



NY Rising Community Reconstruction Program

Recover from yesterday, plan for tomorrow

Conceptual Plan - OAKDALE and WEST SAYVILLE



OCTOBER 2013

This document was developed by the Oakdale and West Sayville Community Reconstruction Planning Committee as part of the NY Rising Community Reconstruction (NYRCR) Program within the Governor’s Office of Storm Recovery. The NYRCR Program is supported by NYS Homes and Community Renewal, NYS Department of State, and NYS Department of Transportation. Assistance was provided by the following consulting firms:

- *Jacobs*
- *Cameron Engineering & Associates, LLP*

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FOREWORD

The New York Rising Community Reconstruction (NYRCR) program was established by Governor Andrew M. Cuomo to provide additional rebuilding and revitalization assistance to communities damaged by Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee. This program empowers communities to prepare locally-driven recovery plans to identify innovative reconstruction projects and other needed actions to allow each community not only to survive, but also to thrive in an era when natural risks will become increasingly common.

The NYRCR program is managed by the Governor's Office of Storm Recovery in conjunction with New York State Homes and Community Renewal and the Department of State. The NYRCR program consists of both planning and implementation phases, to assist communities in making informed recovery decisions.

The development of this conceptual plan is the result of innumerable hours of effort from volunteer planning committee members, members of the public, municipal employees, elected officials, state employees, and planning consultants. Across the state, over 102 communities are working together to build back better and stronger.

This conceptual plan is a snapshot of the current thoughts of the community and planning committee. The plans will evolve as communities analyze the risk to their assets, their needs and opportunities, the potential costs and benefits of projects and actions, and their priorities. As projects are more fully defined, the potential impact on neighboring municipalities or the region as a whole may lead to further modifications.

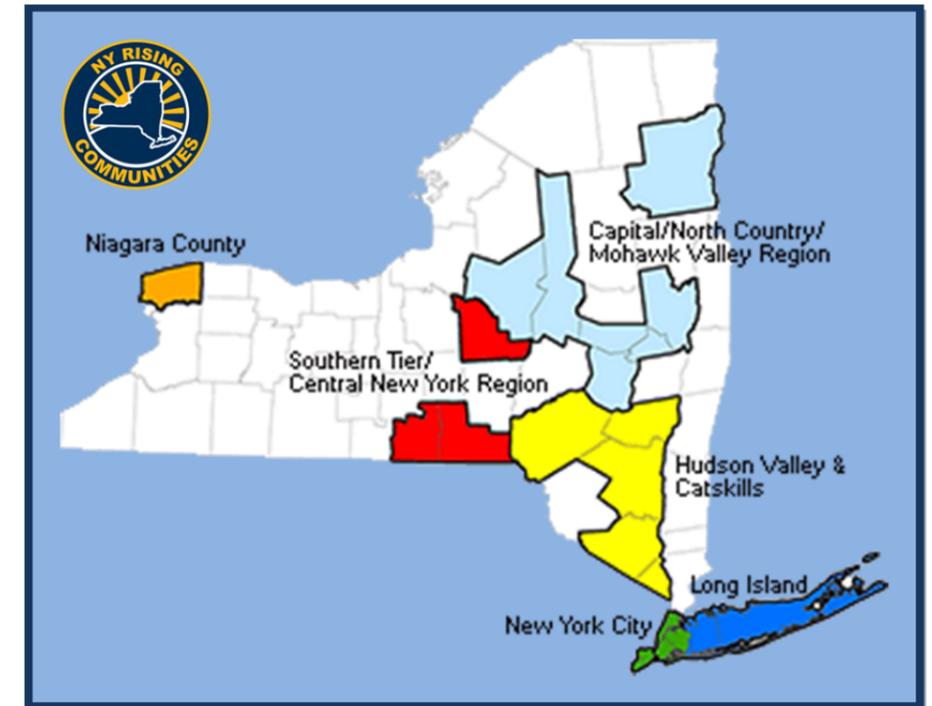
In the months ahead, communities will develop ways to implement additional strategies for economic revitalization, human services, housing, infrastructure, natural and cultural resources, and the community's capacity to implement changes.

Implementation of the proposed projects and actions found in this conceptual plan is subject to applicable federal, state, and local laws and regulations. Inclusion of a project or action in this conceptual plan does not guarantee that a particular project or action will be eligible for Community Development Block Grant – Disaster Recovery (CDBG-DR) funding. Proposed projects or actions may be eligible for other state or federal funding, or could be accomplished with municipal, nonprofit or private investment.

Each NYRCR Community will continue to engage the public as they develop a final plan for community reconstruction. Events will be held to receive feedback on the conceptual plan, to provide an understanding of risk to assets, and to gather additional ideas for strategies, projects and actions.

October 31, 2013

New York Rising Communities



Find out more at:

www.stormrecovery.ny.gov





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1. Program Overview

Description of the Program

The New York Rising Community Reconstruction (NYRCR) Program is intended to empower the communities most affected by the storms to develop and implement locally-created strategies for rebuilding, strengthening, and making their respective communities more resilient against future weather events. The intent of the NYRCR Program is to assist communities to rebuild better and safer based on locally derived plans which consider current damage, future threats to community assets, as well as the economic future of the community.

NYRCR Plans, in accordance with the US Federal Emergency Management Administration (FEMA) *National Disaster Recovery Framework*, will consider the needs, risks and opportunities related to assets in the following recovery support function categories¹:

- Community Planning and Capacity Building
- Economic Development
- Health and Social Services
- Housing
- Infrastructure Systems (Transportation and Utilities)
- Natural and Cultural Resources

A total of 102 communities across New York State have been designated for Community Reconstruction Program assistance. Of these, a total of 10 communities, noted below, make up the eight NYRCR Committees in Suffolk County.

- Village of Amityville/Copiague
- Village of Lindenhurst
- Village of Babylon/West Babylon
- West Islip
- Oakdale/West Sayville
- Mastic Beach and Smith Point of Shirley
- West Gilgo to Captree
- Fire Island

The successful completion of a NYRCR Plan, will allow each participating community to be eligible to obtain funds to support the implementation of resilient and innovative reconstruction projects and other needed actions identified in their respective Plan.



Description of the Planning Process

As part of the NYRCR planning process, communities will assess their vulnerabilities to future natural disasters as well as their needs for economic development. The planning process will also help to identify where funds should be used to repair or reconstruct critical facilities and essential public assets damaged or destroyed by these storms. Lastly, the planning process will facilitate the identification of projects that will increase resilience while also protecting vulnerable populations and promoting sound economic development.

Elements of the planning process are as follows:

- *Public Engagement:* Providing opportunities for public involvement and input at key milestones in the planning process
- *Asset Inventory:* Compiling an inventory of the community’s social, economic, and natural resource assets that have been or have the potential to be affected by coastal or riverine hazards
- *Risk Assessment:* Assessing risk to key community assets based on the following three contributing factors to risk: (1) Hazard, the likelihood and magnitude of anticipated storm events; (2) Exposure, local landscape characteristics that typically increase or decrease storm effects; (3) Vulnerability, the capacity of an asset to return to service after an event
- *Needs and Opportunities Assessment:* Determining needs and opportunities to improve local economic growth and enhance resilience to future weather events
- *Strategies for Investment:* Developing strategies and the projects and actions needed to implement the strategies; prioritizing projects and actions; conducting cost benefit analysis of chosen projects and actions as well as identifying potential funding sources
- *Implementation Schedule:* Preparing an implementation schedule of the actions needed to implement the strategies

Role of the Committee

Each participating community has established a NYRCR Planning Committee (“Committee”) that accurately reflects the community’s populations and represents both the needs of the community and its members’ various talents. Committee co-chairs have been selected by the State in consultation with the participating communities. The composition of the remaining committee members varies, but typically includes Town, Village, and County representatives, elected legislative representatives, the County, local residents as well as established business leaders and community organizations.





NYRCR Planning Committees meet frequently and are charged with building consensus among local residents and stakeholders for a locally-based reconstruction plan. Committee tasks range from the development of a Community Vision Statement to identifying critical assets and future projects. The Committee is also tasked with developing a public engagement plan to both inform and involve residents of the NYRCR Program.

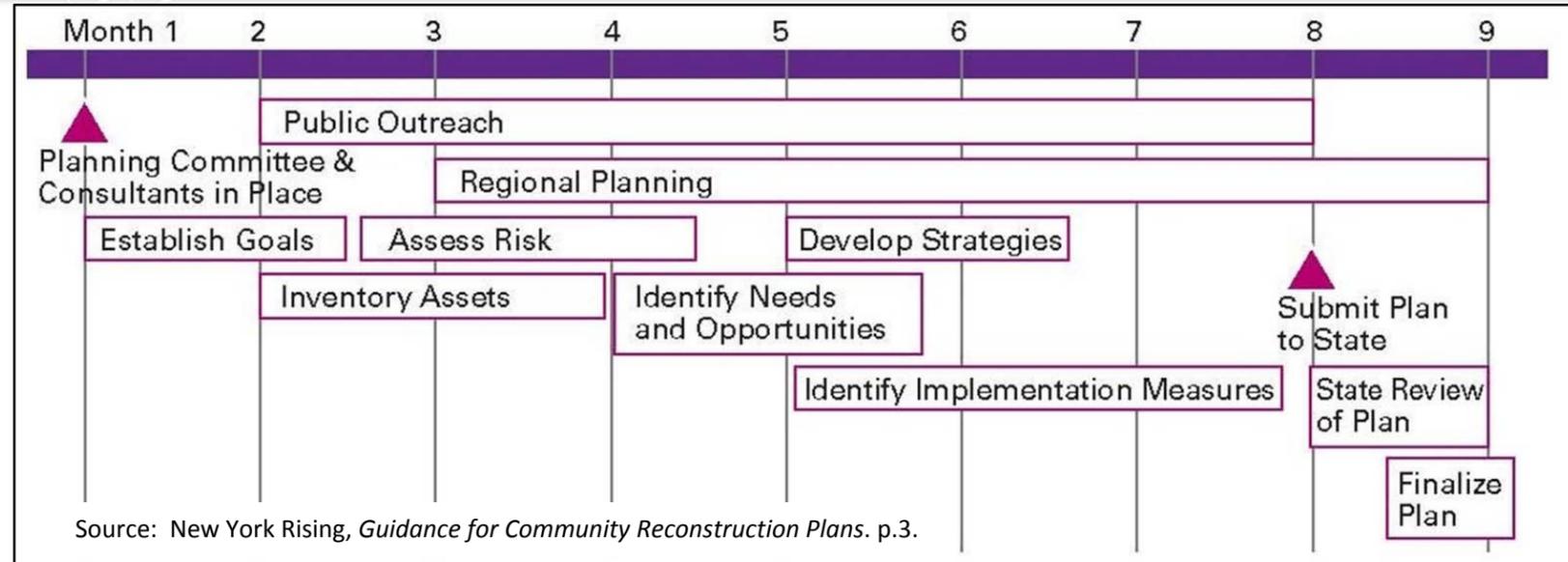
Planning Process Timeline

The NYRCR planning process is anticipated to last approximately eight months. Final plans submittals to the State are due in March 2014. Key milestones in the planning horizon (e.g., public engagement, risk assessment, identification of needs and opportunities) are shown in the adjacent graphic. This Conceptual Plan highlights the progress of the Committee for the one-year anniversary of Sandy and next steps for the completion of a final plan in March 2014. It is important to remember that project implementation will likely begin before the 8-month planning period, and will continue well beyond as the State continually works to match other funding sources -- federal, state, local, private, philanthropic, not-for-profit -- with these projects.

Elements of a Successful Plan

A successful NYRCR Plan will describe projects and actions needed for the community to rebuild a more resilient and economically strong locality. A successful NYRCR Plan, which would qualify communities to receive funding and grants to implement projects and actions identified in their plans, must contain the following components:

- **Inventory and assessment of risk to key assets and systems.** This inventory and assessment of vulnerable key assets and systems is required in order to prioritize projects and actions.



- **Projects and actions to restore and increase the resilience of key assets.** This plan element addresses the restoration of key assets as well as actions that will make local assets more resilient to future threats (e.g., wetlands, dunes, modifications to land use regulations, other improvements in community systems).
- **Protection of vulnerable populations.** Development of new measures to protect vulnerable persons through housing decisions and other services.ⁱⁱ Measures to protect these populations may include siting new facilities in lower risk areas, requiring back up power systems for critical facilities like hospitals and nursing homes, and improving communications systems to ensure that vulnerable persons are not left without aid.
- **Projects with economic growth co-benefits.** This characteristic of a successful plan relates to projects that will improve the future of the local economy but also enhance the community's resilience. Illustrative projects may include a transportation infrastructure improvement project that may result in the ancillary growth of a main business corridor. Similarly, an investment in open space could potentially serve a dual purpose as both a recreational space/community destination and also as a coastal flooding buffer protecting against storm damage.
- **Regional Coordination.** While designated NYRCR communities in Suffolk County have specific local needs, reconstruction and resiliency efforts must also relate to regional issues that arise across Long Island. As such, NYRCR Plans must also address long-term regional objectives across Long Island.
- **Detailed implementation agendas.** Each NYRCR Plan must include a concise description of the tasks it will take to implement the plan. This includes assigning responsibility for specific actions to specific entities or individuals and establishing timelines for each action, as appropriate.

The Conceptual Plan

The purpose of the Conceptual Plan is to provide an overview of the Oakdale and West Sayville NYRCR Committee's planning efforts to date. This includes highlighting the Committee's initial findings with regards to the Community's critical assets, the associated breakdowns that were discovered during and after Sandy that need to be addressed, and the Committee's preliminary ideas for projects and actions to address those immediate needs while thinking strategically about how to build back stronger, smarter, and more resiliently for the long-term sustainability of the community.





2. Community Overview

Oakdale and West Sayville are hamlets and census-designated places (CDP) located within the unincorporated portions of the Town of Islip in Suffolk County, New York. The communities are located along the South Shore of Long Island and are situated between the Connetquot River to the west, Green's Creek to the east and the Great South Bay to the south. The planning area includes land along the east side of Green's Creek, extending along Benson Avenue, north along Saxton Avenue, Brook Street and continuing north along Green's Creek to Lakeland Avenue. State Route 27 (Sunrise Highway) forms the northern edge of the planning area. Portions of the planning area, in the vicinity of the Green's Creek watershed, are situated in the hamlet of Sayville.

The main roadway that extends through the planning area is Montauk Highway (C.R. 85). Like Sunrise Highway, the road is generally oriented in an east-west direction. Sunrise Highway is a major limited access arterial extending along the north side of the communities. The other notable transportation facility is the Montauk Branch of the Long Island Rail Road. This right-of-way also extends through Oakdale and West Sayville and includes rail stations in Oakdale and Sayville to the east.

It is significant to note that Montauk Highway, Sunrise Highway and the Long Island Rail Road all converge as they pass over the Connetquot River to the immediate west of Oakdale. At this location, the Connetquot River extends to the south while the Connetquot River State Park Preserve extends to the north, with no alternative east-west access until Veterans Memorial Highway, three miles to the north.

Both Oakdale and West Sayville are located on an outwash plain, a term used to describe the glacial geomorphology of the region. The outwash plain was formed with the retreat of glacial advances thousands of years ago. While the central and northern portions of Long Island are defined by greater topographic variation- hills, valleys, bluffs- features of a glacial

moraine (Ronkonkoma and Harbor Hill Moraines), the South Shore is characterized by a low-lying, flat land form that slopes to the Great South Bay and the barrier island (Fire Island). The glacial moraine is where the glacial advance stopped. The outwash plain formed as the glacier melted and the run-off "washed" or drained towards the bay. Much of the South Shore along the bay front formed into tidal wetlands that sometimes extended thousands of feet.

Historic Context

Oakdale and West Sayville have unique development histories. A large part of Oakdale was developed as private estates beginning after the Civil War. This included the Robert's estate, known as Pepperidge Hall, the W.K. Vanderbilt estate (now Dowling College), known as Idle Hour and the Bourne estate. Mansions and many service buildings were constructed. In addition, canals were dug in the vast wetlands that existed south of Montauk Highway. Later, when the Vanderbilt estate was sold off in the 1920s, a land developer by the name of E.G. Burke subdivided the property for the sale of individual lots. This occurred before the advent of modern land development standards such as subdivision control, public health and environmental regulations. Subsequently, much of Oakdale was developed in the post-World War II era when much of western Suffolk County was suburbanized.

On the border of Oakdale and West Sayville is a property known as the West Oak Recreation Club containing about 280 primarily seasonal dwellings, a marina, recreational facilities and extensive wooded acreage.

West Sayville's early development was centered on the waterfront. The world famous Bluepoints Oyster Company, a major national supplier of oysters and clams was located in West Sayville. The company capitalized on the vast shellfish beds within the Great South Bay. As a result, a vibrant community developed in West Sayville to service the shellfish industry. Today this is evident by the commercial, working waterfront development at the south ends of both West Avenue and Atlantic Avenue. Many of the houses along these roads are the former residences of bay men. A portion of West Sayville was developed as an estate of 500 acres, formerly known as the Hard estate. This property is now a Suffolk County park and the non-profit, Suffolk County Maritime Museum.





Present Day

Single-family detached residential homes are the predominant land use in both communities. Each community also has a central business district, apartments and townhouses, industrial and institutional uses and extensive areas of active parkland and preserved open space. A significant amount of commercial development also exists along Sunrise Highway.

In Oakdale, the waterfront contains primarily single family residential uses. In addition, there are several clusters of commercial uses including marinas and restaurants. In West Sayville, the waterfront west of Green’s Creek is commercial, much of it working waterfront. In both communities, significant portions of the waterfront are preserved open space parcels.

Development standards during the period of rapid population growth following World War II failed to adequately protect water quality. Sanitary waste from residences was disposed of through on-site cesspools until the 1970’s. Cesspools are simple leaching structures that do little to remove



nitrites. Later, septic tank systems were required which provided somewhat better treatment.

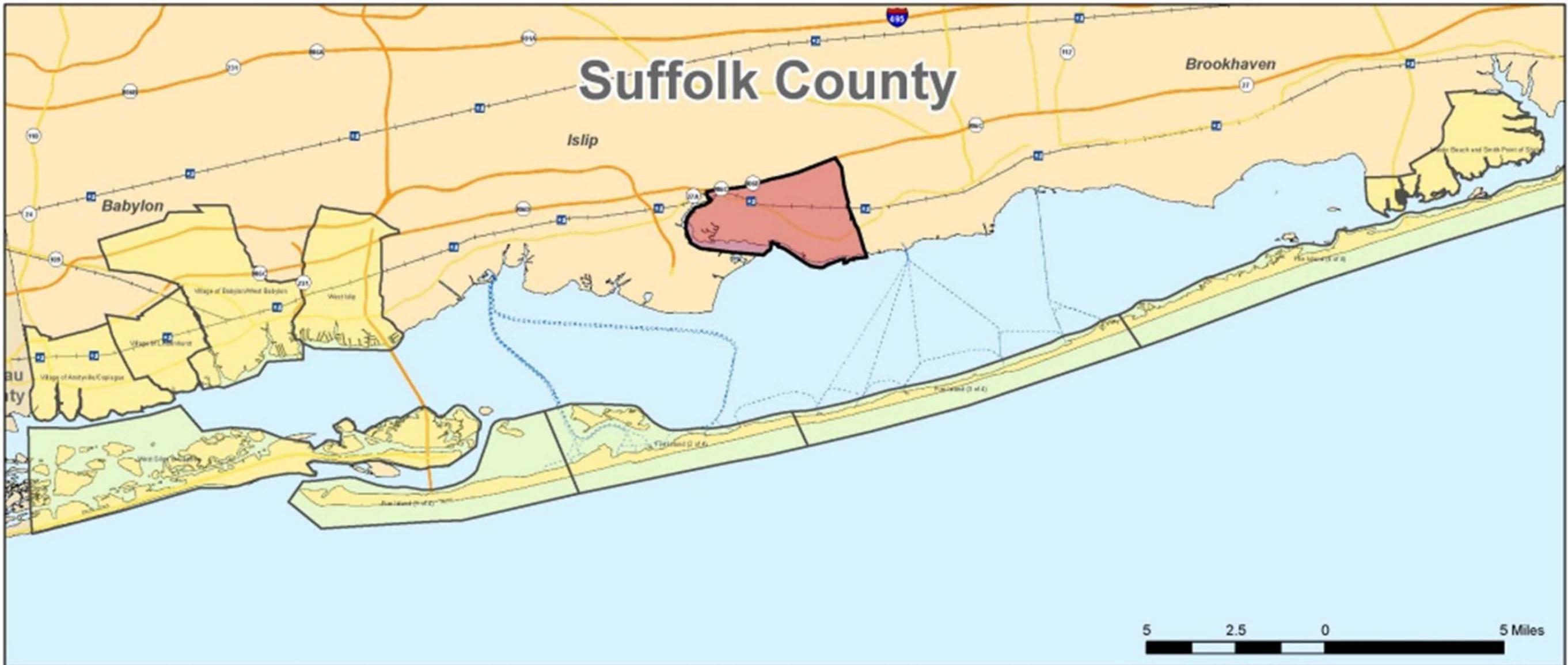
In the 1980’s, Suffolk County adopted density standards that limited the issuance of building permits for new structures based on the discharge of untreated waste. The minimum lot size established for most of the planning area was one house per acre. Similar density restrictions also applied to non-residential buildings including commercial uses. At this density, the Health Department determined that groundwater drinking standards could be attained. The problem, however, was that most of the land in the planning area was already developed at much higher densities.

