would require parking for approximately 5,400 cars.

As review of the above data indicates, it is very important to consider use mix, size of each use in terms of potential traffic generation to Canal Village area, and the required parking spaces to meet such demand when considering areas available for development.

Transit

Public transit in Canal Village area is provided by bus service. As the review below shows, there is Westchester's Bee-Line bus service that traverses the neighborhood on the major streets and connect to the NYC Subway at the Dyre Avenue Station in the Bronx and it also connects to the Mount Vernon East station on the New Haven Rail Line used by Metro North.

Transit Modes

Bee-Line Bus System

The Bee-Line System is owned by the Westchester County Department of Public Works and Transportation and provides service to Westchester County, the Bronx, Manhattan, and Putnam County with major hubs in White Plains, New Rochelle, Yonkers, and Mount Vernon. As a result, the Bee-Line System provided service to a daily average of 111,316 riders in 2013.²

Four of the Bee-Line bus routes enter Canal Village area - the 42 Local, 54 Local, 55 Local, and the 91 Limited - for a total of 18 stops. The 42 and the 55 lines run on regular weekday schedules with different longer lead times over the weekends. The 54 only runs on weekdays with a limited schedule during the day. The 91 Limited runs with a limited schedule from Tuesday through Friday and a slightly expanded schedule from Saturday through Sunday.

A spine through Canal Village area is formed by the 55 bus route, connecting the Eastchester - Dyre Avenue Subway station with the Mount Vernon East Station on the New

2. According to "National Transit Database Filing for the Bee-Line System, 2013"

AVERAGE TRIP GENERATION RATES AND AVERAGE PARKING RATES			
CANAL VILLAGE REVITALIZATION MOUNT VERNON, NEW YORK	TRIPS	PARKING	MOUNT VERNON PARKING REQUIREMENTS
LIGHT INDUSTRIAL			
PEAK AM HOUR	0.92 per 1,000 sq. ft.	0.75 per 1,000 sq. ft.	1 per 1,000 sq. ft.
PEAK PM HOUR	0.97 per 1,000 sq. ft.		
SATURDAY PEAK HOUR	0.14 per 1,000 sq. ft.		
MANUFACTURING			
PEAK AM HOUR	0.73 per 1,000 sq. ft.	1.02 per 1,000 sq. ft.	1 per 1,000 sq. ft.
PEAK PM HOUR	0.73 per 1,000 sq. ft.		
SATURDAY PEAK HOUR	0.28 per 1,000 sq. ft.		
WAREHOUSE			
PEAK AM HOUR	0.30 per 1,000 sq. ft.	0.51 per 1,000 sq. ft.	0.33 per 1,000 sq. ft.
PEAK PM HOUR	0.32 per 1,000 sq. ft.		
SATURDAY PEAK HOUR	0.13 per 1,000 sq. ft.		
ARENA			
PEAK AM HOUR	1,452 per 1,000 sq. ft.	0.27 per seat	No Current Code Requirements
PEAK PM HOUR			
SATURDAY PEAK HOUR			
OFFICE			
PEAK AM HOUR	1.56 per 1,000 sq. ft.	2.84 per 1,000 sq. ft.	3.33 per 1,000 sq. ft.
PEAK PM HOUR	1.49 per 1,000 sq. ft.		
SATURDAY PEAK HOUR	0.43 per 1,000 sq. ft.		
SPECIALITY RETAIL			
PEAK AM HOUR	6.84 per 1,000 sq. ft.	3.76 per 1,000 sq. ft.	5 per 1,000 sq. ft.
PEAK PM HOUR	5.02 per 1,000 sq. ft.		
SATURDAY PEAK HOUR	4.06 per 1,000 sq. ft.		

This chart outlines the trip standards from Trip Generation Handbook, 9th Edition, 2012, and compares parking standards from the Parking Generation Handbook, 4th Edition, 2011 with the requirements from the City of Mount Vernon Code Book. While Mount Vernon’s parking requirements are similar in some cases, in others, such as office and retail, engineering standards require less parking and suggest that the City could reconsider some parking requirements for new construction within the Canal Village neighborhood.

Additionally, the City should consider establishing parking requirements for sports venues. Stadium parking can have a large impact on how the surrounding land can be used and when determining the design for Memorial Field. The current engineering standard is approximately one spot for every 4 seats. This does not take transit into account and additional studies and examples, such as PNC Park in Pittsburgh, the Great American Ballpark in Cincinnati, or should be considered in determining parking requirements in an urban setting with transit.



Parking requirements certainly have an impact on the appeal of the street. As seen here on East Sanford Boulevard, large parking structures and fields of parking lots can have a negative affect on a street. Parking requirements including the number of parking spots, as well as the location of parking should be considered in order to help promote investment and increase values in Canal Village.

Haven Rail in downtown Mount Vernon. This route and the frequency of the bus stops make this line important to the vitality of Canal Village area.

Additionally, the 52 Local line runs just to the west of Canal Village and connects the Eastchester - Dyre Avenue Subway station to the Mount Vernon East Station.

It is recommended that an additional bus stop be considered to be located near the corner of East 8th Street and South Fulton Avenue along the Route 54 Local bus line. This will allow people on South 3rd Avenue to have a more convenient point to access the bus system.

Improvements are needed to the transit experience to increase the talent pool for businesses in Canal Village area and at the same time reduce excessive driving and demand for parking spaces. Access to the businesses from Metro North and the NYC subway system will become more attractive to patrons when it is convenient and when they feel safe and comfortable.

Bee-Line Bus Stops

The extent of visibility of transit operations is important toward recognizing its presence. The bus stops situated in and around Canal Village area vary in appearance and comfort. A small number of bus stops consist of a sheltered bench with a metal sign post; several consist of a bench and metal sign, while most stops are identified by use of a metal sign post alone.

Sheltered benches or bus stops provides the most comfortable condition with protection from the elements that can, in turn, incentivize ridership within Mount Vernon and Canal Village. By providing protection from sun, wind,



The Bee-Line logo



Bee-Line Bus System Map

Transit Lines & Schedules

This chart identifies mass transit modes available within and around Canal Village as well as the major transit options of the New York Metro and the New Haven Rail Line.

Comparing the number of stops and frequency of operation, it is evident that the 55 bus line has the most convenient access in the neighborhood.

Transit Line	Number of Stops within the Canal Village	Frequency	Cost of Ridership
5 - New York City Subway	1 Outside the Canal Village	Weekday: 5-20 min Weekend: 12-20 min	MetroCard: \$2.75 Single ride: \$3
42 - Local	4	Weekday: 10-35 min Weekend: 30-40 min	\$2.75
52 - Local	3 Outside the Canal Village	Weekday: approx. 35 min Weekend: 12-20 min	\$2.75
54 - Local	2	Only Weekdays from 6:40-6:20; 6-7 times a day	\$2.75
55 - Local	7	Weekday: 30-45 min Weekend: 30-90 min	\$2.75
91 - Limited	5	Tues-Fri: 5 times daily Sat-Sun 8 - 11 times	\$2.75
New Haven Rail	1 Outside the Canal Village	Weekday: 20-30 min Weekend: 30-60 min	\$8 - \$10.75

rain, and snow, people are more likely, and willing to wait for the bus. This is important given the 10-35-minute wait time for buses within this area. In addition to protection from the elements, covered stops also provide a sense of protection from the street for those waiting near the curb for the bus. Lighting is typically achieved with highway “cobra” lights. These lights are sometimes located at the bus stop, and other times, they are located across from the stop, or just down the street. While these lights may provide adequate lighting to see, they do not increase the appearance of safety as much as a street light more in line with pedestrian scale would provide.

Many of the bus stops within Canal Village area are established through a simple post at a sidewalk. While the bus stop signs and information appear to be in good condition, these stops also tend to be in less desirable locations such as on hills, or next to a barbed-wire fence. Without shade, or some place to sit, these stops provide less of an incentive for workers, visitors, or residents to make use of the available bus lines. Lighting at these stops is similar to the lighting at the covered bus stops, relatively indirect. An appearance of safety would be improved using a more pedestrian-scale lighting system.

Bus stops within Canal Village area also tend to be missing other pedestrian friendly features within the neighborhood such as crosswalks or crossing signals. To promote pedestrian activity and the use of public transportation, other pedestrian-friendly infrastructure is needed. If an individual does not feel safe going to a bus stop, then they will likely not make use of what is available.

New York City Subway

The nearest New York City Subway station to Canal Village area is the Eastchester - Dyre Avenue Subway station which is the last stop along the Number 5 train. This stop had a daily average weekday ridership of 4,769 in 2016³ and connects to both the 55 and 52 Bee-Line bus routes, enabling commuting into and out of Canal Village area as well as downtown Mount Vernon.

New Haven Rail Line

Just north of Canal Village area, in downtown Mount Vernon, the New Haven Rail Line has a stop at the Mount Vernon East Station. Metro North has a regular schedule on weekdays and weekends, this line is part of one of the busiest rail corridors in the United States and served an average of 125,000 rides daily in 2013.⁴ An additional Metro North stop is located just outside of Mount Vernon at the Metro North Pelham Station.



A Bee-Line Bus

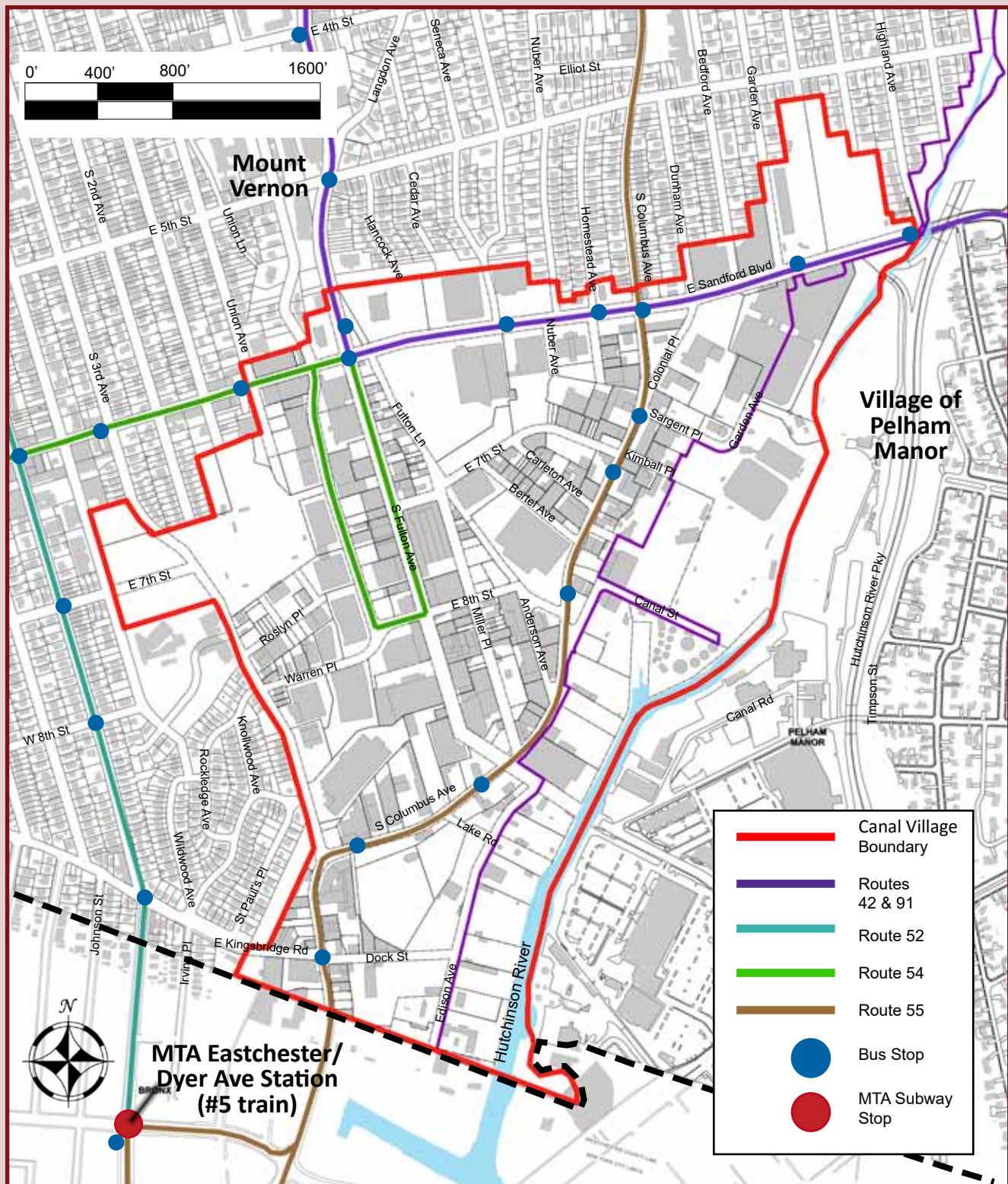


New York City Subway Stop at Dyre Avenue.



Mount Vernon East Station on the New Haven Rail Line

3. According to “Average Weekday Subway Ridership” published in 2016 (available at: http://web.mta.info/nyct/facts/ridershipridership_sub/htm)
4. According to “Getting Back on Track: Unlocking the Full Potential of the New Haven Line” published in 2013.



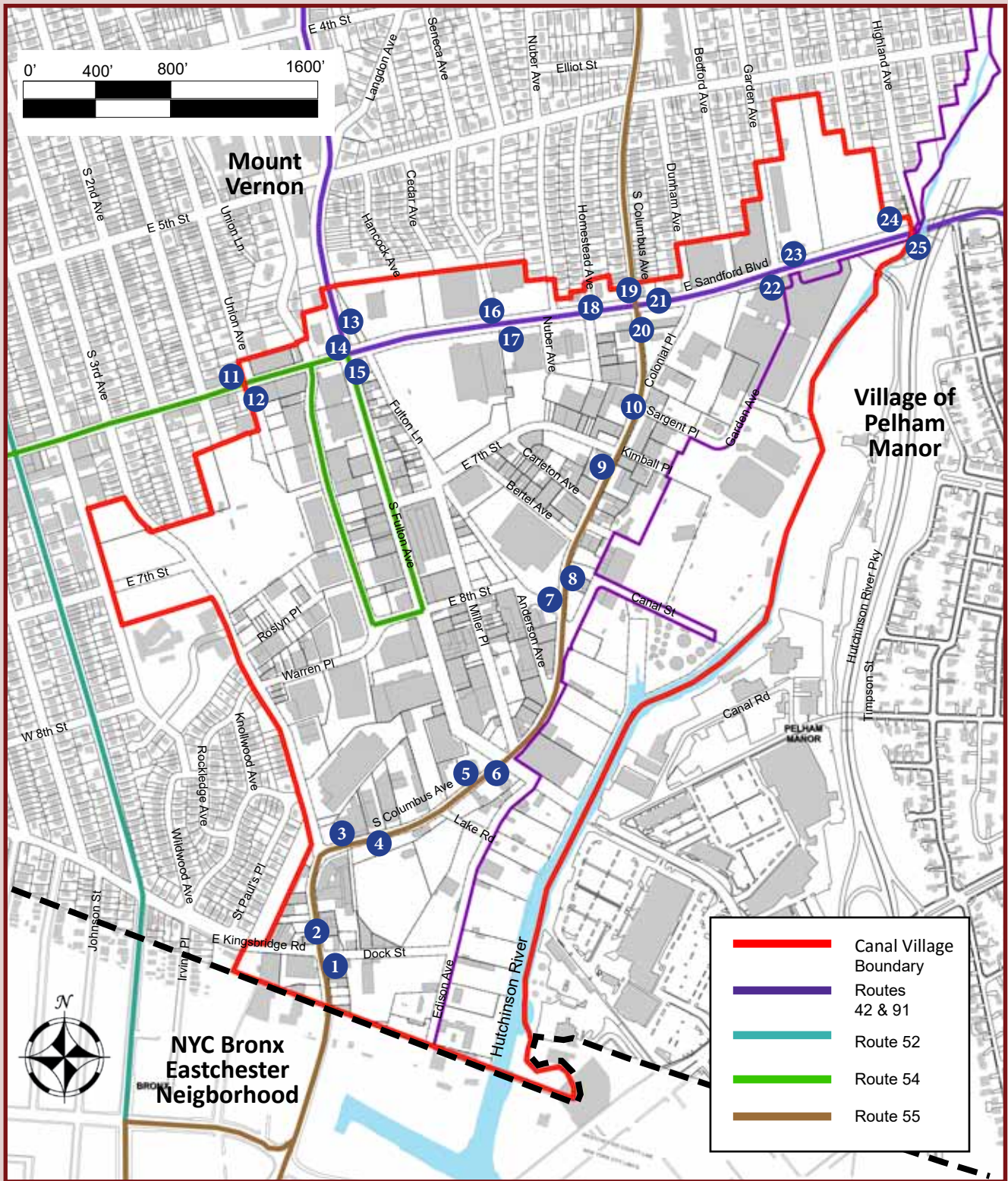
The map above indicates the location of the various modes of public transportation that are available within, and just outside of Canal Village area. Several bus routes provide access to the area from other major transit locations such as the MTA Subway Eastchester - Dyre Avenue station, and the New Haven Rail Line stop at Mount Vernon East.

Bus routes are identified using colored lines which correspond with the labeled bus route. Blue dots locate bus stops along each route and the red dot identifies the MTA Subway stop. Since several bus stops are across the street from each other to accommodate bus routes in both directions, blue dots have been simplified for legibility.

Bus Stop Conditions

The following pages include street view images of each of the bus stop conditions in Canal Village area. Each image is numbered and corresponds to a location on the “Bus Stop Locations” map.





Bus Stop Locations





Pedestrian & Bike Facilities

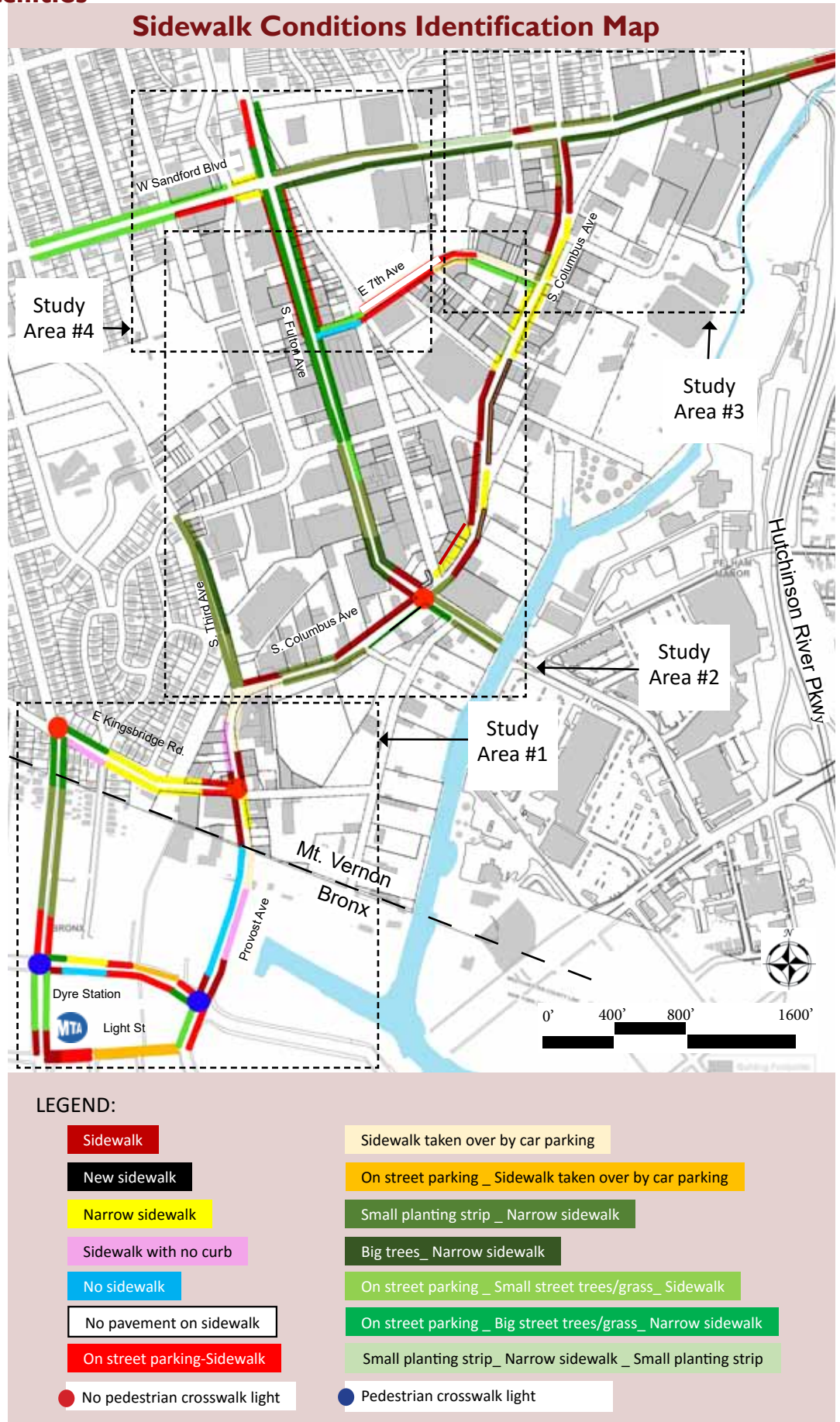
Sidewalk Study & Roadway Conditions

This section describes the current conditions of the sidewalks within the project area to see what will be necessary to improve the pedestrian experience within Canal Village area. One of the strategies needed to help relieve some of the traffic congestion in the neighborhood is to promote pedestrian movement by providing sidewalks that make the pedestrian feel safe and comfortable. Improved sidewalks make it easier for people to get from a transit stop to their destination.

