

# Partnerships and Connections

## The Town of Clarkstown Comprehensive Plan



August, 2009

**TOWN OF CLARKSTOWN  
2009 COMPREHENSIVE PLAN  
DRAFT GENERIC ENVIRONMENTAL IMPACT  
STATEMENT  
(DGEIS)**

**Proposed Action: Adoption of the 2009 Comprehensive Plan**

**TOWN OF CLARKSTOWN, ROCKLAND COUNTY, NEW YORK**

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**Lead Agency acceptance as complete for public comment: August 25, 2009**

**Written comments will be received and considered for 10 days following  
the close of the public hearing (date to be determined).**

## **DEDICATION**

*This publication is dedicated to the people of the Town of Clarkstown, whose active participation and positive contribution made this endeavor truly comprehensive.*

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Clarkstown Department of Environmental Control  
Clarkstown Highway Department  
Clarkstown Historic Review Board  
Clarkstown Planning Board  
Clarkstown Police Department  
Clarkstown Town Attorney  
Clarkstown Town Clerk  
Clarkstown Zoning Board of Appeals

Rockland Lake Fire District  
Nanuet Fire District  
Valley Cottage Fire District  
Central Nyack Fire District  
Congers Fire District  
Hillcrest Fire District  
New City Fire District  
East Spring Valley Fire District  
West Nyack Fire District  
Nyack Joint Fire District

Congers/Valley Cottage Volunteer Ambulance Corps  
Nanuet Community Ambulance Corps  
New City Volunteer Ambulance and Paramedic  
Nyack Community Ambulance Corps  
Spring Hill Ambulance Corps

Clarkstown Central School District  
East Ramapo Central School District  
Nanuet Union Free School District  
Nyack Union Free School District

Nanuet Public Library  
New City Library  
West Nyack Free Library  
Valley Cottage Library

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New York State Department of Transportation, Region 8  
New York State Thruway Authority

Palisades Interstate Park Commission

Federal Emergency Management Agency

U.S. Army Corps of Engineers

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# I - Executive Summary

## INTRODUCTION

The 2009 Town of Clarkstown Comprehensive Plan is truly unique. Beyond simply updating the previous Comprehensive Plans of 1999 and 1966, this Comprehensive Plan examines the past, present and potential future conditions of the Town and works to serve as a reference and guide for land use decisions. This Comprehensive Plan is comprised of information gathered from a range of sources. Clarkstown's residents were invited to attend three public workshops to provide comments on the Comprehensive Plan. In addition to studying numerous existing studies, private consulting firms provided updated technical research and data. Additional data was collected from several surveys given to area high school juniors and seniors, as well as phone surveys of the general populace. An important component of this Plan is the collection of digital geographic information which was used to analyze land use and develop maps. In a truly grass-roots effort, subcommittees comprised of Town staff and citizens collaboratively developed the recommendations of this Plan. The 2009 Comprehensive Plan has taken innovative steps to study Clarkstown in the most comprehensive way possible.



May 15, 2008 Public Meeting

## VISION STATEMENT

The Clarkstown Comprehensive Plan recognizes the interdependence between individuals and society, between our built systems and our natural environment. It is a plan that aims to reconnect people to nature, from the Palisades Ridge, a part of the Hudson Highlands spanning four states, to the Hudson River connecting us to the Hudson River Valley and New York City. It is a plan to safely connect our homes to our jobs, our schools, our businesses, our hamlet centers and our parks, via all of the modes of transportation. These connections will be accomplished through partnerships, through the formation of relationships between the residents of the Town and Town government, between the Town and the County, the Hudson River Valley, the State of New York and ultimately the rest of the nation. The Comprehensive Plan aims to reconnect us to the past while projecting us into a better future, a future that builds upon our strengths while recognizing the limitation of our natural resources. It is a plan that reconnects people to one another and to their communities.

## RECOMMENDATIONS

The recommendations of Comprehensive Plan are organized around seven interconnected central topics:

### Economic Development

- Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses

- Construct a database of information about the Town’s commercial sector
- Enhance communication between the Town and the business community
- Continue the Economic Development Office to attract new businesses and assist business already established within the community
- Work to ensure that a variety of housing options exist within the Town
- Create connections between the commercial sector and educational institutions
- Implement new programs, and continue those already in place, that beautify the Town, making it an attractive place in which to live and conduct business

### **Environmental Resources**

- Create protections for Clarkstown’s unique natural features
- Continue the acquisition of open space lands to protect sensitive environmental areas, as well as farmland
- Continue enforcement of sediment and erosion control measures, both during and after construction
- Protect and conserve both the sources and supply of potable water and the natural features which add to water quality



Shoreline of Lake DeForest

- Enact limits on total development coverage for all zoning districts
- Require stormwater management to a higher extent than currently applicable where development is proposed in watersheds which experience flooding
- Install protections on and around stream corridors
- Enact a wetland protection ordinance (subject to the procedures required by State Law)
- Lobby for air quality monitoring in the Town and County
- Continue to enforce regulations controlling dust and other airborne pollutants due to operations within the Town
- Require more detailed flora and fauna surveys during reviews of development proposals on properties which might contain species of concern
- Continue the acquisition of open space to preserve natural habitats
- Protect views of wooded and natural areas from the removal of vegetation or other native materials which add to the character of the area
- Preserve the suburban and remaining semi-rural character of the Town
- Implement design standards for future commercial construction
- Designate Critical Environmental Areas in Clarkstown
- Implement programs which require and/or encourage environmentally sound building design
- Continue the investigation of and action against complaints of noise, dust and odor
- Continue to assess the potential for noise, dust and odors in projects under review; require the elimination or mitigation of these pollutants as a condition of approval

## **Health Safety & Welfare**

- Ensure the efficient provision of emergency services
- Create zoning to encourage income adjusted housing for emergency service volunteers
- Ensure that Town building and fire codes are current and enforced
- Develop zoning and building regulations that reduce and eliminate potential drainage or flooding problems resulting from new construction
- Develop zoning and building regulations that reduce or restrict odors, sounds, commercial traffic and other negative environmental impacts on residential areas
- Develop zoning that encourages and protects the safety of pedestrian and bicycle traffic



Valley Cottage Engine Company No. 1

## **Historic & Cultural Resources**

- Identify and maintain an up-to-date inventory of historic resources
- Enact legislation to ensure those historic properties in private hands are not destroyed, or so renovated by subsequent owners as to lose their historic status
- Establish a mechanism which notifies the Historic Review Board when development is proposed on a historic property
- Establish a plan to improve the maintenance of all publicly owned historic properties and abandoned cemeteries within the Town
- Create a plan to communicate, promote and educate Clarkstown residents of the historic and cultural resources within the Town

## **Housing**

- Permit apartments over businesses
- Permit accessory apartments
- Create a mechanism for providing tax relief to volunteer emergency service personnel
- Create a comprehensive database of affordable housing units, potential affordable - housing units and lands that could be used for affordable housing
- Adopt zoning that requires a set aside of new units for workforce and volunteer housing
- Plan for and develop additional subsidized-affordable units for seniors
- Expand initiatives to safeguard neighborhoods from inappropriately scaled development
- Implement programs which require and/or encourage environmentally sound building design

## **Recreation, Parks & Open Space**

- Upgrade the pool at Germonds Park
- Replace the existing soccer field at Zukor Park with artificial turf
- Update the playground at Zukor Park
- Construct a comfort station at King's Park

- Construct a multi-use, domed sport and recreational facility
- Construct a regulation sized ice rink
- Develop walking trails at Davenport Preserve
- Provide a complete trail around Conger's Lake
- Continue the acquisition of open space lands following the amended Town of Clarkstown Open Space guidelines

### **Transportation**

- Provide efficient travel between the Tappan Zee Bridge/I-287 corridor, Route 59 corridor, and other parts of Clarkstown
- Add to the economic strength and quality of life in Clarkstown by coordinating with Tappan Zee Bridge reconstruction and other regional transportation initiatives
- Ensure that travel through Clarkstown enhances safety, lowering the number of vehicle crashes that occur in the area and minimizing conflict between travel modes
- Provide local public transportation services that promote sustainable travel options for Clarkstown residents, businesses, and visitors
- Provide for commuter transit services that are accessible, efficient and safe
- Create a walking environment that is accessible, safe, and enjoyable
- Create a cycling environment that is accessible, safe, and enjoyable
- Improve residents' health by reducing air pollution related to motorized travel
- Develop Hamlet Centers with transportation options and connections
- Create diverse mixed-use development areas that allow for walking and biking and are well-served by public transportation

### **IMPLEMENTATION**

Recommendations of the Comprehensive Plan will be implemented by a variety of methods, ranging from simply sharing information to developing entirely new zoning districts for specific areas of the Town.

**Policy Changes** will be made to implement many of the Comprehensive Plan recommendations by instituting new or changing existing processes and procedures employed by various Departments of Town government.

**Critical Environmental Area Designation** of sensitive landscapes will provide these lands greater environmental protection under New York State Law.

**Infrastructure Improvements** will be primarily needed to the Town's transportation network. The Comprehensive Transportation Plan identified over 100 discrete transportation projects in the areas of access management, signal coordination, accident reduction, public transit, sidewalks and bicycle paths.

**Town Official Map Changes** will illustrate necessary improvements to the Town's transportation and drainage systems along with the reservation of property for parkland. The official map will

show areas that applicants for development will be required to set aside as open space or improve with transportation infrastructure such as sidewalks.

**Inter-Municipal Agreements** with County, regional, state and national government agencies will be needed to implement changes that affect geographic areas outside of the Town's municipal borders, require permits from multiple levels of government or are too costly to be borne by the Town alone.

**Zoning Text Amendments** will be needed to change the requirements or procedures for development in entire zoning districts or the Town as a whole. Protection of environmentally sensitive features which cross multiple properties and zoning districts will require zoning text amendments.

**Land Use Changes** are called for along the Town's State Routes 9W, 303, 304 and 59, and Hamlet Centers. New zoning will be developed for these areas that integrates transportation improvements, commercial activity and residential development, as well as encourages growth that is environmentally, socially and culturally sustainable in the long term.

#### **ENVIRONMENTAL IMPACT ANALYSIS**

Following the format of a Generic Environmental Impact Statement under the provisions of the New York State Environmental Quality Review Act, this Comprehensive Plan analyzes the full range of potential adverse environmental impacts associated with its recommendations. Mitigating actions are proposed for the potential impacts of each recommendation to lessen or eliminate these impacts. The Comprehensive Plan also examines the potential environmental impacts of not adopting the Comprehensive Plan or, in the alternative, adopting the recommendations of the Comprehensive Plan independently of one another.



High Tor Mountain

#### **CONCLUSION**

This Comprehensive Plan is the embodiment of the hard work and collaboration of a number of individuals. Extensive public participation, numerous studies and countless hours of deliberation resulted in a document which examines the Town through many different lenses. This multi-faceted approach to comprehensive planning ensures that this document is as representative of the Town as it possibly can be. The Comprehensive Plan strives to guide the Town of Clarkstown toward the brightest future possible, and the great efforts that have gone into the Plan are evidence of the commitment of Clarkstown to continue being a great place to live, work, and enjoy.