An additional threat to water quality that resulted from the development practices of the time was as a result of storm water runoff. For many years, it was an accepted practice to collect rainwater into a piping system and discharge it directly into the creeks and canals as well as into the Connetquot River and the Great South Bay. Later practices reduced this occurrence through the use of recharge basins and leaching pools. However, the sum total is that significant amounts of stormwater continue to be discharged into surface water bodies in the planning area with high quantities of nutrients, hydrocarbons and other contaminants.

Presently, land development is continuing in both communities. Much of it consists of infill development in the form of single houses on previously subdivided lots. Larger developments, multi-family residential clusters are also located within the communities. Recent development has occurred along Oakdale-Bohemia Road in Oakdale utilizing on-site tertiary level waste water treatment systems. Proposed development projects include the Bourne Estate site, now owned by St. John’s University. In addition, a modest amount of commercial development has occurred in the past decade along with the revitalization of several older commercial properties.



NYRCR: Oakdale/West Sayville Planning Area Location



Legend

- Oakdale/West Sayville Planning Area
- Other NYRCR Planning Areas
- NJ Long Island Railroad Station

Roads

- Interstate
- Highways
- Ferry
- Long Island Railroad

Counties

- Nassau
- Suffolk
- Municipal Boundary





Community Reconstruction Planning Area Demographic Overview

Geographic Area and Data

The Oakdale/West Sayville Community Reconstruction Program Planning Area is composed of most of the Oakdale Census Designated Place (CDP) and the West Sayville CDP. With the exception of data on ethnicity and race, all demographic data depicted below is taken from the US Census Bureau’s American Factfinder at the CDP level, and reflects data from the most recent American Community Survey (ACS). Demographic data relating to ethnicity and race were derived from the 2010 Census in order to provide the most recent data available in those categories.

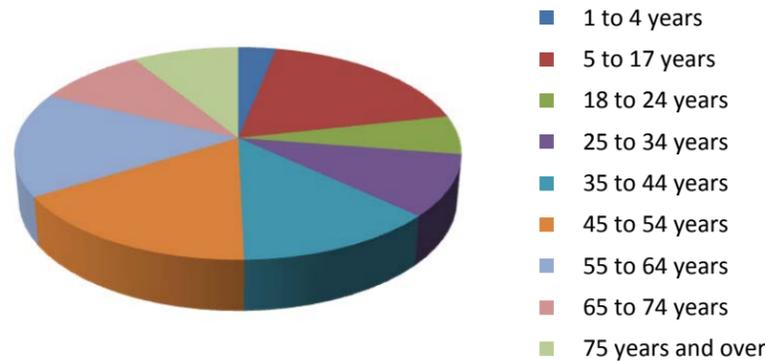
The CDP level was selected because the availability and detail of current Census data varies by geographic location and level of analysis (CDP, Census Tract, Census Block, etc.). The CDP level provided a uniform level of data detail and reporting period. It is acknowledged that the CDP data may include some areas that are not contained within the identified NYRCR Planning Area; however, across all CDPs in Suffolk County, the differences between the Census CDP boundaries and the NYRCR Planning Area definitions are not large. Additionally, the Census data’s intended use in this report is to provide an overview of the composition and general habits of the community. It is unlikely that areas included in the CDP but excluded from the NYRCR Planning Area would result in a substantial effect on the overview-level interpretation of the data or affect the identification of needs and opportunities or projects under the Community Reconstruction Program.

Oakdale/West Sayville General Demographics

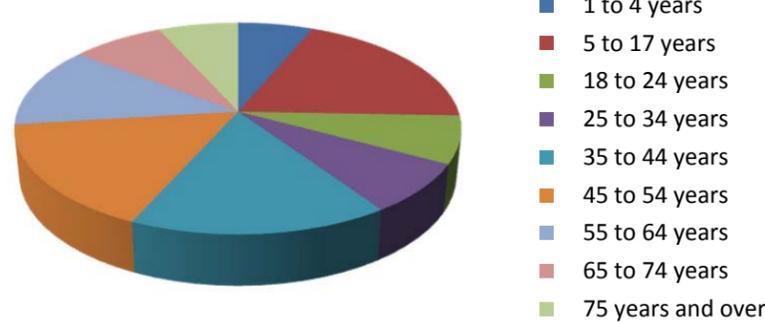
The Oakdale/West Sayville NYRCR Planning Area is composed of two suburban communities that share similar residential population statistics. The age of the population in both communities shows a typical suburban distribution among the Census age groups, with about 30% of the

population between 35 and 54 years old, and the remaining thirds nearly evenly split between residents under 35 and over 55 years old.

Population (Oakdale): Age



Population (West Sayville): Age

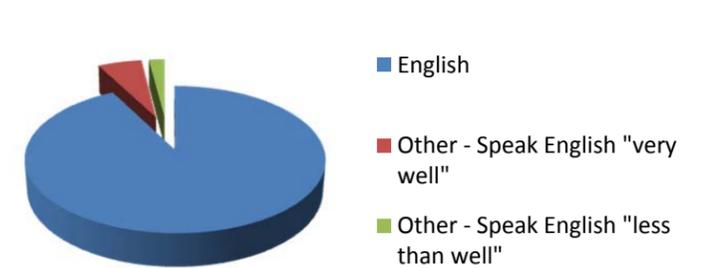


The percentages of race and ethnicity are similar between the two communities. Ninety-six percent of Oakdale is White, 1% African American, 1% Asian, 0.3% other and 0.7% two or more races. Ninety-five percent of West Sayville is White, 1% African American, 2% Asian, 1% other and 1% two or more races. Four percent of the population in Oakdale, and 5% of the population in West Sayville is Hispanic or Latino. The residents report that the majority in both communities either speak English as the only language at home. In Oakdale, about 5% of the population is not native English speakers but rate their English proficiency as “very good.”

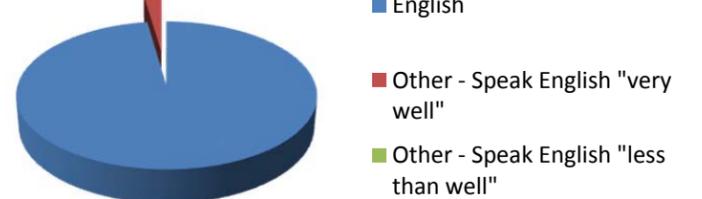
This data is important for the identification of needs and opportunities as the non-English speaking population represents a community of concern

that may not have easy access to important life safety information. In this case, 2% of the population in Oakdale alone report that they speak English less than well, potentially reducing the need to focus on multi-lingual projects and initiatives.

Language Spoken At Home: Oakdale



Language Spoken At Home: West Sayville



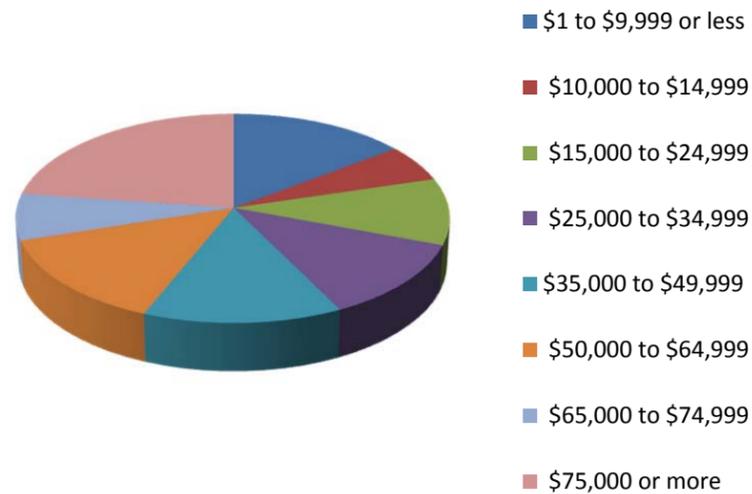
Income and Poverty

Both communities include a diverse range of individual wage earnings. Median household income in Oakdale was \$94,051 with the percentage of individuals below the poverty level at 2.3%. By comparison, West Sayville had a median household income of \$98,631 with the percentage of individuals below the poverty level of 3.2%. Neither community includes a significant population under 150% of the poverty level.

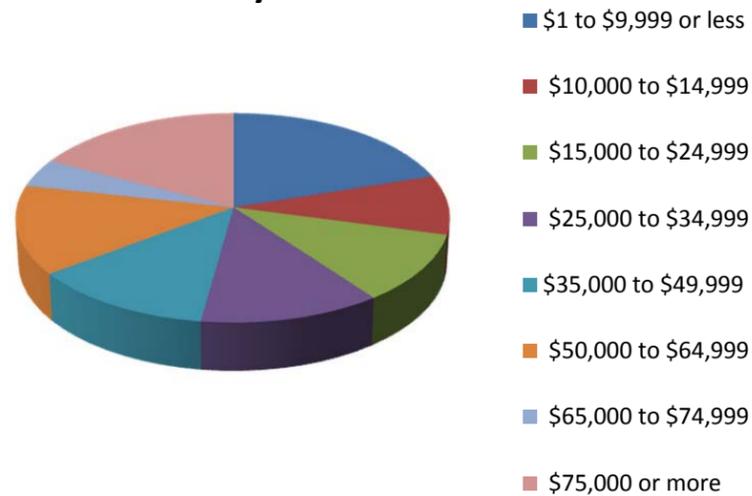




Individual Median Income: Oakdale



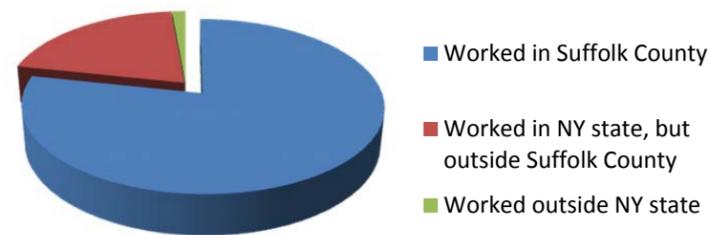
Individual Median Income: West Sayville



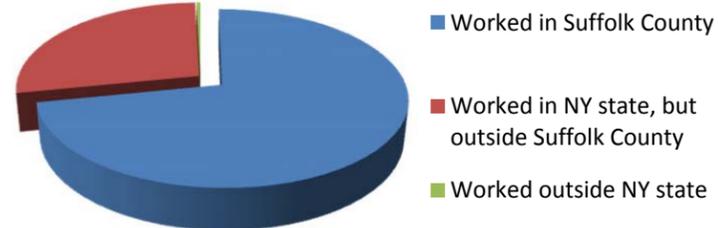
Employment and Journey to Work

Understanding the general character of the communities' workforce helps identify needs and opportunities and prioritize projects to maintain, restore, and enhance the economic vitality of the community. Nearly 75% of the residents in both Oakdale and West Sayville work within Suffolk County, and nearly all of the residents in both communities work somewhere within New York. The majority of workers in both communities drives alone to work or carpools. The next largest means of travel to work is by rail, but the percentage of rail commuters as a portion of all commuters in either community is less than 10%. As would be expected, the percentage of zero-car households in either community is less than 1%.

Place of Work: West Sayville

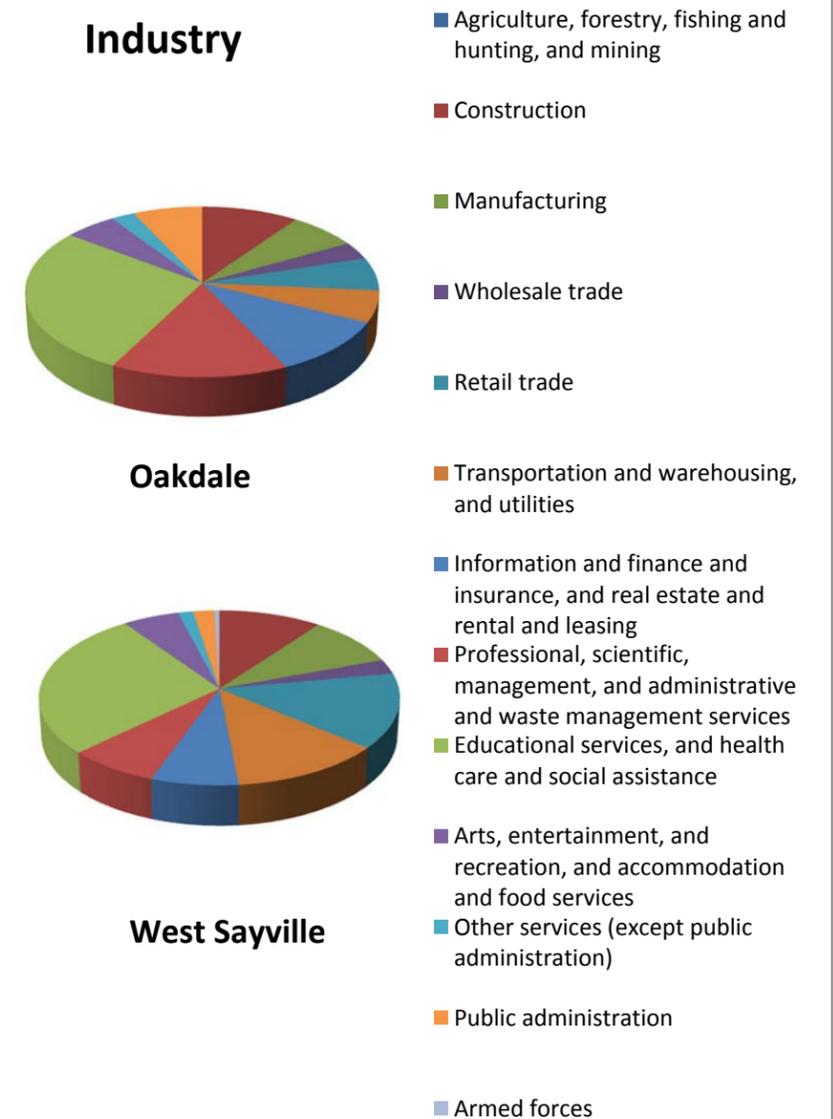


Place of Work: Oakdale



in Oakdale, the second greatest employment sector is professional services.

Industry



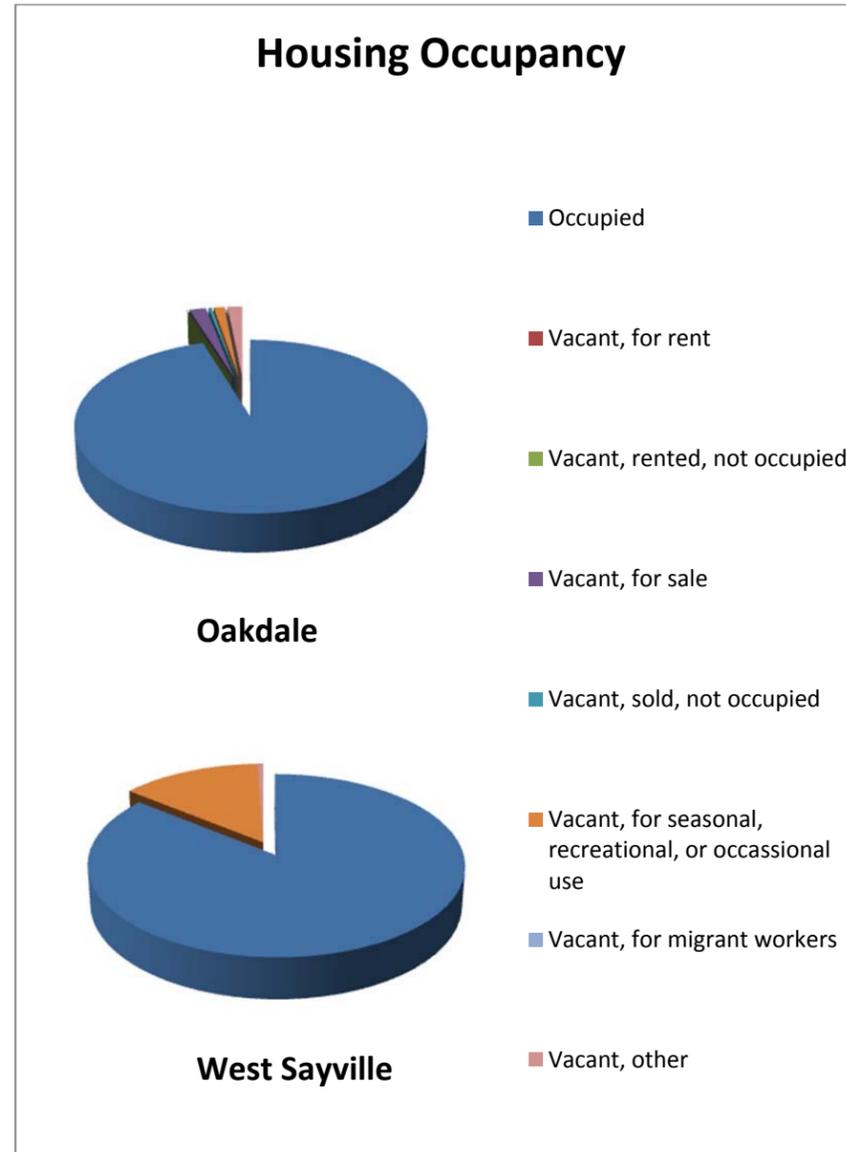
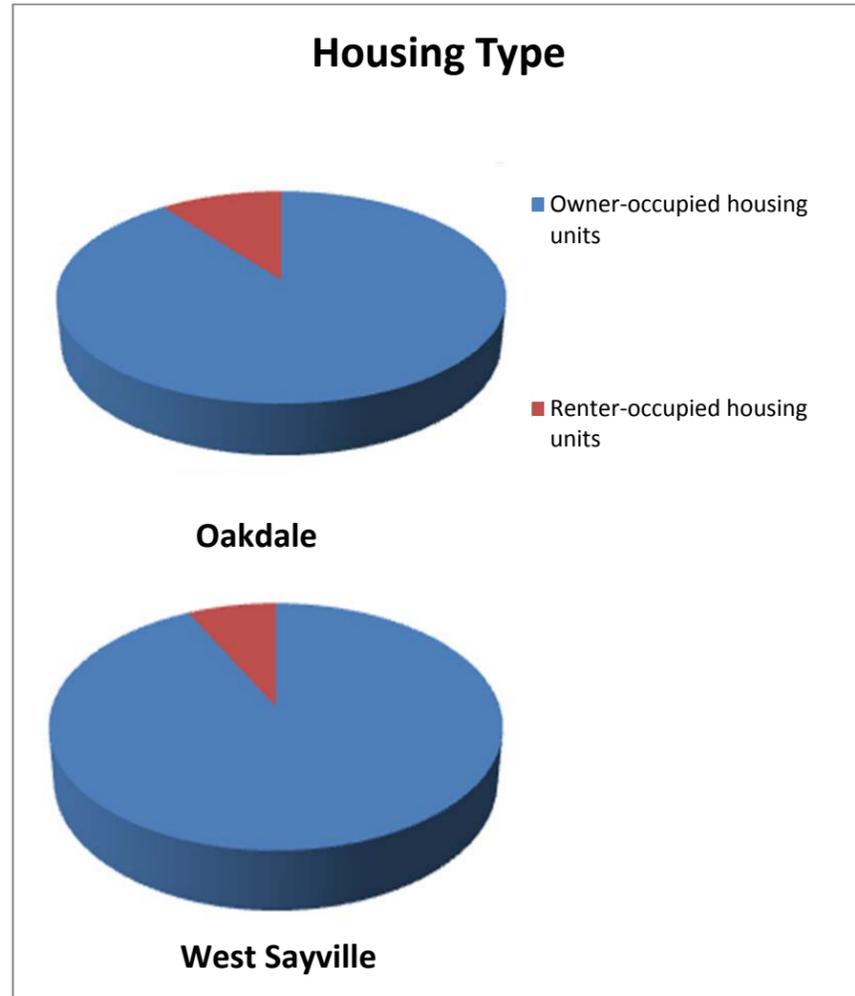
While workers resident in each community support a diverse array of industries, educational services employ the greatest percentage of residents in both communities. In West Sayville, the second greatest employment sector is split between retail and transportation/utilities, and





Housing

In both Oakdale and West Sayville, most housing units are owner-occupied, and few are vacant. In Oakdale, the vacant properties range from unoccupied units for sale to seasonal rentals. In West Sayville, the vacancies are almost exclusively seasonal rentals.