Additionally, to address the overcrowded parking and illegal parking situation it is suggested to provide and promote parking in locations a little farther away from where workers and patrons are currently parking. Having a pleasant experience between the car and the destination is critical for success.

This investigation includes the sidewalk conditions farther south in the Bronx, connecting Canal Village area to the New York Subway Station at Dyre Avenue, Number 5 Train.

The map on the right shows the main thoroughfares through the site that have been reviewed. Conditions were studied and categorized by their physical characteristics. These conditions are shown on the map using a color system.



Typical existing sidewalk problems and solutions

The photos below illustrate the typical existing conditions shown on the maps in this study. Some have been grouped together because their physical characteristics are very similar.



Parking on the Sidewalk
 Existing conditions in the area:
 On street parking _ Sidewalk taken over by car parking
 Sidewalk taken over by car parking
Typical Problem - Creating an unsafe condition, cars are parked on the sidewalk, preventing the pedestrian from using the sidewalk and forcing them to walk in the street.
Solution - Create a curb, add street trees and light posts to make it harder for cars to park on the sidewalk. Providing on-street parking will also solve the problem.



No Sidewalk Delineation
 Existing conditions in the area:
 Sidewalk with no curb No sidewalk
 Not walkable sidewalk
Typical Problem - There is no curb delineating where pedestrians should walk and where trucks and cars should drive.
Solution - Construct a curb to distinguish the line between the roadway and a sidewalk. Plant street trees and light posts to create a buffer between the pedestrian and vehicle, providing a safer sidewalk.



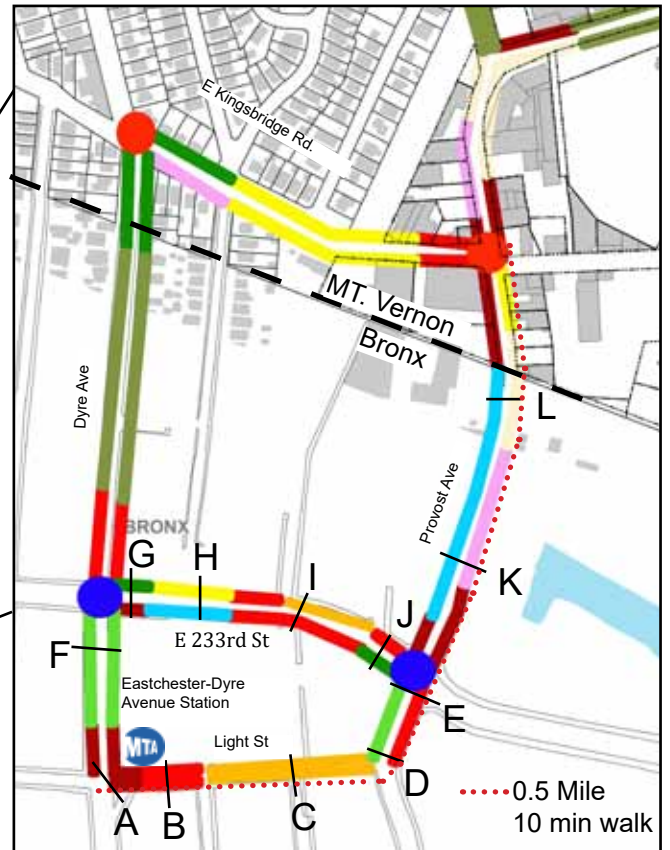
Narrow Sidewalk
 Existing conditions in the area:
 Big trees_ Narrow sidewalk
 On street parking _ Small street trees/grass_ Sidewalk
 Small planting strip_ Narrow sidewalk **Narrow sidewalk**
 On street parking _ Big street trees/grass_ Narrow sidewalk
 Small planting strip_ Narrow sidewalk _ Small planting strip
Problem - The paved footpath is too narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk.
Solution - Widen the sidewalk to be at least 5 feet wide. Plant street trees in planters with or without planting strip to not only provide landscaping, but also a canopy for shade.



Sufficient Sidewalk, but Insufficient Landscaping
 Existing conditions in the area:
 On street parking-Sidewalk Sidewalk New sidewalk
Problem- A good aspect about these streets is that the parked cars buffer the pedestrians from the moving cars, making the pedestrians feel safer. However, the lack of trees and the cluttered facades detract from the experience.
Solution- Street trees will provide shade and make the street more attractive. If there is sufficient space, provide a separated bike lane on top of the curb.

Study Area #1. Street Conditions, Connecting Canal Village to NYC Subway

The closest New York City Subway stop to Canal Village area is the Eastchester-Dyre Avenue station in the Bronx, the last stop on the 5-line. Improving the walk or bike ride between the Train Station and Mt. Vernon will entice more transit users thus reducing car traffic.



Location A - Dyre Avenue



On both the left and right sides:
Sufficient Sidewalk, but Insufficient Landscaping
 Problem- A good aspect about these street is that the sidewalk is comfortable and wide for pedestrians. However, the lack of trees and the cluttered facades detract from the experience.

Location B - Light Street



On both the left and right sides:
Sufficient Sidewalk, but Insufficient Landscaping
 Problem- A good aspect about these street is that the parked cars buffer the pedestrians from the moving cars, making the pedestrians feel safer. However, the lack of trees and the cluttered facades detract from the experience.

Location C - Light Street

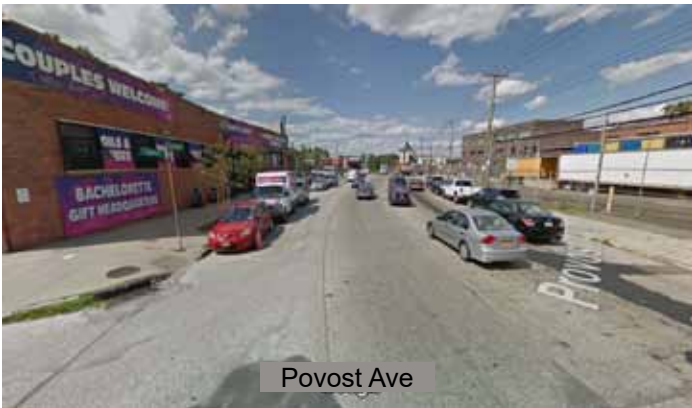


On both the left and right sides:

Parking on the Sidewalk

Problem: Cars are parked on the sidewalk which sometimes prevents the pedestrian from using the sidewalk. This forces the pedestrians into the street with the moving vehicles.

Location D - Provost Avenue



On left side:

Sufficient Sidewalk, but Insufficient Landscaping

Problem: Other than the cluttered signal, this side of the street is in good. It has a wide sidewalk with street trees planted. The parked cars buffer the pedestrians from the moving cars.

On right side:

Sufficient Sidewalk, but Insufficient Landscaping

Problem: This side of the street has a wide sidewalk but some street trees should be added. The parked cars buffer the pedestrians from the moving cars.

Location E - Provost Avenue



On left side:

Narrow Sidewalk

Problem: A narrow sidewalk is better than no sidewalk, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street.

On right side:

Sufficient Sidewalk, but Insufficient Landscaping

Problem: This side of the street has a wide sidewalk but street trees should be added. The parked cars buffer the pedestrians from the moving cars.

Location F - Dyre Avenue



On both the left and right sides:

Sufficient Sidewalk, but Insufficient Landscaping

Problem: The street has a wide sidewalks but additional street trees should be added. The parked cars buffer the pedestrians from the moving cars. The overhead utility cables should be moved higher up with any future pole replacement projects, or placed underground.

Location G - East 233rd Street

E. 233rd St

On both the left and right sides:

Sufficient Sidewalk, but Insufficient Landscaping.

Problem: A good aspect about this street is that the sidewalk is comfortably wide for pedestrians. However, a lack of trees and the cluttered facades detract from the experience.

Location H - East 233rd Street

E. 233rd St

On both sides:

Narrow Sidewalk

Problem - The paved footpath is narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk. There is sufficient space to widen the pedestrian and the bicycle realm.

Location I - East 233rd Street

E. 233rd St

On left side:

Parking on the Sidewalk

Problem: Creating an unsafe condition, cars are parked on the sidewalk which prevents the pedestrian from using the sidewalk, making them walk in the street with moving cars.

On right side:

Sufficient Sidewalk, but Insufficient Landscaping

Problem: A good aspect about these streets is that the parked cars buffer the pedestrians from the moving cars, making the pedestrians feel safer. However, the lack of trees and the cluttered facades detract from the experience.

Location J - East 233rd Street

E. 233rd St

On both the left and right sides:

Narrow Sidewalk

Problem: Having the parking lines on the sides of the street helps to buffer the pedestrians on the sidewalk from the moving vehicles, but it looks as though the sidewalk can be widened by taking some of the excess space from the parking lanes.

Location K - Provost Avenue



On left side:

No Sidewalk Delineation

Problem: The 'scruffy' landscape here is between the street and a lane that fronts the buildings that can be seen behind. This landscaped strip could be designed as an attractive median, that could have a shared bike/pedestrian path along one side.

On right side:

Sufficient Sidewalk, but Insufficient Landscaping

Problem: This side of the street has a wide sidewalk but street trees should be added. The overhead utility cables should be moved higher up with any future pole replacement projects, or placed underground.

Location L - Provost Avenue



On left side:

No Sidewalk Delineation

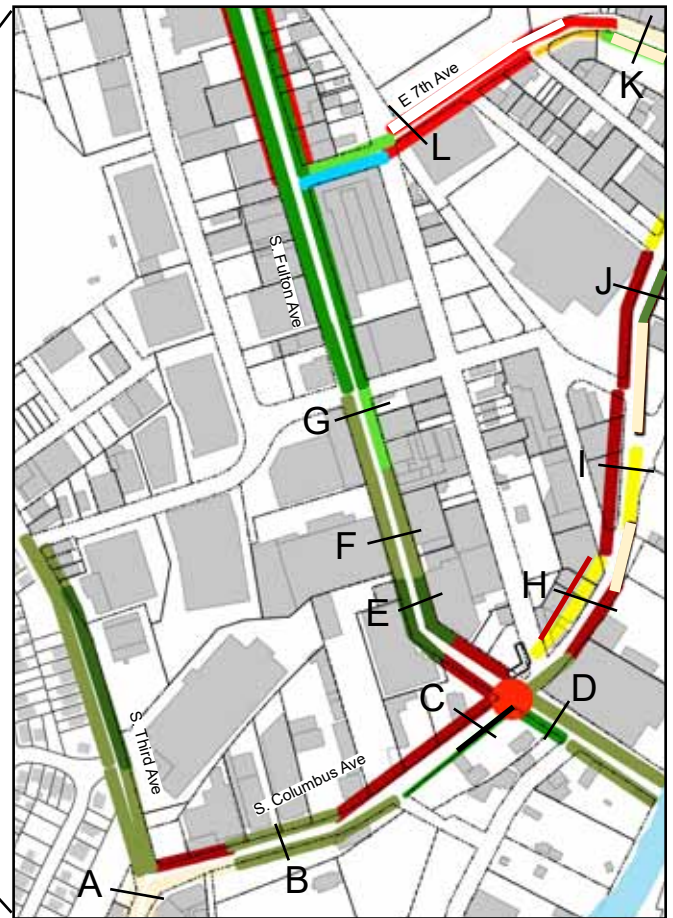
Problem: This side would look nicer with the shared bike/pedestrian path mentioned in the box above. Street trees planted here can grow to a substantial height since there are no power lines above.

On right side:

Sufficient Sidewalk, but Insufficient Landscaping

Problem: This side of the street has a wide sidewalk but street trees should be added. The overhead utility cables should be moved higher up with any future pole replacement projects, or placed underground.

Study Area #2 Street Conditions, Connecting South Fulton Ave and S. Columbus Ave



Location A - South Third Ave



On left side:
Parking on the Sidewalk
 Problem: Cars are parked on the sidewalk which sometimes prevents the pedestrian from using the sidewalk. This forces the pedestrians into the street with the moving vehicles.
 On right side:
Narrow Sidewalk
 Problem: A narrow sidewalk is better than no sidewalk, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street.

Location B - South Columbus Ave



On both the left and right sides:
Narrow Sidewalk
 Problem - The paved footpath is narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk. A narrow sidewalk is better than no sidewalk, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street.

Location C - South Columbus Ave



On both the left and right sides:

Narrow Sidewalk

Problem: The sidewalk is very narrow and lacks landscaping. When there isn't room for shade trees within the right-of-way, they should be planted on the private side of the sidewalk

Location D - South Fulton Ave



On both the left and right sides:

Narrow Sidewalk

Problem: A narrow sidewalk is better than no sidewalk, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street.

Location E - South Fulton Ave



On both the left and right sides:

Narrow Sidewalk

Problem: A narrow sidewalk is better than no sidewalk, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street.

Location F-S. Fulton Ave



On both the left and right sides:

Narrow Sidewalk

Problem: A narrow sidewalk is better than no sidewalk, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street. This portion is almost wide enough but a few more feet and with above the curbs would be better.

Location G - South Fulton Ave



On left side:
Sufficient Sidewalk, but Insufficient Landscaping
Problem: Since the existing trees are older, it appears some of the trees that were there before should be replaced to make the street more attractive.

On the right side:
Narrow Sidewalk
Problem: The paved footpath is narrow, even though there might be enough space for a wider sidewalk.

Location H - South Columbus Ave



On left side:
Parking on the Sidewalk
Problem: Creating an unsafe condition, cars are parked on the sidewalk which prevents the pedestrian from using the sidewalk, making them walk in the street with moving cars.

On right side:
Sufficient Sidewalk, but Insufficient Landscaping
Problem: This side of the street has a wide sidewalk but street trees should be added.

Location I - South Columbus Ave



On both the left and right sides:
Parking on the Sidewalk
Problem: Creating an unsafe condition, cars are parked on the sidewalk which prevents the pedestrian from using the sidewalk, making them walk in the street with moving cars.

Location J - S. Columbus Ave



On both the left and right sides:
Narrow Sidewalk
Problem: This shows on the right side of the photo how when the sidewalk is very narrow and there isn't room for shade trees within the right-of-way, they should be planted on the private side of the sidewalk

Location K - East 7th Avenue



On both the left and right sides:

Parking on the Sidewalk

Problem: Creating an unsafe condition, cars are parked on the sidewalk which prevents the pedestrian from using the sidewalk, making them walk in the street with moving cars.

Location L - East 7th Avenue

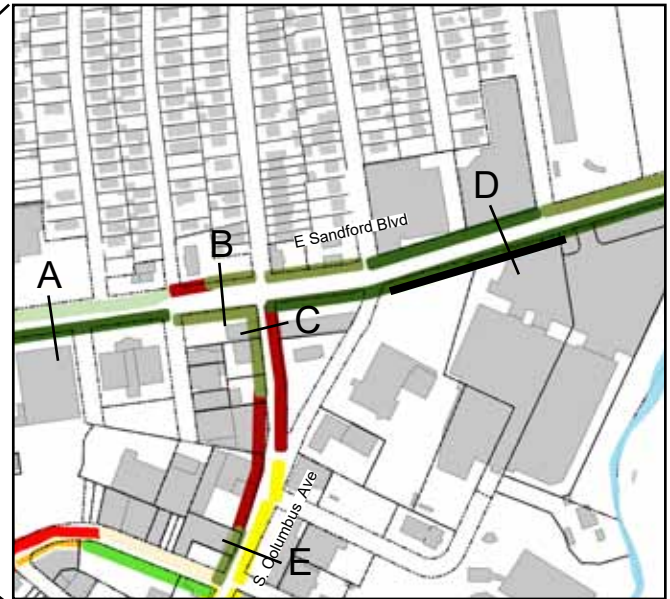
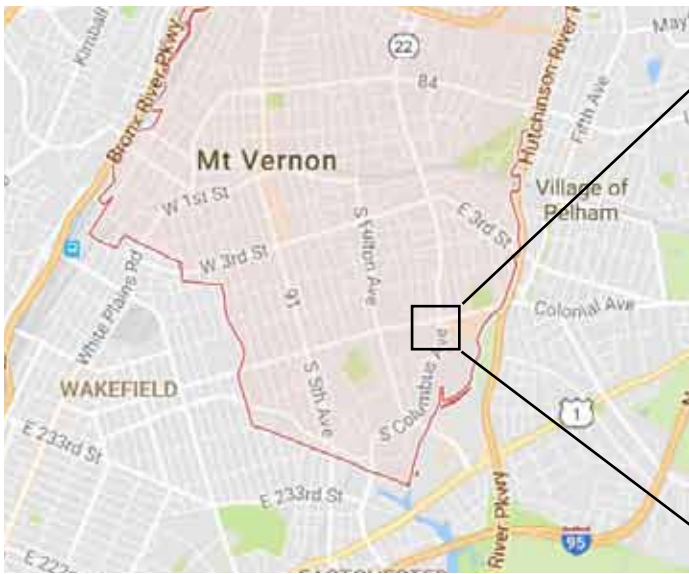


On both the left and right sides:

Narrow Sidewalk

Problem: A narrow sidewalk is better than no sidewalk, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street.

Study Area #3 Street Conditions, Connecting East Sanford Boulevard and Columbus Avenue



Location A - East Sanford Boulevard



On both the left and right sides:

Narrow Sidewalk

Problem - The paved footpath is narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk.

Location B - East Sanford Boulevard



On both the left and right sides:

Narrow Sidewalk

Problem - The paved footpath is narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk.

Location C - South Columbus Avenue



On left side:

Narrow Sidewalk

Problem - The paved footpath is narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk.

On right site:

Narrow Sidewalk

Problem: This sidewalk is too narrow for landscaping.

Location D - East Sandford Boulevard



On both the left and right sides:

Narrow Sidewalk

Problem: This is a very good example for a streets cape for a city street, however it would have been better for the pedestrian if the street was a little wider.

Location E - South Columbus Avenue

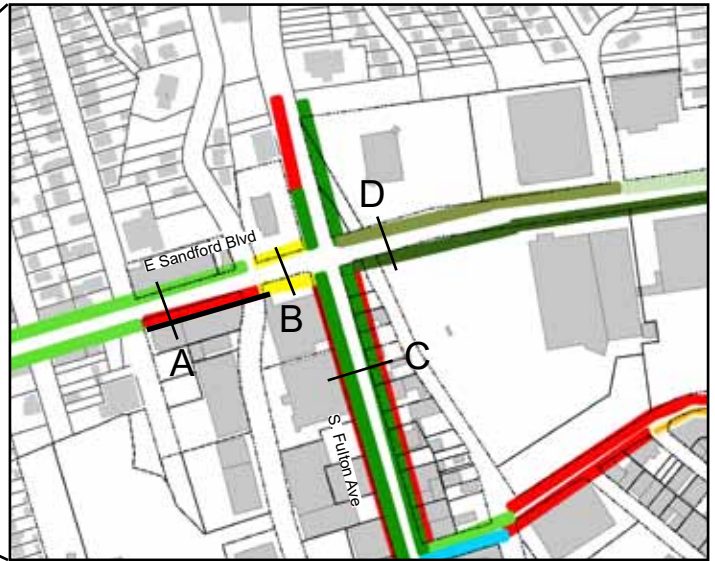


On both the left and right sides:

Narrow Sidewalk

might be enough space between the curb and the edge of the right-of-way for a wider sidewalk.

Study Area #4 Street Conditions, Connecting East Sanford Boulevard and South Fulton Avenue



Location A - East Sandford Boulevard



On both the left and right sides:
Narrow Sidewalk
 Problem: The left side of this photo shows a very good example of a streetscape for a city street, however it would have been better for the pedestrian if the street was a little wider.
 On the right side, the sidewalk is narrow, but without parked cars at the curb, it puts pedestrians closer to the moving vehicles in the street.

Location B - East Sandford Boulevard



On both the left and right sides:
Narrow Sidewalk
 Problem: The sidewalk is too narrow for two people to walk abreast.

Location C - South Fulton Avenue



On both the left and right sides:

Narrow Sidewalk

Problem - The paved footpath is narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk.

Location D - East Sandford Boulevard



On both the left and right sides:

Narrow Sidewalk

Problem - The paved footpath is narrow, even though there might be enough space between the curb and the edge of the right-of-way for a wider sidewalk.

Waterway Use

Existing Conditions for Navigation

The Eastchester canal is a resource that appears to be immensely underutilized. The canal historically served as a significant means of transport for goods and services in the neighborhood. Today it is filled with silt and debris and is navigable only at higher tide levels.

The canal is fed by the Hutchinson River that begins farther north at a location about 7 miles away in Scarsdale, NY. It opens to Eastchester Bay that empties into the Long Island Sound. From there, waterborne crafts can access to New York Harbor by way of the East River. Before the 1950's the Hutchinson River was classified as a "Navigable Waterway" by the Federal Government and was maintained by the Army Corps of Engineers. After the 1950's, this classification was removed from the Hutchinson River in Mount Vernon, down to a "Y" in the Bronx. Sprague is currently petitioning for the classification to be reapplied up to Mount Vernon in order to maintain the waterway and enable easier water shipping. The water is also polluted.