## II – Background

### a) History of Clarkstown’s Comprehensive (Master) Planning

In 1966 the Town of Clarkstown developed its first Master Plan which served the Town for three decades. It was financed through a Federal grant from the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954. It was also financed in part by the State of New York and the Town of Clarkstown. The Plan was authorized and supported by the Town Board, and its preparation was delegated to the Town Planning Board in 1964. The Planning Board engaged and utilized the services of the Rockland County Planning Board’s senior staff and its planning consultant, as well as Clarkstown’s own Town Planner. This endeavor on the part of Clarkstown was deemed unique at that time among the municipalities in Rockland County and set a pattern for other master plans to be developed.

After an intense effort for two and a half years by the Planning Board and its supporting staff, consultants, public agencies, the Town Board and a thoroughly involved citizenry, the studies entitled “Town Development Plan” were completed and adopted by the Planning Board and transmitted to the Town Board in August 1966. The Town Board deemed the Plan to be the basis for the amendment of the Town’s Zoning Ordinance and Map by the Planning Board and its staff. The Zoning Ordinance and Map were duly amended and submitted to the Town Board, where, after public input and review it was adopted in June 1967. The Planning Board then proposed and participated in the initial Hamlet Center redevelopment design program that was undertaken for Valley Cottage. The Planning Board also proposed five year intervals for reviews and updates to the Development Plan, which only occurred in 1971. Thereafter, the Planning Board focused its efforts into ongoing master planning, recommending changes as needed.

With the enactment of legislation in the 1990’s that re-codified planning and along “comprehensive” lines throughout New York State, the Town Board authorized the preparation of an update to the 1966 Development Plan. This time the Planning Board augmented its effort with the services of an Ad-Hoc Committee, composed of knowledgeable and committed citizens. It also engaged a planning consultant for the technical aspects of a truly “Comprehensive Plan” that would utilize the elements mandated by state statute. This update called for zone changes of environmentally sensitive properties to the Conservation Zoning District known as R-160. It was, however, not entirely focused on zoning, but also recommended studying various issues facing the Town in the new century such as diminishing open space, increasing housing costs and decreasing affordable housing supply as well as protecting wetlands and revitalizing all hamlet centers. Upon completion and adoption of the plan by the Planning Board and Ad-Hoc Committee in June 1999 and the subsequent completion of the required State Environmental Quality Review Act (SEQRA) process, this Comprehensive Plan Update was submitted to the Town Board for its consideration. The Town Board, after due diligence and review, adopted the Plan in September 1999. Regrettably, some of the most significant recommendations were not implemented. However, ensuing studies were undertaken and selected actions accomplished in the succeeding years. Now, over 40 years after the first Town of Clarkstown Master Plan was prepared, a new Comprehensive

Plan has been prepared to continue guiding land use within the Town. While this new Plan offers new insight and recommendations, it shares the same spirit of innovative planning and civic responsibility that created the original Master Plan.

## **b) Studies, research & analysis performed**

A Comprehensive Plan was deemed necessary and appropriate in 2007 by the Town Board on the recommendation of the Planning Board. The Town Board passed a resolution in November 2007, as per Town Law Section 272-a, establishing the Comprehensive Plan Special Board which started its work in 2008. The Comprehensive Plan Special Board made use of the data from several studies that were commissioned, along with the research of numerous committees that were formed, to address the issues highlighted in the 1999 Comprehensive Plan. The Citizens Advisory Board for Housing in the Town of Clarkstown was established in 2001 and issued a report in September of 2002 calling for the development of affordable housing for seniors and young adults, as well as emergency service volunteers. In 2001 the Open Space Committee developed recommendations for acquiring open space throughout the Town. In 2003 Hamlet Revitalization Overlay Districts were established for Congers and Valley Cottage. The Drainage Task Force was formed to address flooding problems through improvements to the Town's infrastructure, as well as legislation to prevent future drainage problems. Behan Planning Associates was hired at the beginning of 2006 to develop a Vision Plan for New City. The Town of Clarkstown Economic Development Committee was formed in 2006, and in 2007 retained the services of Saratoga Associates to prepare the Town of Clarkstown Economic Development Strategy, which was completed in 2008. In 2008, C.T. Male Associates was retained to develop the Recreation and Parks Master Plan which provided information and recommendations for the Town's recreational facilities and parks systems. The Comprehensive Plan incorporates the findings of these studies and committees, as well as those commissioned principally for the Comprehensive Plan which include the Clarkstown Comprehensive Transportation Study prepared by Cambridge Systematics, Inc. with The RBA Group and Howard/Stein-Hudson Associates, and the Town of Clarkstown Environmental Resource Assessment prepared by John Mickelson, Ecological and Geospatial Consultant.

The Special Board also had at its disposal studies dating back to the original Town Master Plan, including but not limited to:

- a) Development Plan, Town of Clarkstown, August 1966
- b) Development Plan Update, Town of Clarkstown 1971
- c) Clarkstown Drainage Master Plan, 1972
- d) Route 304 Land Use & Zoning Study, July 1975
- e) Palisades Interstate Parkway Corridor Management Plan, December 1999
- f) Clarkstown Comprehensive Plan Update, 1999
- g) County of Rockland Open Space Guidelines, October 1999
- h) Rockland County: River to Ridge: A Plan for the 21<sup>st</sup> Century, 2001
- i) Mid-Hudson South Region Bicycle & Pedestrian Master Plan, June 2001

- j) Priority Recommendations of the Clarkstown Open Space Citizen’s Advisory Committee, June 22, 2001
- k) New York-New Jersey Highlands Regional Study: 2002 Update
- l) Citizens Advisory Board for Housing in the Town of Clarkstown Final Report, September 2002
- m) Assessment of Existing Parkland, State Recommended Parkland Standards and Fee for Money in Lieu of Land, April 11, 2005
- n) Rockland County Signal Optimization Study, 2007
- o) New City Vision Plan, February 2007
- p) Davenport Preserve Master Plan update, January 2009

The County of Rockland is in the process of completing several additional studies, such as the Countywide Bus Stop Study, Countywide Truck Route Study, Route 59 Corridor Transit Needs Study and the U.S. Geological Survey’s Rockland County Water-Resource Assessment. The County is also considering the development of a County watershed study, in partnership with the five Towns of Rockland. Relevant existing and on-going regional, State and Federal studies were also researched and referenced.

Despite the myriad of studies completed, it is the goal that this Comprehensive Plan not be simply a compilation of studies or a document that “sits on a shelf.” To this end, the Special Board has worked to develop a Geographic Information System (GIS) that embodies and promotes the goals and objectives of the Plan. The County of Rockland Planning Department’s GIS Division has provided the Town with numerous data sources. The Town has built upon this data and developed new layers of information. Additional data is also available from various government agencies (NYS, USGS, US Army Corps., Corps of Engineers, NASA etc), as well as private companies and universities. These data layers will be integrated and compiled by the Town’s GIS Coordinator to provide the most up-to-date environmental, historic and cultural information on the properties located within the Town. As development proposals come forward, this data will be readily available to the Town’s land development professionals to inform the environmental review and planning processes.

Development of a Clarkstown GIS will help verify information on Environmental Assessment Forms (EAF) provided to the Town with land development applications under SEQRA. The GIS will make clear when additional studies are necessary, which, in turn, can be used to update the Town’s Geographic Information System. The GIS can be also used to run development scenarios to determine potential future impacts, thereby guiding long range planning of the Town. The geographical representations that can be created by a GIS can also help engage and educate the public.

### **c) Subcommittees of the Special Board**

To coherently organize the Comprehensive Plan and effectively process the vast amounts of information received from the public participation process and consultant studies, it was necessary to create subcommittees of the Comprehensive Plan Special Board. As such, the Comprehensive Plan was structured around the following seven themes:

- Economic Development
- Environmental Resources
- Health, Safety & Welfare
- Historic & Cultural Resources
- Housing
- Recreation, Parks & Open Space
- Transportation

The seven subcommittees of the Special Board each focused on one of these themes. Subcommittee size ranged from 4 to 12 members; each group had one or two members designated as the chairperson or co-chairpersons. Subcommittee members were selected based on their knowledge and experience and included Town staff and citizens.

The Comprehensive Plan subcommittee members were also responsible for serving as facilitators during the public meetings, recording and categorizing comments from the public. Each subcommittee was responsible for conducting its own research into the existing conditions in the Town related to their respective topics. Some subcommittees conducted all of their own research internally, while others commissioned consultant studies or surveys. The subcommittees developed and proposed recommendations for the Comprehensive Plan based on the comments received during public meetings and information in the consultant reports and surveys. Recommendations were placed into “matrices” and were compared and analyzed for potential environmental impacts and suggested mitigation (see Appendix Section II). The completed matrices were then used to create each subcommittee’s report of existing conditions and proposed recommendations to the Special Board (see Appendix Section III). These reports were used by the Special Board to develop the final recommendations of the Comprehensive Plan.

## **d) Public participation process**

Engaging and educating the public was an integral part of the Comprehensive Planning process. While having a small Special Board helped to streamline decisions regarding the planning process, additional individuals were needed to help the board in reaching out to the public. The Special Board retained the services of Professor John Nolon and Professor Sean Nolon of the Pace University Land Use Law Center to aid in facilitating the comprehensive planning process and public meetings. Professor Sean Nolon, an expert in mediation, hosted a workshop in October 2007 in which he provided training on small group facilitation to the Comprehensive Plan facilitators. This training prepared the Comprehensive Plan meeting facilitators to objectively record comments and deal with potential conflicts during the public meetings.



Comprehensive Plan Kick-Off Meeting

The Planning Department, in conjunction with the Special Board for the Comprehensive Plan, organized the public participation process of the Comprehensive Plan. Every household in the Town received at least three invitations to participate in the process. Over six hundred residents from throughout the Town participated in two Town-Wide workshops and five Hamlet workshops identifying the issues that they wanted addressed in the Comprehensive Plan (Table 1). In addition, a special meeting was held to gather input from members of Clarkstown’s religious and cultural institutions. Comments were recorded, posted on the Town website and analyzed by each subcommittee (see Appendix Section I). The Comprehensive Plan was presented to the public based on the seven themes upon which the subcommittees were structured. Workshops focused on these themes were conducted at each hamlet center and with various stakeholder groups, with the aid of geographical representations and analyses. Various media were used to inform the public process, such as the postcards, newspaper announcements, mailed questionnaires and web alerts.

**Table 1  
Public Outreach Meetings**

<b>Meeting Type</b>	<b>Meeting</b>	<b>Date</b>	<b>Location</b>
Facilitator Training	Facilitator Training Session	October 11, 2007	Town Hall
Town-wide	Kick-Off for Public Participation - Identification of Ideas	October 25, 2007	Town Hall
Hamlet	Nanuet/Spring Valley & Bardonia	December 3, 2007	Nanuet High School
Hamlet	Valley Cottage & Upper Nyack	January 10, 2008	Nyack High School
Hamlet	Congers & Rockland Lake	January 24, 2008	Congers Community Center
Hamlet	New City	February 4, 2008	Clarkstown North High School
Hamlet	West Nyack & Central Nyack/Nyack	February 21, 2008	Clarkstown South High School
Town-wide	Religious & Cultural Outreach	March 4, 2008	Town Hall
Town-wide	Presentation & Discussion of Ideas from Kick-Off and Area Workshops, and Initial Research	May 15, 2008	Town Hall

Tax-payers, businesses and organized civic groups all have a stake in the Comprehensive Plan and were all called to the comprehensive planning process. One often-overlooked group is, unfortunately, the Town’s youth. Now more than ever, the perspective of the Town’s young adults needs to be considered in land use decisions. Too often, decisions have been made with limited consideration for future generations. The Special Board engaged the public school districts that serve the Town to specifically include students in the development of this Comprehensive Plan.