Guidance and Insight from Demographic Analysis

The demographic analysis indicates a few important trends and characteristics that may help shape the identification of needs, opportunities, and projects for the Oakdale/West Sayville NYRCR Planning Area. One of the first observations is that schools and similar educational facilities are critically important. Not only are they important public facilities that provide a necessary service in terms of education, the schools themselves are major employers. Ensuring the resiliency of educational facilities is therefore a goal strongly suggested by the Census data.

Additionally, the journey to work data indicated that most of the NYRCR's workers commute by car. This may raise the priority of resilient roadway infrastructure to provide a means to travel to a worker's place of employment. While at the same time the opportunity to improve, to create, and provide resilient improvements to the pedestrian, bicycle, and transit networks should not be overlooked.

Lastly, housing type and occupancy indicates that the resiliency of the housing stock is of vital importance. There are very few renter-occupied units in the NYRCR Planning Area, indicating relatively low residential turnover and few vacancies. The vacancy assumption is further supported by the occupancy statistics. This indicates that in the event of a catastrophic event, the homes affected are permanent residences and the affected homeowners and their families have few options for relocation within their community. The Census data therefore strongly suggests that programs and incentives to protect and preserve the existing housing supply, to provide for potential increases in the diversity of house types, as well as to provide for the temporary housing of dislocated residents, be prioritized in the NYRCR plan.

These Census findings will be incorporated into the ongoing dialogue with the NYRCR Planning Area Community and reflected in the work of the Committee as they go forward with the identification of projects to help ensure their community's resilience.





3. Effects of Superstorm Sandy

On Friday, October 19, 2012 a tropical depression formed in the Caribbean. In only six hours the depression intensified into a tropical storm. This 18th named storm of 2012 was designated Tropical Storm Sandy. By the following Wednesday on October 24th the storm's maximum sustained winds had increased to 74 MPH and Sandy was upgraded to a Hurricane.ⁱⁱⁱ

After passing through the Caribbean including Jamaica, Cuba, and the Bahamas, and fluctuating between a Category 1 and Category 2 Hurricane, on Saturday October 27th Sandy turned north toward the US coast. The storm made landfall near Atlantic City, New Jersey around 8 PM on Monday, October 29th. The winds had decreased to just below the threshold for a Category 1 Hurricane and meteorologists and the press christened this near hurricane as "Superstorm Sandy."

Sandy's historically unprecedented track approached New Jersey and New York from the east; storms typically approach from the south.^{iv} As a result, the track of Sandy resulted in a worst-case scenario for storm surge and inundation for coastal regions from New Jersey north to Connecticut, including New York City and Long Island. The storm surge came ashore near the time of high tide along the Atlantic Coast and during a full moon when tides are strongest. These factors combined for record tide levels. The storm surge in New York Harbor reached almost 14 feet at the Battery. Forty-five miles away, on the south shore of Suffolk County in Islip, the Storm surge reached nearly 8 feet. This was on top of the morning tide that had already inundated the bay front shore and had yet to retreat.

In addition to the triple threat of the enormous storm surge, the coinciding high tide and the full moon, other factors conspired to create the devastation that resulted from Sandy. Nearby maximum wind gusts ranged from 79 mph in East Farmingdale to 90 mph at Long Island MacArthur Airport in Islip. On the southward facing shores of Long Island, the storm

surge was accompanied by fiercely destructive wave action. An off-shore buoy located 15 nautical miles southeast of Breezy Point on the Rockaway Peninsula reported a wave height of 32.5 feet (the largest since record keeping began).

The effects of Superstorm Sandy on Oakdale and West Sayville were significant. At the highest point of inundation, much of the portion of Oakdale south of Montauk Highway was flooded. Flooding was equal to the expected impacts of a Category 2 hurricane despite the fact that Sandy was not at hurricane level when it made landfall on Long Island. The area of inundation in Oakdale was over one square mile and extended a mile inland along Edgewood Avenue.

Further to the east in Oakdale, the West Oak Recreation Club (WORC), a seasonal residential community, experienced extensive inundation. Many of the dwellings were damaged and property was destroyed. According to information obtained from FEMA, the number of damage claims in Oakdale exceeded 801 per square mile, the highest density breakdown category identified by FEMA.

In West Sayville, the streets along the waterfront were flooded including West Avenue, Shore Road and Clyde Street. According to a FEMA substantial damage inspection report, 50 houses in West Sayville were identified.

Along Green's Creek, flooding occurred on both sides of the creek affecting properties in both West Sayville and Sayville. Flooded roads on the Sayville side included West Lane, Anita Drive, Palmer Circle, Sunset Drive, and Montauk Highway (Main Street). Throughout the communities, a high number of trees and power lines were down. In many cases roads were impassable.

Widespread damage occurred to many coastal facilities including docks, marinas and bulk heading. The Town of Islip reported damage to the West Avenue Dock in West Sayville including damage to decking, the parking lot, electrical and water supply and a need for dredging.





Recover from yesterday, plan for tomorrow

Communications were also severely affected by Superstorm Sandy. Both land line and cellular service was out for different periods of time. During and immediately after the storm this was a major issue to the community and a significant impediment to response and recovery.

The availability of gasoline and diesel fuel was also affected by Superstorm Sandy. This was both a local issue and a regional issue. Locally, many area fuel stations were without electric power and unable to operate fuel dispensing pumps. Later, as power was restored the stations that were open exhausted supplies. "Gas lines" were common for over a week until the Suffolk County Executive issued an executive order mandating rationing by odd- even number access. Regionally, fuel supplies were also affected by supply issues to Long Island since area ports were closed. Regional power supply issues also affected the recovery of the fuel distribution function.

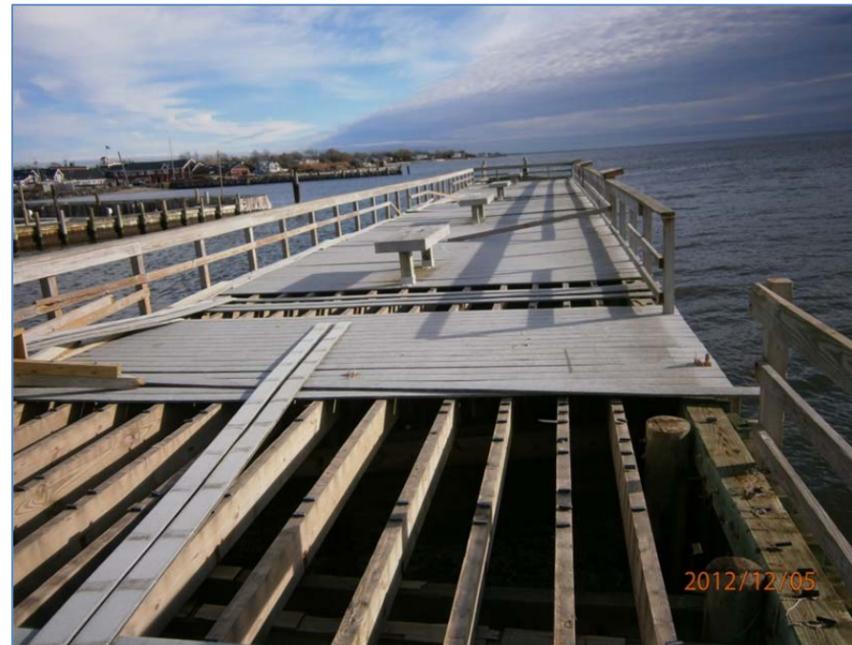
It is noted that other types of storms could affect the communities in ways that are both similar and different from Sandy. For example, other storms could have higher winds and rainfall than what occurred with Sandy. Resiliency from a variety of storm threats is necessary.

The following statements from the Co-Chairs of the Oakdale- West Sayville NYRCR Committee add an important voice to the effects of Sandy.

"My Grandfather built the Snapper in 1929 and not once in those 84 years have we seen flooding and destruction like Sandy. Even the surge from the Hurricane of 1938 was a foot lower on the Connetquot River. The main dining room at the restaurant was destroyed, we were without power for over a week and it took every effort by our family, employees and friends to reopen ten days later for a wedding. The restaurant and my home, which was also flooded, have been rebuilt, better than ever and my personal faith in the human spirit has never been stronger. The images in my mind of the storm and the destruction will never vanish, but the images and memories of employees and friends wading through knee deep water

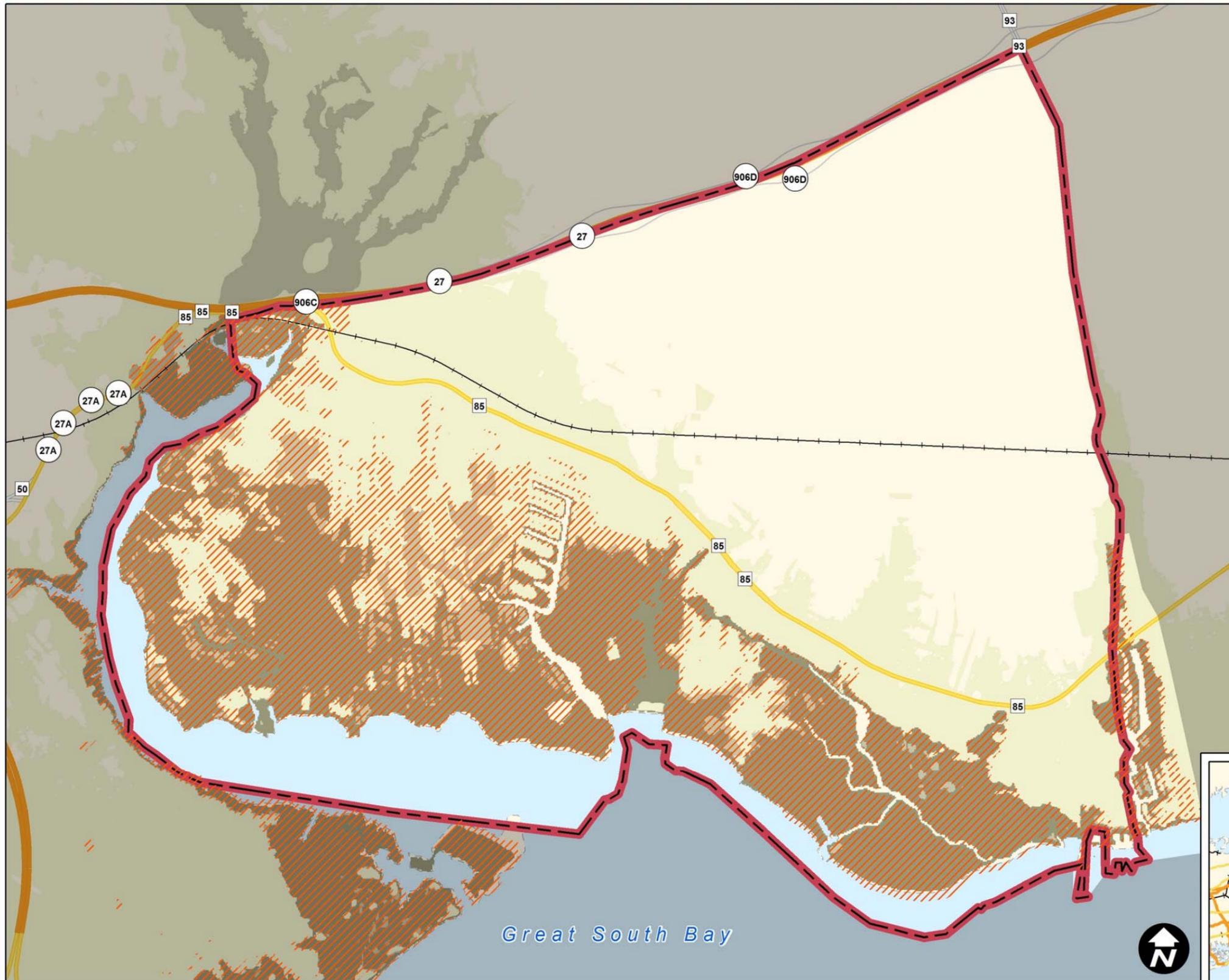
on Shore Drive to come help will always be brighter." Richard H. Remmer, Co- Chair of the Oakdale- West Sayville Community Reconstruction Committee and local business owner

"One of the most important effects of Sandy, ironically, is a positive one. It's the galvanizing effect for the community with neighbors helping each other out, businesses that got up and running with heroic efforts to serve their clients and now with the State and Federal governments helping us rebuild for long term resiliency." Ron Beattie, Co- Chair of the Oakdale- West Sayville Community Reconstruction Committee, former president of the Oakdale Chamber of Commerce



NYRCR: Oakdale/West Sayville

Risk Assessment & Hurricane Sandy Inundation Areas



Legend

Risk Assessment Area

- Extreme
- High
- Moderate

Source: NYS Department of State

Area of Inundation Hurricane Sandy

Source: Raster processing of average USGS peak surge elevations at West Islip and high-resolution LIDAR ground elevations; estimated mathematically as peak surge less ground elevation.

Oakdale/West Sayville Planning Area

Other NYRCR Planning Areas

Source: NYRCR Community-hamlet planning area is defined as the US Census designed place (CDP) area.

Long Island Railroad





4. Geographic Scope of the Plan

The identification of a geographic scope for each NYRCR Plan is of paramount importance as it helps to develop parameters and inform the extent of the planning effort. As such, establishing a geographic scope is a crucial responsibility that is undertaken by the Committee. Properly scoping the NYRCR Planning Area includes meeting federal guidelines for the appropriate use of reconstruction funds. NYRCR Plans are intended to address the damage directly resulting from Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee. As a result, communities seeking to implement projects indirectly impacted by those storms will need to demonstrate how such projects and/or policies would help to mitigate the risk of potential storm damage in the future. Guidance provided by New York State, and noted below, relative to establishing the geographic scope of a NYRCR Plan relates to asset location, risk assessment areas as well as floodplains.

Community assets most likely to be at risk due to future weather events are typically located in extreme, high, and moderate risk areas of the community. However, a review of current and historical storm damage may necessitate the inclusion of other areas in the geographic scope.

The geographic scope of the NYRCR Plan includes areas: where assets are most at risk; where future construction or reconstruction of existing development should be encouraged or discouraged; or where key investment to improve the local economy can be instituted. The identification of more resilient areas for future development can later be reinforced in municipal comprehensive plans as well as other local regulatory requirements.

Oakdale/West Sayville NYRCR Planning Area

The original NYRCR planning area was co-terminus with the hamlet boundary of the community. After Committee meetings and consideration, it became apparent that it would be appropriate to extend the planning area to Green's Creek in West Sayville. This decision was based upon the effects of Superstorm Sandy on West Sayville and also the historical connections between the two communities. Both communities are directly located on the Great South Bay and each are characterized by very low elevations south of Montauk Highway (often at elevation four feet or less).

The Committee membership was modified at this time to include representatives from West Sayville. These members have strong ties to the community and extensive civic experience in a number of community organizations.

The geographic scope was the subject of review at the first public event held on September 17, 2013. At that meeting, the public was given the opportunity to review maps of the planning area and to also provide both verbal and written comments. As a result of this process, the Committee received several comments expressing concern that the planning area did not include properties in the vicinity of the east side of Green's Creek. These residents expressed that this area was affected by Sandy and is vulnerable to future storm damage.

The Committee considered the comments at their regular meeting held on September 24, 2013. The Committee members were given the opportunity to discuss the comments and to view maps of the area including those showing risk levels and inundation levels from Sandy.

At the next meeting held on October 8, 2013, the Committee unanimously agreed to amend the planning area to include the area along the east side of Green's Creek. More specifically, the planning area was extended to Benson Avenue, then north along Saxton Avenue to Brook Street and then to the existing planning area boundary at Green's Creek. Accordingly, the planning area includes a small portion of the hamlet of Sayville both in the vicinity of Green's Creek and in the northern part of the Green's Creek watershed.





5. Review of Relevant Existing Plans and Studies

Plans and studies have been prepared at the regional, county and local levels that encompass the communities of Oakdale and West Sayville. At the regional level, broad findings and strategies are made that do not specifically address the planning area but whose policies and actions can affect the lives of all residents of the region. At the local level, specific plans can have a more direct effect on the day-to-day lives of residents.

The following is a list and summary of plans and studies identified to date that may be relevant to the Community Reconstruction Plan for Oakdale and West Sayville.

Regional

Long Island’s Future Economy- Long Island Regional Economic Development Council - 2011- This plan was initiated by New York State as a means of reviving the regional economy. The plan contains six major strategies that cover a broad spectrum of economic and quality of life issues. The Executive Summary of the Plan describes the strategies as follows (verbatim from document):

- **Create** a cohesive education and workforce training strategy through partnerships among a range of stakeholders – business, trade groups, labor, government agencies, educational institutions, parents and students – with the goal of ensuring that workers from all of Long Island’s communities are prepared to take advantage of new job opportunities in key economic growth sectors.
- **Develop** innovation and industry clusters in transformative locations across the region including downtowns, brownfields and university, research and medical centers by integrating the smart-growth principles of transit-oriented development and vibrant community life.

- **Enhance** and develop multi-faceted, interdisciplinary facilities aimed at incubating and accelerating the commercialization of innovative products generated at the region’s premier research institutions, by linking scientists, engineers, health and medical professionals to entrepreneurs and small businesses.
- **Reinvigorate** Long Island’s manufacturing sector through continued transformation from traditional defense and aerospace work to advanced technology products, creating skilled, high-value jobs and a network of nimble companies that can develop synergistic partnerships with companies in other regions of the state.
- **Produce** a new generation of sustainable, good-paying jobs in the legacy sectors of agriculture, aquaculture, fisheries and tourism by expanding export opportunities, infrastructure, recreation facilities, research partnerships and workforce training.
- **Rebuild** and expand infrastructure to improve job access, revitalize downtowns and transit hubs, speed trade, and attract and retain dynamic regional businesses and highly skilled workforce.

Regional Comprehensive Sustainability Plan- Long Island Regional Planning Council 2010- The plan noted the inability of Long Island to sustain itself fiscally, environmentally and socially based on current governance methods and policies. The plan put forward that fundamental change would be necessary to alter the course of the future by noting the following, “Despite these challenges, Long Island has a tremendous opportunity to redefine what it means to live in a sustainable 21st century suburban community, recognizing it is possible for Long Island to be affordable and prosperous, bringing a return to economic growth and strength. Our ability to act today –and leave behind the status quo -will have a tremendous impact on the future of the region.”

Fire Island Inlet to Montauk Point (FIMP) Reformulation Study, U.S. Army Corps of Engineers (USACE), In progress – According to a summary of the planning process prepared by the Corps, the purpose of the study is to identify, evaluate and recommend long-term solutions for hurricane and storm damage reduction for homes and businesses within the floodplain along the ocean and bay shoreline from Fire Island Inlet to Montauk point. The planning area extends across the bays to the mainland of Long Island

(all in Suffolk County). In some locations, the study area extends northward to Sunrise Highway. Recent media reports indicate that the study is slated to be completed in the near future. Upon approval, funding will become available to complete projects recommended by the study. It is expected that this will include increasing the height and width of the primary dune on the ocean side of the island and widening the beach face. There are also components of the plan that could affect the South Shore and could potentially involve Oakdale and West Sayville. Possible projects that have been reported include raising houses and roads and buyouts of certain highly vulnerable properties. Details are expected when the study is completed.