Water Traffic

With the South Fulton Avenue bridge closed, there has been no usage of the canal upstream of the bridge since January 2017. Recently Sprague Energy filed an application with the Army Corps of Engineers for permission to dredge the canal from their property at the 'Y' of the canal to a distance south almost halfway to the Fulton Avenue bridge. This suggests that the rest of the canal south of that point is navigable.

On-site interviews were conducted on two separate occasions. Not all of the property owners/occupants were available. In fact, only two of the property owners along the canal responded to this effort to determine the canal's level of utilization. Based on the findings from these interviews it was determined that the canal is underutilized. One of the primary reasons given for non-use was the adjacent operation did not require either delivery and/or shipment by water craft.

The only known recent user of the waterway is the asphalt plant at the furthest most downstream property in Mt. Vernon. This operation currently occupies three (3) individual parcels along the canal and makes use of the canal on a daily basis.

Dredging & Future Navigation

Increasing the use of the waterway can have a positive influence on vehicular traffic on land. One barge can carry



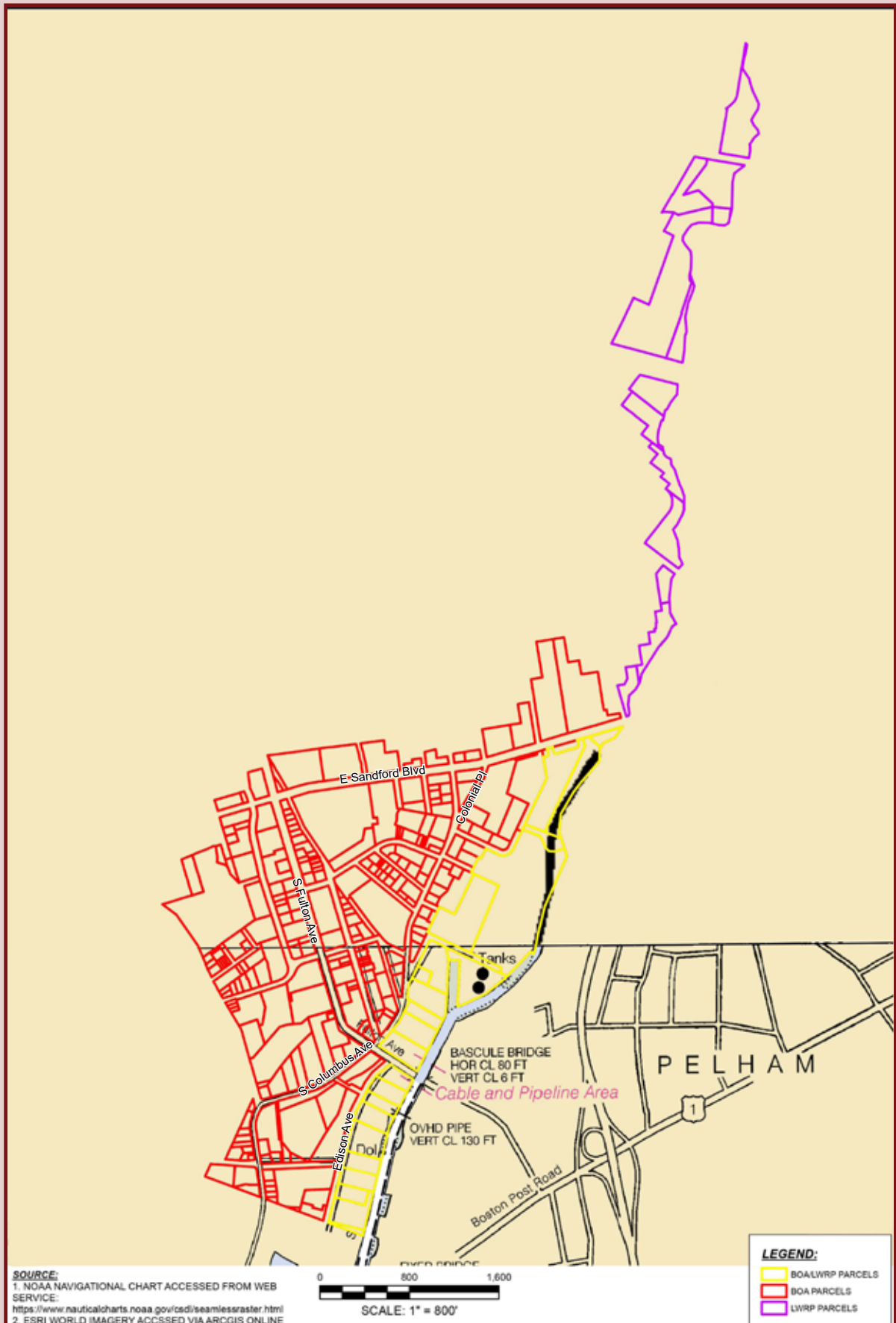
The buildup of silt is quite visible at the "Y" of the canal north of the Fulton Avenue bridge. This could be the spoils pile from previous dredging



The metal sea walls show the change in water level due to the tides. Here at low tide you start to see the edges of the bottom of the canal. Looking south, you can see a barge servicing the asphalt plant.



The Fulton Avenue drawbridge is currently under construction and closed, blocking any water borne traffic further north. The edges of the canal vary in condition. Many of the edges along the Mount Vernon side (left) need reinforcement.



NOAA Navigation Chart

This map shows navigable water in the canal, and up as far as Sandford Blvd.

the load of more than four trucks that would otherwise be on the roadways.

Once the canal is environmentally cleaned up and dredged, the watercourse can also be used for recreation. With a canoe/kayak launch planned further upstream, the canal is the outlet for further canoe adventures.

Another issue other than dredging that influences the use of the canal is that there is also a cost-benefit factor that businesses use to decide whether to ship via the canal or by truck. Depending on the type of business and if their shipping volume is low, they may choose to ship via truck because there is an increased cost for low volume using water craft. If possible, the city could consider offering a credit of some sorts to businesses who use the waterway.

Infrastructure

Water

The Mount Vernon Board of Water Supply manages and provides potable water to residents and businesses for the City of Mount Vernon. As of 2016, this encompassed 105 miles of water mains, and 1,140 fire hydrants. Water is sourced from the Catskill / Delaware reservoir system. From this reservoir system, the water is treated for potential contaminants to make the water safe to drink. The domestic water rates are among the lowest in Westchester County. The Board of Water Supply helps to provide connections for new uses based on a cost that is agreed upon with the property, or business owner prior to installation.

The annual water report from the Mount Vernon Board of Water Supply indicated that the City did not show contaminants that violated allowed maximums in 2016.

Sewers

The Bureau of Sewers oversees sewer maintenance for 195 miles of sewer line. In April of 2016, the EPA mandated that the City of Mount Vernon conduct video surveillance, manhole water testing and other tests to locate illicit sanitary sewer discharges. The City is currently working on a plan to address EPA mandates to curb illicit sanitary sewer discharges. Part of this plan includes a proposal to increase the number of inspectors from the City.

Capacity

Given existing zoning and the minimal increase in density and intensity that is included as a recommendation in Section 4 — Analysis, the City has not expressed concern about current capacity, and the ability to meet increased need from potential site build-out.

Combined Sewer Overflow (CSO)

The City of New York Department of Environmental Protection Bureau of Wastewater Treatment published a Water Quality and Sewer System Report in 2015 that discussed Combined Sewer Overflow (CSO) impacts on the Hutchinson River. This report concluded that water flow from Pelham Lake and Westchester County stormwater flow contribute heavily to Enterococci and fecal coliform concentration loading. The report also states that the levels are so high, that recreation is not recommended in these waters and that to reduce the level of contaminants to a safe level, a complete removal of contributions from Pelham Lake and large levels from Westchester County stormwater flow is required.

Gas and Electricity

Gas and electrical services are provided by the ConEdison utility company. This is a private entity that maintains its supply lines and provides services for new installations as well as outages. There were no complaints regarding gas and electrical services during meetings with the public, as well as with property and business owners.



A location for stormwater discharge in Mount Vernon



Oily residue on water, refuse, as well as bacterial growth are all evidence of contamination of water discharge in Mount Vernon.

ECONOMICS: COUNTY & REGIONAL TRENDS

The Economic and Market Trends Analysis begins with an overview of the labor and employment trends of the city, county, and region. An assessment of the workers and jobs directly with the Brownfield Opportunity Area (BOA) follows. This section concludes with a business inventory and analysis focusing on the Industrial, Retail, and Recreation markets to assess possible future development in the area.

Labor Force

The Labor Force in an area is the total number of residents who are employed or looking for work. In recent years the City of Mount Vernon's resident labor force has declined from a 16-year peak of 35,100 in 2008 down to 33,500 in 2016 (-4.6%) which is just above the level in 2000 (see

Annual Resident Labor Force Population, 2000-2016). Over that period Westchester County's labor force experienced a similar but less significant decline (-2.3% or -11,500 workers). Since 2000, the County's labor force increased by 5.0 percent compared with just 0.9 percent growth in Mount Vernon. The New York Metropolitan Area saw positive growth during both periods, with the majority of post-recession gains occurring in New York City. At the neighborhood level only estimates of labor force trends are available from the US Census Bureau's 5-year American Community Survey. Over the 5-year periods from 2006-2010 to 2011-2015 the Canal Village area's (Census Tract 26) labor force expanded from 1,936 to 2,093 workers (+157 or +8.1%).



Annual Resident Labor Force Population, 2000-2016
Note: December 2007 to June 2009 recession highlighted in blue
Source: NYSDOL, Local Area Unemployment

Unemployment

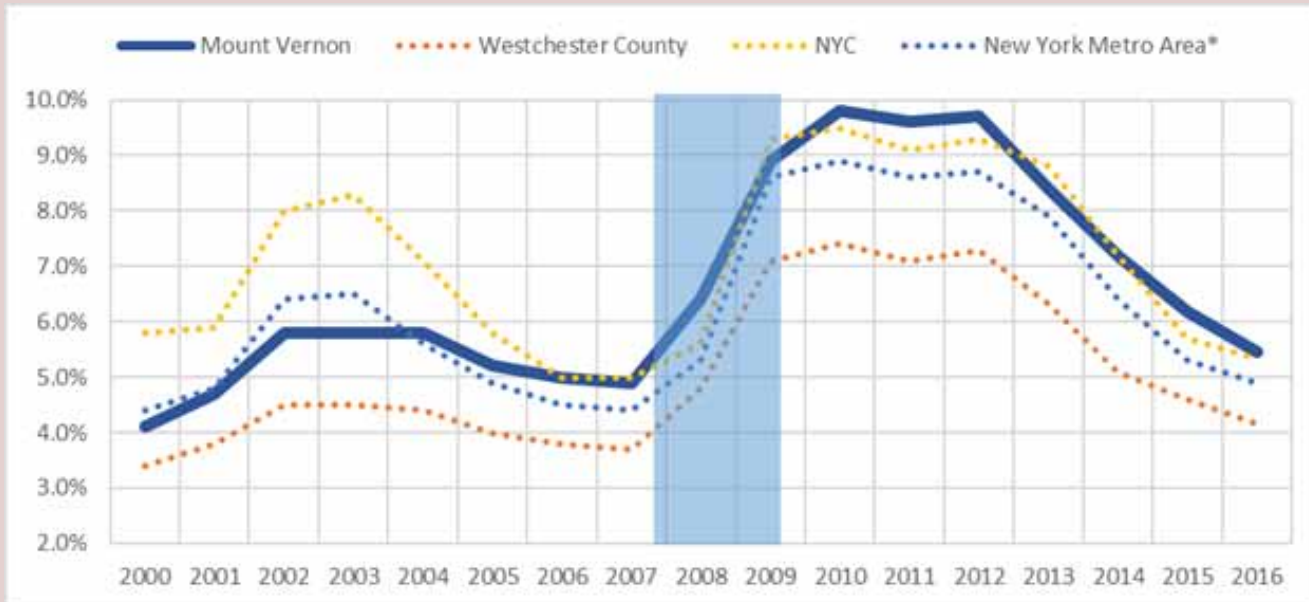
Although in the early 2000s Mount Vernon had a lower unemployment rate than both the New York Metro region and New York City, from the mid-2000s to the present, Mount Vernon’s unemployment rate has remained higher than New York City and the metro region and well above that of Westchester County. This trend indicates that local residents face relative difficulty in obtaining employment and may reflect the increased nationwide incidence of employment discrimination in the post-recession faced by Black or African American workers, which make up a majority of Mount Vernon’s population.¹

According to the NYSDOL, over the period from 2000 to 2008 the City of Mount Vernon had a residential unemployment rate more than one percentage point below that of New York City and one percentage point above Westchester County (see *Annual Average Unemployment Rate, 2000-2016*). Following the financial crisis, from 2009 to the present, Mount Vernon’s average annual unemployment rate was 8.2 percent compared with 8.0 percent in New York

City, 6.1 percent in Westchester County and 7.4 percent in the New York metropolitan area. In 2016, Mount Vernon’s unemployment was considered at a healthy level at 5.5 percent, 1.3 percentage points higher than in Westchester County but just 0.2 percentage points more than New York City.

According to the US Census Bureau’s American Community Survey, in 2000 the Canal Village area had a lower unemployment rate than the City of Mount Vernon at 4.5 and 7.3 respectively, however as the decade progressed residents in Canal Village suffered from unemployment at a disproportionately higher level than Mount Vernon residents as a whole. By the five year period of 2006-2010, the Canal Village unemployment rate had climbed to 13.3 percent. Most recently, over the 2011-2015 period the unemployment rate reached 17.1 percent, 4.5 percentage points higher than the City of Mount Vernon.

1. According to the Bureau of Labor Statistics TED article titled “Unemployment rates by race and ethnicity, 2010,” the disparity in unemployment rates of Black or African Americans compared with White workers increased by 2.9 percentage points from 2001 to 2010.



Annual Average Unemployment Rate, 2000-2016
 Note: December 2007 to June 2009 recession highlighted in blue
 Source: NYSDOL, Local Area Unemployment

Employed Labor Force

The trend among employed Mount Vernon and Westchester County residents is illustrated in *Resident Employed Labor Force, 2000-2016*. Mount Vernon experienced its highest levels of employment prior to and during the 2007-2009 recession. Employment fell sharply in the years from 2008 to 2011 and has since recovered somewhat. The recovery in the County was less tumultuous with a significant gain beginning in 2011. Again, this disparity in employment levels is likely a result of racial employment discrimination in the post-recession era which more greatly affected Mount Vernon than other communities. Canal Village area added 78 employed residents from 2006-2010 to 2011-2015, a gain of 4.7 percent

Employment

Employment is defined as the number of jobs located in an area. As shown in the table *Employment in the New York Metropolitan Statistical Area*, Employment increased by 1,983,764 jobs (18.8%) to 12.5 million, between 2001 and 2015. Westchester County's share of this increase was 78,564 jobs, or an increase of 14.6 percent. While employment in the County has been growing, it has been growing at a slower pace than the region as a whole. At 615,310 in 2015, Westchester County held 4.91 percent of the region's jobs. This is the lowest the County's regional share has been since 2001; down 0.26 percentage points from its peak in 2004.

According to the US Census Bureau, area employment in the Canal Village area increased from 4,566 to 5,844 workers from 2002 to 2014, a gain of 1,278 workers or +28.0 percent. The area saw strong employment growth through the 2007-2009 recession, adding 1,344 workers since 2008 including a gain of 862 retail and 426 construction jobs.

Description	NY NJ PA MSA	Westchester County	Westchester County Share of MSA Total
2001	10,551,642	536,746	5.09%
2002	10,497,210	539,683	5.14%
2003	10,533,977	541,959	5.14%
2004	10,702,892	553,595	5.17%
2005	10,868,914	559,085	5.14%
2006	11,061,943	565,319	5.11%
2007	11,366,549	583,242	5.13%
2008	11,473,388	589,109	5.13%
2009	11,253,435	575,264	5.11%
2010	11,255,588	572,367	5.09%
2011	11,579,459	587,461	5.07%
2012	11,729,399	590,091	5.03%
2013	11,968,179	594,715	4.97%
2014	12,247,401	604,583	4.94%
2015	12,535,406	615,310	4.91%

Employment in the New York Metropolitan Statistical Area
 Source: Bureau of Economic Analysis CA25N Total Full Time and Part-Time Employment by NAICS Industry



Resident Employed Labor Force, 2000-2016
 Note: December 2007 to June 2009 recession highlighted in blue
 Source: NYSDOL, Local Area Unemployment Statistics Program, 2000-2016

Employment by Industry

Shown in *Westchester County Employment by Industry, Change, 2005-2015*, Westchester County has experienced strong growth among highly skilled and well-paying Health Care & Social Assistance, and FIRE industries (Finance, Insurance and Real Estate services) with additional growth among moderate wage and skilled service sectors of Accommodations, Food Services, and Other Services. However, well-paying blue collar industries such as Manufacturing and Wholesale Trade have seen major job losses.²

According to the Bureau of Economic Analysis, the share of county-wide employment by place of work within the New York-Newark-Jersey City NY-NJ-PA Metropolitan Statistical Area (New York Metro Area) has remained relatively unchanged over the period from 2001 to 2015, falling from 5.1 percent to 4.9 percent of total employment, compared to the County which added 78,564 jobs, a gain of 14.6 percent, over that same period. In most industry groups the County's share of the New York Metro Area's employment decreased slightly, however marginal gains occurred among Finance and Insurance industries(+1.0%), farm employment(+0.4%) and federal civilian employment (+0.3%).

2. Other Services includes grantmaking, religious institution administration, equipment repair, laundry services, death care, pet care, photofinishing, parking and dating services.

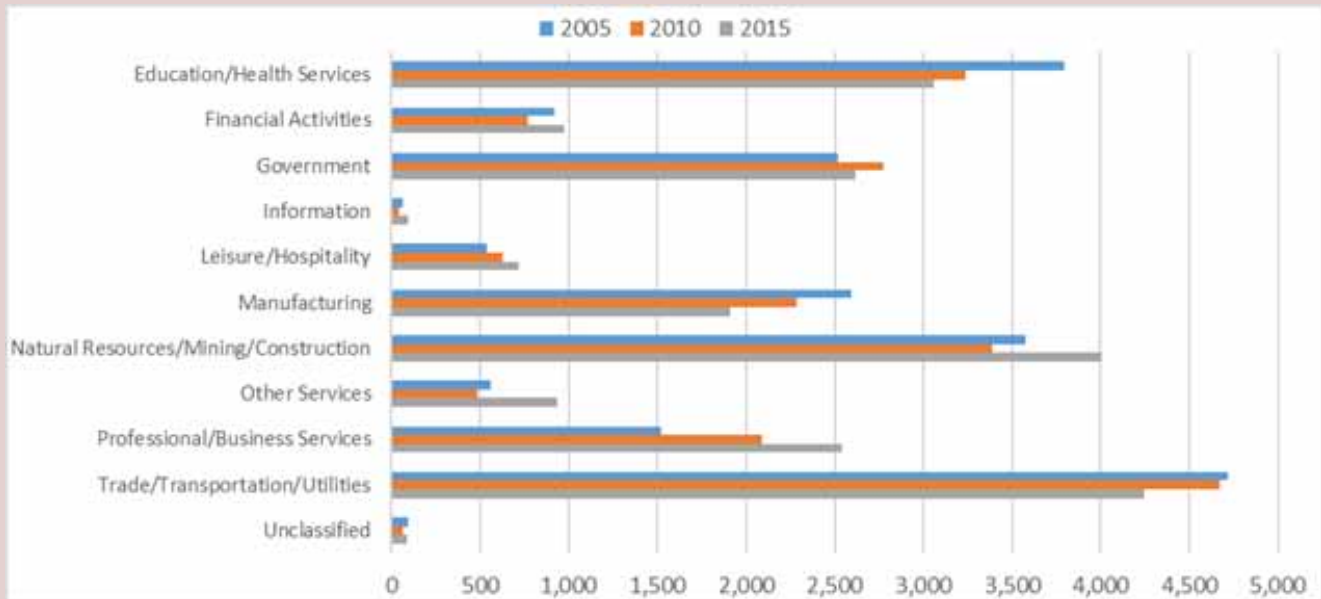
Over the past 14 years, the Real Estate services industry has seen the largest gain in employment within Westchester County, increasing by 16,975 workers from 2001 to 2015 (see *Westchester County Employment by Industry, Change, 2005-2015*). Finance and Insurance services added slightly fewer workers (+15,237) followed by Health Care and Social Assistance services (+12,810), Accommodation and Food Services (+11,570) and Other Services, except Public Administration (+9,914). The largest reduction in employment occurred in Manufacturing (-8,057), followed by Information (-7,287) and Wholesale Trade (-2,987).

According to the NYSDOL's QCEW dataset, employment in Mount Vernon increased by 1.3 percent or 278 workers from 2005 to 2015 (see *Mount Vernon Employment by Industry Group*).³ Employment gains were primarily the result of growth in Professional & Business Services and Natural Resources, Mining & Construction industry groups with the majority of gains assumed to be attributed to gains in Construction, Professional & Scientific Services, Management of Companies, Administration, Support, Waste Management & Remediation industry sectors. Some industry groups saw reduced employment including Education & Health Services (-735 jobs or -19.4%), Manufacturing (-684 or -26.3%), and Trade, Transportation & Utilities (-473 or -10.0%).