The Clarkstown Comprehensive Plan reached out to the community's youth by conducting an extensive school survey. Over 1,300 surveys were completed by juniors and seniors from Clarkstown North and South High Schools, Nanuet High School, Nyack High School and The Rockland Country Day School. The survey collected information on a variety of issues, including housing, environmental issues, park use and volunteer emergency services. Six hundred residents also participated in a telephone survey on housing issues. All of this information was tabulated, analyzed by each subcommittee and incorporated into the Comprehensive Plan.

## **e) State Environmental Quality Review Act**

The Comprehensive Plan provides specific policies for the growth and development of the Town that recognizes that we “are stewards of the air, water, land and living resources, and that [we] have an obligation to protect the environment for the use and enjoyment of this and all future generations” (6 NYCRR Part 617.1 (a)). This Comprehensive Plan is unique inasmuch as it follows the format of an Environmental Impact Statement (EIS) as specified by the State Environmental Quality Review Act. Under New York State Environmental Conservation Law, 6 NYCRR Part 617, an EIS is by definition a comprehensive study of proposed site specific individual land uses. An EIS “provides a means ... to systematically consider significant adverse environmental impacts, alternatives and mitigation” and “facilitates the weighing of social, economic and environmental factors” (617.2 (n)). The law specifically states that the “adoption of a municipality’s land use plan, the adoption by any agency of a comprehensive resource management plan or the initial adoption of a municipality’s comprehensive zoning regulations” is a Type 1 action which “carries with it the presumption that it is likely to have a significant adverse impact on the environment and may require an EIS” (617.4 (a) (1)).

As permitted by Town Law Section 272-a 8, the Town designed the Comprehensive Plan to serve as a Generic Environmental Impact Statement (GEIS). GEISs are broader and more general than site or project specific EISs. They are appropriate for assessing the environmental impacts of “an entire program or plan having wide application or restricting the range of future alternative policies or projects, including new or significant changes to existing land use plans, development plans, zoning regulations or agency comprehensive resource management plans” (617.10). By structuring this Comprehensive Plan as a GEIS, the Town not only complied with State Law, but it saved time and ensured that the Plan was truly comprehensive.

In accordance with the requirements for a GEIS, recommendations of the Plan underwent extensive environmental review. First, recommendations for matters to be considered in the Plan were collected through an extensive scoping process. Input gathered during the public meetings and received in e-mails and letters was grouped and categorized. This input was processed and tabulated in the form of “actions” which were then carefully studied to determine any potential adverse impacts before any action was recommended for implementation within the Comprehensive Plan. Mitigation was proposed to eliminate or reduce the extent of each of the adverse impacts in general terms, realizing that as recommendations of this plan are implemented, site or project specific review will be required of additional potential adverse impacts.

This analysis, performed by the subcommittees of the Comprehensive Plan Special Board, allowed each recommendation to be fully weighed and considered, and helped them resolve potentially conflicting recommendations. With this information at hand, the Special Board was able to effectively produce the final recommendations of the Comprehensive Plan.

### III – History of Land Use

Clarkstown became an official town on March 18, 1791, when it was separated from the Town of Haverstraw by an act of the New York State Legislature. Since Rockland County was not created until 1798, Clarkstown was first a Town in Orange County before it became a Town in Rockland County. The name Clarkstown is derived from that of the area's principal landowner at the time, Daniel De Clarke. Among the reasons given for the split from Haverstraw were the long travel times to the Town offices and difficulty in managing such a large area of land with a growing population. The first Supervisor of the Town of Clarkstown, David Pye Sr., would later become Rockland County's first Clerk.

Prior to European settlement, several Native American tribes populated the lower Hudson Valley. Among these were the Lenni Lenape (Delaware), Iroquois, Mohegan and Minsie.<sup>1</sup> The name for the hamlet of Nanuet was advanced by James DeClarke in 1856, in honor of a Kakiat Native American who resided in the area. Clarkstown existed as a predominately agrarian township for most of its early history. The county court house, one of Clarkstown's earliest prominent public structures, was built before the Town was separated from Haverstraw. It was constructed in 1774 after the original structure in Tappan was destroyed by a fire. New City was chosen as the new location due to its central location in the county. Soon after, two hotels were built, and in 1815 the Clarkstown post-office was established.<sup>2</sup>

At this time the Town was almost entirely devoted to agriculture, and goods were sailed down the Hudson to be brought to market in New York City. Grist and sawmills were also common throughout the area and quarries were located near New City as early as 1788 and in Upper Nyack in the early 1800's.<sup>3</sup> One of Clarkstown's most important early exports was the ice cut from Rockland Lake by the Knickerbocker Ice Company, the largest ice company in New York.<sup>4</sup>

Clarkstown's early roads and railways, like later transportation infrastructure, played an important part in the Town's development. The Nyack Turnpike, which connected Suffern to the port in Nyack on the Hudson River, was completed in 1828.<sup>5</sup> This important route spurred early development in the area now known as West Nyack. The many brooks in this area supplied power to grist and sawmills.<sup>6</sup> Nanuet can attribute its growth to the advent of the Erie Railroad about 1841.<sup>7</sup> The hamlet of Congers was named after Abraham B. Conger who donated a tract of land to the West Shore Railroad. The entry of the railroad spurred speculation in this area and led to the purchase of 2,400 acres of land by agents of the Boston Improvement Company. These acres were

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<sup>1</sup> Cornelia F. Bedell, ed. Now and Then and Long ago in Rockland County (N.Y.: Arno Press Inc. 1968) 27

<sup>2</sup> Bedell, 416

<sup>3</sup> Bedell, 253-254

<sup>4</sup> Bedell, 239

<sup>5</sup> SEARCH Foundation, Portrait of West Nyack (NY: Zingaro Printing Corporation 1973) 16

<sup>6</sup> Frank Mertangue Green The History of Rockland County (Historical Society of Rockland County 1989) 417

<sup>7</sup> Green, 422

subsequently sub-divided into 10,000 lots, some as small as 25 x 80 feet in size.<sup>8</sup> Likewise, the hamlet of Bardonia received its name from that of the Bardon family who farmed and operated an iron product shop in the area.<sup>9</sup>

During the twentieth century several transportation projects had enormous impacts on the development of Clarkstown. In 1947 construction began on the Palisades Interstate Parkway. The Parkway runs a total distance of 42 miles between Bergen County, New Jersey and Orange County, New York, cutting a north-south route across Rockland County; the project was completed in 1958.<sup>10</sup> In 1945 a decision was made to build the New York State Thruway which would run from Buffalo to Albany and then south to the New York/New Jersey border.<sup>11</sup> The eventual path of the Thruway through Rockland County would influence a project of even greater significance in the region. In 1955, the construction of the Tappan Zee Bridge brought about immense changes to Clarkstown's landscape, and led to the development which shaped the Town into the place it is today. Proposals for a Hudson River crossing in this area had been made as early as 1930.<sup>12</sup> Construction of the bridge began in March 1952 after a long debate over where the structure should be placed; the bridge was opened on December 15, 1955. With the opening of the Tappan Zee Bridge, Clarkstown experienced a population boom doubling from 1950 to 1960, and almost doubling again from 1960 to 1970 (Chart 1). With this change, agricultural activity in the Town declined as land was sold and developed for housing. In an effort to guide future development, the Town adopted a Master Plan in 1966. During this time many Town and County roads were constructed and improved, and numerous infrastructure improvements were undertaken to keep pace with the Town's growing population.

With the rapid growth in population and subsequent infrastructure expansion, the Town experienced an influx of business and industry. Small retail stores and strip malls developed throughout the Town, and several large firms located their offices and industrial works in Clarkstown. The Nanuet Mall, which opened in 1969, featured 101 stores in a fully enclosed two-level complex.<sup>13</sup> In 1998, the Palisades Center Mall opened; this four-story, 1.85 million square feet shopping complex is one of the largest malls in the country and attracts shoppers from the entire region.

Today, Clarkstown has a varied land use pattern. Aside from its parks and water bodies, much of Clarkstown's 41 square miles has been developed according to the Town's zoning districts (Figure 1). Rockland State Park and High Tor State Park, both owned by the Palisades Interstate Park Commission, along with parkland owned by the County of Rockland, generally ring the northern and eastern borders of the Town, while Town parkland is evenly distributed throughout the municipality. The Town's major water bodies include Rockland, Swartout and Congers Lakes and Lakes Lucille and DeForest, the most prominent being Lake DeForest which bisects the Town and is traversed by a causeway, County Route 80, the only major east-west roadway aside from Route

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<sup>8</sup> Thom Olsen, "Centennial History of Congers, 1883 – 1983. Rockland County Century of History (Canada Historical Society of Rockland, 2002) 330

<sup>9</sup> John Scott, "Bardonia" Rockland County Century of History (Canada Historical Society of Rockland, 2002) 327

<sup>10</sup> The Roads of Metro New York, 2009, Eastern Roads, June 4, 2009, <http://www.nycroads.com/roads/palisades>

<sup>11</sup> Linda Zimmerman, ed. Rockland County Century of History (Canada Historical Society of Rockland, 2002) 183