Long Island South Shore Estuary Reserve Comprehensive Management Plan- Long Island South Shore Reserve Council, New York State Department of State- 2001- This estuary plan includes the Great South Bay and the other bays that are part of the estuary that lies between much of mainland Long Island and the barrier beach. The plan includes recommendations for management of the estuary in a holistic manner and in contrast to the multitude of municipal, county and state jurisdictions that divide the estuary. The plan addresses, “improving water quality, restoring and protecting living resources, expanding public use and enjoyment, sustaining the estuary–related economy and increasing public education, outreach and stewardship...” Both West Sayville and Oakdale are bay-front communities that are inextricably tied to the estuary both economically and environmentally. The South Shore Estuary Reserve Council is assisted by the New York State Department of State.

County

Suffolk Country Comprehensive Plan 2035- 2011, Suffolk County Planning Commission- This report was issued as the first volume of a series that will cover all aspects of the Suffolk County environment, economy, sustainability and resource protection. Volume One began the process by presenting updated information on demographics and socio-economic information, development trends, as well as a summary of prior regional and local plans.





Sunrise Highway Corridor Study- 2010, Suffolk County Department of Planning, Towns of Islip and Brookhaven Planning Departments- This multi-jurisdictional effort, studied land development issues along the S.R. 27 corridor extending from Great River in the Town of Islip to Bellport in the Town of Brookhaven. It includes parts of the northern boundary of the planning area.

Land Available for Development and Population Analysis Western Suffolk County, Suffolk County Planning Department- 2009- This study was done as a component of the County's Comprehensive Water Resources Management Plan. The study was to determine the potential for population growth and demand for ground water. In Oakdale, it found that 51 acres of land were available for development. These were identified by residential (36 acres), commercial (10 acres) and industrial (6 acres). For West Sayville, 33 acres were identified; ten acres of agricultural land, 20 residential, two acres of commercial and one acre of industrial.

Suffolk County Demographic, Economic and Development Trends (with available updates), Suffolk County Department of Planning- 2008- This report is provides information on demographic, socioeconomic and development trends for both Suffolk County and, in some cases, for Nassau County as well. The report is updated on a regular basis with the most recent update occurring in August 2013. This report finds a slight growth in jobs in the bi-county area (+ 19,400, 1.54% compared to June 2012). Of note is the finding that the number of businesses increased 1.7% in the five years between 2006 and 2011.

Comprehensive Water Resources Management Plan (in progress), Suffolk County Department of Health- This is a very significant study that is being conducted by Suffolk County. It is for the purpose of updating a similar study that was done in 1987. The study has involved the collection and testing of extensive groundwater samples as well as the mapping of land uses and build-out projection. The purpose of the study is to ascertain if the County is meeting water quality standards that are necessary to ensure

a safe drinking water supply. Since Suffolk County's 1.5 million residents rely on groundwater as their sole source of drinking water, the quality and quantity of groundwater water is critical. There are no surface water supplies in the county, e.g., reservoirs. The study has produced some important reports but is not yet final.

Shopping Center and Downtowns, Suffolk County, New York, 2006, with 2010 survey update, Suffolk County Department of Planning- This report was published in 2006 and the data was updated in 2010. This was after the "Great Recession" began in 2008 while the economy was only beginning to recover. Oakdale was identified as having a total of 102 storefronts of which 35 were retail, 49 were non-retail (e.g., offices, personal service), and 18 were vacant. The vacancy rate was 18%. West Sayville was surveyed as having a total of 20 stores of which eight were retail, 10 were non-retail and 2 were vacant. The vacancy rate was 5%. By comparison, the vacancy rate for the Town of Islip for shopping center-type development was 12.1% and for downtowns 12.2%.

Smart Growth Policy Plan for Suffolk County, Suffolk County Department of Planning- 2000 – This report describes the Smart Growth planning process and also discusses eight Smart growth principles and how they can be implanted in the county.

Local

Town of Islip Comprehensive Plan- 1976 and 2011 Update, Town of Islip Planning Department- The plan prepared in 1976 was part of the "Community Identity" series of the Town's Comprehensive Plan process. The plan addressed detailed local issues including land use and environmental protection. Key recommendations for Oakdale included the fostering the development of a hamlet center along Montauk Highway, the use of clustering and up-zoning for the development of large tracts such as LaSalle Military Academy, protection and preservation of wetlands and a town boat launching facility on the Connetquot River. In West Sayville, the plan recommended protecting residential areas; it addressed the large Federal Aviation Administration parcel with an eye to protection and the conservation of the Green's Creek watershed, among other recommendations.

In 2011 the Town of Islip prepared a town-wide update to the Comprehensive Plan that broadly addressed issues of demographic changes, affordable housing, environmental protection, commercial development along with other issues.

Oakdale Hamlet Center Vision Plan 2008, Town of Islip Planning Department- 2008- This plan specifically addressed the commercial corridor in Oakdale along C.R. 85, Montauk Highway. It included the following policy recommendations: Development should create a sense of place, a downtown character, a maritime theme, the removal of blight, diversification of housing stock for smaller households, cross access agreements to interconnect properties and traffic calming.

Town of Islip All Hazard Mitigation Plan, Town of Islip- 2008- The purpose of this plan was to identify all of the Town's natural, human and technological hazards, to review and assess post disaster occurrences, estimate the probability of future occurrences, identify vulnerability, set goals to reduce potential impacts and recommend a prioritized list of solutions. The plan is currently being updated by the Town.

Green's Creek and Brown's River Watershed Management Plan- Town of Islip- 2007- This plan encompasses the eastern portion of the NYRCR planning area and includes portions of West Sayville and Green's Creek. The plan is a comprehensive assessment of the natural resources, habitats and environment of the watershed. It recommends actions to protect the watershed from further degradation and also recommends actions for the restoration of environmental resources.

Town of Islip Sewer Study- (Pending), Town of Islip- Town representatives have indicated the intention to start a planning study of the feasibility of installing sewers within the planning area- and extending to other hamlets to the east. The study is being funded by New York State. Expected completion is the Spring of 2014.





6. Community Vision

One of the first steps in the NYRCR planning process was the development of a Community Vision Statement. A vision statement is a concise expression of a community's values and is also a broad image of its future. It serves to reference all subsequent work in the planning process and is a way of keeping the plan on track. All strategies and projects identified later in the process should be checked against and adhere to the Community Vision so as to ensure that recommended actions do not detract from or eventually stand in the way of the community achieving its desired goals.

The formation of a vision statement is as much about the process as it is about the final product. That is, the discussions that go into developing a vision are as important as the final product. It is the expression of individual ideas and values, along with a healthy level of debate and give-and-take, which enables a consensus to be formed. This consensus is the foundation of a vision statement that truly reflects a community's collective aspirations of the future.

The Community Vision should:

- Be specific enough to be meaningful, while broad enough to be inclusive,
- Highlight what is unique about the community, and
- Acknowledge an understanding of the community's vulnerability to coastal natural hazards, with a focus on a resilient and safer future.

The first official Committee meeting included an exercise in which members were asked to imagine their communities in the future 10 years, 20 years, 50 years in the future, and envision what it would look like to be safe and resilient. The Committee was asked to suggest ideas, words, and phrases that illustrate what makes their community livable, unique and appealing, what should be improved, and what should be preserved.



Written comments and suggestions were submitted by Committee members and included in the deliberations.

The second Committee meeting was used to refine the Community Vision Statement with the purpose of sharpening it to a point where the Committee was comfortable introducing the Vision to the larger community at the first public engagement event.

The first public event was held on September 17, 2013, and was designed as an open house with multiple information/ input stations. Community members were greeted with a large board that read, "What is Great About Your Community?" They were then presented with markers and post-it notes to contribute their ideas to a Community Word Cloud.



This warming exercise was intended to get them thinking about what they love about their area, what they want it to look like in the future, and what is most important to preserve going forward. This prepared the community members for the next station where they could view the draft Community Vision and directly provide their written feedback.



Committee Meeting #3 was held on September 24, 2013 and included a review of the public's feedback on the draft Community Vision Statement. Upon completion of the review, the Committee determined to approve the Vision Statement for incorporation into the Conceptual Plan. The Committee is aware that the Community Vision Statement can be revisited throughout the planning process if the Committee wishes to do so. The Committee understands that vision statements are intended to be used and not filed away and forgotten.

Community Vision Statement for Oakdale-West Sayville:
Oakdale and West Sayville will be communities with a "greener" and more sustainable future with hazard resistant buildings and infrastructure and well-functioning natural systems that can prevent or minimize damage to life and property and the disruption of critical services. The rich history of the communities, the spectacular public and private spaces emphasizing the importance of the health of our waterways and coastal proximity will guide future development with downtown identities which will focus on the essential character and charm of Oakdale and West Sayville.



7. Community Assets

One critical element of the NYRCR Plan is to ensure that both reconstructed assets and new construction post-storm are more resilient against future storms. This begins with the preparation of a community asset inventory for the Oakdale/West Sayville NYRCR Planning Area. The purpose of the inventory is to compile a comprehensive description of the assets located within as well as beyond the planning area (i.e., a resource that is physically located outside of the NYRCR planning area but whose service area encompasses the community whose loss or impairment due to weather events and/or flooding would put critical facilities and essential social, economic or environmental functions of the community at risk).

Generally, community assets include places or entities where economic, environmental and social functions of the communities occur in addition to critical infrastructure required to support those functions. Identified assets can consist of public and privately-funded facilities and services such as schools, hospitals and medical facilities, as well as emergency services including fire and police protection. Community assets can also include cultural, natural and recreational resources that play a critical role in a community's identify and that advance the health of the natural environment. These critical community resources promote the health, safety, and general welfare of the Oakdale/West Sayville community. Aside from structures or services, another important community asset class relates to infrastructure and/or physical systems. These range from electric and gas utilities to key transportation routes which provide access to and within a community (i.e., roadways and rail systems). Concentrations of land uses such as those that would comprise a downtown commercial district were also noted.

Numerous data sources were reviewed and local community and Committee feedback were used in order to identify assets within the Oakdale/West Sayville community. These assets were characterized based on their location relative to risk area designations/flood hazard regions,

classification as a critical or non-critical facility as well as asset class guidance provided by New York Rising Community Reconstruction Program documents.^v

Initial Asset Inventory

The identification of known assets is an important step in developing strategies to improve the resiliency of Oakdale/West Sayville. The assets were identified through two methods: community engagement and technical mapping. The community engagement approach was undertaken by the Oakdale/West Sayville NYRCR Committee, who identified assets known to community residents. The technical mapping effort was undertaken by the Jacobs/Cameron team (NYRCR Consulting Team) using data supplied by NYS Department of State (NYS DOS) and other state and federal agencies including FEMA. The mapping effort is intended to supplement the work of the Oakdale/West Sayville NYRCR committee, identifying resources that may be inaccessible to the public but regulated by a public agency (such as undeveloped parklands and marshes), as well as those that may hide in plain sight—assets vital to the community's health and resilience that go unnoticed on a day-to-day basis because they only become obvious when they fail, such as small roadway bridges and more obscure government service offices. The assets identified through the mapping effort will be combined with the asset data provided by the NYRCR Committee and community residents during committee and public workshop sessions. The result will be a complete picture of not only the physical assets themselves but their value as perceived by the community.

The thematic maps beginning on page 20 illustrate various assets located within Oakdale/West Sayville. Map data is sourced primarily from geodatabase and shape-file resources provided by the NYS DOS and supplemented by data readily available to the public through the NYS Department of Environmental Conservation. Some data sources were cross-referenced with FEMA HAZUS data sets for New York to verify the accuracy of the federal data, although in most cases, NYS DOS data was presented.

Risk Assessment

Risk Assessment Area data is included to depict the risk level to various government services and community resources and suggest issues for further consideration in the development of strategies and projects. The tables on these pages summarize the preliminary findings, listing the assets and the risk assessment area where they are located.

Understanding which areas have been and will be affected by storms and other threats such as sea level rise is the first step toward understanding what's at risk in the planning area. The three risk assessment areas – extreme, high, and moderate – depict geographic areas at risk from coastal hazards according to differences in the exposure of the landscape. Assets located in the extreme risk area are currently at risk of frequent inundation, vulnerable to erosion in the next 40 years, or likely to be inundated in the future due to sea level rise. Assets located in the high risk area are currently at infrequent risk of inundation or at future risk from sea level rise. Assets located in the moderate risk area are currently at moderate risk of inundation from infrequent events or at risk in the future from sea level rise.

1. Cultural, Natural, and Recreational Resources

The South Shore of Long Island has historically been and continues to be a natural and recreational resource. The area along the coastline is also the location most likely to be inundated during a storm event, but for undeveloped natural coastal resources, their location provides protective detention capacity lessening the impact of storm surges on inland locations. Many of these resources are relatively large in geographic area and span multiple Risk Assessment Areas.

Cultural and Recreational Resources are named according to the data set provided by the responsible government agency. Natural features that are elements of the landscape and not given place names by an agency are not named or listed individually. When wetlands are associated with a waterbody, they are named as associated with that waterbody.

The Oakdale/West Sayville NYRCR Planning Area is buffered from the Great South Bay by a network of tidal marshes and wetlands. These areas are identified as parks, but serve more of an ecological function than a traditional recreational one.





Parkland Resources

Asset/Resource	Risk Assessment Area(s)
Ludlows Creek State Tidal Wetlands	Extreme, High, Moderate
Connetquot River (aka Pickman- Remmer) State Tidal Wetlands	Extreme, High
Pepperidge Hall Marsk State Tidal Wetlands	Extreme, High

The rivers and creeks that flow north to south through the NYRCR Planning Area are associated with several areas of freshwater wetlands that transition to tidal wetlands near the coast. One area of isolated Maritime Grassland is located in a non-risk area north of the Long Island Railroad.

Natural Resources

Asset/Resource	Risk Assessment Area(s)
Tidal Wetlands associated with Indian Creek and unnamed water bodies in state tidal wetland resource areas	Extreme, High
Freshwater Wetlands associated with West Brook, Indian Creek, and Green Creek	Extreme, High, Moderate
Natural Heritage Priority Communities: Maritime Grasslands	NA

Two National Register-listed resources are located in the Oakdale/West Sayville NYRCR Planning Area. Both are north of Montauk Highway, in an area not identified as a risk area, but immediately adjacent to the moderate risk area.

National Register Listed Historic Resources

Asset/Resource	Risk Assessment Area(s)
Jacob Ockers House	NA
St. John's Episcopal Church and Cemetery	NA



The Oakdale/West Sayville NYRCR is also home to two National Historic Landmarks, located at the Long Island Maritime Museum in West Sayville. Both landmarks are vessels: the Priscilla, which is in the water and the Modesty, which is currently unrestored and in storage above the flood zone.

Other natural and cultural facilities, in particular those under the jurisdiction of the County and Town, will be added to the Asset Inventory in the final CR plan.

2. Health and Social Services: Life Safety

Health and Social Services: Life Safety includes fire protection, police services, hospitals, and emergency operations facilities.

There are five Emergency Operations Facilities in Suffolk County. These facilities would coordinate emergency services during an emergency. Two of these facilities are along the South Shore of Long Island: the Babylon Town Civil Defense facility is located directly north of the Village of Lindenhurst NYRCR Planning Area and the Islip Public Safety facility is located between the West Islip and the Oakdale/West Sayville NYRCR Planning Areas.



The Oakdale/West Sayville NYRCR Planning Area does not have a police station within it. The Suffolk County Police Department provides police services for the NYRCR Planning Area. The NYRCR Planning Area has two Fire Stations within it. Both fire stations are located in the Moderate Risk Assessment Area.

Fire Stations

Asset/Resource	Risk Assessment Area(s)
West Sayville HQ Fire Station	Moderate
West Sayville Fire Station 1	Moderate

There are no hospitals located within the Oakdale/West Sayville NYRCR Planning Area. The closest hospital, Southside Hospital Medical Center, is located in West Islip.

Ambulance service for Oakdale and West Sayville is provided by the Community Ambulance Company, a municipal entity located in Sayville. The facility is not located in a risk area.

3. Health and Social Services: Administration and Education

Community assets reviewed in this category serve a variety of public functions, from health treatment facilities to general purpose shelters in public schools, and post offices to town halls. During a storm event, these facilities may potentially serve as critical disaster response and recovery centers, the identification of which is essential to future disaster management and preparedness.

The Federal Aviation Administration, within the US Department of Transportation, comprises the one federal non-recreation area in the NYRCR Planning Area and is located in a non-risk area.

Federal Non-Recreation Areas

Asset/Resource	Risk Assessment Area(s)
US Dept. Of Transportation (FAA)	N/A

There are six Office for Persons with Developmental Disabilities (OPWDD) facilities located in the NYRCR Planning Area. Two fall within a moderate risk area along Montauk Highway near the Oakdale LIRR station in the



western portion of the NYRCR Planning Area. The remaining four facilities are located in the northeast portion of the NYRCR Planning Area within a non-risk area.

NYS OPWDD State and Voluntary Program Locations

Asset/Resource	Risk Assessment Area(s)
Montauk Highway IRA	Moderate
Vanderbilt Blvd IRA	Moderate
Sycamore Avenue	N/A
Bourne Boulevard	N/A
Skills Unlimited	N/A
Waiver Services, Day Training, Sheltered Workshop	N/A

The NYRCR Planning Area is served by the Oakdale and West Sayville post offices located along Montauk Highway. Both fall within a moderate risk area.

Post Offices

Asset/Resource	Risk Assessment Area(s)
Oakdale	Moderate
West Sayville	Moderate

One religious institution, Saint John's Church, is located on Montauk Highway and has been identified as being in a moderate risk area in the central portion of the NYRCR Planning Area.

Religious Institutions

Asset/Resource	Risk Assessment Area(s)
Saint John's Church	Moderate
B'nai Israel Reform Temple	Moderate

There are six schools located in the NYRCR Planning Area, two of which are located in non-risk areas. Four schools are located in moderate risk areas near the LIRR rail line and Montauk Highway.

Three of the schools are identified by NYS DOS as emergency shelter facilities, as noted in the following table. Two are located within non-risk areas, while one, the Oakdale Bohemia Junior High School, is located within a moderate risk area near the Oakdale LIRR station.

Schools

Asset/Resource	Risk Assessment Area(s)
Dowling College	Moderate
Saint John's University	Moderate
Idle Hour Elementary	Moderate
Premm School	Moderate
Oakdale Bohemia Junior High School (Shelter)	Moderate
Cherry Avenue School (Shelter)	N/A
Sayville High School (Shelter)	N/A

The NYRCR Planning Area contains two state-owned properties located inside risk areas, both of which are located in the southwest region near the marina within moderate and moderate to extreme risk areas.

State-owned Buildings and Properties

Asset/Resource	Risk Assessment Area(s)
Environmental Conservation - Ludlow's Creek Tidal Wetlands	Moderate
Environmental Conservation - Pickman-Remmer Tidal Wetland	Extreme, High, Moderate
People with Developmental Disabilities - Sayville Hostel #2102	N/A

4. Infrastructure: Transportation

Data sets reviewed within this category include both transportation infrastructure as well as transportation-related facilities. Transportation assets within the Oakdale/West Sayville NYRCR Planning Area are catalogued below.

Major roadways extending through this NYRCR Planning Area include Sunrise Highway (SR 27) which generally represents the northern boundary of this planning area. SR 27 in the vicinity of Pond Road is within a Moderate Risk Assessment Area. Montauk Highway/Main Street (SR 27A) extends through a Moderate Risk Assessment Area with a small area west of Baymens Court/Sunset Drive in an Extreme Risk Assessment Area.

Long Island Railroad's (LIRR) Montauk line provides service to points west and east. This particular NYRCR Planning Area is home to the Oakdale LIRR station. Three grade crossings (Oakdale Bohemia Road, Locust Avenue, and Cherry Avenue) are situated within the Oakdale/West Sayville NYRCR Planning Area. Each of these is gate-protected with two crossing gates.