3. QCEW and BEA employment counts are not comparable as BEA employment estimates makes adjustments to account for employment and wages not covered, or not fully covered, by the state UI and the UCFE programs, while such not covered employment is omitted from QCEW estimates.



Westchester County Employment by Industry, Change, 2000-2015
 Source: US Bureau of Economic Analysis, Table CA25N: Total Full-Time and Part-Time Employment by NAICS Industry, 2001-2015



Mount Vernon Employment by Industry Group, 2005-2015

Note: Due to New York State Department of Labor disclosure standards, employment for single industries with low employment levels were combined other industries for privacy reasons

Sources: US Bureau of Labor Statistics QCEW Program & New York State DOL QCEW Program

Location Quotients

Location quotients are a tool for assessing an area’s specialization or concentration of employment within specific industries relative to comparable or surrounding areas. A location quotient value higher than 1.0 identifies industries with larger proportionate employment compared with the greater regional economy, while a value of less than 1.0 indicates lesser relative employment than the region. Typically, large relative concentrations of employment indicate a local region’s locational advantage and can also function as an indicator of local demand for industry services. Location quotients were determined for both Mount Vernon and Westchester County in the context of the Region.

Mount Vernon has a locational advantage in Manufacturing as well as the Natural Resources, Mining & Construction industry group, of which construction is the primary dominant industry sector in terms of employment share

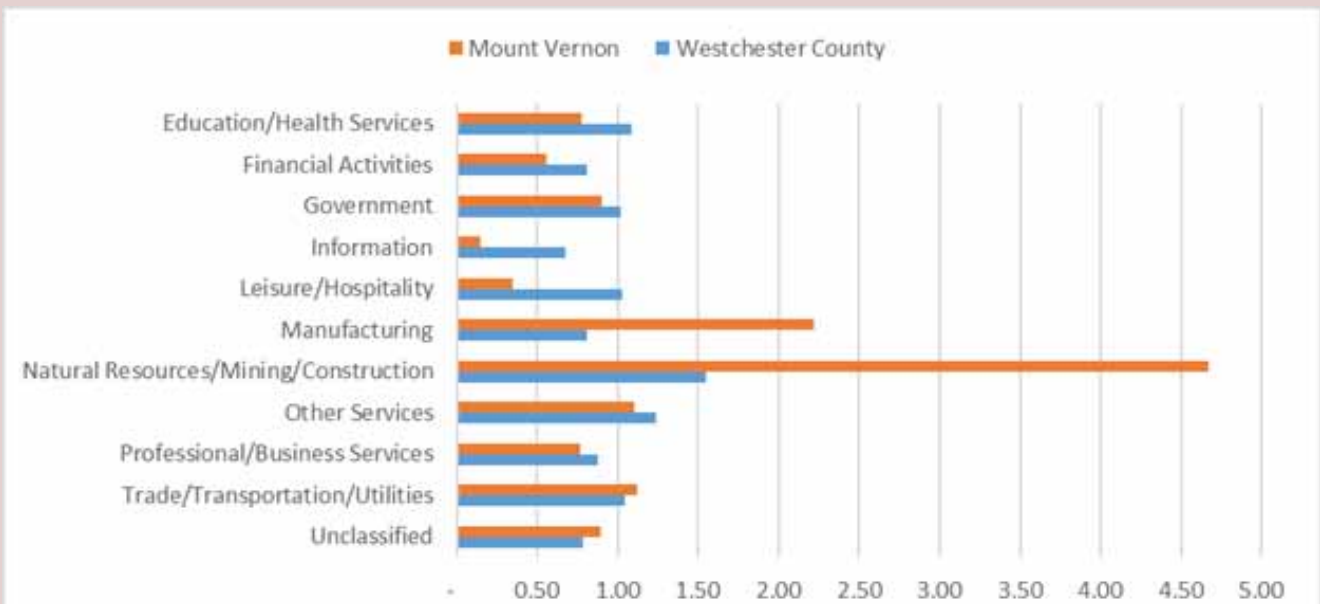
(see *Mount Vernon & Westchester County vs New York Metro Area Location Quotient, 2015*). Both industry groups have increased their location quotients since 2005, a sign of strength of these activities in Mount Vernon compared to the remainder of the region. To a lesser extent, the Trade, Transportation, Warehousing & Utilities industry grouping also had a relatively strong concentration of employment.

Westchester County’s location quotient values were nearer to 1.0 because the County’s economy, which is far larger and more diverse than that of Mount Vernon and more closely resembles that of the New York Metro Area. Like Mount Vernon, the County had larger relative concentrations of employment in the Other Services, Natural Resources, Mining & Construction and Trade, and Transportation and Utilities industry groups. The County’s Natural Resources, Mining & Construction sector location quotient also expanded from 2005 to 2015 likely due to increased construction activity and demand for services in the New York Metro Area.

With the exception of the aforementioned three industry clusters and “unclassified” employment, Mount Vernon’s economic activity lags behind that of the Region and Westchester County. The disparity is greatest in the Information and Leisure/Hospitality sectors, indicating that there is potential for these businesses in Mount Vernon—especially in Leisure/Hospitality, where a low location quotient is often indicative of unmet demand.

Although directly comparable data is not available for the Brownfield Opportunity Area (BOA) site,⁴ its obvious concentrations of Construction, Manufacturing, Retail and Transportation/Warehousing industries is an indicator of the Area’s significant contributions to some of the most thriving economic sectors in the City of Mount Vernon.

4. Urbanomics requested zip code level QCEW employment data from NYSDOL but was unable to receive it due to department non-disclosure requirements.



Mount Vernon & Westchester County vs New York Metro Area Location Quotient, 2015

Note: Due to New York State Department of Labor disclosure standards, employment for particular small industries was grouped with other industries as a form of data suppression

Sources: US Bureau of Labor Statistics QCEW Program & New York State DOL QCEW Program

ECONOMICS: THE BROWNFIELD OPPORTUNITY AREA ANALYSIS

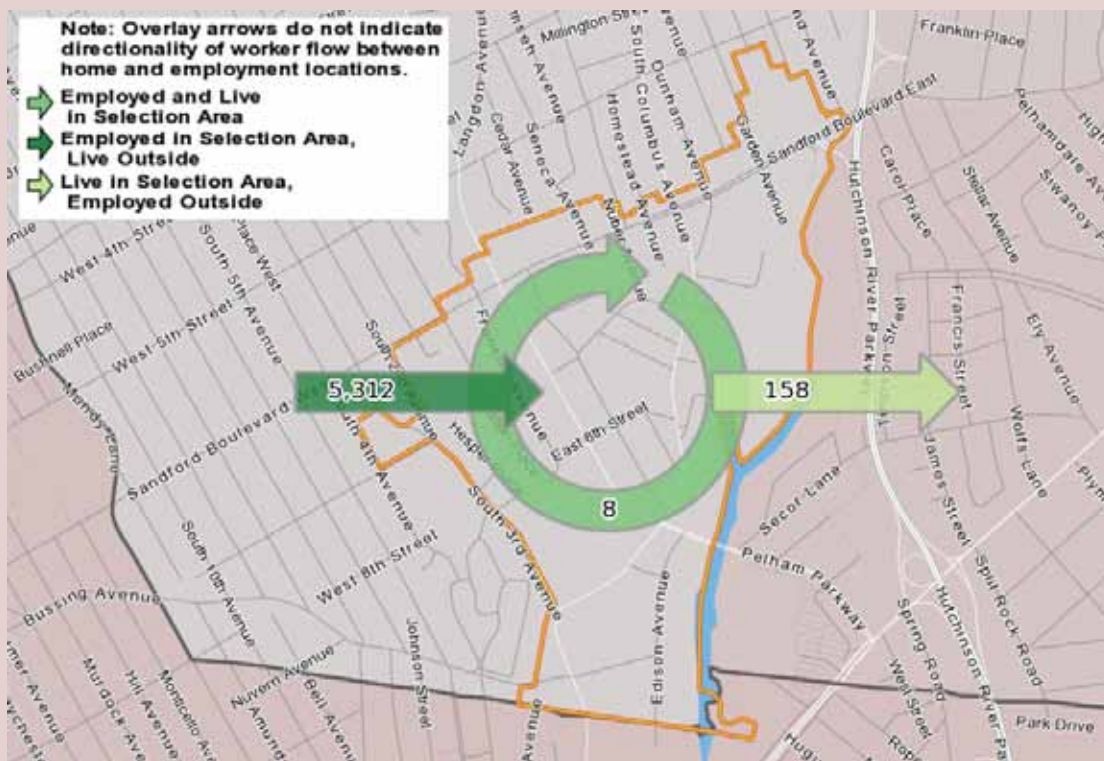
As shown in *BOA Worker Inflows and Outflows, 2014*, only 8 employed residents both work and live in the Brownfield Opportunity Area (BOA); the remainder travel either to, or from the area. Because those who live and those who work in the BOA form two different groups, this section provides the characteristics of each one.

Resident Labor Force Characteristics

According to the Longitudinal Employer-Household Dynamics (LEHD) Program, with just 657 residents, the BOA's resident workforce is similarly small (166 employed residents in 2014), having decreased by 129 (-43.7%) since 2002, likely due to reduced job opportunities both locally and within the City. Given the City's considerable gain in total employment from 2014 to 2016, it is likely that area resident employment has recovered somewhat, but still lags behind.

Place of Work

The greatest share of employed local residents work elsewhere in either Mount Vernon, or New York City (both 20%), followed by Yonkers and White Plains (both 10%). Among those that work in the BOA Study Area, the largest share reside in New York City (37.3%) followed by Mount Vernon (7.7%), Yonkers (7.0%) and New Rochelle (5.2%).



BOA Worker Inflows and Outflows, 2014
Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014

Annual Earnings

Shown in *Resident Area Workers by Annual Earnings, 2014* figure, the BOA has considerably more low wage earners (\$15K-\$39K) and less moderate and high wage earners (\$40K+) than the rest of Mount Vernon and Westchester County. The BOA has only a slightly higher share of workers earning less than \$15,000, below the poverty level for a family of two, compared with other areas.

Educational Attainment

As well as earning less than surrounding areas, resident workers in the BOA are relatively less educated than those in Mount Vernon, the County, and the Metro Area (see *Resident Area Workers Aged 29 or Older by Educational Attainment, 2014*). Just 24.6% of BOA resident workers have a four-year college degree or more compared with 33.8% in Westchester County; 42.3% have earned a high school degree or less in the BOA, compared to 24.9% in the County.

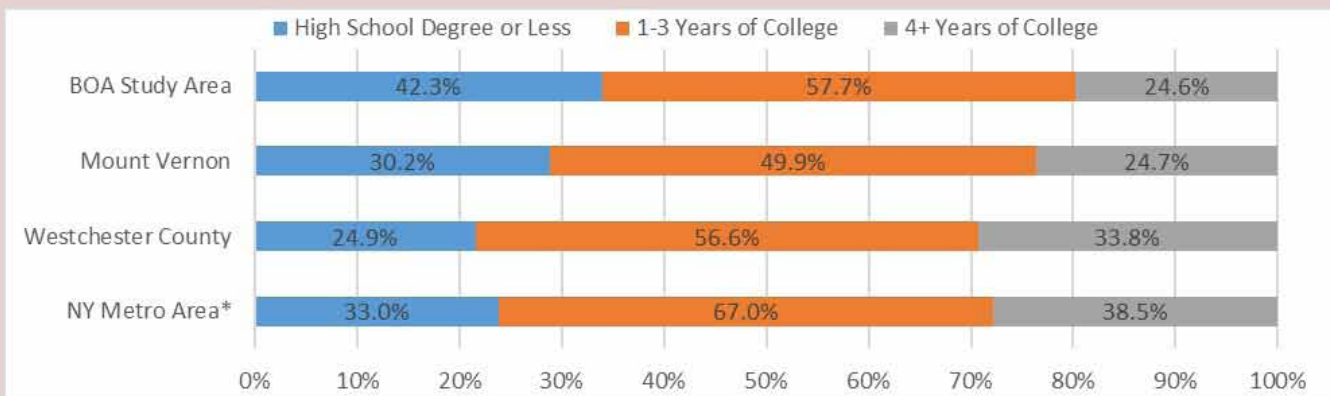
With the majority of Mount Vernon’s new jobs being offered in high skilled service industries and significant job losses in Manufacturing and other blue collar industries, the lack of a college degree for Mount Vernon residents is a substantial barrier to employment in City’s fastest growing industries.



Resident Area Workers by Annual Earnings, 2014

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area

Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014



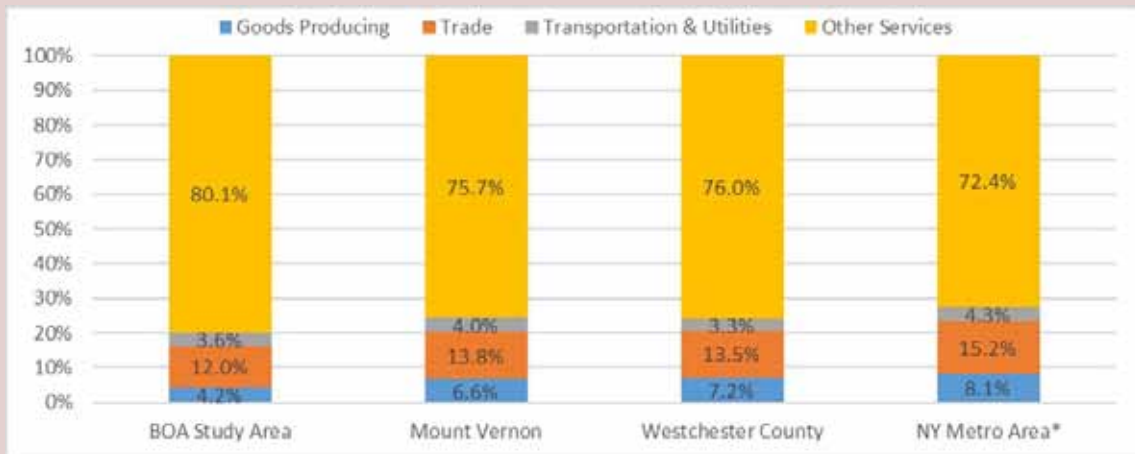
Resident Area Workers Aged 29 or Older by Educational Attainment, 2014

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area

Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014

Industry Supersectors

The resident workforce is employed in industry supersectors with a relatively similar distribution as Mount Vernon as a whole (see *Employed Residents by Industry Supersector, 2014*). The local workforce is notable for having a smaller share of workers employed in either Goods Producing, or Retail supersectors than Mount Vernon, the County, or New York Metro Region despite having a far larger share of local jobs in those supersectors than surrounding areas. This trend provides strong evidence that local firms are not hiring locally and thus area residents are not benefiting economically from the presence of industries and major shopping centers while incurring the negative effects of their commercial neighbors including heavy truck and shopper traffic, noise and air pollution.



Employed Residents by Industry Supersector, 2014

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area

Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014

Total Population, 2000-2015

	BOA Study Area	Mount Vernon	Westchester County	New York Metro Area*
2000	1,934	68,381	923,459	N/A
2010	1,907	67,292	949,113	19,567,410
2011-2015	2,357	68,221	967,315	19,979,950
% Change, 2000-2015	-1.4%	-1.6%	+2.8%	N/A
% Change, 2010-2015	+23.6%	+1.4%	+1.9%	+2.1%

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.

Sources: US Census Bureau, 2000-2010 Decennial Censuses & ACS 2011-2015 5-Year Estimate.

Demographic Trends

Total Population

Over the period from 2000 to 2010, the City of Mount Vernon’s population decreased marginally by 1.6 percent from 68,381 to 67,292 residents as Westchester County’s population increased by 2.8 percent. The BOA Study Area, a community with a very small resident population of 1,907 residents (as of 2010) concentrated primarily in the northwest section of the Study Area near Brush Park, lost 27 residents (-1.4%) from 2000 to 2010 (See *Total Population, 2000-2015*). Sharp population growth over the period from 2010 to the five-year period of 2011-2015 is likely due to the Census Bureau’s estimating error as no major residential development activity occurred in recent years.

Throughout the outreach process, it has been stated that the population of Mount Vernon is much greater than indicated in official reports. Urbanomics tried to confirm this using a variety of sources, but was unsuccessful. None of the sources were able to substantiate this belief. These additional outreach efforts are summarized as follows.

School District

The school district is one of the most sensitive indicators of population change, especially among under-reporting groups. As in table School Enrollment, 2000-2015, the Census data shows a decrease in school age population (between the ages of 5 and 17) of 935 children between 2000 and 2015.

In data submitted by the Mt Vernon City School District to the New York state Department of Education, total enrollment has decreased by 600 students from 2000 to 2015. The public K-12 system has shown a decrease of 1,788 students in that time period. The only increase in enrollment was seen in the private schools, which saw an increase of more than 600 students in the past five years. This increase in students attending private schools is not limited to Mount Vernon residents, but may come from anywhere in the vicinity.

Utilities

Often utilities hook ups indicate changes in households. A conversation with conEdison determined that there are a total of 29,297 meters in the City of Mount Vernon, serving both residential and commercial customers. In this case, conEdison indicated that meters are not an adequate indicator of population growth because single meters can indicate either individual residential households or entire multi-family buildings.¹

Total Population, 2000-2015

	BOA Study Area	Mount Vernon	Westchester County	New York Metro Area*
2000	1,934	68,381	923,459	N/A
2010	1,907	67,292	949,113	19,567,410
2011-2015	2,357	68,221	967,315	19,979,950
% Change, 2000-2015	-1.4%	-1.6%	+2.8%	N/A
% Change, 2010-2015	+23.6%	+1.4%	+1.9%	+2.1%

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.

Sources: US Census Bureau, 2000-2010 Decennial Censuses & ACS 2011-2015 5-Year Estimate.

School Enrollment, 2000-2015

	Population aged 5-17	Total Enrollment	Public K-12	Non-Public K-12
Change 2000-2010	-5.9%	-12.8%	-14.5%	-2.3%
	(22)	(1,466)	(1,430)	(18)
Change 2010-2015	-8.3%	8.7%	-4.2%	81.7%
	(913)	866	(358)	612

Sources: US Census Bureau, 2000-2010 Decennial Censuses & ACS 2011-2015 5-Year Estimate; NYS Department of Education.

Health Services

A report of the Mount Vernon Neighborhood Health Center (MVNHC) reported that 83,000+ patients were seen in 2015—a number significantly greater than the population of 68,000. It was determined that these were total patient visits, not unique patients. Additional data were requested from MVNHC (which did not respond to the request) and HealthLinkNY, the New York State health reporting service. Urbanomics was informed that MVNHC is not currently reporting to HealthLinkNY and that they are unable to provide any statistical information until they do so.²

Department of Immigration and Naturalization

No data is available below the county level. The Census Bureau’s ACS file provides some data on immigration which has been used by the City of New York to analyze sub-county level immigration trends.

1. Con Edison Public Affairs Manager’s Office of Westchester County on 5/2/2017.
 2. Email from Karina Platt at HealthLinkNY dated May 22, 2017.

Department of Aging

The New York State Department of Aging was contacted both in Albany and in Westchester County. Neither agency reported any city-level data that would be useful in determining population trends.³

Race/Ethnicity

According to the US Census Bureau’s American Community Survey data over the five-year period from 2011-2015, the majority of residents in the BOA Study Area (see Distribution of Population by Mutually-Exclusive Race-Ethnicity, 2015) identified themselves as Black non-Hispanic (77.5%). This share was somewhat more than in

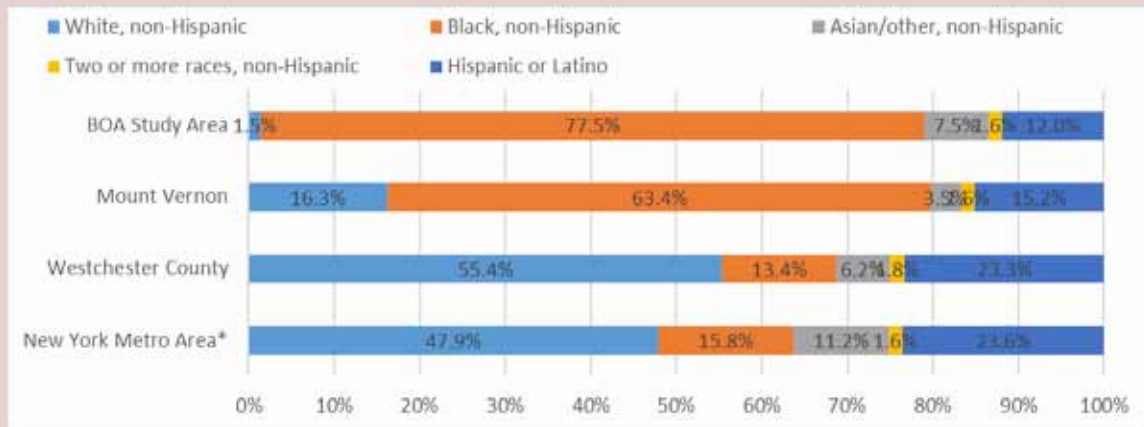
Mount Vernon (63.4%) and considerably more than the County (13.4%) and the Metro Area (15.8%). The BOA Study Area’s share of White non-Hispanic residents was significantly less than comparable areas, accounting for just 1.5 percent of the population. The Study Area had a sizeable Hispanic population (12.0%), though less than the share of such residents in Mount Vernon (15.2%) and Westchester County (23.3%).