<sup>12</sup> Zimmerman, 179

<sup>13</sup> Clarkstown Town Board, Town of Clarkstown, N.Y. (1991) 23

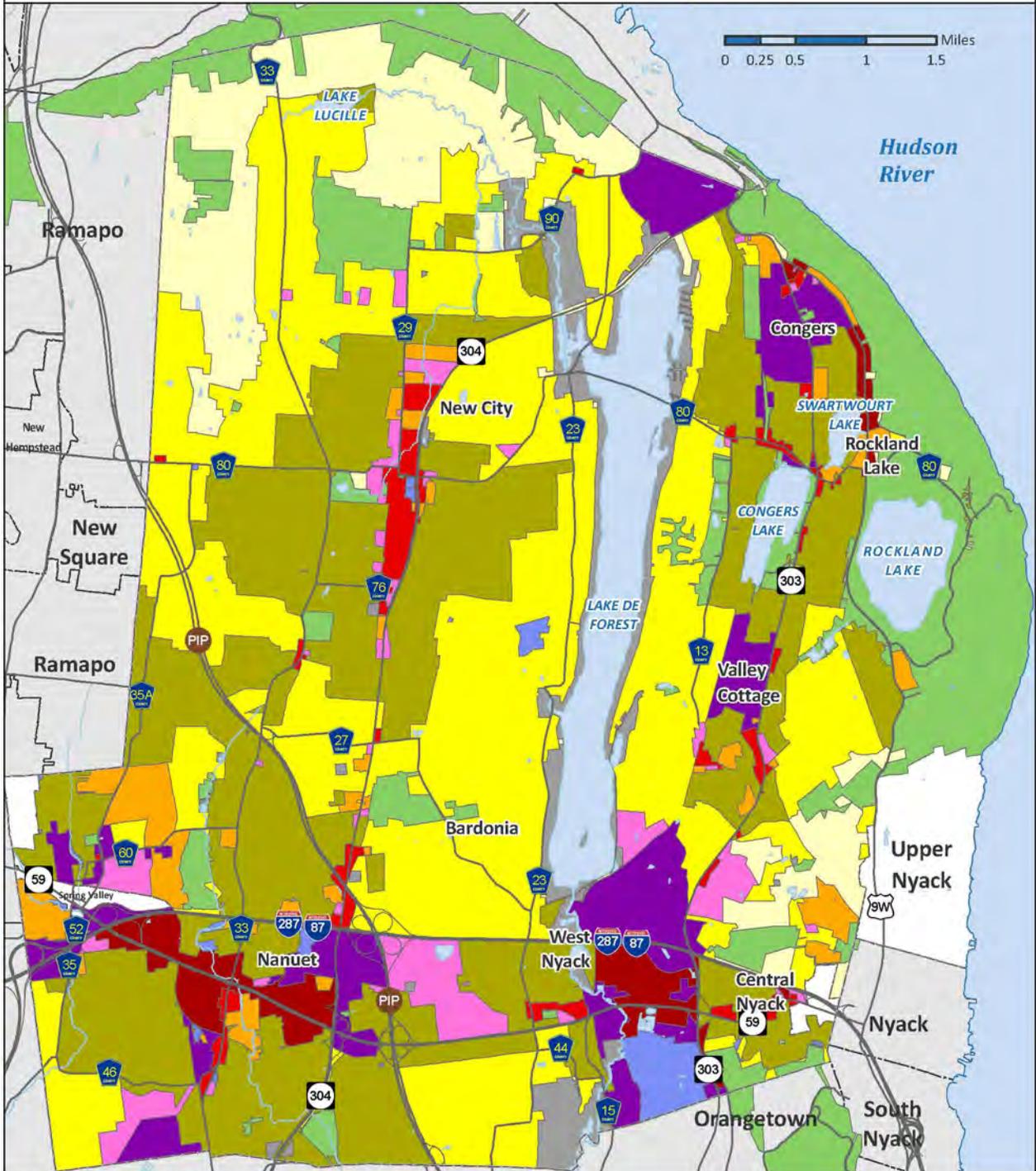
59 and the Thruway. The remaining State Routes 9W, 303 and 304 run north-south and were developed along side or in place of rail line.

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Current Land Use and Generalized Zoning

Lakes and Streams	<b>Current Land Use</b>	<b>Generalized Zoning</b>	Neighborhood Shopping
Town and Village Boundary	Parks	Low Density Residential	Regional Shopping
Major Road	Municipal	Medium Density Residential	Office
	Utilities	High Density Residential	Industrial
		Multifamily Residential	

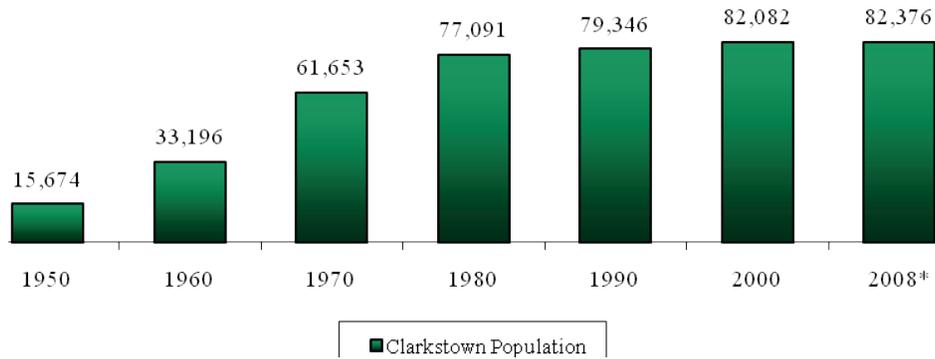


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Figure 1

**Chart 1**  
**Town of Clarkstown Population 1950-2008**

*Source: U.S. Census Bureau*



\*2008 U.S. Census Estimate

Clarkstown is composed of the hamlets of Bardonia, Central Nyack, Congers, Nanuet, New City, Rockland Lake, Valley Cottage, West Nyack, all of the Village of Upper Nyack, and portions of the Villages of Nyack and Spring Valley. New City is the seat of both Town and County governments. All of the Town's Hamlet Centers are situated in close proximity to State highways. Hamlet Centers typically have shopping that serves residents in the immediate vicinity. Major regional shopping is found primarily along Route 59, where both the Palisades Center and Nanuet Mall are located. Industrial and office parks are also situated along State highways generally between Hamlet Centers. Two rock quarries are located in Clarkstown, both in manufacturing zones in West Nyack and New City. The majority of the Town's land is developed as residential, generally following a concentric zoning pattern around the Hamlet Centers, with higher densities nearer the center and lesser densities farther away, the exception being clusters of multi-family development each totaling over 1,200 units in Nanuet and Valley Cottage.

As the Town proceeds into the twenty-first century new challenges and opportunities face the community and the greater region. Plans are moving ahead to replace the aging Tappan Zee Bridge and install a new public transportation network across and beyond Rockland County. Economic and environmental issues have taken center stage in the national spotlight. The effects of their prominence can be felt at the municipal level as the community works toward ensuring that employment opportunities are abundant while curtailing pollution and energy consumption. With change comes the opportunity for advancement and betterment, and, as the Town of Clarkstown has done in the past, it will meet the future with a vision and commitment to ensuring it is a community of unsurpassed quality.

## **IV – Vision Statement (Proposed Action)**

Throughout the history of the Town of Clarkstown, connections have been formed and broken; there have been cycles of disconnection and reconnection. The Town was connected to the rest of the world through the Hudson River, a center of boating and ship building. Rail lines connected the Town's Hamlets to New York City and to the Erie Canal. Development of the Palisades Interstate Parkway and the Tappan Zee Bridge connected the Town to the larger Hudson Valley region via passenger vehicle, spurring and accelerating development. Over time ship building declined, public access to the Hudson River was cut off, and rail lines were ripped up without thought for the future. Now with the replacement of the Tappan Zee Bridge, rail lines are being discussed again. The Town needs to reconnect...

The Clarkstown Comprehensive Plan recognizes the interdependence between individuals and society, between our built systems and our natural environment. It is a plan that aims to reconnect people to nature, from the Palisades Ridge, a part of the Hudson Highlands spanning four states, to the Hudson River connecting us to the Hudson River Valley and New York City. It is a plan to safely connect our homes to our jobs, our schools, our businesses, our hamlet centers and our parks, via all of the modes of transportation. These connections will be accomplished through partnerships, through the formation of relationships between the residents of the Town and Town government, between the Town and the County, the Hudson River Valley, the State of New York and ultimately the rest of the nation. The Comprehensive Plan aims to reconnect us to the past while projecting us into a better future, a future that builds upon our strengths while recognizing the limitation of our natural resources. It is a plan that reconnects people to one another and to their communities.

## V - Comprehensive Plan Recommendations

### a) Economic Development

The Town of Clarkstown is home to a diverse range of businesses and is positioned as a desirable locale for many others. The Town offers businesses an attractive setting to anchor their enterprise, complete with service and financial institutions to provide necessary supportive functions, as well as a solid infrastructure to keep businesses running smoothly once they are established. Clarkstown is a business-friendly community in every sense of the term, and the Town is constantly renewing its efforts to ensure it remains as such; like the successful businesses which are sited and located in Clarkstown, the Town must evolve to meet the challenges posed by the shifting demands of the economy as they arise.

Clarkstown's largest business sector as of 2005 is retail trade; trailing the retail sector in terms of the number of persons employed are several other economic divisions which comprise the heart of Clarkstown's skilled workforce (Table 2). It is predicted that the Health Care and Social Assistance sector will eventually surpass retail trade as Clarkstown's largest business sector.

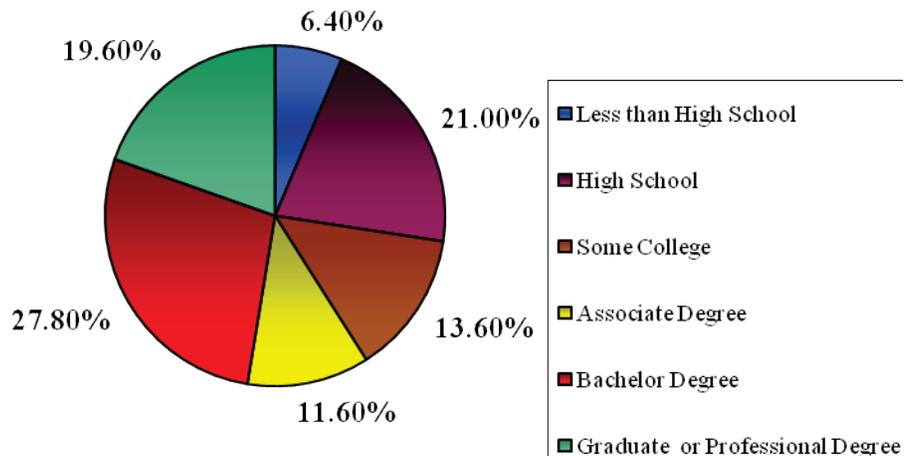
**Table 2**  
**Town of Clarkstown – Leading Business Sectors**

<b>Business Sector</b>	<b># of Persons Employed (2005)</b>
Retail Trade	7,884
Health Care and Social Assistance	6,856
Accommodation and Food Services	2,943
Professional, Scientific and Technical Services	2,687
Construction	2,336
Administrative Support, Waste Management and Remediation Services	1,981
Other Services (except Public Transportation)	1,706
Manufacturing	1,408
Wholesale Trade	1,482
Information	1,271
Finance and Insurance	1,083

The Town of Clarkstown has four large commercial parks totaling over 100 acres of land. These areas are well suited to accommodate the needs of the business sectors targeted for growth in the future. In addition to these commercial parks, construction of the Kohl Industrial Park is near completion. This park, located on 15 acres of land in Congers, will provide over 254,000 square feet of industrial and office space. Over 250 acres of Empire Zone land exists in the Town of Clarkstown, much of which is open to new business.

As of 2006, over 60% of the Town of Clarkstown's residents over the age 25 had a college degree while only 93.6% had a high school diploma, which was an increase from 90% in 2000. These numbers correspond with the composition of the Town's workforce, half of which is employed in Management and Professional occupations. Furthermore, this makeup is also the driving factor behind Clarkstown's higher household and per capita income figures.