A total of six LIRR spans, built in the early 1960s, were identified as being in poor condition based on state data. These will be further described in the final plan. Other identified resources are:

Bridges in Poor Condition^{vi}

Asset/Resource	Risk Assessment Area(s)
Byron Lake Pk. Ped. (BIN # 2261270)	High

Two scour critical bridges, noted below, are located in this NYRCR Planning Area.

Scour Critical Bridges^{vii}

Asset/Resource	Risk Assessment Area(s)
Shore Drive crossing Grand Canal (BIN # 3300750)	Extreme
Hollywood Drive crossing Grand Canal (BIN # 3300760)	Extreme





5. Infrastructure: Utilities

A number of key utilities are located within the Moderate Risk Assessment Area of the Oakdale/West Sayville planning area, including sewage treatment plants, drinking water wells and communications towers. At-risk properties dedicated to flood control are found in both the Extreme and Moderate Risk Assessment Areas. Water, electric and gas distribution systems have not been mapped and quantified here but are distributed throughout developed areas in these Risk Assessment Areas.

Infrastructure Resources

Asset/Resource	Risk Assessment Area(s)
2 flood control properties	Extreme
5 flood control properties	Moderate
1 water treatment plant	Moderate
2 sewage treatment plants	Moderate
1 drinking water well	Moderate
2 microwave towers	Moderate
1 rail support facility	Moderate

6. Housing

There are over 3,000 residential structures in Risk Assessment Areas in the Oakdale/West Sayville planning area. Approximately half of the residential structures are located in a Moderate Risk Assessment Area north of Montauk Highway. The remaining structures – comprised almost entirely of single-family homes – are situated south of Montauk Highway and within Extreme and High Risk Areas. Approximately 90 percent of the multi-family and two-to-three-family structures are located north of Montauk Highway.

Housing Resources

Asset/Resource	Risk Assessment Area(s)
764 single-family, 4 multi-family structures	Extreme
362 single-family, 2 two-three-family, 4 multi-family structures	High
1,818 single-family, 41 two-three-family, 48 multi-family units	Moderate

7. Economic Centers

Most, or approximately 92 percent, of the at-risk commercial and industrial properties in the Oakdale/West Sayville planning area are located along the Montauk Highway corridor. Except at the extreme eastern and western ends, the entire corridor is in a Moderate Risk Area. The remaining commercial and industrial properties (8% of the total) are along the waterfront in an Extreme Risk Assessment Area, except for one property that is within a High Risk Area. Note that some properties have multiple businesses although they are counted as a single parcel.

Economic Resources

Asset/Resource	Risk Assessment Area(s)
7 commercial, 1 industrial property	Extreme
1 commercial, 1 industrial property	High
109 commercial, 7 industrial properties	Moderate

Initial Asset Inventory: NYRCR Committee and Public Outreach Contributions

The initial plan was to have the GIS data driven maps discussed previously serve as a base for the asset inventory work of the NYRCR Committees and community residents; however, the urgency of the New York Rising Community Reconstruction Project required that the NYRCR committees begin assessing their community’s needs and opportunities before the GIS data was available. The results of this approach proved to be beneficial: without a basemap of pre-identified assets, the NYRCR committees and community residents felt free to identify all manner of assets that were vital to the functioning and identity of their community. As a result, the



NYRCR Committee and community input maps call out typical assets, such as police and fire stations, but also important community features, such as popular restaurants and meeting halls that serve as community centers. This latter category is vitally important as the services of these community centers, such as VFW halls and other civic organization headquarters, have established themselves as resources during times of crisis, centers for normalizing and stabilizing community identity in the aftermath, and places of celebration during good times.

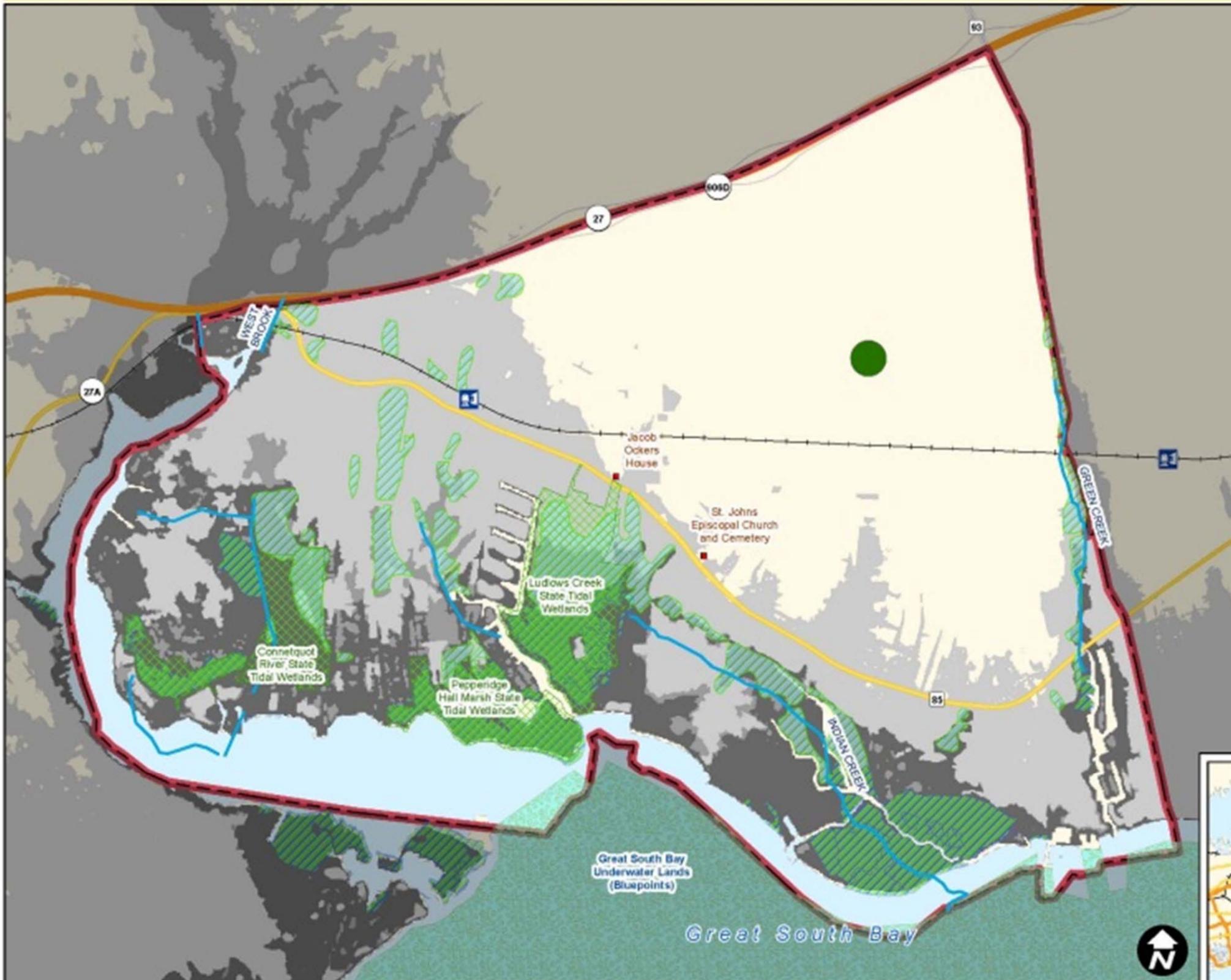
The NYRCR Committee and community input maps of assets are shown on the following pages. This data will be reconciled with the GIS data to complete the whole picture of assets, needs, and opportunities in the NYRCR Planning Area.

Next Steps - Continue to refine the assets inventory working with the Committee, government agencies and other relevant entities.



NYRCR: Oakdale/West Sayville

National Register Historic Resources, Natural Resources, and Recreational Areas



Legend

- Rivers
- Federal Recreation Areas
- State Parks
- Tidal Marshes
- Long Island Railroad Station
- Nature Preserves
- Natural Heritage Communities
- County Recreation Areas
- Freshwater Wetlands
- Historic Resources
- Oakdale/West Sayville Planning Area
- Other NYRCR Planning Areas
- Long Island Railroad

Risk Assessment Area

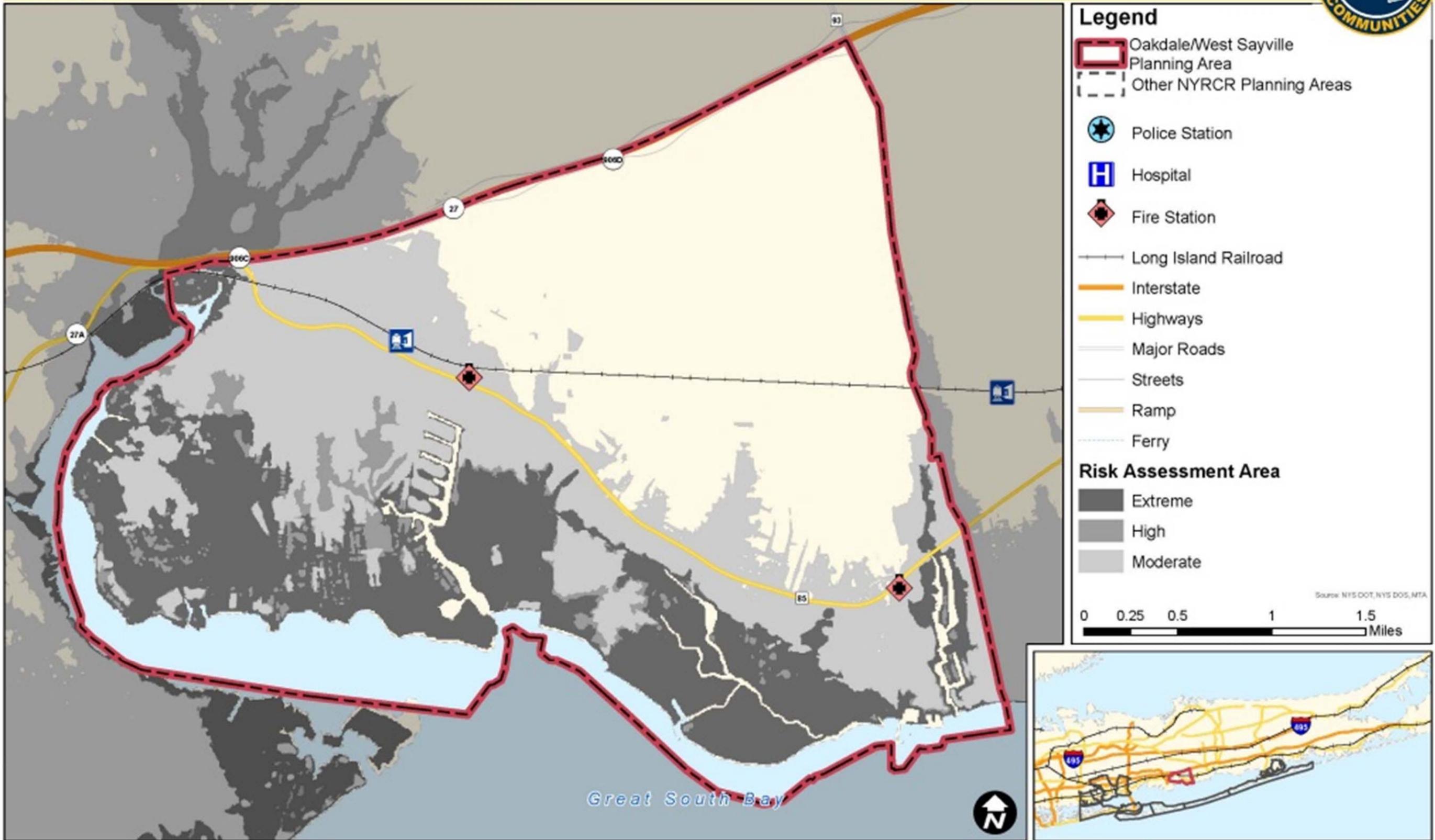
- Extreme
- High
- Moderate

Source: NYS DOT, NYS DOS, MTA

0 0.25 0.5 1 1.5 Miles

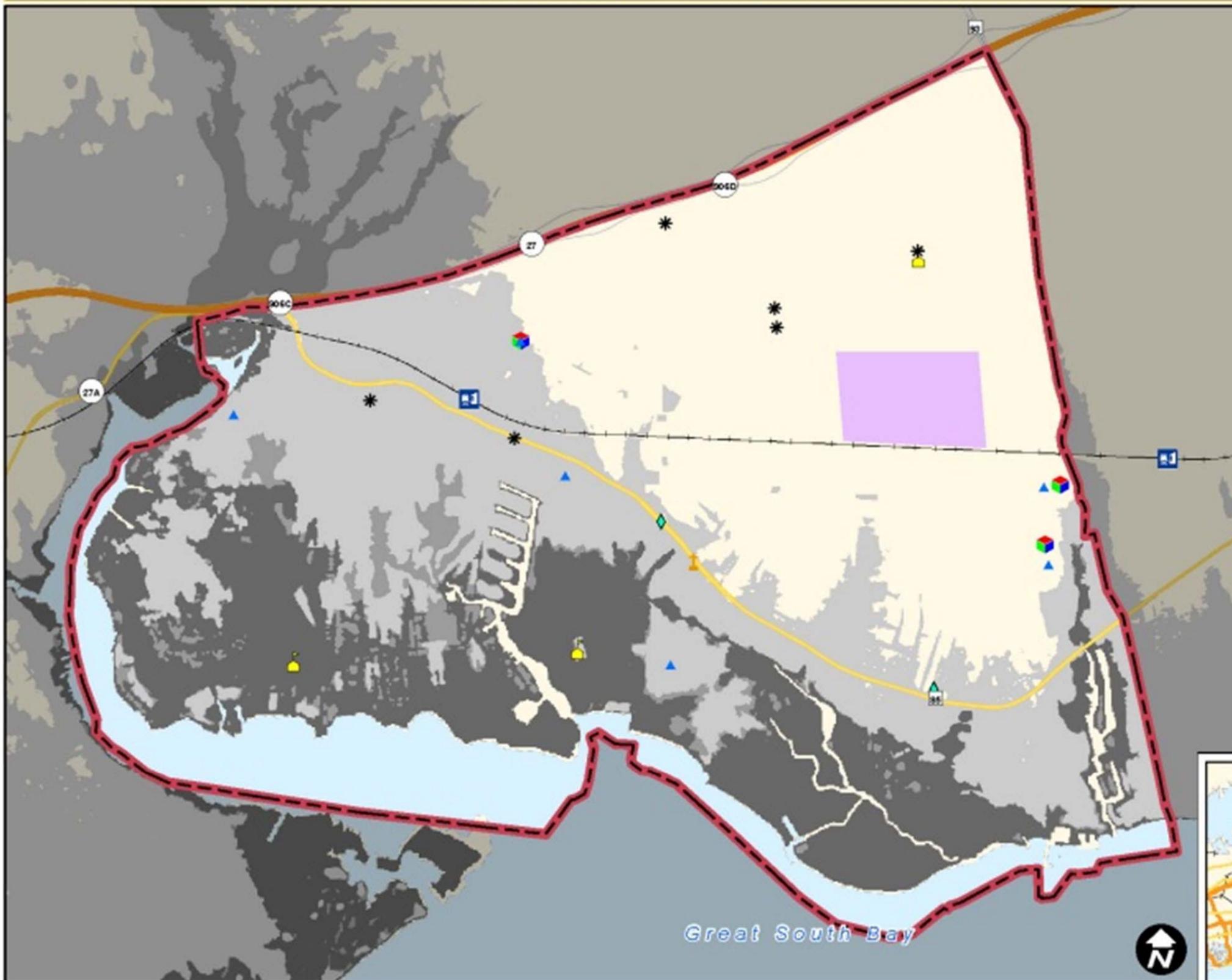


NYRCR: Oakdale/West Sayville Emergency Services



NYRCR: Oakdale/West Sayville

Health and Social Services: Administration and Education



Legend

- ★ Chemical Dependence Treatment Sites
- 🏠 Extension Clinics
- 🏢 NYS Facilities & Offices
- ✳️ NYS OPWDD Locations
- 📍 Post Offices
- ✝️ Religious Institutions
- 🎓 Schools
- 🏠 Shelters
- 🏠 State-owned Properties
- 🏛️ Town/Village/City Halls
- 🏠 Veteran's Affairs Facilities
- 🟪 Federal Non-Recreation Area
- 🚉 Long Island Railroad Station
- 🔴 Oakdale/West Sayville Planning Area
- ⬜ Other NYRCR Planning Areas
- 🚊 Long Island Railroad