Median Age

Since 2000, the median age of residents in the BOA Study Area declined from 36.4 to 34.4 (-2.0) while Mount Vernon, the County and the Metro Area all experienced a reverse trend, with the median age of the population increasing due to a growing senior population (see Median Age, 2000-2015).

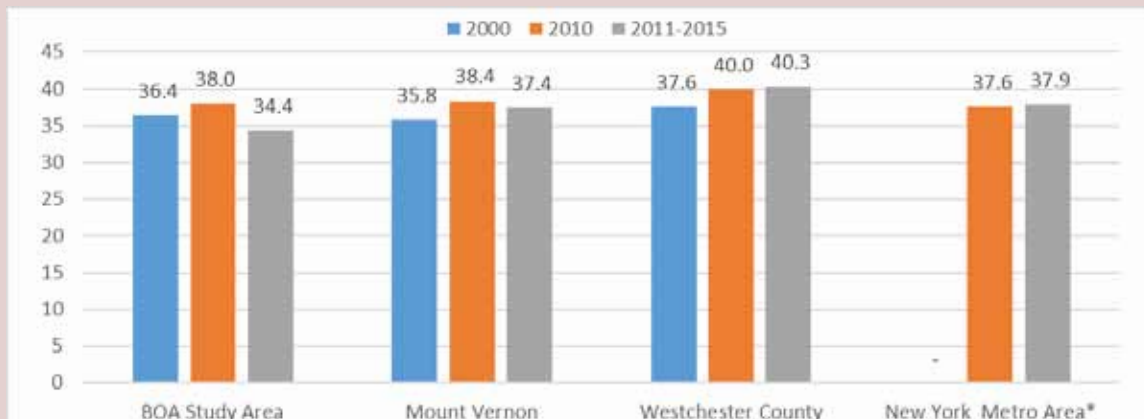
3. Collette Phipps at the Westchester County office of the NYS Dept of Aging; Steve Sconfienza, Chief Research Scientist at New York State Office for the Aging

Distribution of Population by Mutually-Exclusive Race-Ethnicity, 2015



Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area. Source: US Census Bureau, ACS 2011-2015 5-Year Estimate.

Median Age, 2000-2015

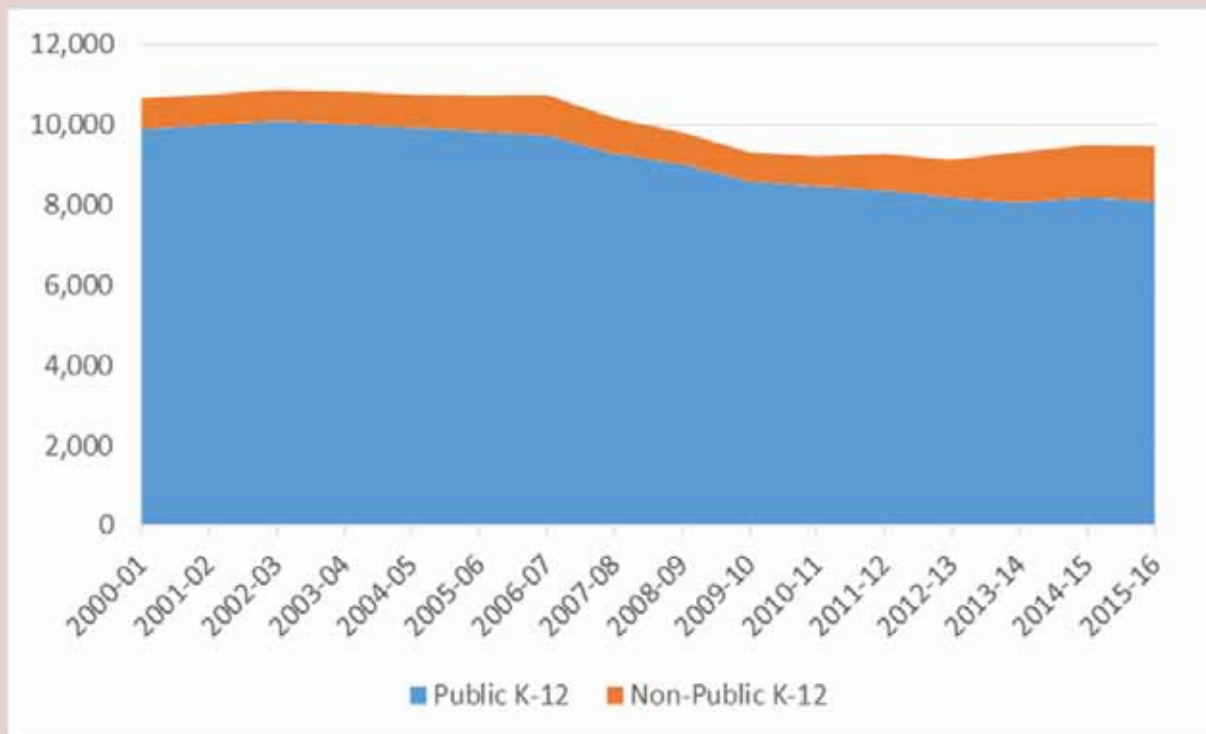


Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area. Sources: US Census Bureau, 2000-2010 Decennial Censuses & ACS 2011-2015 5-Year Estimate.

Student Enrollment

Since 2000, K-12 enrollment within the Mount Vernon School District (see K-12 Student Enrollment in Mount Vernon) has declined by 1,788 students (-18.1%) as enrollment within private and charter schools increased by 594 students (+77.4%). As a whole, public and non-public school enrollment in Mount Vernon dropped by 600 students (-5.3%). This trend is in line with area population trends where according to the US Census Bureau, the population under age 18 declined by 11.0 percent in Mount Vernon and 8.8 percent in the BOA Study Area from 2000 to 2010.

K-12 Student Enrollment in Mount Vernon, 2000-01 to 2015-16



Source: New York State Education Department, Office of Information and Reporting Services. Numbers indicate enrollment in both Public and non-Public Schools

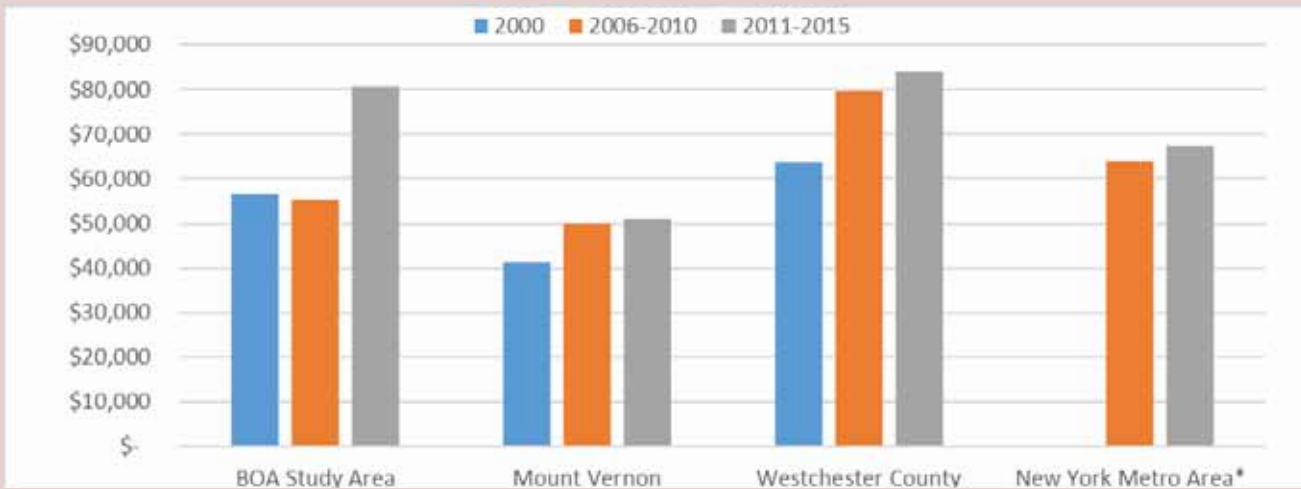
Median Household Income

According to the US Census Bureau, median household income in the BOA Study Area remained largely unchanged from 2000 to the five-year period of 2006-2010 (see Median Household Income, 2000-2015). However a rise in income of 46.0 percent occurred over the five year periods of 2006-2010 to 2011-2015. As of 2015, the median household income in the BOA Study Area (\$80,739) is notably greater than that of Mount Vernon as a whole (\$50,952). According to the US Bureau of Labor Statistics’ Consumer Price Index, the nationwide gain in inflation over the period from 2000 to 2015 was roughly 40 percent. In Both Mount Vernon and Westchester County annual median household income lagged far behind the inflation rate (+23.9% and +32.0%) over that period while household income growth in the BOA Study Area (+42.5%) slightly exceeded the inflation rate.

Total Households

The BOA Study Area is home to just several hundred households. From 2000 to 2010, the area remained relatively stable with a loss of 16 households (-2.6%). During this period, Mount Vernon and Westchester County both experienced minimal growth with gains of 2.1 and 3.0 percent respectively (see Total Households, 2000-2015). The Census Bureau’s estimate of a 13.6 percent gain in households within the BOA Study Area from 2010 to the five year period of 2011-2015 is likely a result of estimating error as no major residential development activity occurred over that period.

K-12 Student Enrollment in Mount Vernon, 2000-01 to 2015-16



Notes: BOA Study Area values based on average median income of block groups Block Group 2, Census Tract 26; Block Group 2, Census Tract 34; and Block Group 2, Census Tract 34.

(*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.

Sources: US Census Bureau, 2000-2010 Decennial Censuses & ACS 2011-2015 5-Year Estimate.

Total Households, 2000-2015

	BOA Study Area	Mount Vernon	Westchester County	New York Metro Area*
2000	627	25,729	337,142	N/A
2010	611	26,260	347,232	7,152,840
2011-2015	694	24,989	341,866	7,121,206
% Change, 2000-2010	-2.6%	+2.1%	+3.0%	N/A
% Change, 2010-2015	+13.6%	-4.8%	-1.5%	-0.4%

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.

Sources: US Census Bureau, 2000-2010 Decennial Censuses & ACS 2011-2015 5-Year Estimate.

Household Size

According to ESRI, a leading demographic data provider, the Study Area had an average household size of 3.3 persons in 2016, greater than Mount Vernon (2.6), Westchester County and the Metro Area (both 2.7). Similarly illustrated in Distribution of Households by number of Persons, 2015, the Census Bureau estimated that over the 2011-2015 period, the Study Area had a larger share of households with three or more persons (61.0%) compared with Mount Vernon (40.4%), Westchester County (44.4%) and the Metro Area (43.1%). Given, the younger median age in the Study Area, such large households are likely occupied by families with numerous young children. While the Study Area had a similar share of single person households as the County and the Metro Area, it had a far lesser share of two-person households, typically occupied by older couples without young children.

Tenure and Vacancy

The BOA Study Area has a high share of homeowner households, accounting for nearly seven-in-ten households (see Share of Owner-Occupied Residential Units, 2000-2015). Homeowner households have increased as share of total households from 63.6 percent in 2000 up to 66.1 percent in 2010 and 69.6 percent over the 2011-2015 period. Today, the homeowner tenure rate is slightly higher in the Study Area than in Westchester County (61.9%) and well above the rate of such households in Mount Vernon (38.8%) and the Metro Area (52.0%).

Distribution of Households by Number of Persons, 2015



Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.
 Source: US Census Bureau, ACS 2011-2015 5-Year Estimate.

Share of Owner-Occupied Residential Units, 2000-2015

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.
 Source: US Census Bureau, ACS 2011-2015 5-Year Estimate.

Residential vacancy rates by tenure are illustrated in Residential Vacancy Rate by Tenure, 2015 for the 2015. Generally vacancy rates of five percent or more within an urban area are a sign of surplus supply.

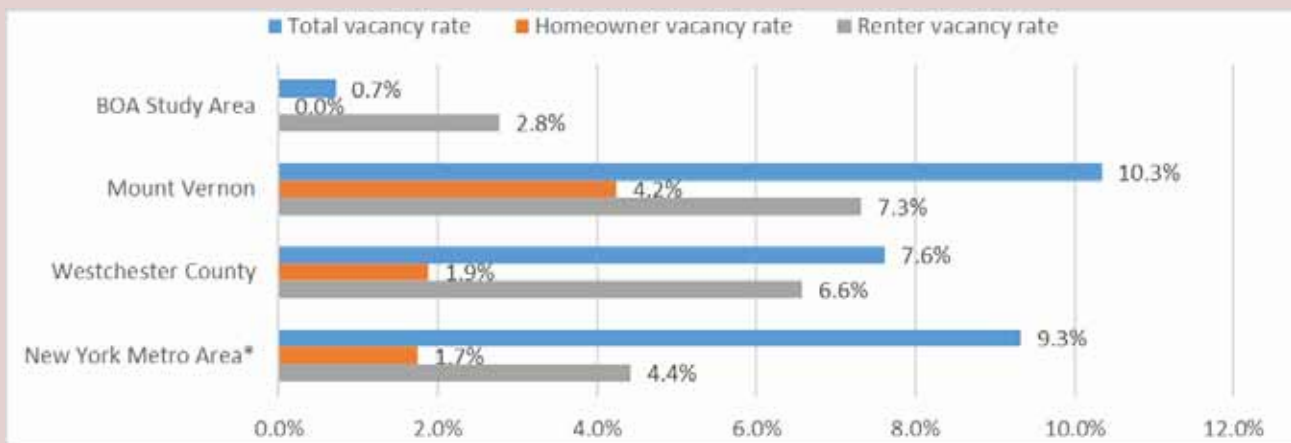
The residential community along the edges of the BOA Study Area is small and established with quality single family housing along South Second and Third Streets. In the BOA Study Area, 0.0 percent homeowner and 2.8 percent renter vacancy rates are indicative of inadequate housing supply and typically associated with fast rising property value.

The vacancy rates within Mount Vernon as a whole are much higher at 10.3 percent overall and a 7.3 percent renter vacancy rate. In the suburban Westchester County and Metro Area, where a vacancy rate of five percent is generally considered the equilibrium between supply and demand, these vacancy rates indicate inadequate regional supply of owner occupied housing, but a sufficient supply of rentals for the current population.

Housing Units

From 2000 to the 2010, the number of housing units in the BOA Study Area remained relatively unchanged while both Mount Vernon and Westchester increased housing supply by 7.2 percent and 6.1 percent respectively (see Housing Units, 2000-2015). The Census Bureau estimated a gain of 50 unit in the BOA Study Area from 2010 to the five-year period of 2011-2015 however this gain may be the result of estimating error as no major development occurred in recent years. The Census Bureau estimated that Mount Vernon lost 3.9 percent of units over this time period while the supply of units in Westchester County and the Metro Area remained largely unchanged.

Residential Vacancy Rate by Tenure, 2015



Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.
 Source: US Census Bureau, ACS 2011-2015 5-Year Estimate.

Housing Units, 2000-2015

	BOA Study Area	Mount Vernon	Westchester County	New York Metro Area*
2000	655	27,048	349,445	N/A
2010	649	28,990	370,821	7,783,415
2011-2015	699	27,871	370,032	7,853,605
% Change, 2000-2010	-0.9%	+7.2%	+6.1%	N/A
% Change, 2010-2015	+7.7%	-3.9%	-0.2%	+0.9%

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.
 Sources: US Census Bureau, 2000-2010 Decennial Censuses & ACS 2011-2015 5-Year Estimate.

Number of Bedrooms

During the five year period of 2011-2015, the Census Bureau reported that the BOA Study Area had more than double the share of 3-bedroom units (59.8%) compared with Mount Vernon, the County and the Metro Area, a result of the Study Area’s large concentration of small single-family homes. The BOA Study Area had a comparatively small share of small households with two bedrooms or less (17.2%).

Future Housing Demand

Projected Housing Demand

Forecasts for the City of Mount Vernon derived from Westchester County and the New York Metropolitan Transportation Council indicate that the population of Mount Vernon will increase to 75,022 by the year 2035.

Current average household sizes were applied to determine that these residents will be situated in 27,206 households—3,458 more than currently exist in Mount

Vernon. These households were classified by age of head of household using the population by age forecasts and trended headship rates (share of total households by age of head). As seen in the table, between 2015 and 2035 there will be increased demand for all age categories with the exception of between 55-64 and 85 and older.

There will be relatively little future demand (50 new units) for those under 35 as the millennials age in to the 35-44 and 44-54 year age cohorts. The “age-restricted housing” of 55 and older will require 1,363 new units to meet its needs. The prime working ages of 35-44 and 45-54 will need the greatest share of new housing with demand for some 2,045 new units. In the past, the prime working age groups would require larger apartments to accommodate children, however given current trends of delaying starting families and the subsequent decrease in nativity rates, the majority of these new residents will likely require only one or two-bedroom units. Those with larger families may take over houses as older residents downsize and relocate to smaller units.

Distribution of Households by Number of Bedrooms, 2015



Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area.
Source: US Census Bureau, ACS 2011-2015 5-Year Estimate.

Households by Age of Head of Household 2000-2015, Projections to 2035

Age of Head	2000	2010	2015	2020	2025	2030	2035
Under 35	2,568	4,321	3,780	3,503	3,577	3,705	3,830
35-44	6,058	5,077	4,484	4,294	4,573	4,971	5,385
44-54	5,172	6,009	5,528	5,561	5,833	6,250	6,672
55-64	3,831	4,770	4,726	4,407	4,359	4,421	4,432
65-74	2,758	3,205	3,220	3,667	3,986	4,418	4,877
75-84	1,986	1,907	1,291	1,182	1,141	1,118	1,080
85+	788	971	719	943	931	935	930

Source: Census, NYMTC 2050 Population Forecasts for Westchester County, Urbanomics

Unmet Existing Demand by Unit Size

The figure that follows shows the correspondence between the size of Mount Vernon Households and the number of bedrooms in Mount Vernon Housing Stock. Almost 60 percent of households consist of only one or two people, the categories most likely to require 1-bedroom or studio units. If there is any additional demand for housing in Mount Vernon, it will be for these smaller unit sizes.

Units in the Pipeline

While there is demand for additional housing in the City of Mount Vernon over the course of the next 20 years, there are already developments in the pipeline.

Approved developments that have not been incorporated into the count of existing housing include some 555 units within four developments as follows:

- Grace Terrace Housing: 125-129 South Fifth Avenue, a 10-story 66 unit, affordable housing building built in 2016 ⁴
- 42 West Broad Street, 249 unit apartment building, completion expected in 2017 ⁵
- La Porte at 203 Gramatan Avenue, 159 workforce housing units, completed in 2017 ⁶
- The Mount Vernon Modern, 130 Mount Vernon Avenue 81 units, under construction, unknown completion year

There are an additional 1,085 residential units proposed, but not yet approved:

- Hartley Park Towers, 30 Oakley Avenue, 376 units, not yet approved ⁷
- Enclave developments, 5 buildings containing 179 apartments, proposed 2017 ⁸
- The Pointe, South Fourth Avenue at East Third Street, 350 units proposed
- 1 Bradford Road, 120 units proposed
- The Millennial, 135 North High Street, 30 units proposed
- Parkview Terraces, 222 Gramatan Avenue, 30 units proposed

If all of the proposed housing is approved, the remaining demand in the City of Mount Vernon will total an additional 1,808 units.

4. <http://www.lohud.com/story/news/local/westchester/mount-vernon/2016/11/04/new-mount-vernon-affordable-housing-set-open/93284626/>
 5. <http://newyorkyimby.com/2016/01/1809223.html>
 6. <http://www.lohud.com/story/news/local/westchester/mount-vernon/2016/07/01/mount-vernon-la-porte/86514910/>
 7. <http://www.realestateindepth.com/commercial/developer-tops-out-mount-vernon-project/>
 7. <https://westfaironline.com/85994/enclave-equities-plans-179-apartments-in-mount-vernon/>

Comparison of Distribution of Household Size and Housing Units by Number of Bedrooms, Mount Vernon 2015

Household Size		Number of Bedrooms	
1 person	32.6%	5.4%	Studio
2 people	27.0%	30.9%	1-Bedrooms
3 people	16.4%	28.3%	2-Bedrooms
4 people	13.5%	21.8%	3 bedrooms
5+ people	10.5%	13.6%	4+ Bedrooms

Source: US Census Bureau, ACS 2011-2015 5-Year Estimate.