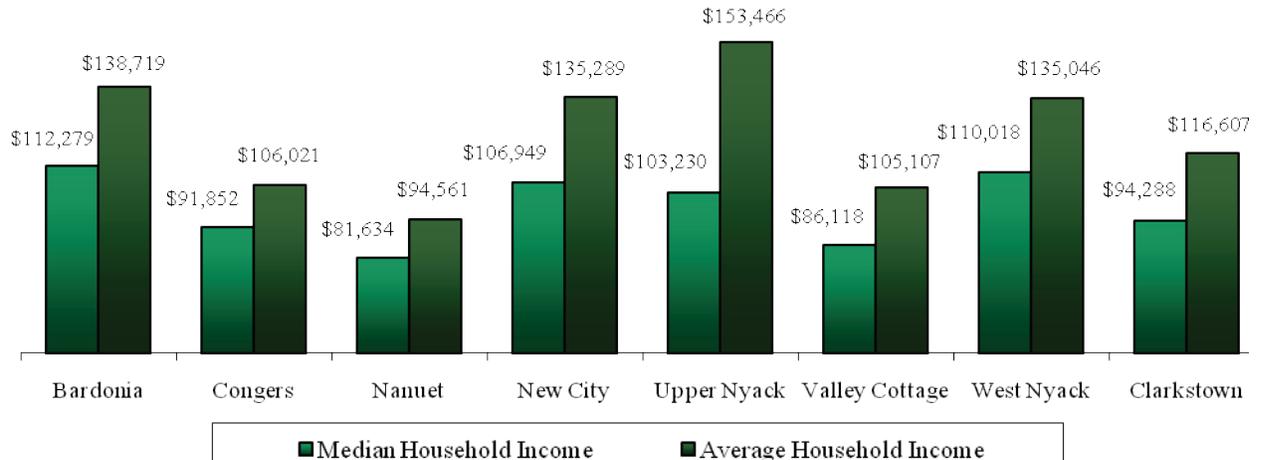
**Chart 2**  
**Town of Clarkstown**  
**Educational Attainment, Population 25+ Years Old: 2000-2006**  
 (Source: U.S. Census Bureau; 2006 American Community Survey)



A comparison of median and average household incomes within Clarkstown illustrates the degree of economic diversity within the Town. While incomes in Clarkstown are overall higher than those of all of Rockland County, the large difference between median and average household incomes indicates the presence of substantial income gaps. This reinforces the need to support not only a wide range of job-types within the Town, but also emphasizes the importance of developing a diverse housing stock.

**Chart 3**  
**Household Income Characteristics,**  
**Town and Hamlets of Clarkstown: 2007**

(Source: EASI Demographics - Presented in Town of Clarkstown Economic Development Strategy, 2008)



Based on the forgoing the Town of Clarkstown Economic Development Strategy prepared by Saratoga Associates identified the following as target industries for the Town of Clarkstown:

- Biotechnology
- Clean technology / alternative energy
- Educational services
- Financial services
- Information technology
- Medical devices
- Professional and technical services

The Economic Development Strategy recommends that new commercial and industrial development be directed to existing business cores, designated growth areas and enterprise Empire Zones. Empire Zones offer tax reimbursements through New York State and serve as magnet areas for businesses. Some of Clarkstown’s Empire zoned land is located along the Route 303 corridor in northern Valley Cottage and Congers. As prime land for commercial and industrial development, it is the recommendation of the Economic Development Strategy that Route 303 be considered for infrastructure improvements; this recommendation was also made by Cambridge Systematics in the Town of Clarkstown Comprehensive Transportation Plan.

With a limited amount of vacant commercial and industrial space spread throughout the Town it is crucial to maintain a database of these areas to aid prospective businesses in their consideration of Clarkstown as a possible business location. Through the Economic Development Specialist such properties can be cataloged for swift reference when needed. The Town must also remain vigilant

to innovative redevelopment and reclamation opportunities, which can potentially open up new or underutilized areas for new commercial and industrial development.

Like most communities located on the outskirts of the New York Metropolitan Area, Clarkstown is experiencing pressures to build residential units that will cater to the growing number of residents moving out of New York City. This outward movement to the suburbs has resulted in higher housing costs and has exacerbated the need for both affordable and workforce housing in Clarkstown, in addition to increasing pressures to develop more residential sites. A diverse economy requires a workforce that includes a variety of job types and associated salaries. Housing prices must reflect this variety, as affordable workforce housing is essential to sustaining a viable economy for the community. The Economic Development Strategy recommends the development of varied housing, and favors Clarkstown's hamlet centers as areas in which new housing types may be added in conjunction with office and retail development.

Clarkstown's local economy could be bolstered further by enhancing connections between local employers and Clarkstown's schools. After-school programs, internships, job shadowing and mentoring programs, and partnerships with local businesses and higher-educational institutions should be considered primary strategies to augment a skilled workforce originating from within the community. In addition, programs which cater to fledgling business, such as business incubators and microfinance, should be sought out and supported by the Town.

## **RECOMMENDATIONS**

**Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and will not conflict with existing residential uses.** Both the Economic Development Strategy prepared by Saratoga Associates and the Comprehensive Transportation Plan prepared by Cambridge Systematics make specific recommendations pertaining to the development and expansion of Clarkstown's existing commercial and industrial sectors which are situated along its State Route corridors (Figure 2).

**Construct a database of information about the Town's commercial sector.** By maintaining a database of information on businesses and commercial real estate Clarkstown can more readily assist businesses seeking to locate within the Town. This database will also provide a localized tool for monitoring municipal commercial trends. In order to establish this database a number of partnering organizations, such as the Rockland Business Association, Industrial Development Agency and Chambers of Commerce, can be contacted and individual businesses surveyed to make the process as comprehensive as possible.

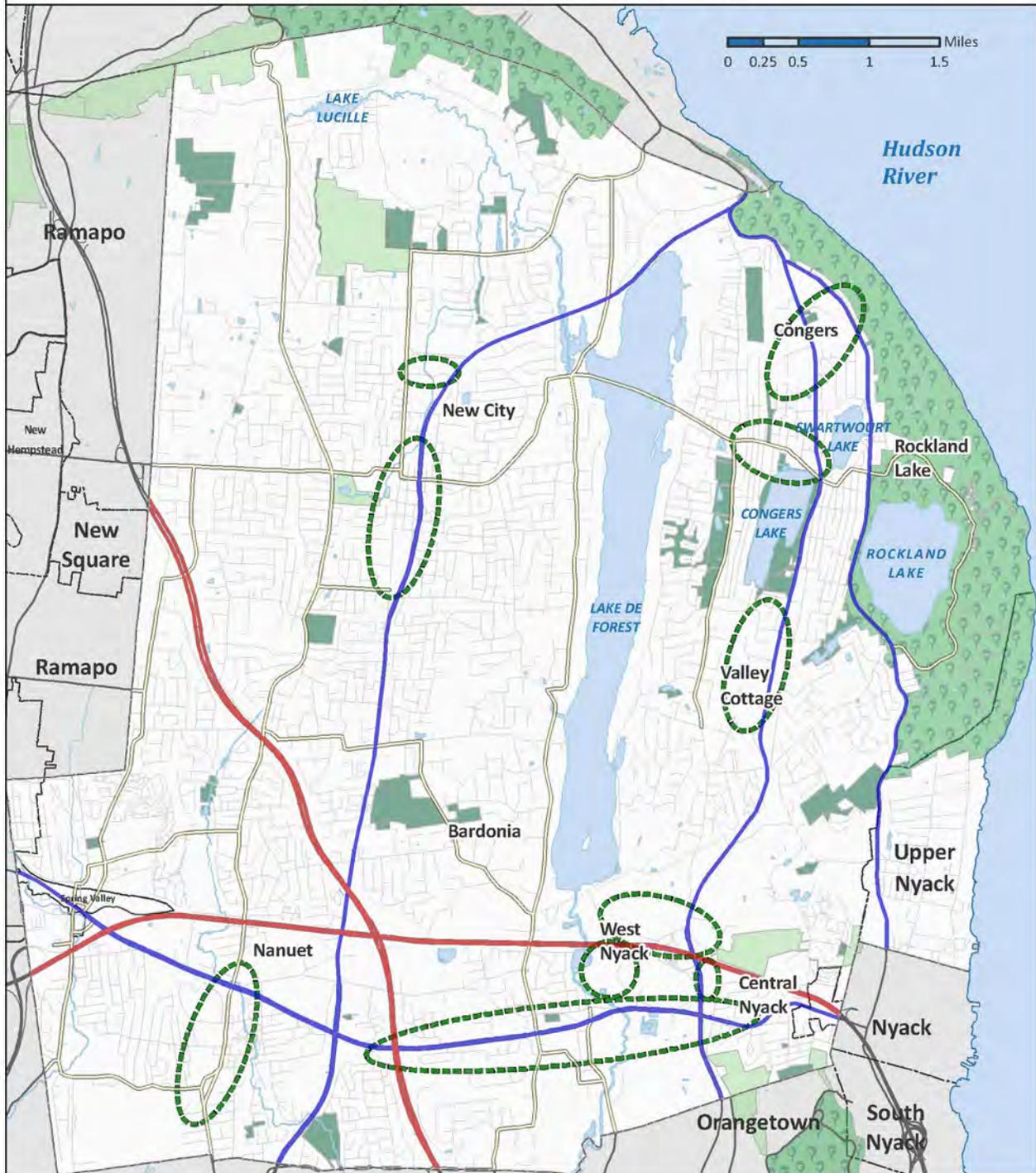
**Enhance communication between the Town and the business community.** To provide more information directly to the business community the Town should consider adding an economic

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Economic Development Areas

-  Lakes and Streams
-  Clarkstown Parks and Open Space
-  Interstate Highway
-  Town and Village Boundary
-  Rockland County Parks
-  State Highway
-  Economic Development Area
-  New York State Parks
-  County Highway
-  Local Road



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Figure 2

development page to its website. An economic development handbook will be produced for distribution to local businesses. These works will provide businesses with commonly requested information on conducting business within the Town, information on funding sources, and contacts to municipal and regional commerce organizations. The Town's membership in economic development organizations such as "Patterns for Progress" should provide the Town with the latest information on conducting business in the Hudson Valley. The Town will continue direct outreach to the commercial sector by organizing visits to local businesses.

**Continue the Economic Development Office to attract new businesses and assist business already established within the community.** A Town office dedicated to economic development is a fundamental component for the vitality of the Town's business sector. Through this office, inquiries concerning economic development can be handled swiftly and information of this nature can be organized, stored and disseminated from a single location.

**Work to ensure that a variety of housing options exist within the Town.** The Town must examine ways in which to provide additional affordable housing units. This housing diversity is crucial to a successful local economy. Skilled workers will migrate to areas providing similar salaries and lower housing costs if more options are not made available. The recommendations put forward in the Housing section should be implemented.

**Create connections between the commercial sector and educational institutions.** The Town should work to establish links between schools, colleges and the business community to endorse curricula and programs that teach students the skills that are in demand in the local economy.

**Implement new programs, and continue those already in place, that beautify the Town, making it an attractive place in which to live and conduct business.** Maintaining and enhancing the aesthetic qualities of the Town are important to preserving the high quality of life enjoyed by Clarkstown's residents and businesses. Programs and policies that preserve and enhance the aesthetic environment are also fundamental to attracting new businesses to the community.

## b) Environmental Resources

The environmental diversity of the Town of Clarkstown is one of the features that attract residents, as well as commercial and business development. This diversity should be protected and enhanced within the framework of the Comprehensive Plan, so that the balanced development of the Town will continue.