Risk Assessment Area

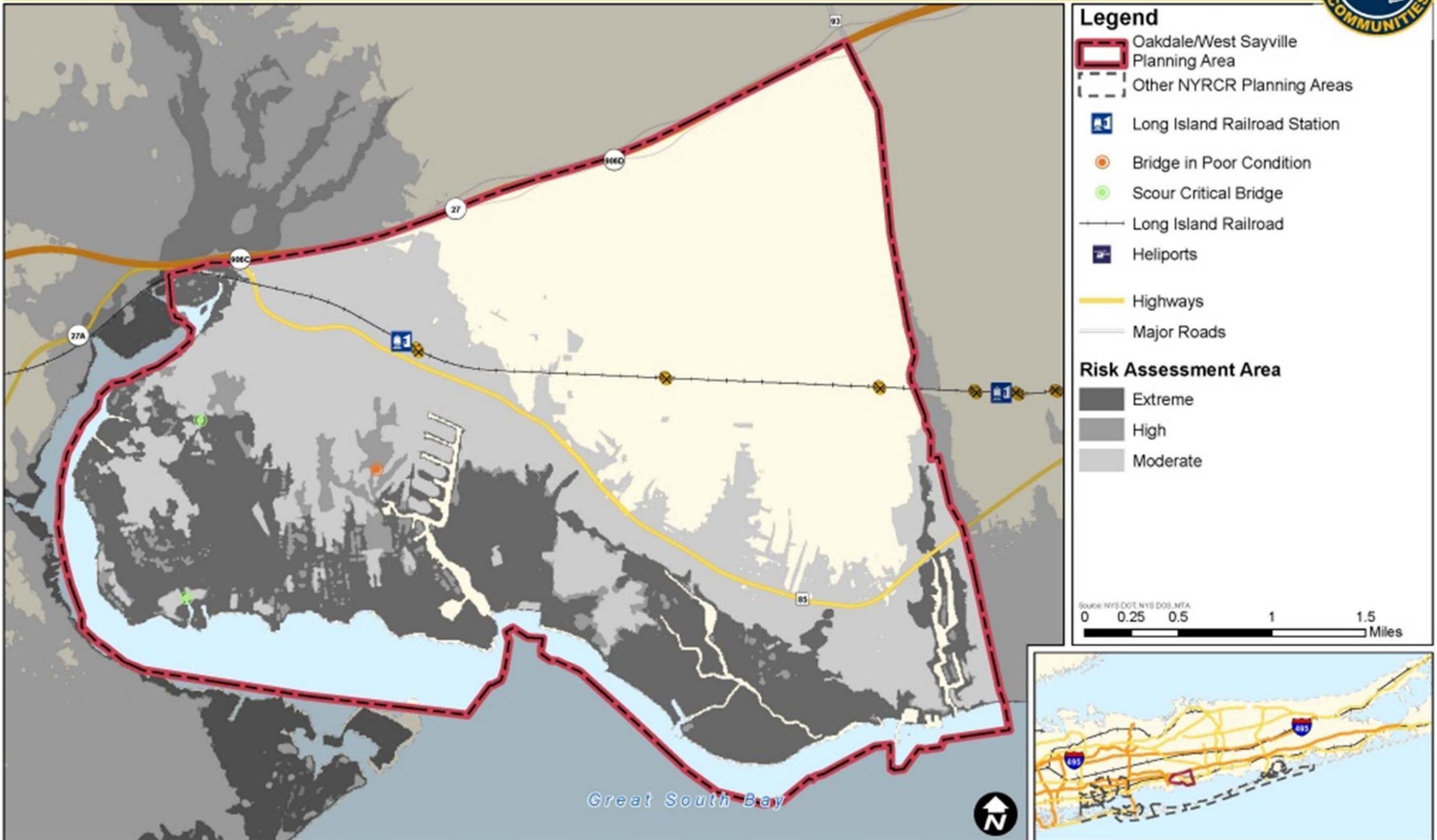
- 🟤 Extreme
- 🟠 High
- 🟡 Moderate

Source: NYS DOT, NYS DOG, MTA

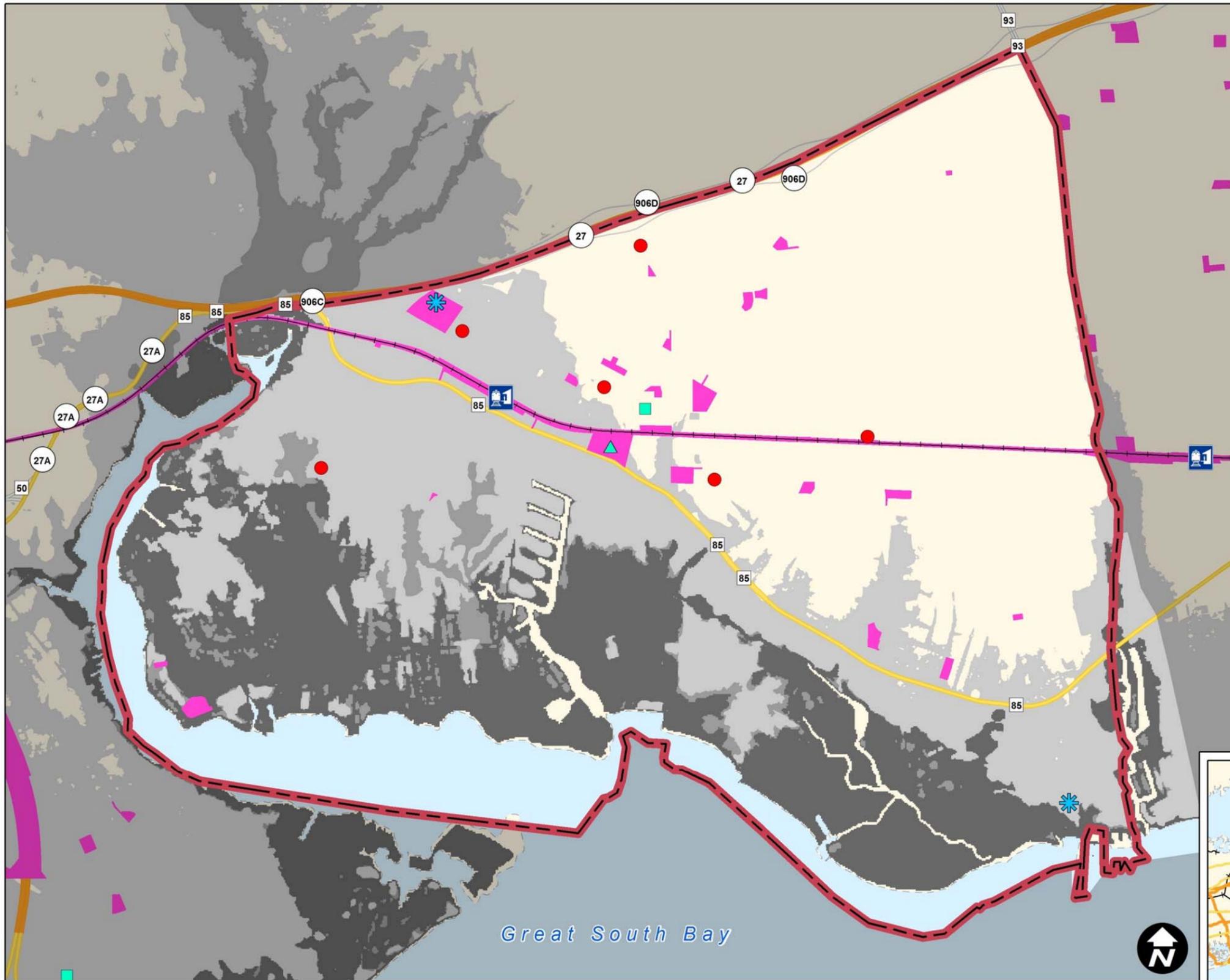
0 0.25 0.5 1 1.5 Miles



NYRCR: Oakdale/West Sayville Transportation Assets



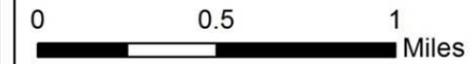
NYRCR: Oakdale/West Sayville Utilities



Legend

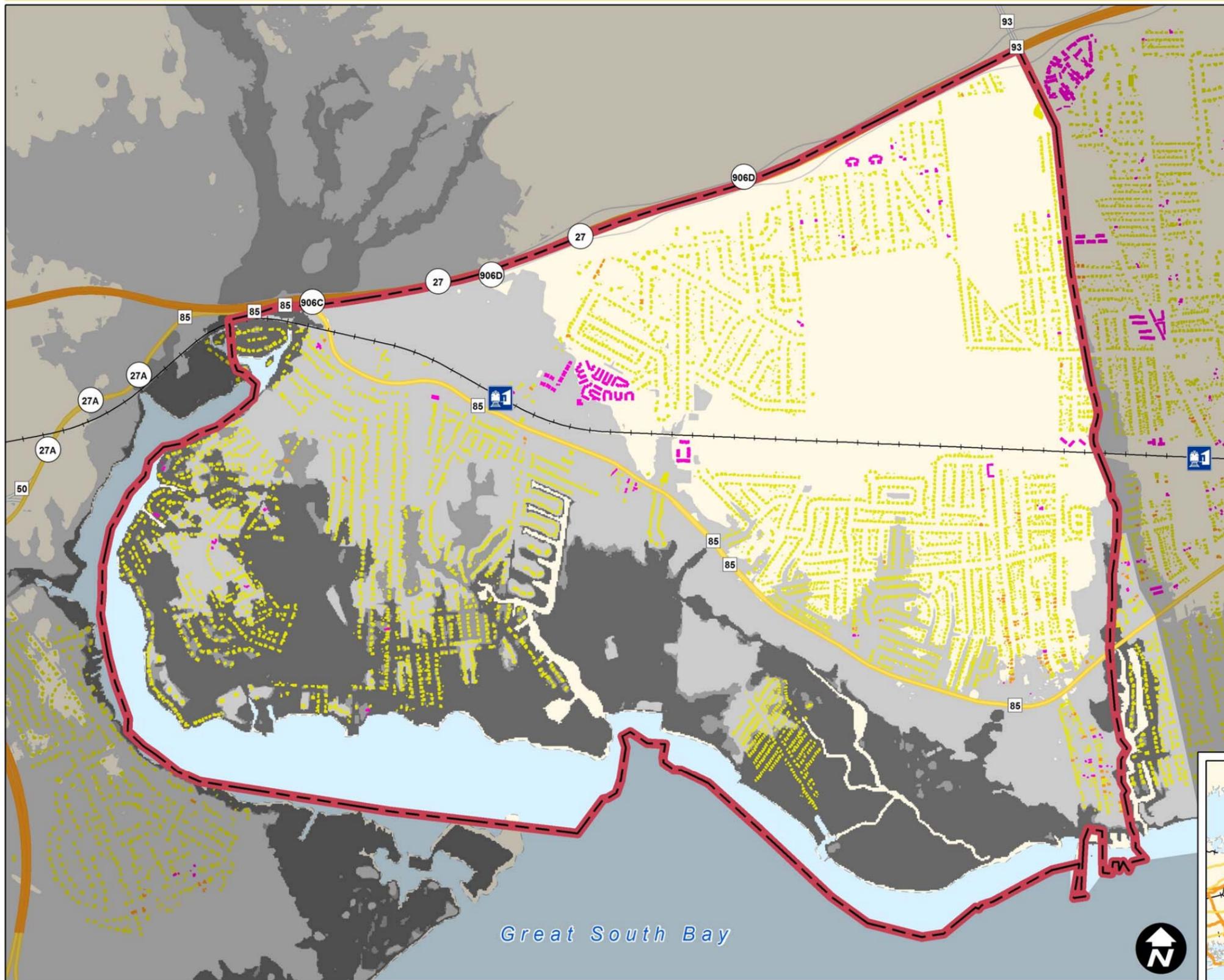
- Sewage Treatment Plants
 - Drinking Water Treatment Plants
 - ▲ Drinking Water Wells
 - FM Stations
 - ★ Microwave Towers
 - Cellular Towers
 - Utility Property
 - Long Island Railroad Station
 - Oakdale/West Sayville Planning Area
 - Other NYRCR Planning Areas
 - Long Island Railroad
- ### Risk Assessment Area
- Extreme
 - High
 - Moderate

Source: NYS DOT, NYS DOS, MTA



NYRCR: Oakdale/West Sayville

Housing: Single- and Multi-Family



Legend

Housing Unit Type

- Single Family
- 2- to 3-Family
- Multi-Family
- Long Island Railroad Station
- Oakdale/West Sayville Planning Area
- Other NYRCR Planning Areas
- Long Island Railroad

Risk Assessment Area

- Extreme
- High
- Moderate

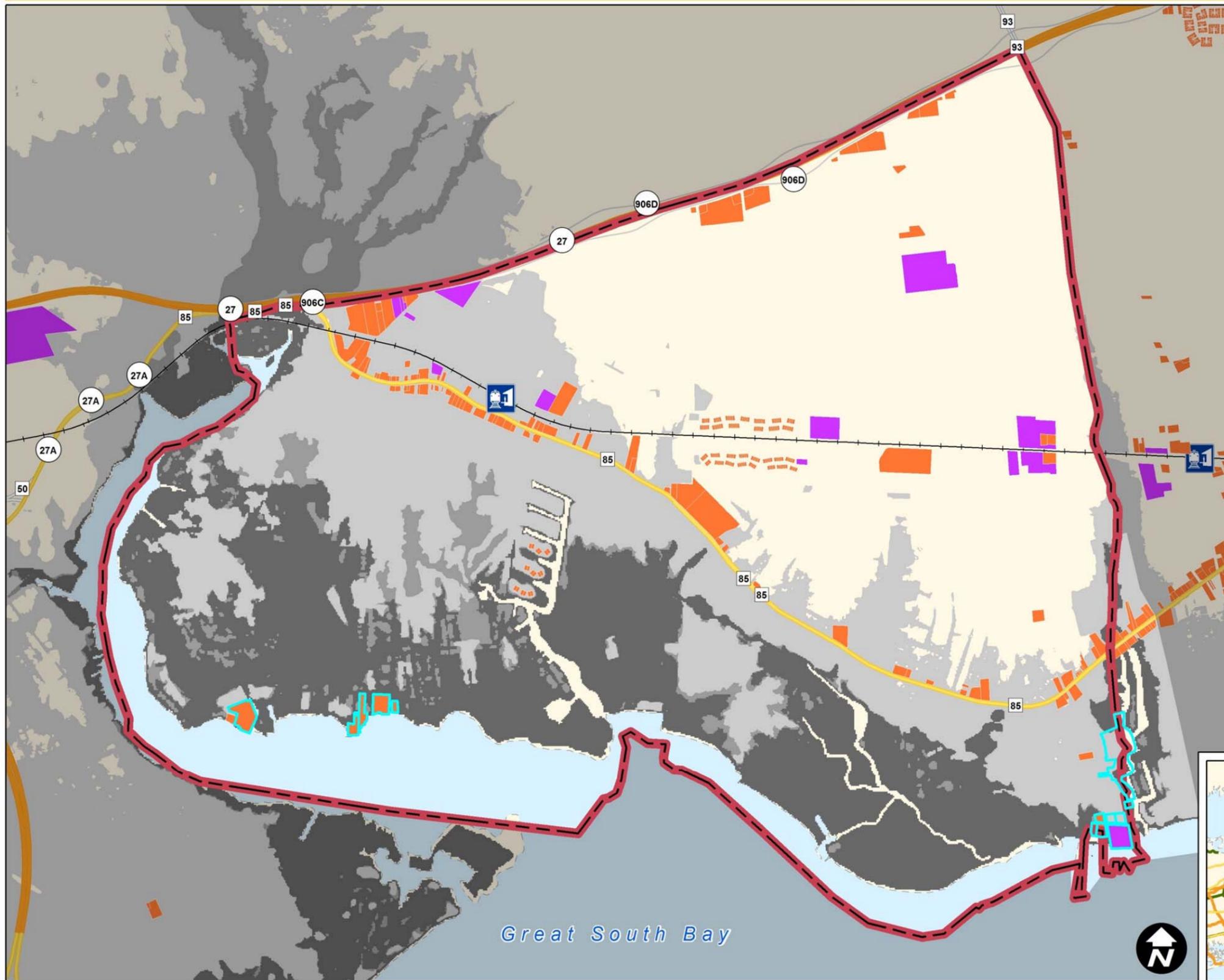
Source: NYS DOT, NYS DOS, MTA

0 0.5 1
Miles



NYRCR: Oakdale/West Sayville

Economic Assets: Commercial and Industrial Properties



Legend

Commercial/Industrial Properties

- Commercial (Orange square)
- Industrial (Purple square)
- Oakdale/West Sayville Planning Area (Red outline)
- Other NYRCR Planning Areas (Dashed black outline)
- Long Island Railroad Station (Blue square with '1')
- Long Island Railroad (Black line with cross-ticks)

Risk Assessment Area

- Extreme (Dark grey square)
- High (Medium grey square)
- Moderate (Light grey square)

Source: NYS DOT, NYS DOS, MTA

0 0.5 1 Miles



NYRCR: Oakdale/West Sayville Committee-and Community-Identified Assets in the Extreme Risk Area

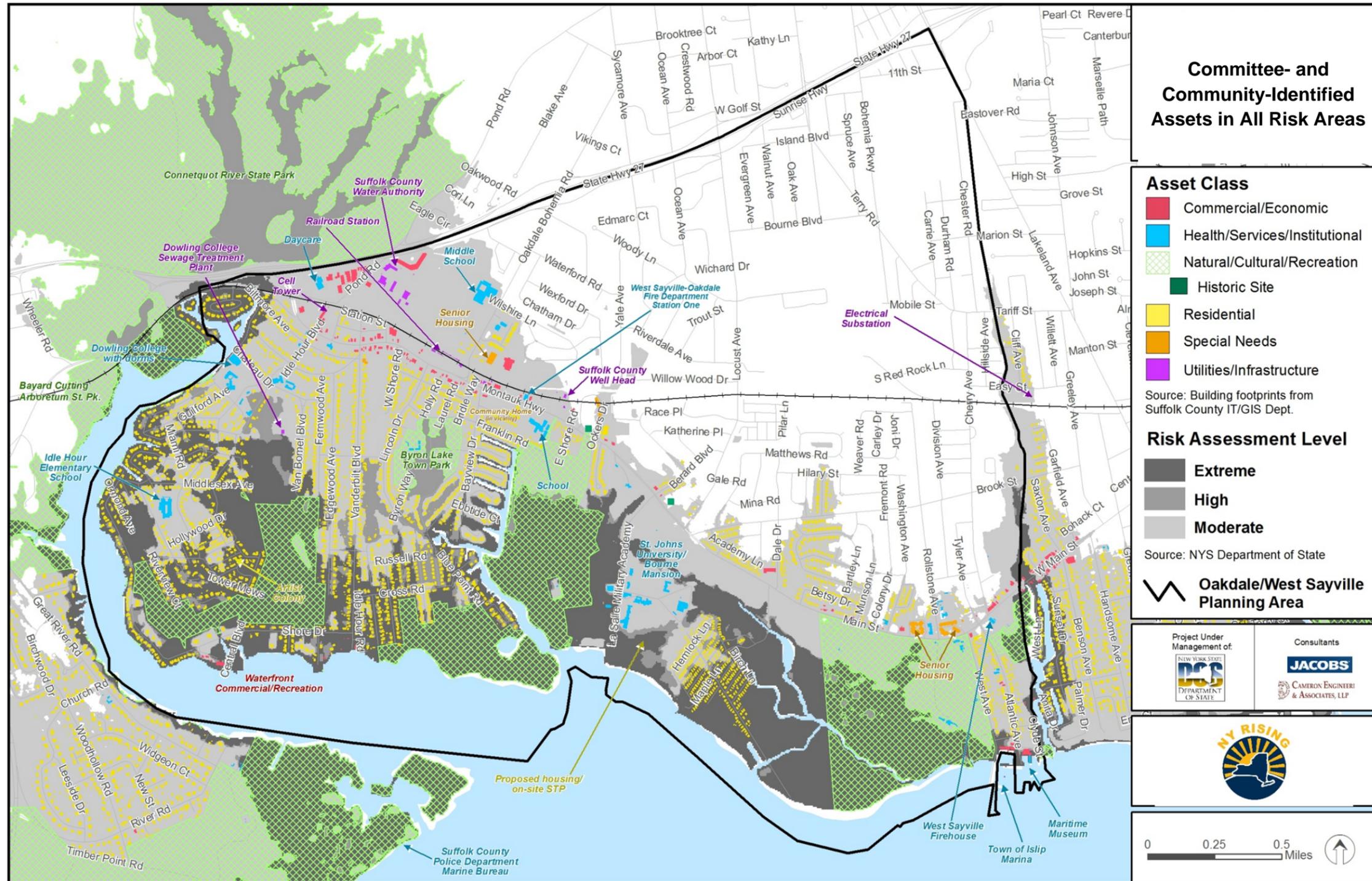


NYRCR: Oakdale/West Sayville

Committee-and Community-Identified Assets in the Extreme and High Risk Areas



NYRCR: Oakdale/West Sayville Committee-and Community-Identified Assets in All Risk Areas





8. Needs/Opportunities and Strategies

As discussed in Section Three of this report, the effects of Superstorm Sandy were devastating. Both short-term and long-term impacts resulted from the storm affecting all aspects of life for many residents and business owners of Oakdale and West Sayville. Impacts ranged from the immediate, such as emergency life safety situations, to the more long term, such as the destruction of homes.

In Section Seven, *Community Assets*, the report notes the work of the Committee is identifying those facilities and improvements that are both critical to the functioning of the communities and also those that have a high value in terms of local importance. The asset information was reviewed along with the risk maps to better understand the threat to the identified assets. Following this process, the Committee then began compiling the needs and opportunities of the Oakdale and West Sayville Communities.

Needs are those problems and conditions that must be addressed to both return the community to pre-storm conditions and to also provide the ability of the communities to build back in a more resilient manner. It is not limited to merely identifying what needs to be done to fix what is broken but to go beyond and, “Build Back Better”. As such, the needs of the Oakdale and West Sayville were considered by the Committee as those needs in the immediate and short-term as well as those needs extending into the longer term.

On the flip side of needs is the concept of opportunities. This concept is based on the idea that rather than just address a need (solve a problem), there may also be the opportunity to create something that will constitute a greater benefit than simply fixing the problem. The benefit may be in many forms including economic and environmental. In this manner, the solving of a need is also an opportunity to create other benefits.

A good example is found in the NYRCR Program Guidance Document developed by New York State. The document describes the development of the River Walk in San Antonio, Texas. San Antonio was severely affected by flooding in 1921 and suffered the loss of 50 people along with extensive property damage. The city had a need to protect its population from future flood risk and started preparing plans to relocate the river around the downtown. A young architect (Robert Hugman) understood the need but also saw an opportunity. He created a plan to address the flood risk while also retaining the river and turning it into an asset for the city. His idea was to make the river a public place with park-like qualities and commercial access. The result was a two-fold benefit: the city was protected from flooding while also benefitting from a beautiful and unique public space. The River Walk today is a major economic asset (the largest tourism destination in the state) that also adds immeasurably to the quality of life of city residents.

The Committee deliberated on the Needs and Opportunities of the Oakdale and West Sayville communities over the course of several meetings.

Eventually the Needs, Opportunities, and Strategies will provide the basis of the Community Reconstruction Plan. The Community Reconstruction Plan that will be produced by the Committee at the end of the planning process *must* be realistic. It cannot be simply a wish list of uncoordinated projects unrelated to the realities of funding, financing, existing zoning and building codes, and the political process.