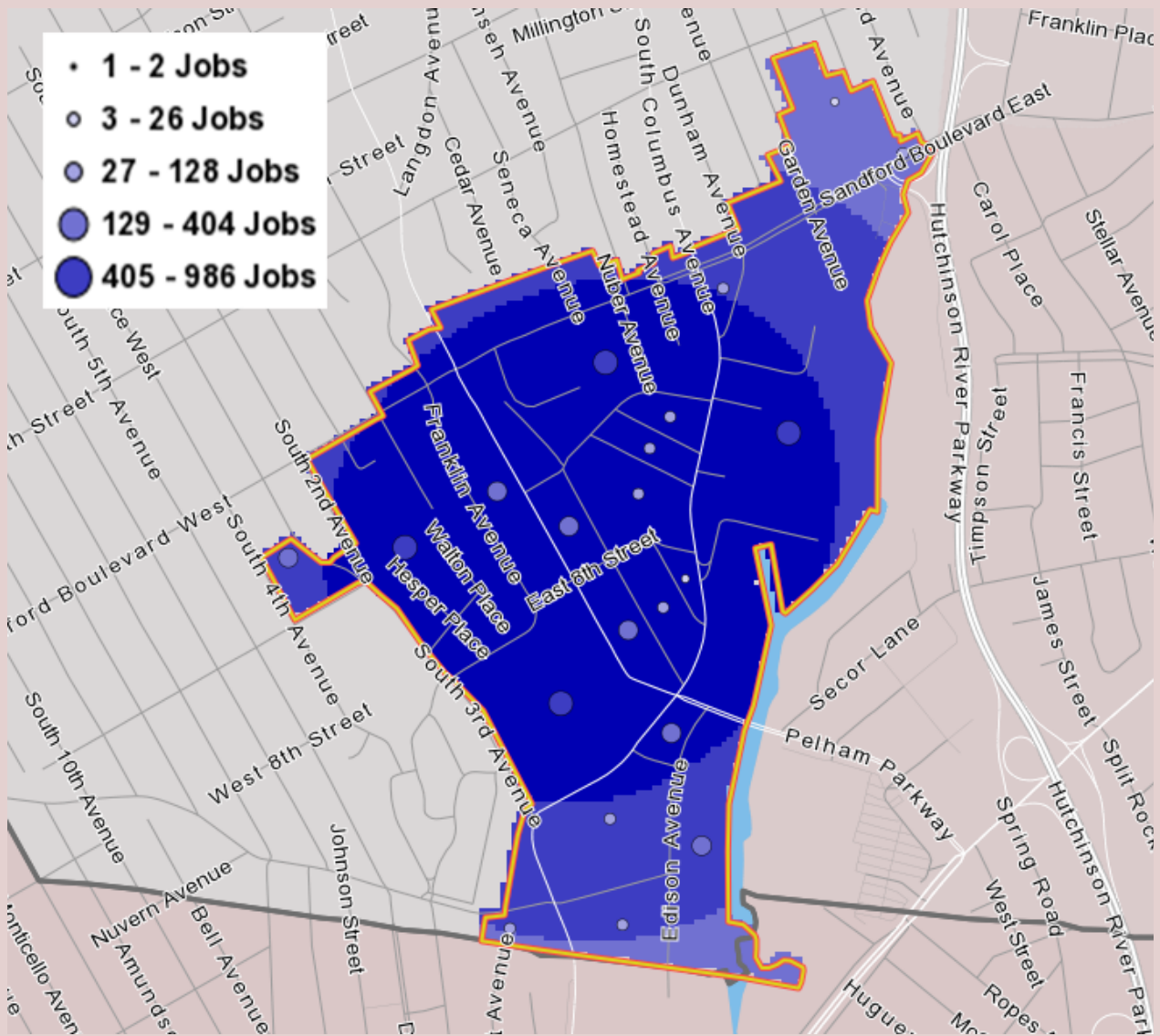
Worker Characteristics

With 5,320 local workers in 2014 according to the US Census Bureau’s LEHD Program, the BOA has a larger industrial workforce than the City’s two other smaller sized industrial neighborhoods (Washington Street Corridor and the Mount Vernon West Corridor). The Area is also predominantly commercial with more than twice as many workers as area residents. From 2002 to 2014, the number of area workers increased by 1,200 (+29.1%), a substantial gain compared with the City and Westchester County, both of which increased local employment by roughly four percent. The majority of the gain is attributed to development

stimulated by the Sanford Boulevard Redevelopment Project, including construction of a 285,000 square foot retail complex along Sanford Avenue from 2002 to 2004. Major retailers of this complex include Best Buy, Target, Bed Bath & Beyond, and TJ Maxx.

Location of Work

Concentrations of employment are relatively evenly distributed across the BOA (see *BOA Workers by Job Location, 2014*), with a lesser number of workers in the southern- and eastern-most sections of the area.



BOA Workers by Job Location, 2014

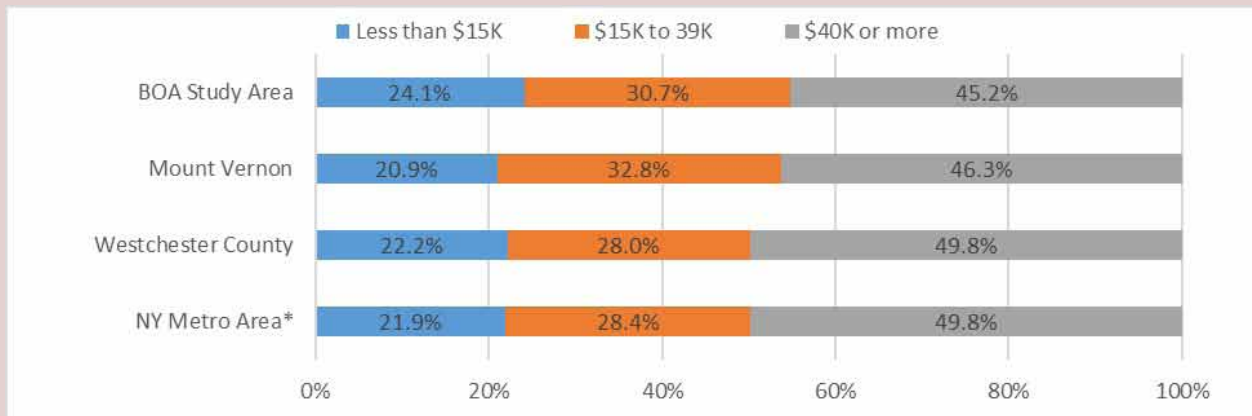
Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014

Workers by Earnings

Compared with Mount Vernon, the County, and the New York Metro Area, the BOA workers' earnings are similar to those in Mount Vernon, although the BOA has a relatively higher share (24.1%) of very low income workers earning less than \$15,000 (see *Resident Area Workers by Annual Earnings, 2014*). Additionally, both Mount Vernon and the BOA have more workers earning less than \$40,000 than Westchester County, and the New York Metro Area. The income gap between Mount Vernon and Westchester County is strongest at the household level where, according to the US Census Bureau's 2015 American Community Survey, just 24.6 percent of Mount Vernon households earned more than \$100,000 annually versus 45.1 percent of County households. While individual workers may receive similar earnings in the City and the County, Mount Vernon has a far lower share of married couple households (27.8%) compared with the County (51.6%), resulting in fewer workers in the household able to financially contribute.

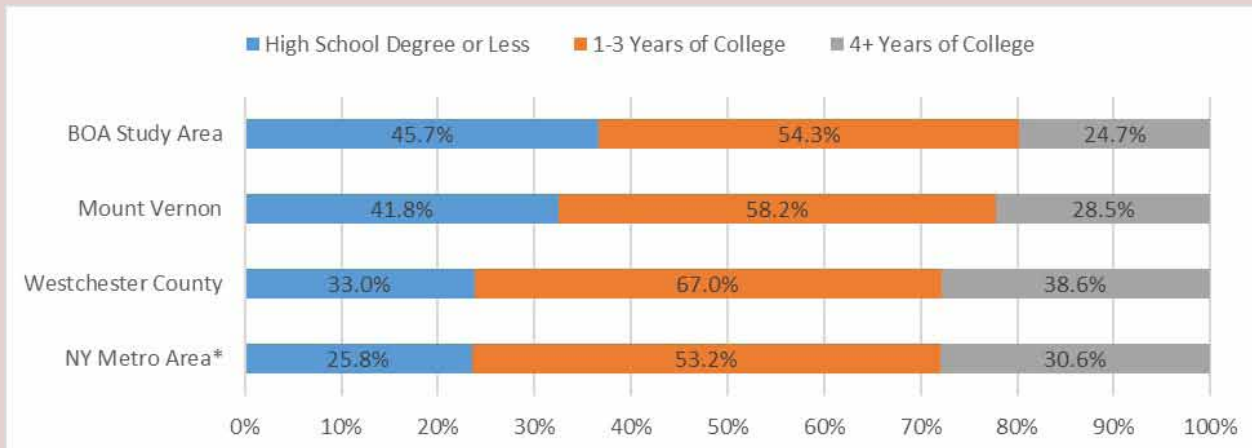
Educational Attainment

BOA workers, similar to those in Mount Vernon, are less educated as a whole than those in the County (see *Resident Area Workers Aged 29 or Older by Educational Attainment, 2014*) with roughly a quarter of BOA workers with four years of college, compared with 38.6 percent of Westchester County workers. The gap in educational attainment is strongest among those with a high school degree or less. While just 25.8 percent of New York metro area workers have a high school degree or less of education, 45.7 percent of BOA workers have such an education, which is a major barrier to employment in fast-growing service industries in the region.



Local Area Workers by Annual Earnings, 2014

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area
 Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014



Resident Area Workers Aged 29 or Older by Educational Attainment, 2014

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area
 Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014

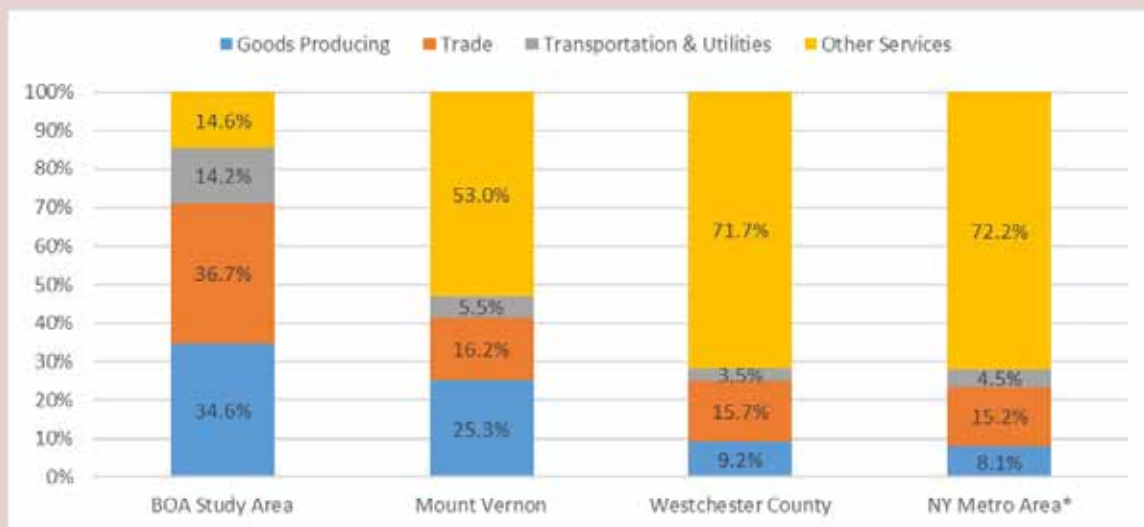
Industry Supersector

Over the course of the 19th and 20th Century, the area within BOA became heavily industrialized, with the development of Hutchinson River as a deep water port for offloading and storage of fuel, construction and industrial materials. Such activities peaked over the period from 1940 until 1960, with nearly 500 trucks transporting fuel oil out of the area on a daily basis. By the 1990s, such uses were greatly reduced. According to the US Census Bureau, from 2002 to 2014, the BOA’s workforce shifted from being predominantly blue-collar labor force with a majority concentrated in Goods Producing sectors (52.4%) followed by Trade sectors (20.4%) and Transportation & Utilities (18.9%) to a more evenly distributed workforce with roughly one-third of workers in Goods Producing Sectors (34.6%), another one-third in Trade sectors (36.7%) and the remaining third evenly split among Transportation and Utility sectors (14.2%) and Other Services (14.6%).

Illustrated in *Local Jobs by Industry Supersector, 2014*, the BOA’s workforce is more “blue collar” than the City, County, and New York Metro Region with a far greater share of Goods Producing and Transportation/Utility workers. The BOA also has a sizeable retail sector that is double that of surrounding areas. Beyond retail, the BOA is home to a disproportionately smaller service sector compared with the region which has a majority of workers employed in service industries, which typically employ highly educated workers earning high wages.

Among individual industry sectors, the largest number of BOA workers in 2014 were employed in Retail Trade (1,396), Construction (1,059), Manufacturing (781), Transportation/Warehousing (755) and Wholesale Trade (554). According to InfoGroup⁵ and Empire State Development, the retail workforce is primarily employed by large national retailers such as Target (244 workers), Super Stop & Shop (150 workers), Best Buy (100 workers), Bed Bath & Beyond (53 workers) and TJ Maxx (50 workers). Most construction firms are small operations although several large contractors are located in the area including Persico Contracting and Trucking (166 workers) and Verde Electric (108 workers). Today the largest manufacturers are American Christmas (95 workers), a holiday decorations manufacturer and installer, Bridge Metal Industries (86 workers), a sheet metal contractor; Dab-O-Matic (60 workers), a plastic fabricator; and DCW Casings (50 workers), a sausage casing producer. Among Transportation and Warehousing firms, the largest local employer is First Student Charter Bus Rental (134 workers). Other industries accounted for 775 workers or roughly one-in-seven jobs and are primarily small to mid-size businesses with less than 70 workers.

5. InfoGroup is a leading provider of national business data.



Local Jobs by Industry Supersector, 2014

Note: (*) Refers to the New York–Newark–Jersey City, NY–NJ–PA Metropolitan Statistical Area

Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2014

Major gains in employment from 2002 to 2014 occurred in the Retail sector (+1,095), Real Estate services (+157), Management of Companies (+109), Healthcare and Social Assistance (+108), and Construction (+102). Although most sectors added workers, the majority of job losses occurred in the Manufacturing sector (-421) with the loss of major employers such as Capri Album Company, Magnetic Analysis Corporation and Gemini Manufacturing, with marginal losses in Utilities (-28) and Educational Services (-15). Since 2014, the BOA Area lost two major employers, We Recycle! (90 workers), a computer and technology hardware recycler and TransCare New York (151 workers) an ambulance service provider.

Industry	Year		Change, 2002-2014	
	2002	2014	Absolute	Percent
Total	4,120	5,320	+1,200	+29.1%
NAICS Industry Supersectors				
Goods Producing	2,159	1,840	-319	-14.8%
Trade	840	1,950	+1,110	+132.1%
Transportation & Utilities	1,709	755	-954	-55.8%
Other Services	341	775	+434	+127.3%
NAICS Industry Sectors				
Utilities	28	0	-28	-100.0%
Construction	957	1,059	+102	+10.7%
Manufacturing	1,202	781	-421	-35.0%
Wholesale Trade	539	554	+15	+2.8%
Retail Trade	301	1,396	+1,095	+363.8%
Transportation and Warehousing	752	755	+3	+0.4%
Information	6	2	-4	-66.7%
Finance and Insurance	8	21	+13	+162.5%
Real Estate and Rental and Leasing	40	197	+157	+392.5%
Professional, Scientific, and Technical Services	14	13	-1	-7.1%
Management of Companies and Enterprises	0	109	+109	N/A
Administration & Support, Waste Management and Remediation	85	125	+40	+47.1%
Educational Services	17	2	-15	-88.2%
Health Care and Social Assistance	42	150	+108	+257.1%
Arts, Entertainment, and Recreation	30	63	+33	+110.0%
Accommodation and Food Services	27	38	+11	+40.7%
Other Services (excluding Public Administration)	72	52	-20	-27.8%
Public Administration	0	3	+3	N/A

BOA Employment by Industry, 2002 & 2014

Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2002-2014.

ECONOMICS: BROWNFIELD OPPORTUNITY AREA BUSINESS INVENTORY

This section provides inventory and in depth analyses of the most prominent industry clusters in the area. These are made up of the Industrial, Retail, and Recreation markets, including contributing conditions, as well as case studies to serve as possible models for future development of the Brownfield Opportunity Area (BOA).

Industrial Market Scan

Introduction

BOA Industrial Inventory

According to records received from the Mt. Vernon Assessor's Office, the BOA has approximately 94 acres of industrial space. This includes 144 parcels with a total industrial square footage of 4.08 million sq/ft.

Sample Data

The New York State (NYS) Empire Zones Program, and its successor program, the Excelsior Program, are both NYS tax incentive programs designed to spur investment and job creation in designated areas throughout the state. The Mount Vernon Empire Zone was designated in 2002, and the BOA is included within its boundaries.

NYS Empire State Development (ESD) has been collecting data on all Empire Zone / Excelsior certified firms since the program's inception. At the end of each tax year, Empire

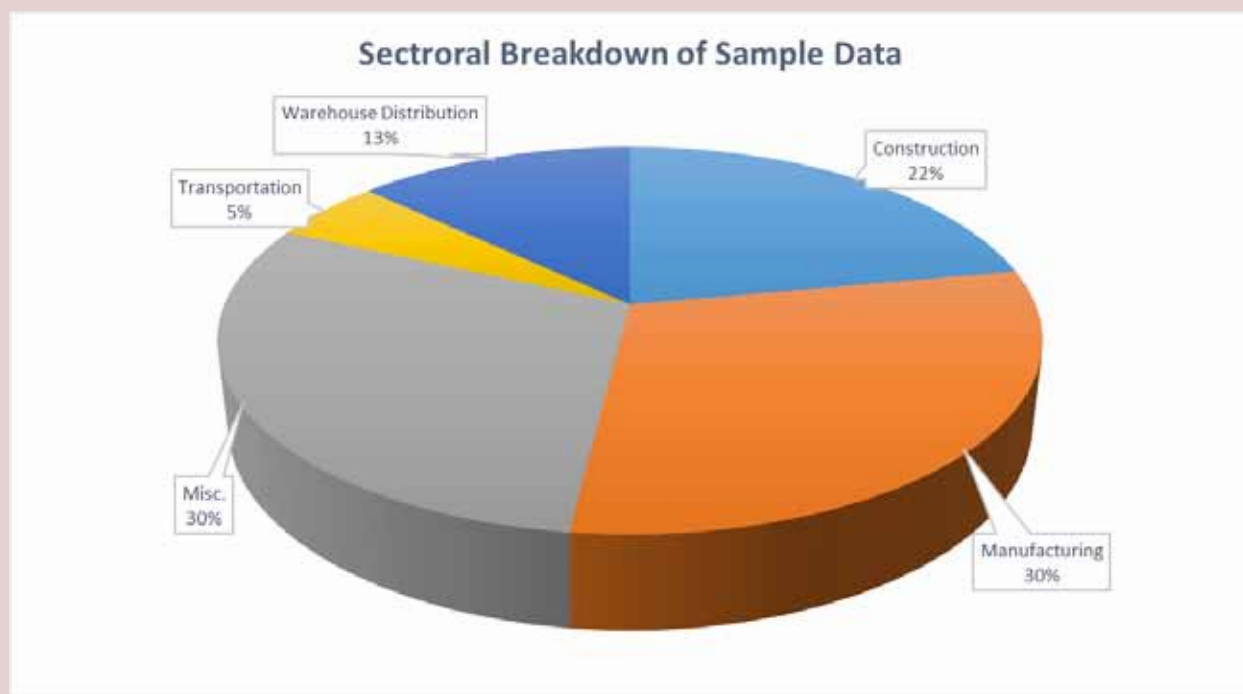
Zone / Excelsior certified firms are required to fill out a Business Annual Report (BAR) which contains general company information, as well as detailed information on the company's annual investment and employment figures.

In December 2016, the ESD provided the following details from all BAR reports filed with ESD since the Mt. Vernon Empire Zone's initial designation in response to a Freedom of Information Law (FOIL) request:

Scope of the Data Pull: The data requested covers all of the Mt. Vernon based companies who are, or were, certified under the Empire Zones Program, and/or the Excelsior Zones Program. This includes any and all decertified companies as well.

Details of the Data Pull: All available fields for the Empire Zones and/or Excelsior Zones Business Annual Reports for the above companies, over the specified time period.

A detailed spread sheet was received from ESD in February 2017, containing all of the requested fields for the years 2005-2014, including detailed information on investment, employment, and wage levels. This data was then geo-coded to filter out any addresses outside of the BOA. After filtering the data, 77 industrial businesses based in the BOA were identified.



Sectoral Breakdown of Sample Data

It is important to note that while the method of sampling introduces the possibility of selection bias, the City feels the results are representative of area trends. There are only 144, mainly single story / single tenant, industrial parcels in the study area, so our sample of 77 represents a large portion of the population.