Kennedy Dells Park

In a series of public hamlet meetings, residents raised a number of concerns for the future development of the Town; among these are adaptive re-use of existing buildings and sites, air quality, managing and controlling future development, energy and energy conservation, flooding and flood control, flora and fauna, capacity of existing infrastructure for both future development and stormwater run-off, noise and dust pollution, recycling, general resource conservation, visual resources, and water resources.

These general concerns and more specific considerations are the basis for this report and for recommendations to address the environmental issues of future land use within the Town.

### Land Resources

Soils within the Town vary extensively, ranging from deep well-drained loam soils to glacial tills (Figure 3). Overall, there are 43 different soil types present within the Town, with Wethersfield, Wethersfield-Urban Land Complex, Cheshire-Urban Land Complex and Holyoke-Rock Outcrop Complex being the most prevalent. However, much of the soils are Hydrologic Group C and D soils with lower permeability rates, which severely impacts infiltration capacity. Development on these types of soils has resulted in higher runoff rates due to development and the accompanying increases in impervious coverage. While the early development of Clarkstown was heavily agricultural, this use has declined and been replaced with predominantly residential uses. There are now only a handful of farm operations still active in the Town (Figure 4). Cropsey Farm in New City was acquired for open space through the partnership of the State, County and Town, and the Cropseys have a life estate allowing them to continue to farm a portion of their 24 acre property. Recently, Smith Farm in New City and parts of Dr. Davies Farm in Congers were subdivided for residential development. The last large operating farm is Dr. Davies' 48 acre apple orchard located in Congers. The remainder of the Town has largely been developed with impervious surfaces.

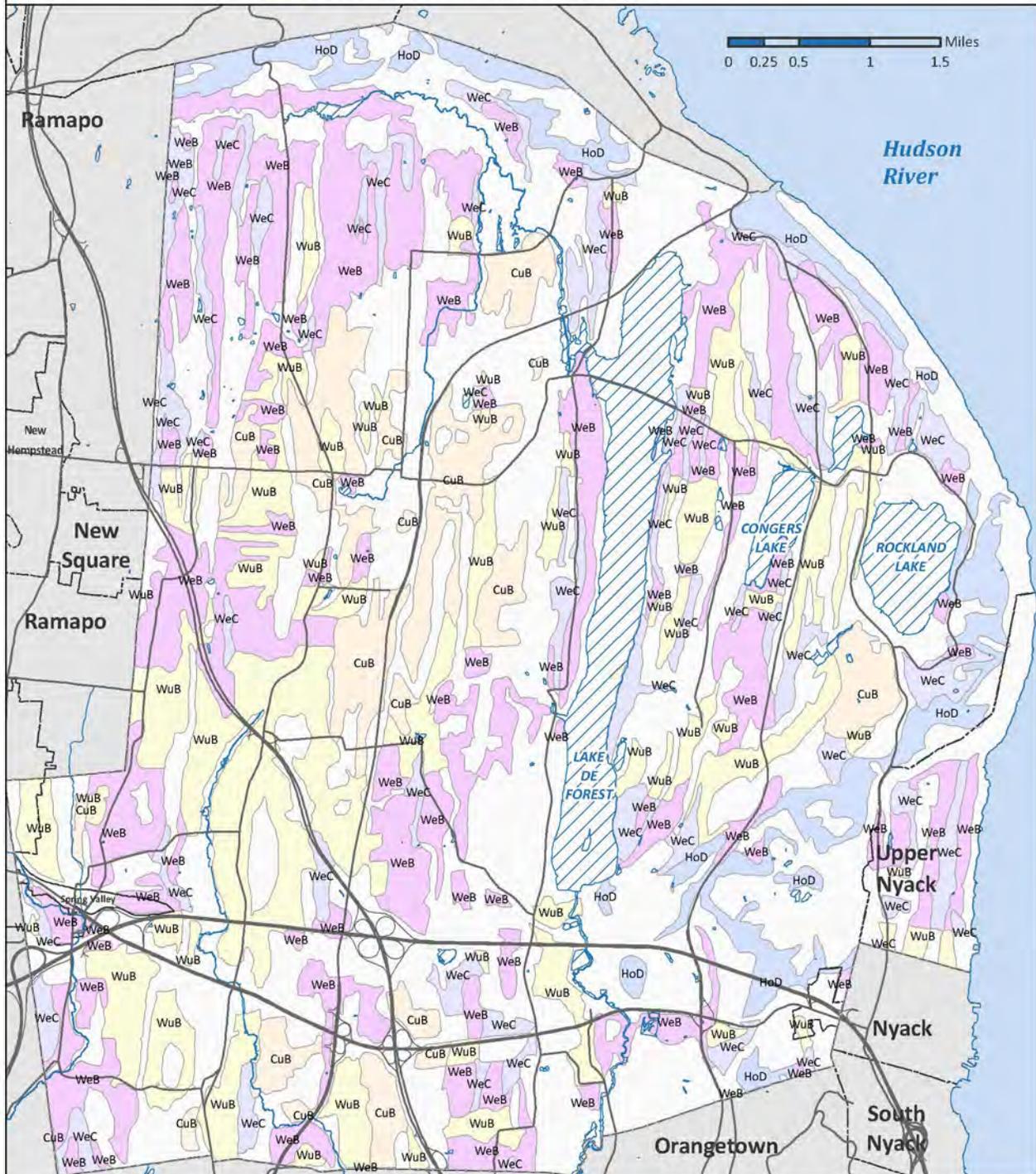
Underlying bedrock geology is composed mainly of the Holyoke-Rock Outcrop Complex and Chatfield-Rock Outcrop Complex soils, totaling 2,969 acres which are found generally on the

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Five Major Soil Types

- Lakes and Streams
- Town and Village Boundary
- Major Road
- CuB, Cheshire-Urban land complex, 2 to 8 percent slopes
- HoD, Holyoke-Rock outcrop complex, hilly
- WeB, Wethersfield gravelly silt loam, 3 to 8 percent slopes
- WeC, Wethersfield gravelly silt loam, 8 to 15 percent slopes
- WuB, Wethersfield-Urban land complex, 2 to 8 percent slopes



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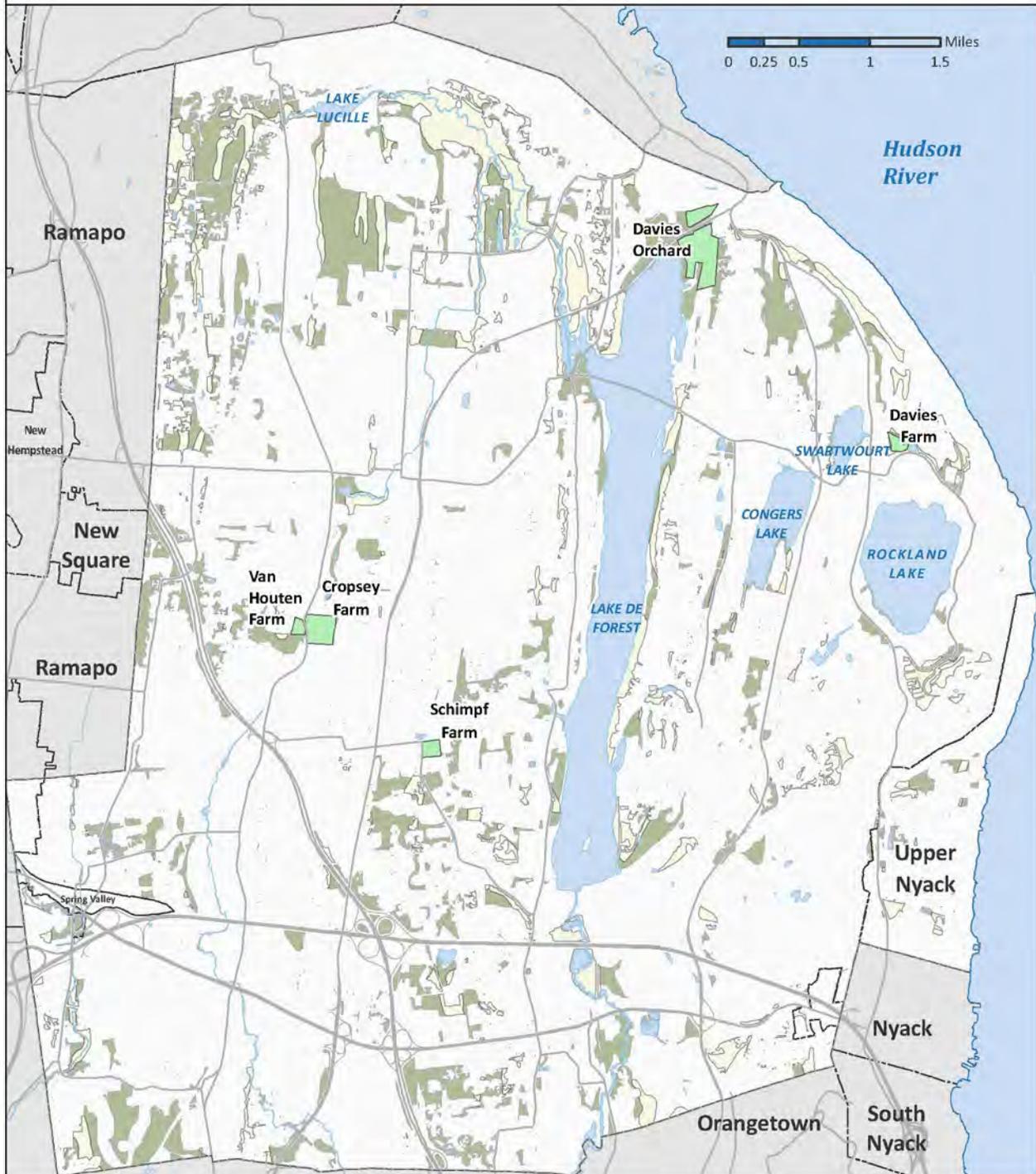
Figure 3

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Agriculture

-  Lakes and Streams
-  Town and Village Boundary
-  Major Road
-  Soils of Statewide Importance in Less Developed Areas
-  Prime Farmland in Less Developed Areas
-  Farms



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Figure 4

hillside areas on the east and north sides of the Town, along the Palisades Ridge and Hook Mountain (Figure 5). A small area (19 acres) of Chatfield soil is located on the east side of Lake DeForest. These soils are shallow soils over bedrock formations, with 15% to 30% rock outcrop depending on the slope of the formation. These soils are characterized by moderate to severe surface run-off and erosion potential.



Cliffs are generally not found within the unincorporated portions of the Town, but rather on the east side of Town, more within the boundaries of the Village of Upper Nyack. Unique landforms within the Town include the steep slopes and ridgeline of the eastern and northern parts of the Town (Figures 6 & 7). These have sensitive characteristics from the standpoint of soil erosion, rock outcrops and visual impacts from within and outside of the Town.

Ridgelines and steep slope areas are predominant around the east and north sides of the town, part of the Palisades Ridge formation. These areas are minimally developed, and in some locations the Town has already acquired several parcels under its open space initiative to preclude development on these lands. However, there are still several parcels capable of development, and with increasing development pressure these should be carefully analyzed to avoid severe impacts to both the view shed and soils.