The structure of the NYRCR Plan is to frame actions based upon recovery functions. For example, this occurred with the Community Assets identified in Section 6. Similarly, the identification of Needs and Opportunities was conducted by recovery support functions. The functions are described in the NYRCR Guidance Document as follows:

- **Community Planning and Capacity Building:** This recovery function addresses the community’s ability both to implement storm recovery activities and to plan to mitigate the effects of future storms
- **Economic Development:** The primary economic concern after a disaster is returning economic and business activities to a state of

health and developing new economic opportunities that result in a sustainable and economically strong community

- **Health and Social Services:** One of the more immediate considerations after a disaster is whether public health, health care facilities and essential social service needs have been restored, especially as it affects vulnerable populations
- **Housing:** Housing is a fundamental need and a housing assessment is the foundation on which to build strategies that will help to achieve local housing goals
- **Infrastructure:** Investments in infrastructure can be effective both in rebuilding capabilities lost during the storm and in providing economic development
- **Natural and Cultural Resources:** A growing body of evidence indicates the value of coastal ecosystems in wave attenuation, deflection, and erosion reduction

The Committee developed a list of Needs and Opportunities and featured them as one of several major stations at the Public engagement event held on September 17, 2013 from 6:00 to 9:00 PM. The public was given the opportunity to read and ask questions about the draft list. Committee members, State officials and staff from the NYRCR Consulting Team were available to answer questions and discuss ideas. In addition, the public was also given the opportunity to submit written comments and to also “vote” on the draft list of Needs and Opportunities. This exercise was done with “thumbs up, thumbs down” stickers that were tabulated after the meeting for the Committee’s use.

At a regular meeting of the Committee held on September 24, 2013, the comments were reviewed along with the tabulated poll results. Discussion followed and the Committee continued to fine tune the needs based upon the feedback from the public engagement event.





Strategies

The next step in the planning process following the identification of the Needs and Opportunities was the development of Strategies to achieve rebuilding, resilience and economic growth. The Strategies are intended to be implemented through projects and programs that come out of the planning process. The Committee began the consideration of Strategies at their meeting held on September 24, 2013, following the discussion of the Needs and Opportunities list.

The outcome of this process is summarized in the Strategies Matrix included in this section. It is noted that the Strategies Matrix is a draft document that is subject to change and fine tuning by the Committee as the planning process continues, to consider the risk assessment, the

benefits of a project or action, the cost and availability of resources, the value to the community, the timing in coordination with other projects and the availability of funding.

Some of the potential actions the Committee identified include:

- Development of a comprehensive, storm resilient infrastructure improvement plan with the identification of specific improvements (e.g., Byron Lake vicinity). Included in the plan would be a review of controls on storm surge inundation such as flood gates and drainage backflow check valves and raising low elevation roads.
- Improvements to planning and communication before and after future storm events.

- Planning for the revitalization of Downtown Oakdale in accordance with the community’s 2008 Vision Plan, a component of which is the installation of a wastewater collection and treatment system.
- Linking of the CR communities with adjacent areas with the design and development of a land and marine (kayak) based trail system that would highlight the communities’ environmental and historic estate heritage.

Next Steps- Continue to refine the needs, opportunities and strategies based upon Committee review and public input.

Strategies / Projects Matrix Oakdale / West Sayville

Need	Strategy	Projects
Community Planning and Capacity Building		
Need for educational programs to help prepare residents for major storm events, including where shelters are and how to protect homes and persons	Public education for resiliency and preparedness	Create a strong educational outreach program to provide information, ensure that a system and adequate infrastructure is in place for notification, evacuation and emergency response Create a preparedness mindset, presented often Public outreach and education on the impacts in flood prone areas on life and property, insurance, storm preparedness, evacuation areas, securing of property, safety Review and update preparedness and evacuation plans and coordinate with regional agencies
	Coordination and improvements to communication systems and protocols during severe storm events to ensure that residents secure necessary assistance and information	Conduct periodic (e.g., annual) public education effort on storm impacts on life, safety and property
	Consistency and one source of information in advance of central response substantially in advance of a storm	
	Need to review current management/ regulatory approaches in extreme and high risk areas	Establish resiliency as an objective in existing planning and approval process in local government
Revision of municipal laws and regulations to improve emergency preparedness, management, or response protocols		Updates to building codes, land use regulations and design codes
Identify deficiencies in code and explore possible improvements		



Need	Strategy	Projects
Economic Development		
New development in Oakdale along Montauk Highway to strengthen the business district to increase the tax base, create jobs and grow the local economy	Provide wastewater treatment facilities	Development of a centralized wastewater treatment system to accommodate a downtown scale of development
	Projects, policies and incentives that help to support growth of the business district	Modification of zoning regulations to conform to 2008 Vision Plan
	Need to capitalize on the economic activity associated with the marine industry	Strategies that can be implemented through both public and private partnerships (also see Infrastructure recommendations for raising low elevation roads and installing sewers)
Identify opportunities for compatible marine tourism/ recreational uses		Develop promotional programs that brand the marine industry in Oakdale and West Sayville
Diversification of the economy to capitalize on environmental qualities and estate heritage	Create a trail system to link Oakdale to West Sayville	Plan a trail system that would extend from the west side of the Connetquot River (Bayard Cutting Arboretum, Connetquot State Park Preserve) through former estates and extending to Green's Creek, County Park
	Increase opportunities for public access and recreational opportunities along waterfront	Identify on-road and off-road routes that connect to destinations
	Need for better identity of the maritime presence in communities	Publicize/ promote broad base of maritime history and activities
Need for better identity of the maritime presence in communities	Publicize/ promote broad base of maritime history and activities	Develop and seek funding for advertising campaign
Diversify economy	More year-round businesses	Work with regional economic development agencies and local chambers of commerce
Regional - Protect from barrier beach overwash (breaches)	Support Fire Island to Montauk Point (FIMP) project	Participate in public review and meetings
Health and Social Services		
To identify need for more storm shelters in closer proximity to population	Enhance existing facilities so they can serve as temporary shelters	Work with shelter providers, such as school districts (Connetquot, Sayville), to find suitable buildings for emergency shelters
	Create local shelters in low risk areas, where needed	Establish agreements and stock with emergency supplies, generators, bath facilities/ showers, flood preparation
Need for emergency health services during a and after storm event	Restoration of access to basic care to pre-storm levels or better (also see Infrastructure recommendations for raising low elevation roads and installing sewers)	Ensure access to critical health facilities through adequate infrastructure improvements
Availability for routine healthcare during storm and after	Improve delivery of routine services	Identify health practitioners who will be available to administer routine care during storm event
Ensure communications for period immediately following storm event	Neighborhood and community based traditional communication	Place message centers in protected locations (e.g., railroad station)



Need	Strategy	Projects
Ensure access to disaster response services	Identify emergency shelters in community	Inventory all shelters and quantify capacity, proximity to population, facility limitations
Need to implement resources that are available	Identify local and regional distribution facilities	Plan and fund local and regional distribution supply facilities
	Provide for redundant shelters and distribution facilities	Organize volunteers and resources
Need for emergency care responders (e.g., Red Cross) to promptly assist community following storm event	Increase and improve cooperation and communication with emergency care responders	Meet with emergency care providers to plan more rapid response
	Increase human capacity	Expand local base of volunteers
Need to inventory available resources both people and materials		
Housing		
Need to repair and make more resilient housing damaged by Sandy	Plan for resiliency at the community and neighborhood level while addressing individual needs (See Infrastructure section- provide sewers to make repairs/ raising homes more cost effective)	Assist homeowners in accessing assistance at all levels of public and private services
	Encourage provision of storm/ flood resilient housing	Provide incentives for the elevation or retrofit of dwellings
Provide housing in downtown Oakdale	Land use/ zoning changes	Base amendments to zoning code on 2008 Vision Plan, prepare code changes for legal consideration
	Sewers (see Infrastructure)	Support Town study process, seek funding sources for construction
Provide housing for those with damaged homes	Provide service to identify and disseminate temporary housing information	
Protect vulnerable population	Maintain inventory of special population housing	
	Maintain evacuation plans	
Ensure affordability of housing for all residents	Provide for increase in supply of a mixed housing stock (e.g. unit sizes, density)	
	Seek to incorporate in land use policy	



Need	Strategy	Projects	
Infrastructure			
Ensure reliability of evacuation routes and emergency access routes	Invest in infrastructure improvements that enable the elevation of vulnerable roads that are critical for emergency access and storm evacuation	Develop a comprehensive road infrastructure storm-resilient improvement plan. Consider roads, drainage, utilities and integration with adjoining properties	
	Reduce inflow of tidal surges at vulnerable outfall locations	Review outfalls pipes and add check valves where determined to be appropriate	
	Provide for periodic inspection, maintenance and upgrade of storm water drainage system	Seek funding opportunities for capital improvements and maintenance equipment	
	Provide increased stormwater retention areas		Increase drainage capacity
			Utilize natural retention systems (swales, wetlands, infiltration areas) instead of direct discharge to surface water bodies
			Acquire vacant properties for stormwater storage and natural filtration
	Designate the responsible party to keep routes open		
Identify key routes that are vital to evacuation and emergency access			
Protect the environment and human health from wastewater pollution	New investments in wastewater infrastructure that would cost-efficiently and effectively treat sanitary wastewater	Monitor the progress of Town of Islip's planning study of sewerage in the Oakdale West Sayville communities	
		Investigate community resources to support feasibility studies	
		Seek funding sources for wastewater capital improvements	
Regional - Protect the vulnerability of essential utility services	Improve and harden utility infrastructure, including; electric, telephone and cable services	Evaluate feasibility of underground power and communication facilities	
		Provide regulatory requirement for generators and on-site fuel supply for cellular communication facilities	
		Provide for more frequent and more effective tree maintenance programs	
	Work at a regional level to address disruption of substations and feeder systems	Ensure coordination with utilities	
Reduce chronic flooding that threatens life safety and property	New investments in flood control structures to reduce the impact of storm surges	Review feasibility and appropriateness of flood gates at key locations. Investigate sources of funding to develop feasibility report	
	Check valves installed on outfall pipes	Inventory outfalls and conduct engineering review of feasibility and functionality of check valves	
Protect the environment and public health from fuel spills	Require existing fuel tanks to be adequately secured	Review fuel tank installation and maintenance standards and upgrade as necessary	
	Encourage switch from heating oil to natural gas	Work with natural gas providers to extend service into community	



Need	Strategy	Projects
Provide independent, stand-alone alternatives to utility grid service	Develop solar power and other green energy alternatives	Review current permitting process, amend as necessary to streamline process for solar panel installations
		Distribute informational materials to public on benefits of solar and other green technologies.
		Seek incentives for the installation of generators
Regional - Protect the vulnerability of regional transportation systems	Evaluate LIRR, SR27 and CR25, for long term resiliency	
	Coordinate with regional transportation providers	
Natural and Cultural Resources		
Reduce stormwater and wastewater pollution in local waterways	Conservation and management actions to protect and improve natural environment	Prepare a watershed management plan for the Idle Hour peninsula Construct wastewater collection and treatment system(s) (see infrastructure)
	Construct green and engineered (hybrid) stormwater collection and treatment systems (see infrastructure)	Work with The Nature Conservancy (TNC) and other community organizations and the public sector to analyze and plan improvements
	Conduct public education campaign on pollution issues	
Improve the environmental quality of damaged or altered environmental assets	Restore and protect wetlands, shoreline, beaches and historic structures. Improve stewardship of natural flora and fauna	Replace Phragmites with native wetland plants
		Manage ditches in wetlands - review as part of wetlands restoration project
		Integrate upland storm protection into restoration efforts
Protect important historic and cultural facilities and identify with area's history	Locally supported stewardship	
	Publicity campaign	Tie into other themes- maritime presence, "Gold Coast" trail, eco-touring including kayak and canoeing, bicycle and pedestrian across Connetquot River at Bubble Falls to connect to points west including Bayard Cutting Arboretum
Address sediment accumulation in canals, e.g., Grand Canal	Seek environmentally appropriate dredging options including spoil removal	Work with County DPW to advance funding and implementation
		Prioritize locations



9. Potential Projects

The next critical step in the planning process will be for the Committee to refine the list of potential strategies to those that are most needed and best suited for the NYRCR planning area and to develop detailed projects to implement those strategies. The Committee has identified the following preliminary projects based on discussions of assets, needs and opportunities. The projects previewed here appear to have broad agreement among Committee members. Inclusion of these projects in the Conceptual Plan does not guarantee their recommendation in the final plan. Nor does it preclude the inclusion of alternative or additional projects going forward. The strategies and projects contained herein are preliminary in nature and will continue to be developed, expanded upon, or in some instances, eliminated from consideration. The Committee will continue to refine its strategies and list of resiliency projects in the coming months.

The Committee has preliminarily identified several projects that would assist in recovery, provide greater resiliency and foster economic growth. The projects listed are assumed to be the start of a comprehensive list that will be generated by the Committee as the planning process continues. The projects are also subject to change as the public engagement process continues. They are identified here to give an idea of the direction of the Committee’s work at this point in time. In the final plan, they will be identified in each of the recovery functions.

Some projects may involve structural protection. However, the Committee has discussed considering non-structural protection options including management measures, ‘adaptive’ measures along with ‘hybrid’ structural/ nonstructural options.

Flood Damage Mitigation with Environmental and Recreational Enhancements

Grand Canal Levee Improvement, Oakdale

Primary Project Category: Infrastructure and Natural & Cultural Resources

Brief project Description: The Grand Canal was constructed in the early phase of the development of the Idle Hour neighborhood of Oakdale and was an open road called Central Boulevard. It remains a mapped road. A levee was created by the excavation of the canal through an area of wetlands that was characteristic of this part of Oakdale. As the excavated material was removed, some of it was deposited along the side of the canal to form the present day levee. The levee extends for over a half a mile and separates the canal from a large tract of wetlands to the east. The wetlands are owned by New York State and are under the jurisdiction of the New York State Department of Environmental Conservation (NYS DEC). At the present time there is some tidal exchange between the canal and the wetlands but it is limited. It is proposed to increase the tidal exchange to an appropriate level (to be determined) and to also allow for water to overflow from the canal into the wetlands during storm surges. Further, it is proposed to utilize the top of the levee as a recreational hiking path.

Community Benefits: There are several potential benefits of the project to the community. First, is the potential reduction in the impact of future storm surges through the use of the State wetlands to accommodate the flooding within the wetlands. Secondly, the project could also help to restore the wetlands to a more naturally functioning system with regular tidal exchange. Lastly, the project also represents an opportunity to improve public recreational opportunities in the area through the development of a low impact trail on the top of the levee. This could also be a segment of the proposed South Shore Gold Coast Trail, a larger system of trails and bike paths that would feature the historical and environmental assets of the communities.

Coordination with Outside Agencies- The project has not been designed but would require, at a minimum, coordination with the NYS DEC as both the agency with ownership jurisdiction of the levee and adjacent wetlands as well as serving as a permitting agency. Assistance from

nongovernmental agencies such as The Nature Conservancy and or the Audubon Society will also be sought.

Next Steps: A preliminary evaluation of the project should be done with experts in wetlands management, hydrology and coastal processes. In addition, NYSDEC and other experts (e.g., The Nature Conservancy) should be consulted.

Infrastructure Resiliency: Ensuring Safe Road Access

Infrastructure Resiliency- Raise Vulnerable Roads

Primary Project Category: Infrastructure

Brief Project Description: Significant portions of Oakdale, West Sayville and the Green’s Creek corridor are developed at very low elevations, often within a few feet of sea level. During storm events, many roads are flooded and are often impassable. This presents a significant threat to public safety affecting both evacuation functions as well as emergency response. This project would specifically identify the vulnerable road sections and would set priorities for raising pavement levels. It would also address the related issues of drainage and utilities. From this a program would be developed to fund and implement the project.

Community Benefits: The community would benefit from more reliable access and egress and, potentially, higher property values. This is both a public safety and quality of life benefit. Further, the project would be designed with the intent to accommodate a ‘Complete Streets’ program that would accommodate pedestrian and bicycle modes of transportation. Further, the project would seek to accommodate road runoff using natural bio filtration techniques.

Implementation Timeline: Immediate for initial evaluation/ design, Extending to intermediate for completion.

Next Steps: Research/ establish criteria for minimum road elevations relative to risk area and road classification (collector, local, etc.). Coordinate with Town of Islip Department of Public Works and Suffolk County DPW. Identify initial road section that meet the criteria, prioritize





projects and seek funding for engineering, design and then permitting, contracting, bidding, construction and inspection. Commence work.

Increase Public Access to Waterfront and Provide Storm Surge Buffer

Public Access to the Waterfront

Primary Project Category: Natural and Cultural Resources

Brief Project Description: The Extreme Risk Area includes many developed properties that are subject to frequent and severe flooding and repetitive loss. Many of the properties are residential homes. There are also a limited number of vacant, undeveloped properties in the Extreme Risk Area. The project would be twofold: the conversion of developed sites that are identified for buyouts into vacant lots and the acquisition of undeveloped parcels to avoid future development that would be highly vulnerable to storm damage. The buy outs would be on a voluntary basis. Once acquired, the lots would be retained in public ownership and limited in use. Possible uses could be retention areas for stormwater/ runoff storage, wetlands restoration, coastal protection and public access to the waterfront.

Community Benefits: The benefits to the community would include the removal of structures in the Extreme Risk Area, the avoidance of potentially dangerous emergency response during storm events, the improvement of the coastal environment and the enhancement of public access to the waterfront.

Implementation Timeline: Immediate for properties included in buyout program.

Next Steps: Identify properties in that are included in the buyout program and evaluate for the potential to be used for storm water retention, coastal protection, environmental restoration and public recreational access.

Water Quality Improvement: Sewage Treatment

Sewage Treatment - Oakdale and West Sayville

Primary Project Category: Infrastructure

Brief Project Description: Both Oakdale and West Sayville are communities that are characterized by low elevations relative to sea level and high elevations relative to groundwater. In fact, much of the planning area south of Montauk Highway is within four feet of sea level with groundwater often a few feet below the surface. In addition, the area does not have a centralized sewer system and most developed properties rely upon on-site wastewater disposal. These are in the form of cesspools or septic tanks with leaching pools/fields. The proposed project would involve the construction of a tertiary wastewater collection and treatment system with the subsequent discontinuance of the onsite systems.

Community Benefits- The project would provide several significant benefits. It would greatly improve water quality both in groundwater and in the surrounding surface waters. Such improvement is vital to the long term health of the Connetquot River and the Great South Bay, both of which are part of the State designated South Shore Estuary Reserve and both of which are adversely affected by high levels of wastewater discharge. It would also remove a major impediment to the implementation of the Town of Islip’s Vision Plan for Oakdale that depends on the availability of sewers to achieve a compact, mixed –use downtown.

Implementation Timeline: Long term

Next Steps: Completion of the Town’s planning study of the feasibility of a centralized wastewater collection and treatment system.

Non-Capital Project

Storm Preparation Improvements- Develop an action plan and implement storm preparation programs to reach all residents, especially vulnerable populations. In support of this effort, the Committee supports the update of the Town of Islip’s Emergency Management Plan as a priority action.





10. Regional Perspective

Regional Overview

Long Island spans over 118 miles from New York Harbor to Montauk Point and has a maximum width of approximately 23 miles between the Long Island Sound to the north and the Atlantic Ocean to the south. Long Island, the 11th largest island in the nation, has a land area of over 1,400 square miles and is larger than the state of Rhode Island. Due to its island geography, many of the communities and counties within the Island share similar challenges as well as opportunities relative to the natural environment, physical infrastructure, and other built systems. Additionally, it is important to understand the cause and effect relationship that occurs on the Island. For example, new impervious development in northern areas may result in excessive run off in South Shore communities. Potential Island-wide issues are expanded upon below.

Potential Regional Issues and Concerns

Natural Environment: Long Island has 1,180 miles of shoreline fronting the Atlantic Ocean, Sound, and a number of lakes, bays, inlets and canals. Approximately one-fifth of Long Island's land is protected from development by federal, state, county, or municipal entities. About half of this land represents over 800 public parks on Long Island ranging from small community playgrounds to larger parks like Fire Island National Seashore and Bethpage State Park.^{viii} The Pine Barrens contain wetlands and dry upland areas and are inhabited by an array of wildlife species, many of which are endangered or threatened. The continued protection of Long Island's water supply from sole source aquifers is also a significant regional issue.

Developable Land Supply: Almost two-thirds of Long Island's land surface is developed with buildings, pavement and other manmade structures. This condition in combination with the large amount of protected/

preserved land, results in a limited supply of available vacant land to accommodate new housing or economic development activities.