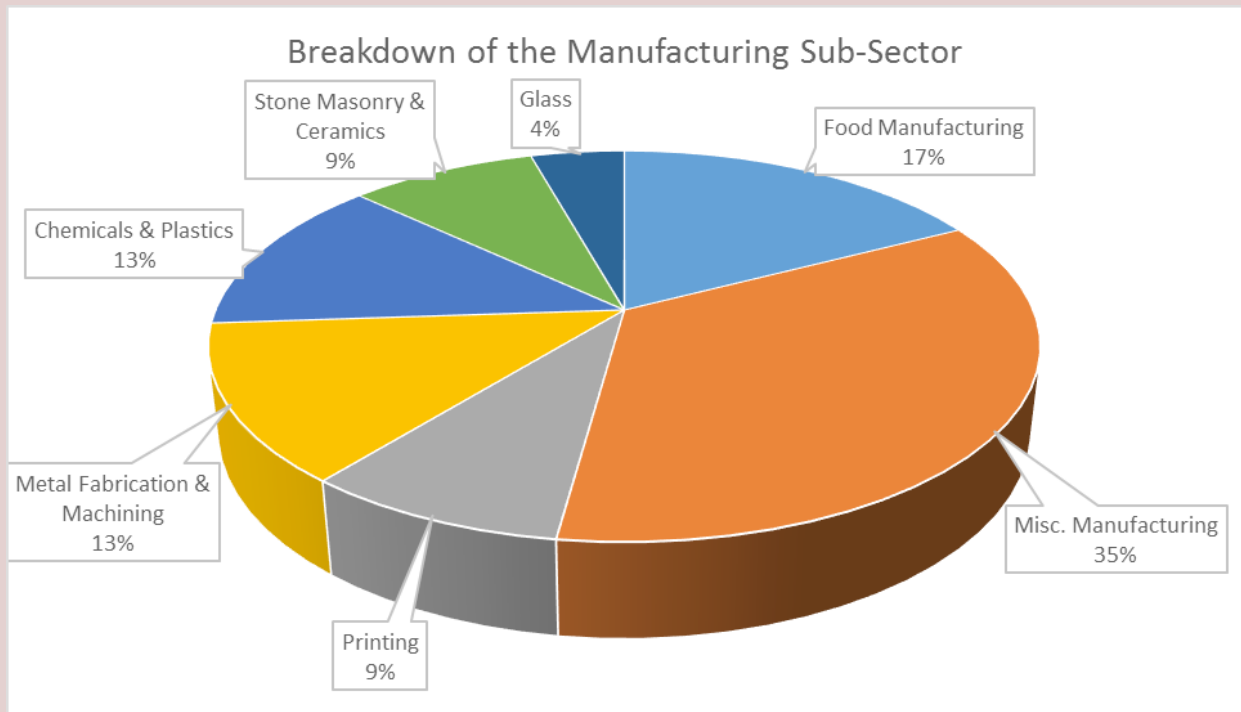
Additionally, the BOA Pre-Nomination Study identified 2,619 industrial jobs, of 3,215 total jobs, in the BOA as of 2007. InfoGroup (Reference USA) identified 4,042 total jobs in the study area as of 2016. The number of jobs represented in the sample of 77 firms ranges from a low of 1,361 in 2008 to a high of 1,871 in 2011. Comparing the number of jobs from the Pre-Nomination Study and InfoGroup with the number of jobs from the industrial sample, reveals that a rough majority of jobs in the BOA are represented by the industrial sample.

The Industrial Sector

Breakdown of Industrial Subsectors

Mount Vernon’s Industrial Sector is led by manufacturing and construction firms. Manufacturing sub-sectors include plastics and chemical manufacturers, food manufacturing, stone masonry and ceramics, printers and metal fabricators/machinists.

The local construction sector includes firms engaged in infrastructure projects, including providers of asphalt for paving projects as well as smaller electrical and HVAC contractors, and general contractors. The most unique entry in the list was a stained-glass studio which designs large artistic installations, mainly for churches and universities.



Breakdown of the Manufacturing Sub-Sector

Industrial Wages

The data received from NYS Empire State Development provided the ability to calculate the mean and median wages for all the firms in the industrial sample for each year from 2005 to 2014. Due to the fact that large outliers tend to bias wage data, median wages were used as the measure of central tendency. Over the study period, median wages range from a high of near \$45,000 to a low of approximately \$33,000. The median industrial wage declined significantly during the recession, indicating the local industry might be especially sensitive to downturns.

After analyzing the industrial wage data provided by NYS ESD, data from the *Quarterly Census for Employment and Wages (QCEW)* published by the New York State, Labor Market Regions, Metropolitan Areas, Local Workforce Investment Areas and Counties was used to determine the average wage rate for retail jobs in NYS. This data was filtered for Retail Trade information (NAICS Code: 44) over the 10-year period from 2005 – 2014. These results were used to compare median annual industrial wages to average annual retail wages.

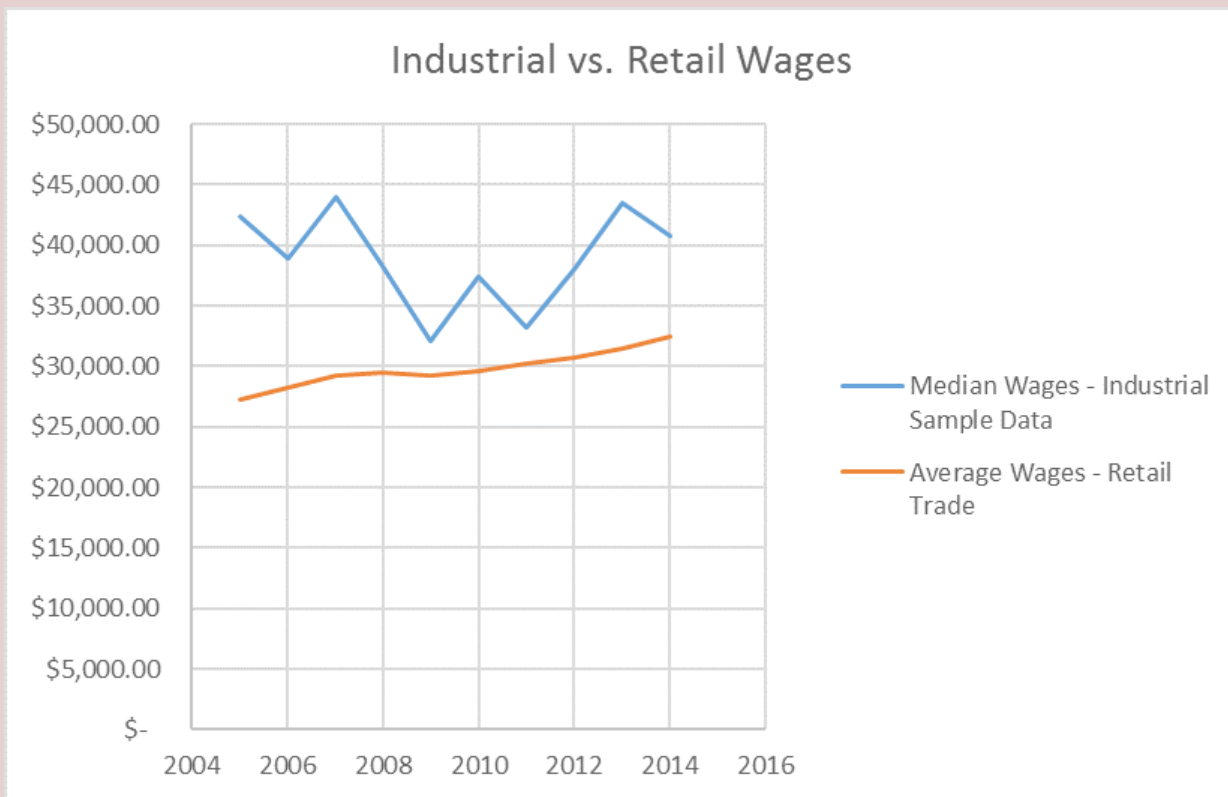
Note: the retail wage data did not provide median numbers. The average was assumed to be close to the median. In fact, this turned out to be the case when the median and average wage data for the industrial sector was compared, confirming that this assumption was reasonable.

Industrial vs. Retail wages

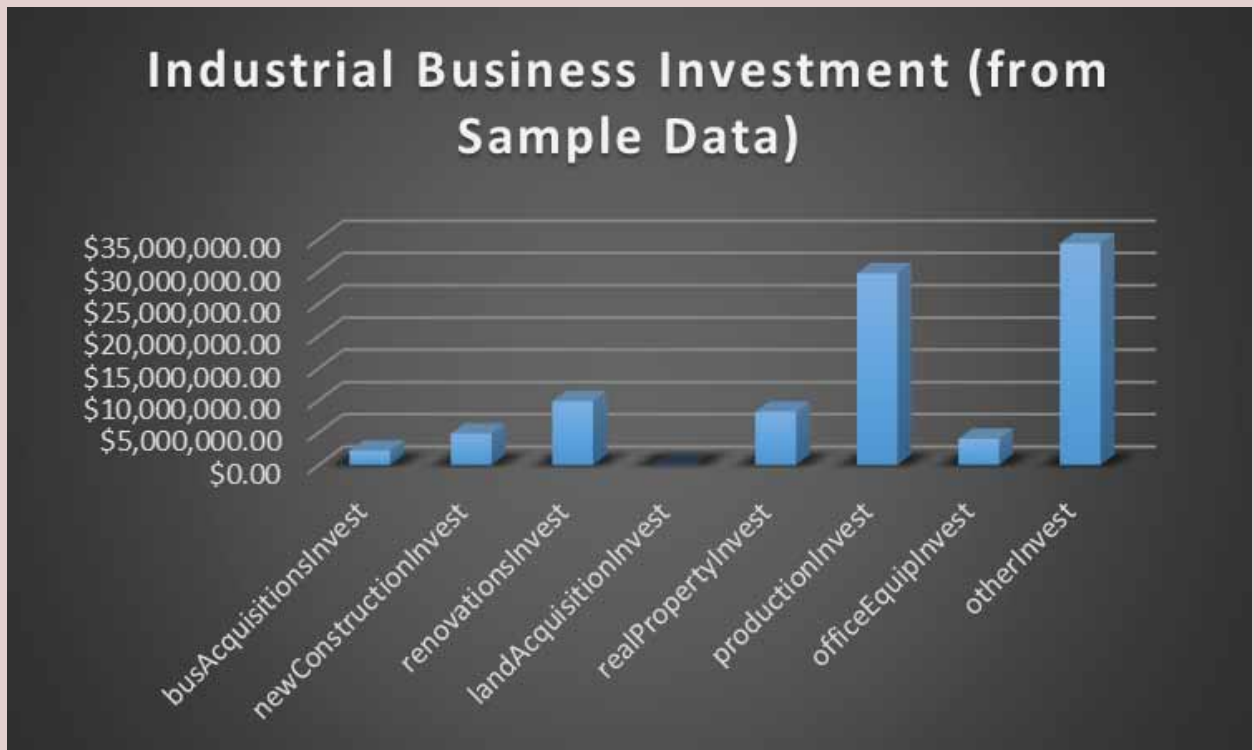
After comparing the data, it was revealed that the industrial wages from the sample area exceed retail wages by \$9,000, on average, for the 10-year observation period. Additionally, while the median industrial wage declined during the recession, it never dipped below the retail wage numbers.

Industrial Investment

Industrial firms from the sample area invested a total of \$93 million over the 10-year observation period for an average annual investment amount of \$9.3 million. The leading investment categories (other than non-classified investments) were production (equipment), followed by property renovations.



Industrial vs. Retail Wages



Industrial Investment

	# of Anchors	Amount of Retail SF	Anchors	No. of Businesses	Trade Guidelines	Area
Canal Village	4+	~400,000 SF	Target, Bed Bath and Beyond, Staples	38	5-10 miles	
Types	# of Anchors	Amount of Retail SF	Anchors	No. of Businesses	Trade Guidelines	Area
Micro Neighborhood Convenience	Anchor-less/ convenience shop	<30,000 SF	Sometimes convenience store, generally no anchor	NA	1 mile or less	
Small Neighborhood Center	1+	30,000-125,000 SF	Grocery Store, local dining, convenience	5-20 stores	3 miles	
Large Neighborhood Center	2+	125,000-400,000 SF	Discount supermarket, specialty grocery store, drugstore, eating establishments	15-40 stores	3-6 miles	
Power Center	3+	400,000SF+	Big-box category stores	NA	5-10 miles	
Lifestyle Center	0-2	150,000-350,000 SF		NA	8-12 miles	

ICSC Commercial District Classification Table
Source: ICSC 2016

Retail and Recreation Market Scan

Introduction

Retail Inventory

The BOA currently offers over 400,000 SF of retail and is anchored by national chains such as Target, Bed Bath & Beyond, and Stop & Shop. The Commercial District Classification developed by the International Council of Shopping Centers (ICSC) considers shopping areas with over 400,000 square feet of retail, such as the BOA, as a 'Power Center'. This category of commercial district typically pulls its customer base from a 5-10 mile radius, or 10-15 minute drive.

Current retail offerings are largely concentrated along East Sandford Boulevard, likely due to the Commercial Business zoning in that area, and are located in strip malls or big box properties. An inventory of existing retail businesses within the BOA also shows that a significant portion of the total number of businesses were eating and drinking places (37%). These establishments, however, consist largely of fast food chain restaurants and quick eateries with unhealthy offerings.

Anchors and Destinations

While many big box retailers act as anchors for the BOA, the area also features a number of recreational attractions like the Ice Hutch, Sports Underdome, and Glover Field. These destinations draw a large number of people to the area throughout the year and are concentrated in the northern corner of the study area along East Sandford Boulevard, and along the canal. In addition to the retail and recreation nodes, there is also a small quick service food node featuring Columbus Diner and Dunkin Donuts at the intersection of South Fulton Avenue, and South Columbus Avenue, across from the Pelham Manor Shopping Plaza.

Retail Spaces and Vacancy

Only four retail properties were listed for lease on Loopnet, a national commercial real estate online listing website, between December 2016 and March 2017. This is likely due to the heavy industrial zoning within the area. Retail properties for rent close to East Sandford Boulevard are priced comparably with those in downtown of Mount Vernon. 510 South Columbus Avenue, a 3,300 SF property just south of East Sandford Boulevard had a listed asking rent of \$28 per square foot. In town, average asking prices are \$30-40 per square foot. Properties further to the south of the study area were priced lower at \$10-12 per square foot. These properties are in fact industrially-zoned buildings that have special purpose permits for uses such as street retail, offices, and warehouse distribution.

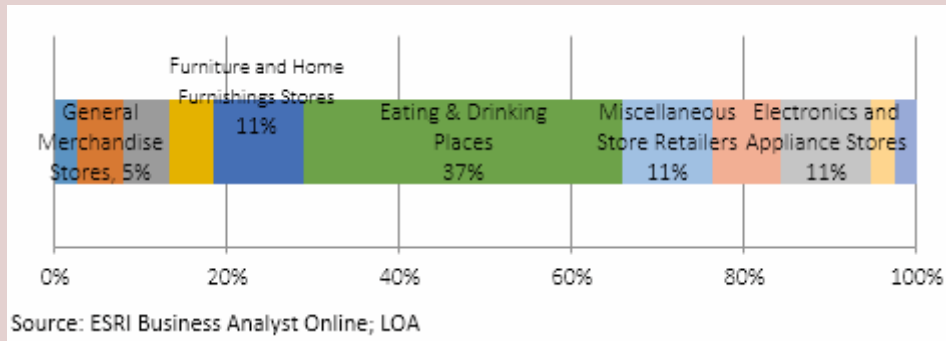
There are also a number of underdeveloped sites that may be viable for future retail development, particularly along East Sandford Boulevard where commercial business zoning already exists. These underdeveloped sites feature large underutilized parking surfaces.

Leasing Rates in Canal Village

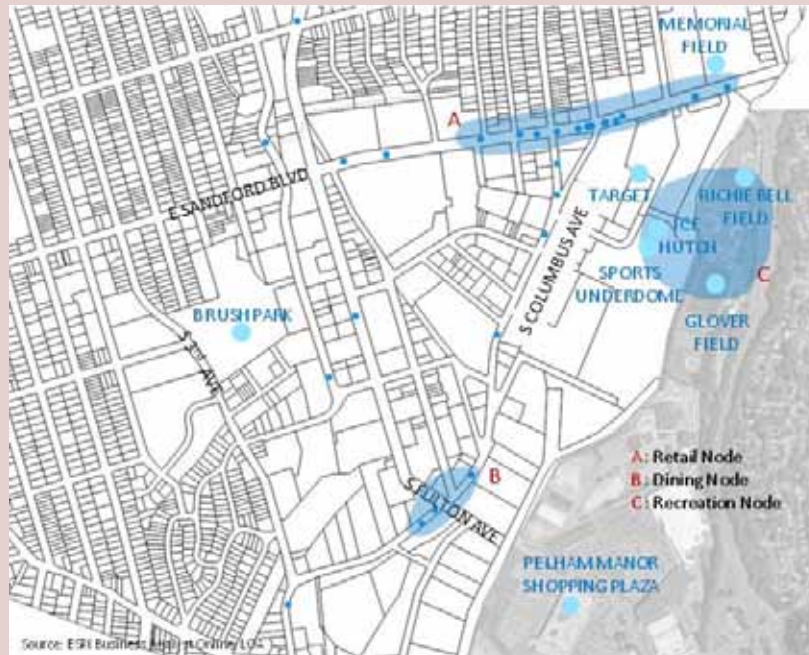
As of October 4 2017, the average leasing rate in Canal Village area was \$9.15 for all land types per square foot on an annual basis according to Loopnet; \$5.96 for vacant land and \$13.99 for warehouse space. It should be noted that there is little available space in the area, just two vacant land properties and seven warehouse spaces were available for lease.



Canal Village Retail Inventory



Number of Businesses within Canal Village area (Retail Trade Only)
Source: ESRI Business Analyst Online; LOA



Anchors + Destinations

Business Environment

Trade Area Drive Times

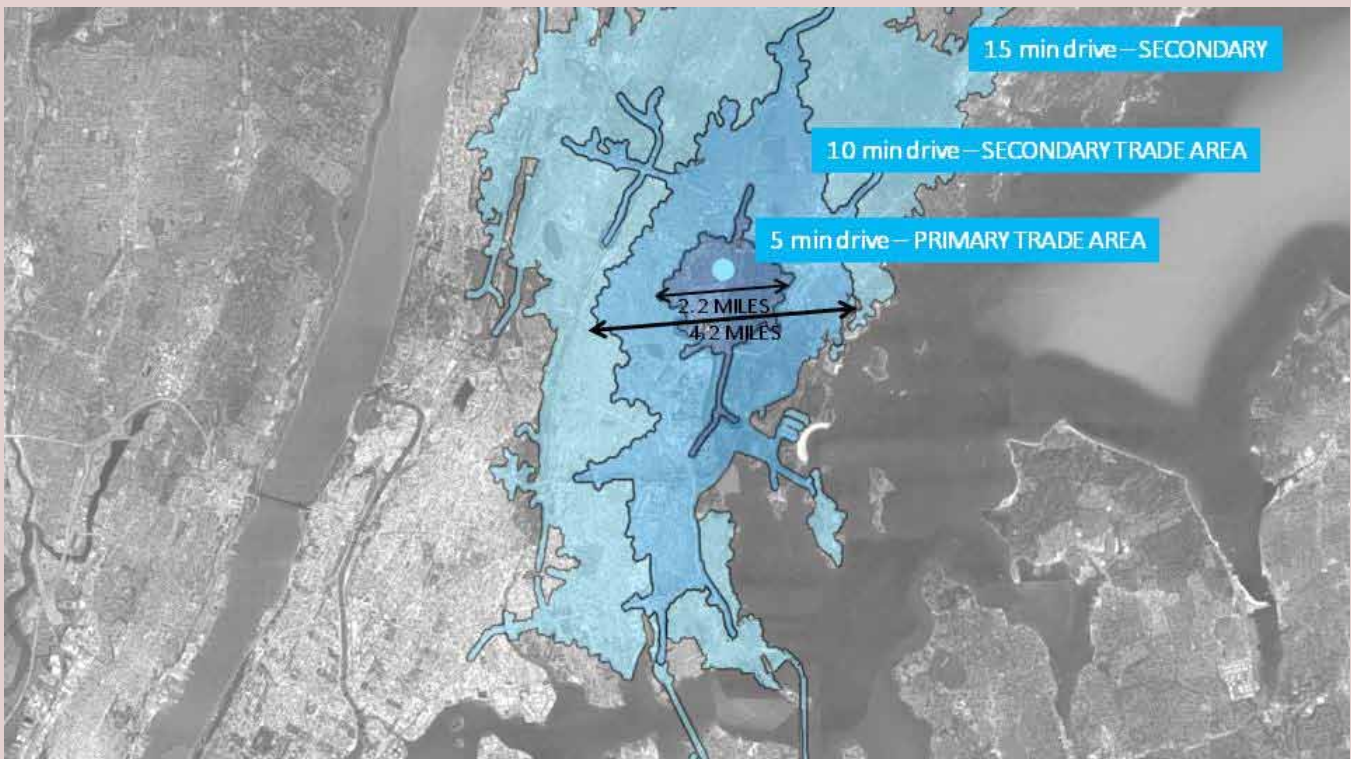
Given that the BOA is not easily accessible on foot or by public transit, as well as the fact that East Sandford Boulevard is auto-oriented in nature, it is assumed that the majority of current customers arrive by private vehicle. Hence, drive times were used to determine the primary and secondary trade areas for the BOA. These trade areas extend farther north and south rather than east and west due to major north-south arterials and also restrictions given by major natural barriers such as the Bronx River and Long Island Sound.