Soil erosion and resultant sedimentation of receiving waterbodies has and continues to be a major concern for the Town of Clarkstown. While the major source of sediment has traditionally been from active construction sites, erosion of soils is a naturally occurring phenomenon and additional soils are eroded from stream banks due to increases in storm run-off. These factors all contribute to lessened water quality levels, reduced stream and wetlands functionality, and increased potential for flooding.

### **Water Resources**

The Town is crisscrossed with a number of streams and rivers, which generally flow to the south and discharge into the Town of Orangetown or the Town of Ramapo (Figure 8). The major streams are the Hackensack River, the Nauraushan Brook and the Pascack Brook. These ultimately discharge into Newark Bay, demonstrating the large scale area both affecting and affected by drainage originating in the Town of Clarkstown. The Town is enrolled in the Federal Emergency Management Agency flood damage prevention program, and many of the Town's streams and rivers have been analyzed for flood plain mapping (Figure 9). Studies by the Center for Watershed Protection indicate that impervious coverage is directly related to impacts on streams and resultant stream degradation. The Rockland County Health Department has performed some measurement of

impervious coverage within the Towns based on aerial photography, and indicates that many streams in the County are impacted based on impervious cover percentages.

Several major lakes and ponds exist within the Town, including Rockland, Swartout and Congers Lakes and Lakes Lucille and DeForest. Of the five, Congers Lake and Lakes Lucille and DeForest are manmade impoundments, the latter being owned by United Water and representing a major water supply source for Rockland County.



Lake DeForest

Wetlands are distributed throughout the Town of Clarkstown, and are regulated by the U.S. Army Corps of Engineers and the New York State Department of Environmental Conservation (Figure 10). Federal wetlands account for approximately 974 acres, with state wetlands accounting for approximately 447 acres. There is significant overlap of these two jurisdictions. In addition, the federal wetland areas were indicated on mappings from high altitude aerial photographs; the exact delineation of Federal wetlands must be performed in the field to establish final boundaries. Due to these issues, the total extent of wetlands is approximate as shown on the various mappings available. Stringency of wetland regulations varies between the State and the Army Corps, with the State being more rigorous. Army Corps rules include Nationwide Permit provisions which allow filling of wetlands to limited degrees based on information provided by the applicant. In some cases, it has been found that applicant(s) have exceeded the limits established under the Nationwide Permit provisions, and wetlands have been filled to the extent which would require individual permits and a much greater degree of review.

Drainage and flooding were two of the most frequently raised issues during the hamlet meetings held to solicit community input for the Plan. There are several areas within the Town that experience varying levels of flooding during severe storm events. The Town has taken aggressive steps to reduce both the occurrence and severity of flooding, establishing the Drainage Task Force and accelerating a number of projects which had been scheduled for completion. Major among these are the Kill vonBeaste, Demarest Mill Creek Phase II, Jerry's Ave and Nanuet Railroad Culvert Crossing. Pending projects include the Hackensack River Improvement, Elk's Drive, Cranford Drive and the completion of the Jerry's Ave detention pond. Presently, the FEMA flood maps are being revised by that agency, and the Town is continuing efforts to complete drainage projects. In addition, the Town has joined with the other towns in Rockland County, and together the five towns have involved the County and its Drainage Agency in undertaking a county-wide drainage study to provide a coordinated effort to reduce flooding.

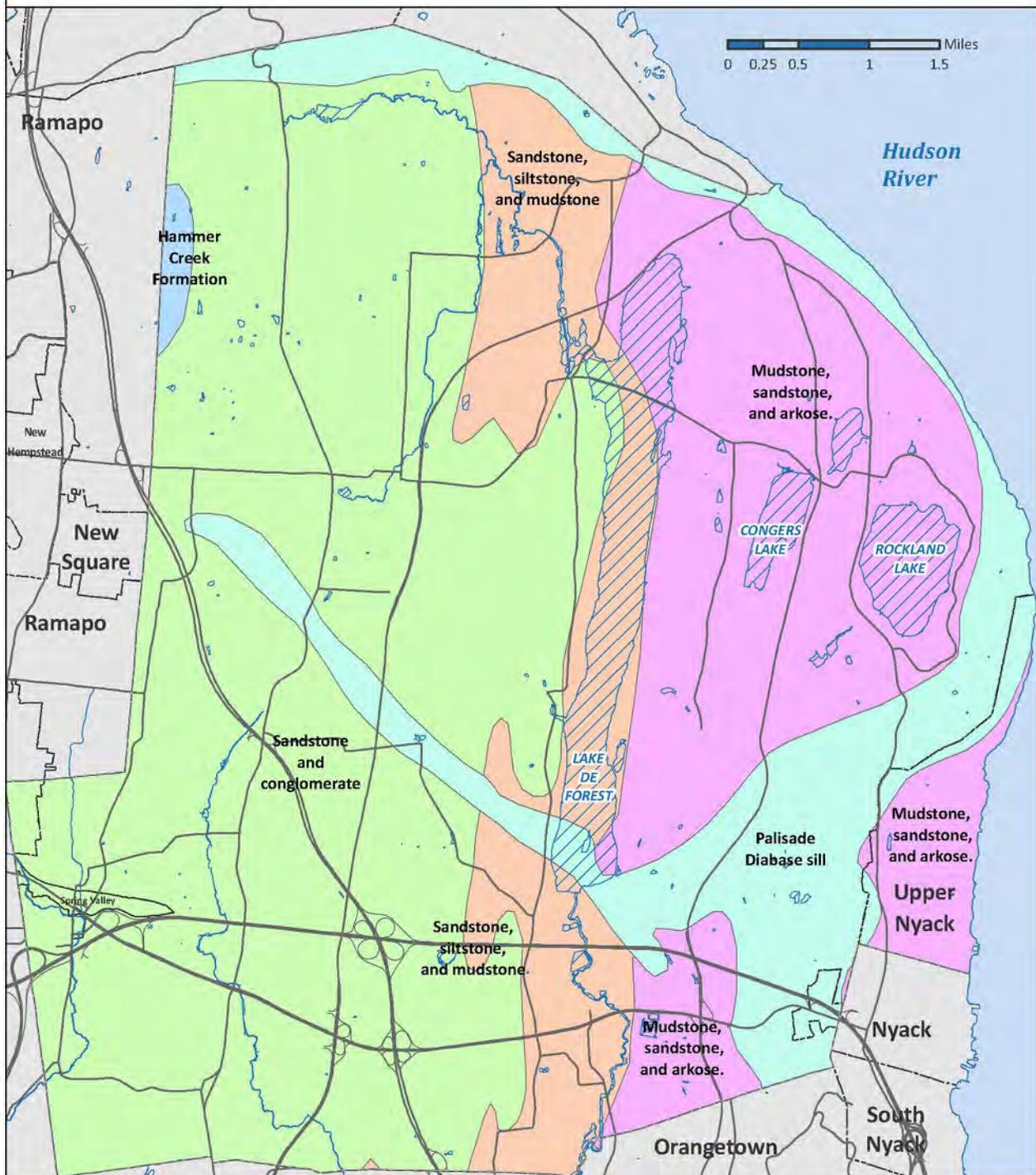
Groundwater issues have existed within the Town for some time, manifested in the form of bleed-out, saturated yards, and basement infiltration. During various months of the year, some of the soils in the Town are subject to a "perched" water table, high groundwater that does not infiltrate into the soil because of an impermeable layer of soil below it. Soils within the Town are generally of hydrologic class C or D, indicating lower permeability, which can exacerbate the types of problems

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Bedrock Geology

- Lakes and Streams
- Trba, Mudstone, sandstone, and arkose.
- Trhc, Hammer Creek Formation
- Town and Village Boundary
- Trbg, Sandstone and conglomerate
- Trp, Palisade Diabase sill
- Major Road
- Trbs, Sandstone, siltstone, and mudstone



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Figure 5

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Slope Steepness by Percent

	Lakes and Streams		0 - 2 %		15 - 20 %		40 - 50 %
	Town and Village Boundary		2 - 5 %		20 - 25 %		> 50 %
	Major Road		5 - 10 %		25 - 30 %		
			10 - 15 %		30 - 40 %		



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Figure 6

# Town of Clarkstown, NY: 2009 Comprehensive Plan

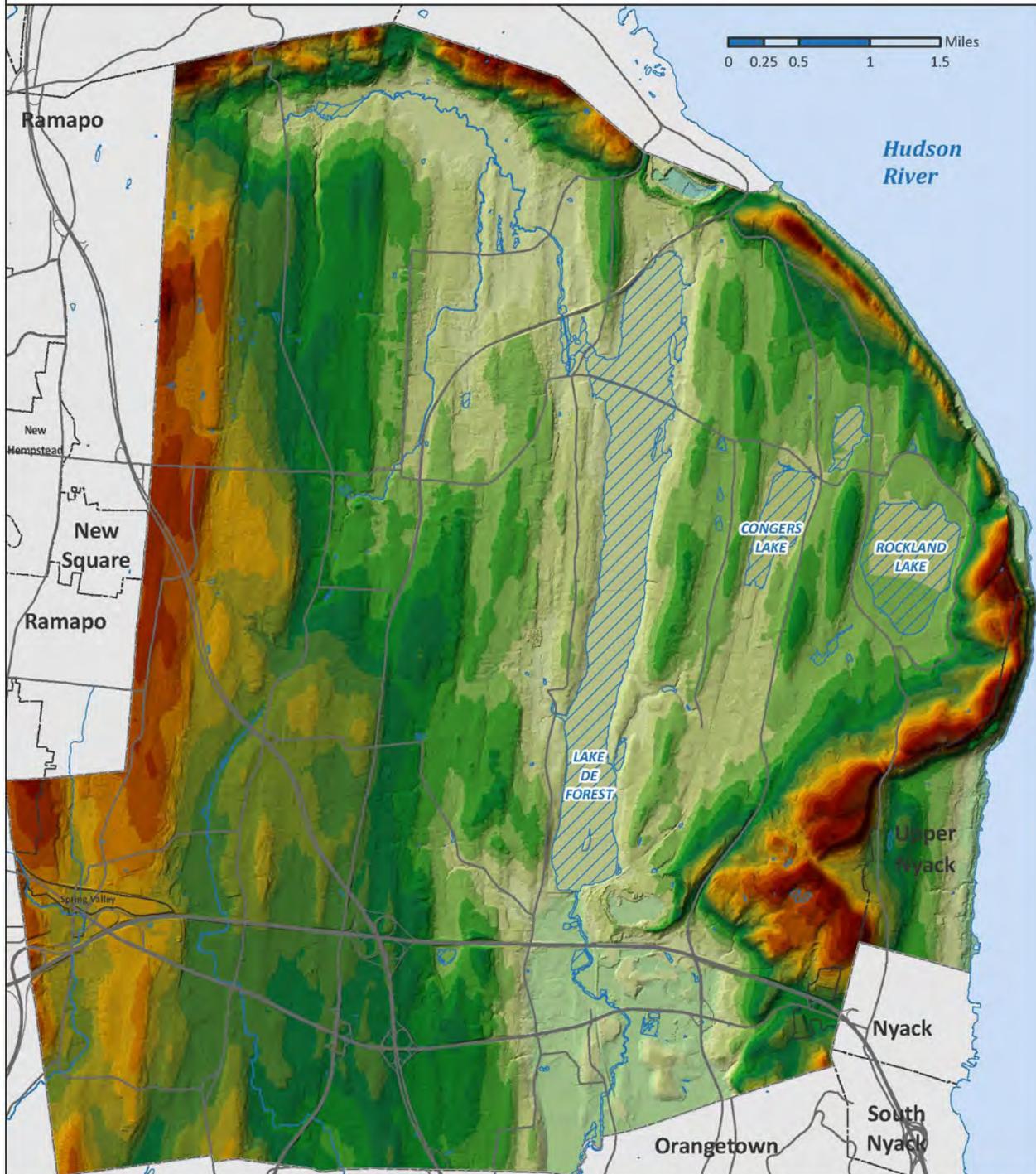


## Elevation Zones

 Lakes and Streams

 Town and Village Boundary

 Major Road



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Figure 7

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Surface Water Bodies and Sub Watershed Zones