Water Quality: Long Island's aquifers receive their fresh water from precipitation which percolates into the ground and is recharged into the groundwater system. The greatest threat to the quality of this water is development (residential/commercial/industrial) in sensitive areas that would add pollutants and impede the absorption of precipitation. In coastal areas, as water is drawn for use, less groundwater is available to be discharged into the estuaries. The subsequent loss of water and pressure allows saltwater from the ocean to flow into the aquifer, causing the groundwater to become saline and undrinkable. This is known as "saltwater intrusion" and is a threat to the Island's drinking supply.^{ix}

Other threats to water quality include non-point source pollution and storm water runoff, which are county-wide concerns. Non-point sources typically include fertilizer and pesticides, oil and other automobile fluid, as well as animal and pet waste. This type of pollution has the potential to seep into ground water and impact surface waters such as the Great South Bay. While the Great South Bay is a surface water body, it is also a significant habitat comprised of features such as barrier beaches and islands, wetlands as well as marsh islands. Additionally, the bay is a key component of the local economy which relies on the health and stability of the bay ecology. As a result, the bay is in many ways a regional resource. Degradation of water quality as a result of non-point source runoff is of rising concern relative to the bay.

Non-point source releases into the bay can result in increased bacteria levels which in turn can lead to the closure of large areas of the bay to economic activities like fishing as well as recreational marine-dependent uses. The continued discharge to ground and surface waters in addition to increased runoff from roadways and septic systems have been adversely impacting water quality and vegetation in the vicinity of the Great South Bay. These water quality concerns also have the potential to impact spawning habitats as well as many marine species that are dependent on these systems.

Utilities: Electricity and the susceptibility of the power grid are both national and regional issues of concern. Long Island's Regional Economic

Development Council (REDC) strategic economic development plan update has similarly stressed the importance of addressing utility vulnerabilities which currently exist across the Island. More specifically, one of the longest-lasting impacts of Superstorm Sandy was the vulnerability of Long Island's electric power grid. The Smarter Grid Research, Innovation, Development, Demonstration & Deployment (SGRID3) initiative, a collaboration between Stony Brook University and Brookhaven National Laboratory, initially focused on the development and deployment of new smart grid technologies as a mechanism to reduce energy and associated costs to consumers. However, this objective changed in the wake of Superstorm Sandy with the focus shifting to autonomous control capabilities that when employed would make Long Island's grid more resilient during weather events and able to recover more quickly in the aftermath.

Climate Change: As a coastal area, Long Island is susceptible to rising sea levels, especially as it relates to storm surges. Flooding generated by major weather events, 100-year storms, or just a heavy downpour, causing damage to residences and property, have been occurring with greater frequency. According to a joint Columbia University and City University of New York study, the sea level is anticipated to increase by 4 to 12 centimeters in the New York region by the 2020s and by 30 to 56 centimeters by 2080.^x Should polar icecaps melt rapidly, climate models projects that sea levels will rise even more. As a result, climate change is a significant Island-wide issue.

Other issues that are pertinent on a regional level include those related to public health and economic equity. These include projects designed to improve the quality of life for the Island's impoverished, underinsured or at-risk populations. Emergency preparedness projects are also important to improve the overall safety of the Island's population. These include: maintaining evacuation route access; improving the communication capability for a multi-jurisdictional response during emergency events.

Regional Issues and Public Engagement

In order to obtain input regarding larger issues important to the community, a sampling of potential town-wide and regional issues have been presented to the community during public engagement events.





Community members have been asked to agree or disagree with the sampling of regional project ideas. To date, the public has indicated their preference or displeasure by placing a thumbs up or thumbs down sticker on large display boards. NYCRP Committees have also been asked to provide feedback related to regional projects. Once these initial projects are further vetted within the Committee and an opportunity for collaboration with other Suffolk NYRCR Communities has taken place, a more definitive list of regional strategies and projects will be developed. Potential projects on a regional level may include:

- Enhance barrier beach protection to protect mainland communities
- Harden the electrical grid to mitigate/shorten power outages
- Harden the natural gas distribution systems
- Expand natural gas connections into new areas to decrease reliance on fuel tanks
- Harden land line and cellular communication facilities
- Facilitate communication between all regional utilities/services and local government
- Long Island Rail Road (LIRR) improvements to ensure adequate transit operations
- Improve roadways to ensure emergency vehicle access and functioning evacuation routes
- Update regional hazard mitigation plans to address local issues
- Streamline environmental permitting procedures
- Implement regional shoreline stabilization projects emphasizing the Living Shoreline concept
- Consider regional water quality protection
- Enhance resiliency of Bergen Point Sewage Treatment Plant
- Consider region-wide storm surge protection





11. Overview of Public Engagement to Date

Public Engagement Strategy

Governor Cuomo has been a strong proponent of bottom-up, community-driven planning; in other words, the real “experts” are the residents of the communities that have been confronted first-hand by these natural disasters. A critical component, therefore, of the NYRCR Program is the exchange of information between the NYRCR Consulting Team, the Committee, and the public to identify appropriate projects, strategies, and solutions that are likely to carry community support. The public in this case is defined as area residents, employees, civic groups, neighborhood and homeowner associations, environmental and other interest groups, business interests, governmental agencies, educational, medical, religious, and other institutions, the media, elected/ appointed officials, as well as other stakeholders who express interest in the process.

The Public Engagement Strategy will:

- Establish the means to engage and facilitate information-sharing with the public throughout the development of the NYRCR plan.
- Educate the public and elicit public comments and suggestions regarding all aspects of the Plan within the NYRCR planning area.
- Employ outreach techniques that allow for collection and coordination of public communication and comments.
- Reach out to groups that might normally be underrepresented in a planning study, such as minorities, Spanish-speaking residents, low-income residents, seniors, youth, and the disabled.

Outreach Techniques for Disseminating and Receiving Information

The utilized a number of dissemination techniques to achieve a thorough, responsive, open, and transparent communication process.

Committee Members/Meetings

All Committee Meetings are open to the public, with meeting dates and times posted on the NY Rising website. For each Committee Meeting, notifications are sent and meeting materials are prepared. They include agendas, sign-in sheets, minutes, comment log, PowerPoint presentations, graphics/boards, and handouts. The Public is invited to comment on the work of the Committee by filling out a comment form available at each Committee Meeting.

Public Engagement

While the Committee represents the interests of many, it is important to provide opportunities for the public to participate in the development of the Plan. While the primary vehicle is public engagement events, additional outreach opportunities for comment are provided at different venues in the Planning Area and through the NY Rising website.

Public Engagement Events

Each public engagement event includes a presentation of work done to date and an opportunity for attendees to provide feedback. The NYRCR Consulting Team provides the following for each event: public notice (including press releases, announcements, individual mailings, and other appropriate means), outreach to underserved communities and displaced stakeholders, information gathering from those attending, and the collection and inclusion of feedback into the ongoing planning process. A summary of each public outreach session is available in hard copy and electronically.

Public engagement events are scheduled to coincide with major milestones. A good public involvement process educates, or brings people along, during the development of the Plan, so when it is time to implement the Plan, the public and the elected decision-makers have had an opportunity to participate in the decision-making process. Members of the public who are informed and engaged in the process are more likely to support a recommended course of action. Sign language interpreters can be provided upon request at public engagement events to accommodate the hearing impaired. Event materials are available in English and if requested, in Spanish.

Presentation materials are developed for each event that illustrate the key points of the information presented using plain language, graphics, simulations, etc. These are available following the event on the NY Rising website for download. An annotated summary of events are prepared and available for public distribution.

The process includes a series of four public engagement events:

1. To define the Community Vision and solicit initial input on the asset inventory and assessment of risk to community assets
2. To solicit input from the public concerning the content of the conceptual plan
3. To confirm projects and implementation frameworks
4. To present the investment and action strategies

Outreach for public engagement events: posting on state NYRCR webpage and other electronic media; ads in weekly print media when time and budget allows; flyers and posters at strategic locations throughout the community including libraries, community centers, and other centers of activity; e-mails and/or texts to lists available from chambers, civics, school districts, churches, synagogues, American Legion, VFW, AARP, Hibernians and other community leaders. Outreach also includes requests to community organizations to post information on their websites. Phone calls are made to: elected officials and other key players in the local residential and business community and calls to each committee member to assist them with their outreach effort (e.g., calls/e-mails to their contacts and announcements at their events).

Each event is formatted as an open house that the public can attend during any part of the allotted three-hours. Stations are positioned around the room for the various topics. Committee members, municipal representatives, State planners and the NYRCR Consulting Team each station to provide opportunity for the community to exchange ideas in a comfortable setting. This structure provides an opportunity for each attendee to work within their own schedule and comment on all or some of the specific aspects of the process in a meaningful way.





As the project progresses, the public is presented with maps, a geographic scope, community assets, and a vision statement, needs and opportunities, strategies and projects that have been vetted and/or created by the Committee. The desired outcome of each public engagement event is to obtain the public’s reactions and feedback to the Committee’s work in order to incorporate their input. These comments will be compiled by the NYRCR Consulting Team and provided to the Committee in a clear and comprehensive manner. The Committee will review the public’s feedback and incorporate it into the NYRCR Plan.

Other Considerations

Although the events are advertised as events for NYRCR planning, community members attend who are more interested in assistance with individual property concerns. To accommodate these individuals at each public engagement event tables are available in a separate area for State, FEMA, and NGO staff from the various intake centers to provide individual assistance. These community members are subsequently encouraged to participate in the NYRCR planning process.

Requests for Information

All requests for information will be acknowledged by the NYRCR Consulting Team within a week with a letter or email accompanied by the materials requested or by a referral to the State’s website where the material can be downloaded. If a response to the request requires more than a week, the individual making the request will be contacted with an estimate of the anticipated delivery date. An offer will always be made to provide further assistance should it be necessary.

Website

The NY Rising website will serve as a repository for downloadable versions of all public information, event and event notifications. Posted materials include an overview of the planning process, reports, maps, and documents, summaries of public engagement events, notices of public

engagement events, and contact information. The website includes an area to accept public comment, as well as a section for Frequently Asked Questions (FAQs). All materials and information on the website is kept up to date. The address is: <http://stormrecovery.ny.gov/nyrcr>



Print and Broadcast Media

Study information is also disseminated through selected local, print, radio, and TV media to keep the community informed and to respond to media inquiries. A particular effort will be made to include publications, radio, and TV stations that target minority populations.

Outreach Techniques for Receiving Input

An important component of the outreach program is to understand public sentiment and to be able to answer questions and address public concerns. Several methods are provided for the public to make comments and ask questions. The NYRCR Consulting Team uses these comments to enhance and improve the NYRCR plan. The team documents all comments

received and adds them to the record. Comments are also reviewed by the Committee and the NYRCR Consulting Team.

Surveys (Optional)

A web-based survey tool may be used to gauge public opinion over a range of issues. The advantage of a survey is its potential reach to individuals that cannot or choose not to attend public engagement events. Surveys are restricted to one per email address to limit ‘ballot stuffing.’ The survey is an opportunity to get feedback on very specific questions. Surveys completed by the public that might not come to events can help balance the opinions of those that do attend.

Study Team Communication

The Study Team is also available to directly answer specific questions and receive comments. The primary contact for the Study Team is: Vanessa Lockel, Community Reconstruction Program Suffolk Lead, New York Rising Community Reconstruction Program. Ms. Lockel can be reached at vlockel@stormrecovery.ny.gov.

E-Mail

E-mail comments and requests for information can be sent to the State’s e-mail address at: info@stormrecovery.ny.gov This email address is prominently displayed on the website so that it is widely disseminated and available for public use. The NYRCR Consulting Team incorporates input and/or respond, as appropriate based on guidance from the State. The team will work with NYS to post comments or questions (with responses) that appear repeatedly to the FAQ page on the state’s website.

Comment Forms

Comment forms are available at committee meetings and public engagement events and on the state’s website to provide an opportunity for the public to contribute their thoughts, which are then passed along to the Committee and the NYRCR Consulting Team.





12. Next Steps

Strategies and Projects

The process undertaken by the Committee has focused on building towards the final development of a specific plan of projects and implementation strategies that will make Oakdale/West Sayville more resilient. The strategies and projects presented in this NYRCR Plan are in the early stages of development. They require narrowing of scope and purpose, expert input, and prioritization. Input from specialists in several planning areas and from the public will be solicited in the coming weeks in order to begin the process of narrowing down the options to the most effective, most feasible, most appropriate, most needed, as well as most desirable to the public. The Committee will use the feedback from their peers and experts to prioritize the final list of strategies, which will be submitted to the State by November 30, 2013.

The NYRCR Consulting Team will work with the Committee to flesh out the strategies with the greatest potential into implementable projects. Steps to prioritize strategies will include, but will not be limited to, conducting a thorough risk assessment of assets, exploring new and innovative ideas for addressing resiliency issues, and linking vulnerable assets to innovative strategies. The development of projects from these strategies will require homing in on the exact desired outcomes of projects and/or the specific geographic areas, developing detailed scopes of work and cost estimates, and defining the community benefit values to calculate the cost/benefit ratios.

The NYRCR Consulting Team, along with the State Planning team will help the Oakdale and West Sayville Committee to consider innovative strategies and actions to address their specific list of resiliency issues, particularly strategies that create co-benefits with other community issues. Wherever possible, the team will seek to leverage existing programs, upcoming projects, and eligible funding sources to incorporate resiliency measures that have been prioritized by the Committee.

Prioritization will be interwoven throughout the process. The assets will be categorized by risk assessment area and community value, which will serve to highlight those most critical. Stemming from the assets, the needs and strategies will be categorized into immediate, short-, medium-, and long-term, as well as discussed at length in terms of feasibility, necessity, and value. Finally, projects will be ranked by value and criticality. Additional considerations will include relation to the Community Vision and the comprehensiveness of the list (ensuring the inclusion of projects with local and regional impact and with immediate to long-term project implementation timelines).

A final list of potential projects to be advanced in this process will be submitted to the State by December 31, 2013.

Consideration of the Implementation Structure

The implementation timeline of potential projects will vary based on the complexity of the project, the institutional coordination necessary, and the potential for necessary environmental permitting. The intention of this program is to identify a range of projects which would include immediate implementation projects that could occur within 0 to 6 months; mid-term implementation projects that could be implemented within 6 months to three years; and, long-term implementation projects that could occur over a period in excess of three years.

The ability to identify projects that are programmatic in nature or that could be implemented incrementally over time is also desirable. These projects could begin with planning and design, progress to property acquisition and eventually be implemented in sections based on risk, community desire, and relationship to critical asset. These projects may also have the ability to access or leverage multiple funding sources if they address multiple resiliency issues or can provide benefit to multiple community assets.

As projects are better defined and prioritized by the Committee and through public engagement, implementation structures and schedules will be developed and optimized to encourage the quickest and most efficient expenditure of resources and associated benefits for Oakdale and West Sayville.

Technical Support

At present, the NYRCR Consulting Team is developing a format to engage multiple experts to discuss strategies and projects that would be most suitable for Suffolk County in general, as well as for each NYRCR community in particular. Based on Oakdale and West Sayville's identified needs and preliminary list of strategies, expertise may be sought from the following entities (in addition to the specialist available on the NYRCR Consulting Team) in these specified areas:

- Suffolk County Emergency Management
 - Evacuation routes
 - Fire prevention
 - Emergency management plans
- Suffolk County Police
 - Post-event public safety and looting protection
- Suffolk County Economic Development & Planning
 - Commercial corridor development
 - Housing mix
- Suffolk County Public Works
 - Mitigation of repetitive flooding on roads and from creeks and inlets
 - Bulkheading and shoreline structures
- Southside Hospital and Brookhaven Hospital
 - Critical facility plan
 - Post-event physical and mental health role in community
- FEMA Hazard Mitigation
 - Hardening of critical facilities and mitigation of homes
- National Grid/PSEG
 - Expansion of natural gas connections
 - Information on clean energy alternatives
- Verizon/Other Telecommunication Utilities
 - Hardening of critical facilities
- NYS Department of Environmental Conservation
 - Permit streamlining
- US Environmental Protection Agency
 - Green infrastructure for repetitive flooding and water quality
- US Housing and Urban Development
 - Relocation out of hazard zones

NYRCR Plans will be refined as community needs evolve and based on correspondence/feedback from the organizations listed above. At a future





date, as potential projects and strategies are refined, engineers/experts on the project team will be incorporated into the Plan to discuss the feasibility and cost of projects. Additional next steps may include a potential Island-wide webinar to tackle regional issues common to all of Long Island.

Recent and Upcoming Events

Recent and upcoming events, aside from regularly scheduled committees are noted below.

Rebuild by Design, Nassau/Suffolk Counties, New York: The Rebuild by Design event took place in early October 2013. This event provided an opportunity to showcase Long Island and to explore the potential for innovative projects in the area. Design teams from across the nation and the Netherlands toured Nassau County extensively and also spoke with first responders from Suffolk County. The experts felt that the feedback from Suffolk’s first responders was invaluable in terms of strengthening their knowledge of resilient post-storm design as well as designing for practical and emergency situations.

Community Reconstruction Event, Albany, New York October 23rd: Suffolk County had two Conceptual Plans featured at this event, one of which was the Oakdale and West Sayville communities. Committee members from Oakdale and West Sayville and other Suffolk County NYRCR representatives were in attendance. This conference, with Governor Cuomo, was a unique opportunity to see what is going on with other NYRCR communities in the State as well as to learn about other design solutions.

Public Event #2: The NYRCR Consulting Team is currently engaged in organizing the format, logistics, and materials for the second public engagement event, scheduled for November 12. The event will offer an

opportunity for the community to review and provide feedback on the contents of this Conceptual Plan.



Oakdale/West Sayville Committee Events

The next public event of the Committee is Community Public Event 2 that is scheduled for Tuesday, November 12, 2013. The event will run from 5:00Pm to 8:00Pm and will take place at Dowling College in Oakdale. The Committee will also continue regular meetings of the full Committee as well as of the subcommittees.

Upcoming Milestones

- Complete public engagement events for presentation of Conceptual NYRCR plan (November 2013)
- Submit final NYRCR-accepted list of strategies to the State (End of November 2013)
- Complete public engagement event for investment and action strategies (End of January 2014)
- Submit final NYRCR-accepted list of project and actions to the state (End of March 2014)
- Provide final NYRCR Plans to State for review and approval (End of March 2014)

Endnotes

ⁱ The National Disaster Recovery Framework (NDRF) is a guide that enables effective recovery support to disaster-impacted states, tribes, territorial and local jurisdictions. This framework provides a flexible structure that focuses on how best to restore, redevelop, and revitalize the health, social, economic, natural and environmental fabric of the community and build a more resilient nation. The NDRF is consistent with Presidential Policy Directive

(PPD) -8, related to National Preparedness. Excerpted from FEMA. *National Disaster Recovery Framework* <http://www.fema.gov/national-disaster-recovery-framework>

ⁱⁱ Vulnerable populations include people with disabilities, low and very-low income populations, elderly, young children, homeless and people at risk of becoming homeless.

ⁱⁱⁱ Factual information incorporated into this section of the report has been gathered through review of the NOAA website for the days leading to and directly after Superstorm Sandy, as well as review of pertinent Newsday and local Patch articles.

^{iv} US Department of Commerce, NOAA, National Weather Service. *Hurricane/Post-Tropical Cyclone Sandy, October 22–29, 2012 May 2013. p. 1,*

^v New York Rising Community Reconstruction Program. *The Process for Inventory, Risk Assessment in Coastal Areas and the Assessment of the Effectiveness of Flood Reduction Actions in Riverine Areas.* Prepared by a multi-firm working group.

^{vi} Aggregated GIS data provided by NYSDOS. Bridge data developed and maintained by NYSDOT State Highway Bridge Program, which inspects all bridges every two years. For more information on bridge condition from NYSDOT, visit <https://www.dot.ny.gov/main/bridgedata>

^{vii} Aggregated GIS data provided by NYSDOS. Bridge data developed and maintained by NYSDOT State Highway Bridge Program, which inspects all bridges every two years. For more information on bridge condition from NYSDOT, visit <https://www.dot.ny.gov/main/bridgedata>

^{viii} Long Island Regional Planning Council. *Long Island 2035 Visioning Initiative Final Report.* December 2009. p. 38.

^{ix} Ibid. p. 38

^x Ibid. p. 38.

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NY Rising Community Reconstruction Program