Current Retail Mix (Secondary Trade Areas)

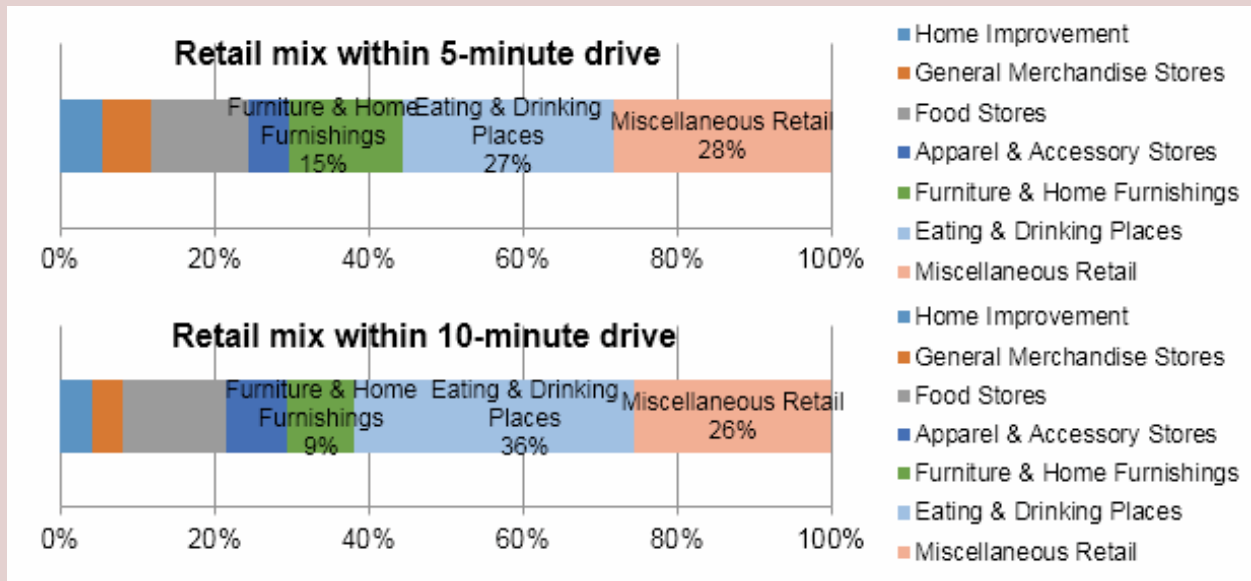
The primary trade area has a slightly higher proportion of home improvement, furniture and home furnishing, and general merchandise stores compared to the secondary trade areas. Meanwhile, secondary trade areas have a higher proportion of eating and drinking establishments. Canal Village area therefore has opportunities to increase its offering of food and drinking establishments to be comparable and competitive in the region.



Storefront setback along East Sandford Boulevard
Source: GoogleMap



Trade Area for Canal Village: 5-min, 10-min, 15-min drive
Source: ESRI Business Analyst Online



Retail mix by number of businesses
Source: ESRI Business Analyst Online

	Westchester County	5-MIN DRIVE
2016 Total Population	977,739	23,948
Population Growth (2016 - 2021)	0.50%	0.36%
Average Household Size	2.68	2.74
Median Age	40.8	40.0
Median Household Income	\$85,658	\$62,912

Demographics + Psychographics



Tapestry Segmentation of 5-min drive trade area
Source: ESRI Business Analyst Online

Market Analysis - Leakage, Psychographics

Market Demand: Residents

Demographics + Psychographics

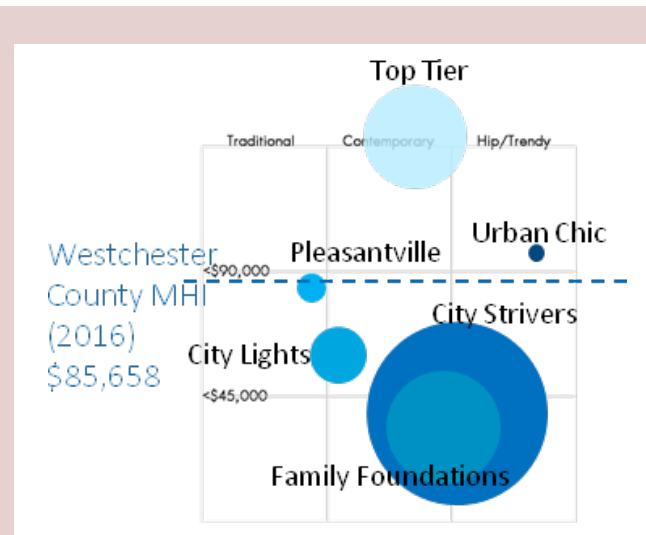
Overall, the population within the primary trade area has a lower median household income than the County and is expected to grow at a slower rate.

A psychographic analysis was conducted with ESRI Tapestry Segmentation to identify customer groups in the various trade areas (5-, 10- and 15-min drives), and describe the socioeconomic characteristics of these residents. Psychographics is the study and classification of people according to their attitudes, aspirations, and other psychological criteria, especially in market research. ESRI Tapestry segmentation provides an accurate, detailed geodemographic segmentation system that integrates consumer’s spending habits, concerns and values with residential characteristics to explain why they buy and identify markets and classify neighborhoods.

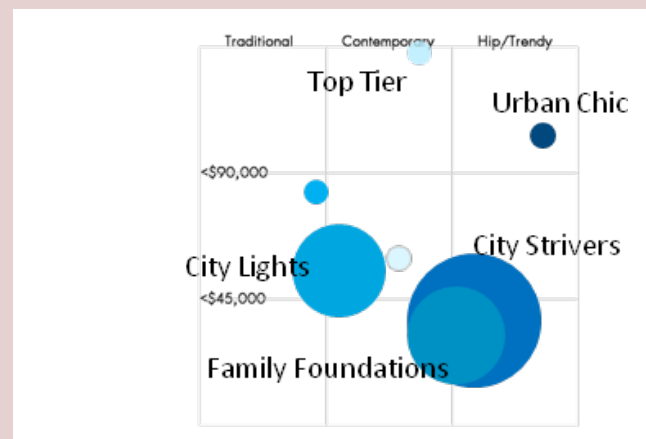
Within a 5-minute drive, for example, ‘City Strivers’ and ‘Family Foundations’ customer segments make up 64.6% of the trade area’s customer base. These segments comprise of a young, foreign-born population who are recipients of Supplemental Security Income. Despite their low incomes, these customers maintain a bold preference for more contemporary or trendy items and often seek out deals on branded clothing and occasionally indulge in restaurants and personal services. This further supports the opportunity to increase the BOA’s offerings of food and drinking establishments.

Also important to note, within the 5-minute drive trade area, ‘Top Tier’ customers make up a sizeable portion of the population. This group is very different from ‘City Strivers’ and ‘Family Foundations’ in that it is comprised of highly-educated professionals with high median household incomes. They are socially responsible consumers who aim for a balanced lifestyle, are attentive to good nutrition and prefer upscale salons, spas and fitness centers.

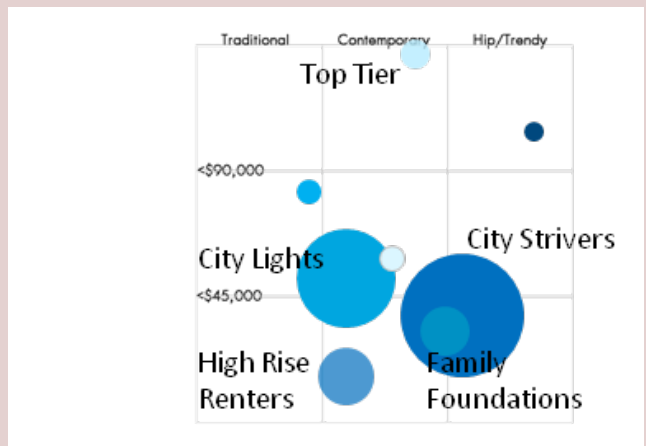
In general, farther from the BOA, median household incomes fall and consumers are more careful with their spending. There is a significant drop in ‘Top Tier’ customers beyond the 5-min drive when ‘City Strivers’ and ‘City Lights’ become the dominant consumer base within both the 10- and 15-min drive secondary trade areas. Although ‘City Lights’ customers have a moderate median household income, they are price savvy consumers who are saving for the future and budget well to support their urban lifestyles.



Successful Retail Zones for Primary and Secondary Trade areas within a 5-minute drive
Source: Larisa Ortiz Associates



Successful Retail Zones for Primary and Secondary Trade areas within a 10-minute drive
Source: Larisa Ortiz Associates



Successful Retail Zones for Primary and Secondary Trade areas within a 15-minute drive
Source: Larisa Ortiz Associates

Based on the psychographic profiles above, a proprietary matrix reflecting the “successful retail zone” is created. The matrix by Larisa Ortiz Associates (LOA) allows for plotting of psychographic profiles of the primary and secondary trade areas based on income levels (vertical axis) and lifestyle choices (horizontal axis). “Low” income on the axis refers to Median Household Income (MHI) below \$45,000, “Middle” income refers to MHI between \$45,000 and \$90,000, and “High” income refers to MHI above \$90,000. The income levels translate to corresponding price points for a successful retail zone. The horizontal axis, on the other hand, is driven by three main lifestyle categories: Traditional, Contemporary, Hip/Trendy. The area of convergence of the various tapestry segments therefore reflects the kind of retailers for whom the area would be a good fit.

Based on the psychographic analysis of buyers within the primary and secondary trade areas, there appears to be a large opportunity for contemporary and hip products and services at low to moderate price points. Where possible, there is also some opportunity for some targeted businesses to meet the needs and preferences of the ‘Top Tier’ customer within a 5-minute drive.

Market Demand: Employees

There are a total of 10,445 employees within a 5-minute drive of the BOA. These workers are mostly employed in Retail Trade (21%), Manufacturing (13.4%), Construction (12.9%), Transportation and Warehousing (9.7%) or Wholesale Trade (8.1%). Some of the bigger employers in the area include Super Stop and Shop, Bridge Metal Industries, and FedEx Ship Center – all located within the study area.

Within a 10-minute drive, there are 70,450 workers. The top three industries include Health Care and Social Assistance, Retail Trade and Educational Services. Large employers include the Wartburg Adult Care Community, Natural Life Medical Center, and Lippman Eye Care Center in New Rochelle, and Bay Plaza Shopping Center, Bartow Mall Shopping Center, Harry Truman High School, Northeast Bronx Educational Park and Mercy College in the Bronx.

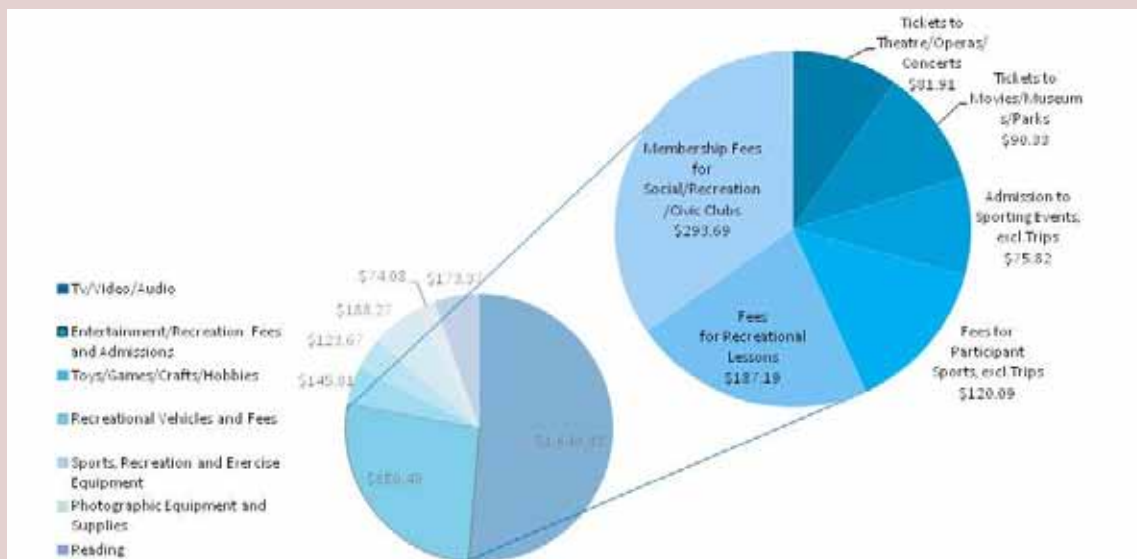
Both primary and secondary trade areas of the BOA have a balanced residential to employee customer base of 1: 2.3. This ratio is commensurate with other communities that serve a mix of both residents and employees.

Recreation Spending

Residents within a 5-minute drive of the BOA spend about 50% more than the national average on things like fees for recreation club memberships, fees for recreation lessons, and fees for participant sports. The second largest category of recreation spending in all trade areas is ‘Entertainment/Recreation Fees and Admission’. This includes spending on membership fees for social/recreation/

civic clubs, fees for recreational lessons, fees for participant sports, admission to sporting events, tickets to movies/museums/parks and tickets to theatre/operas/concerts.

This existing demand shows that the BOA has the opportunity to build upon its existing node of recreation facilities by making it even more visible and accessible to local residents.



Recreation spending within primary trade area
 Source: ESRI Business Analyst Online, Larisa Ortiz Associates

Market Supply: Leakage Analysis

An analysis of retail leakage compares the discretionary income of residents within the trade area against the total sales estimated for local businesses, also within the same trade area. Although there is retail leakage in all primary and secondary trade areas, there is greatest opportunity to expand retail offerings within the BOA to meet the local demand within a 10-minute drive.

The tables for *Leakage by Retail Category for 5-min & 10-min Drive Trade Area* show that for some retail categories, local businesses sell more than local residents are purchasing. This means that outsiders may be coming into the area to shop (known as a ‘surplus’).

In other categories, residents are spending more than local stores are selling, suggesting that residents are spending outside the trade area (known as ‘leakage’). Depending on the size of leakage, this may suggest opportunities for both existing and new businesses to better meet the needs of the residential customer base.

In 2016, residents within a 5-minute drive of the BOA consumed a total of \$459,498,551 in goods and services. Only 4% of this was spent outside the trade area, or a leakage of \$16,106,580. This suggests that the area generally is meeting the needs of shoppers within the 5-minute drive time trade area.

5-Minute Drive Time Leakage Analysis

That said, some retail categories within the 5-minute drive time trade area do offer opportunities for growth and expansion. The *Leakage by Retail Category for 5-min Drive Trade Area* table summarizes the amount of square footage that could potentially be supported within individual retail categories based on International Council of Shopping Centers’ (ICSC) Seasonally-Adjusted Mall Sales Productivity. The table refers to CR, or Capture Rate, which is defined as the percentage of total potential spending in any retail category that can reasonably be expected to occur within the trade area based on competitive venues, proximity to customer base, and quality of a potential business.

	Leakage (+)/ Surplus (-)	40% Capture Rate	60% Capture Rate	100% Capture Rate
Furniture & Home Furnishings Stores	-\$10,134,794			
Bldg Materials, Garden Equip. & Supply Stores	\$3,439,168	4,299	6,448	10,747
Grocery Stores	-\$11,179,161			
Specialty Food Stores	\$4,019,806	1,978	2,967	4,944
Beer, Wine & Liquor Stores	\$1,740,421	-	-	-
Health & Personal Care Stores	\$12,288,605	12,137	18,205	30,342
Clothing & Clothing Accessories Stores	\$20,089,698	17,858	26,786	44,644
Sporting Goods, Hobby, Book & Music Stores	-\$5,338,846			
General Merchandise Stores	-\$41,475,892			
Florists	-\$65,265			
Office Supplies, Stationery & Gift Stores	-\$61,302			
Used Merchandise Stores	-\$957,479			
Other Miscellaneous Store Retailers	\$506,909	304	455	759
Restaurants/Other Eating Places	\$7,000,604.00	4,256	6,384	10,639
		40,830	61,246	102,076

Leakage by Retail Category for 5-min Drive Trade Area
Source: ESRI Business Analyst Online; Larisa Ortiz Associates

Larisa Ortiz Associates estimates the supportable square feet of retail space by applying a range of conservative capture rates. Higher capture rates are usually assigned to those categories that are underserved and/or highly convenience in nature, assuming that if those additional goods and services were available in the trade area they would receive greater market support.

If the BOA were to “capture” between 40-60% of demand in these categories, the area could support between 40,830SF and 61,246SF of retail space.

10-Minute Drive Time Leakage Analysis

Within a 10-minute drive, a leakage totaling \$1,196,978,225, or 30% of total demand was experienced. If drawing from a 10-minute drive time trade area, the BOA would be able to support more health and personal care stores, restaurants, and specialty food stores.

The *Leakage by Retail Category for 10-min Drive Trade Area* table also shows that in order to capture demand from its secondary trade area, the BOA will also need to grow its offerings in other categories such as sporting goods and hobby stores, florists, office supplies and stationery stores, used merchandise stores, and even grocery stores. The BOA can support a conservative estimate of 250,000 SF of these additional retail offerings.

Despite the leakage of 30% of discretionary spending outside the area, the assessment of competitive districts suggest that much of this spending is likely going to regional malls within a 10- or 15-minute drive of the BOA. These competing retail shopping centers include:

- Pelham Manor Shopping Plaza
- Bay Plaza Shopping Center
- Cross County Shopping Center

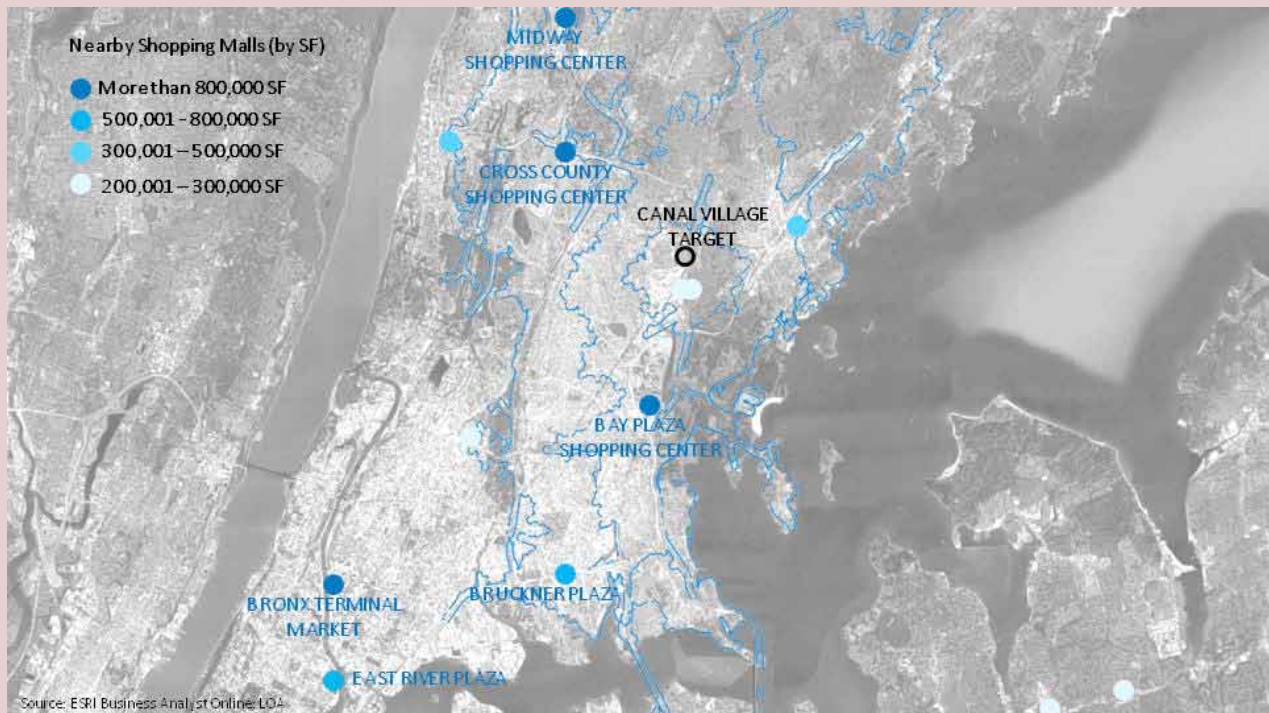
	Leakage (+)/ Surplus (-)	20% Capture Rate	40% Capture Rate	60% Capture Rate
Furniture & Home Furnishings Stores	\$13,130,711	6,500	13,001	19,501
Bldg Materials, Garden Equip. & Supply Stores	\$22,583,904	14,115	28,230	42,345
Grocery Stores	\$188,414,627	65,700	131,400	197,100
Specialty Food Stores	\$28,258,913	6,952	13,904	20,855
Beer, Wine & Liquor Stores	\$23,796,147			
Health & Personal Care Stores	\$88,916,032	43,909	87,818	131,727
Clothing & Clothing Accessories Stores	\$106,941,838	47,530	95,059	142,589
Sporting Goods, Hobby, Book & Music Stores	\$30,976,747	23,737	47,474	71,211
General Merchandise Stores	-\$7,044,104			
Florists	\$4,256,553	5,037	10,075	15,112
Office Supplies, Stationery & Gift Stores	\$9,903,479	5,118	10,236	15,354
Used Merchandise Stores	\$10,573,203	13,912	27,824	41,736
Other Miscellaneous Store Retailers	\$481,656	144	288	433
Restaurants/Other Eating Places	\$65,468,135	19,899	39,798	59,697
		252,554	505,108	757,661

Leakage by Retail Category for 10-min Drive Trade Area
 Source: ESRI Business Analyst Online; Larisa Ortiz Associates

Strategic Position

Drawing from these findings, it is possible to conclude that the BOA could be poised to become a lifestyle hub with a mix of affordable, contemporary retail and recreational offerings.

In order to achieve this, the BOA needs to build upon its existing recreation node by making it highly visible and accessible to the public and improving its retail offerings to meet the demands of residents within a 10-minute drive, particularly those offerings that complement sports and recreational activities (between 24,000 - 50,000 supportable SF). Products and services in the BOA should range in the low to moderate price points, with some opportunity to extend to higher price points to meet the preferences of local ‘Top Tier’ customers seeking upscale salons, spas, and fitness centers.



Nearby competitive shopping malls
 Source: ESRI Business Analyst Online; Larisa Ortiz Associates