-  Lakes and Streams
-  Sub Watershed Zones
-  Town and Village Boundary



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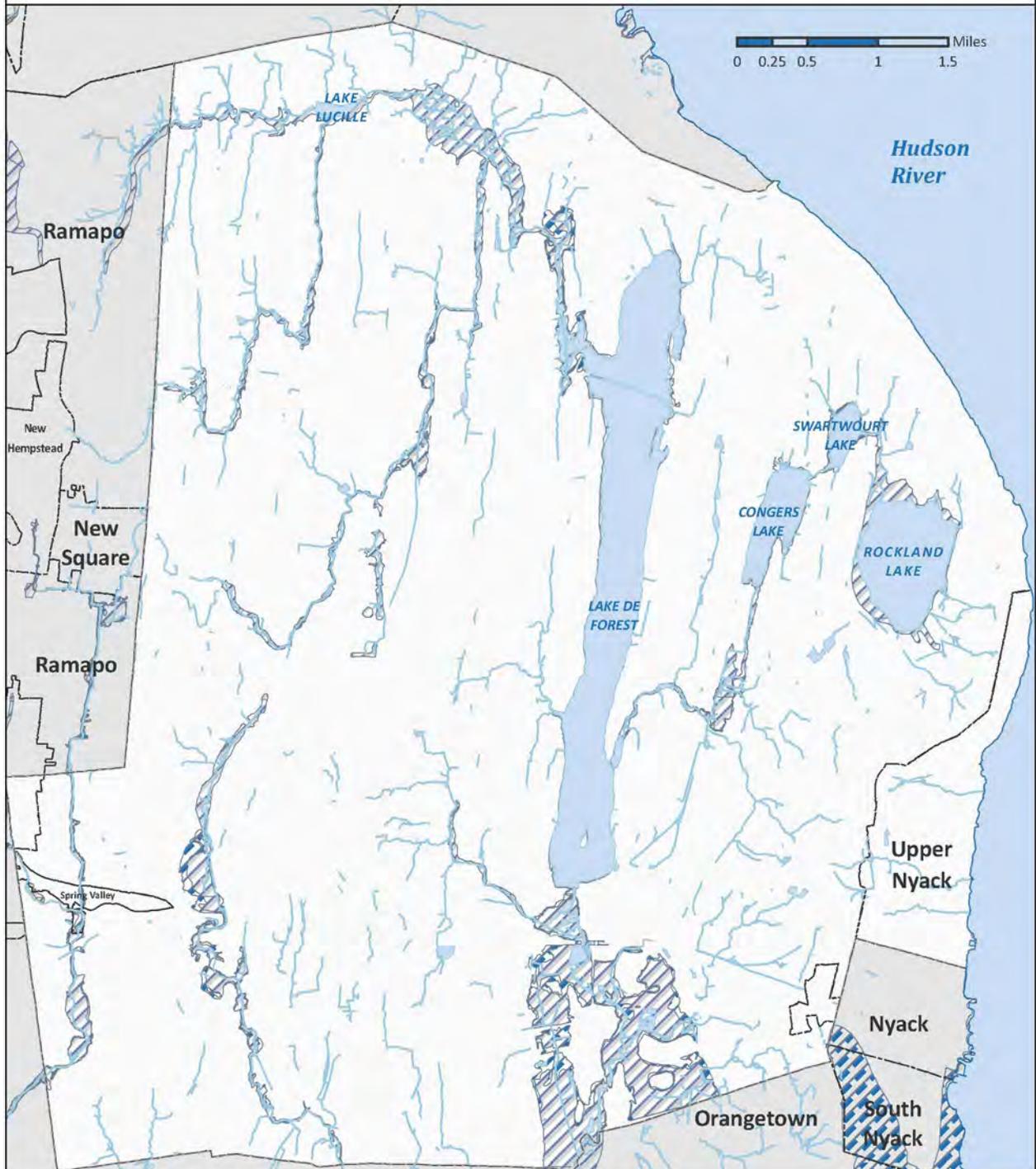
Figure 8

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## FEMA Flood Zones

-  Lakes and Streams
-  100 Year Flood Zone
-  Town and Village Boundary
-  500 Year Flood Zone



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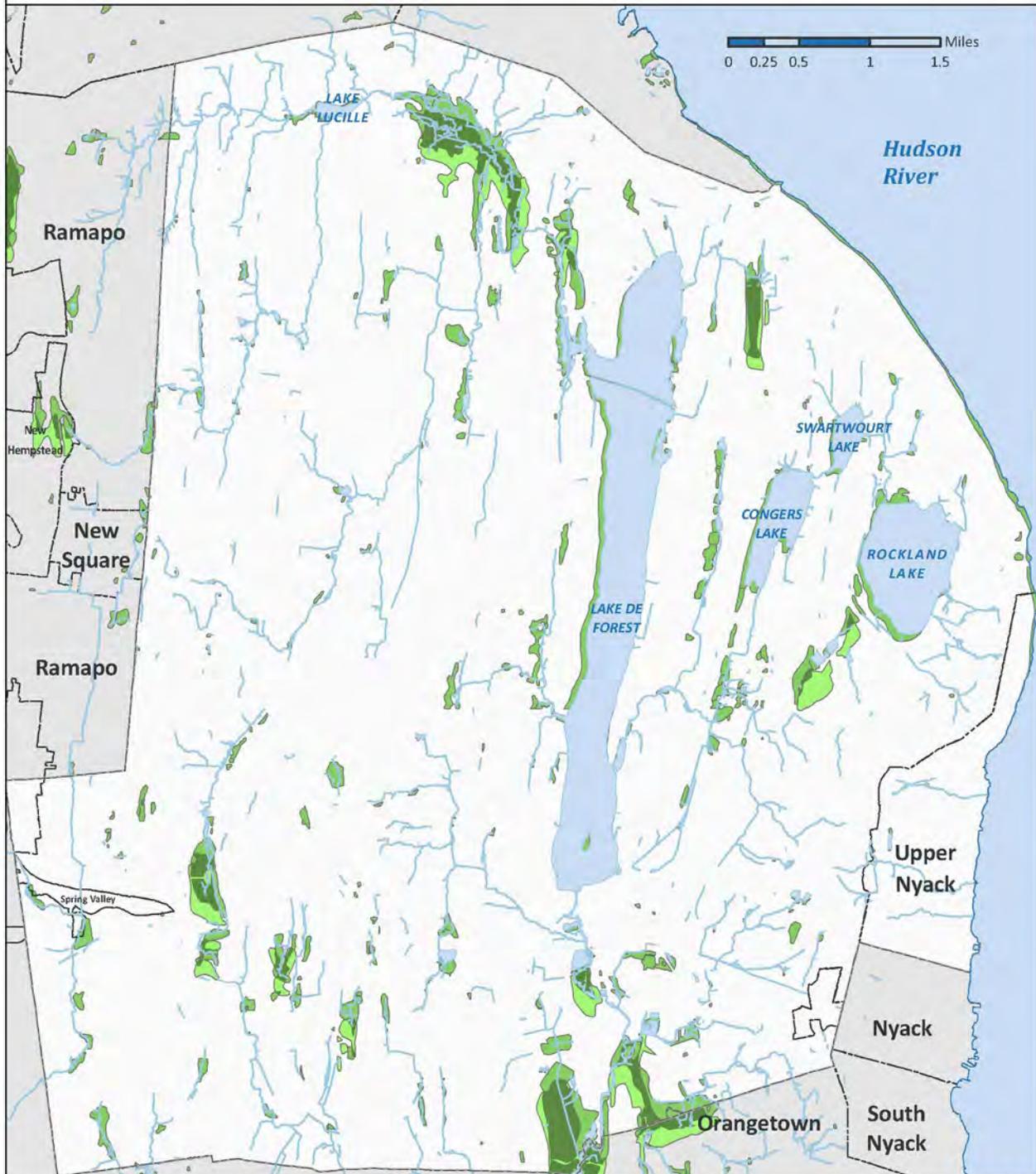
Figure 9

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Wetlands

-  Lakes and Streams
-  New York State and Federal Wetlands
-  Town and Village Boundary
-  New York State Wetlands
-  Federal Wetlands



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Figure 10

experienced by residents. These issues are serious on a limited scale, and generally are the responsibility of the home or building owner. For the purposes of the Comprehensive Plan, groundwater resources should be preserved or enhanced. Much of the public drinking water supply comes from wells, and there are also many private water supply wells. The responsible use of this crucial resource is vital to the community. In addition, preserving a more natural hydrologic cycle will serve to reduce run-off and drainage issues.

Potable water supply is also one of the most raised issues at the various hamlet meetings. Water supply in the Town comes from a combination of surface waters from Lake DeForest and numerous wells throughout the Town. The lake is the most visible and publicly known supply source, and has been a point of contention for various citizen groups. The complaints center on two specific issues, first that water is released downstream, including during those periods of time when the reservoir is very low and the County Health Department has implemented water conservation measures. The second issue relates to the automatic lowering of the bascule gates of the dam, which is intended to prevent excessive loads on the dam structure in the event of large rainfall resulting in excess storage volume within the reservoir. In this case, there seems to be a direct correlation between the lowering of the gates and downstream flooding in the West Nyack area, particularly Klein Avenue and West Nyack Roads. The problem is compounded by the restriction of the Hackensack River by the CSX railroad bridge upstream of NYS Route 59, where the 100 year floodplain elevation increases by approximately 1.5 feet from the Hackensack downstream to upstream faces of that bridge.

### **Air Resources**

Air quality within the Town has been impacted by a variety of land uses and its evaluation is somewhat dependent upon the individual perspective which is employed to evaluate it. The three major factors contributing to air quality are dust, vehicle emissions, and industrial processes. Dust can be attributed to construction site activities in many instances, and is also a complaint leveled against the Tilcon mining sites within the Town. Construction activities are governed by the preparation and implementation of erosion and sediment control plans, which include provisions for dust control.

The Town, and in fact the entire county, is in a non-attainment zone with regard to air quality. The air quality of the County falls below the standards established by the US EPA. Rockland County is cited by the US EPA as a 'Currently Designated Nonattainment Area for All Criteria Pollutants' on the basis of having periods of time during which the air has excessive ozone levels and fine particulate matter of 2.5 micrometers or smaller. Health studies have shown a significant association between exposure to ozone and fine particles and heart or lung disease

### **Plants and Animals**

John Mickelson, Ecological and Geospatial Consultant, performed an extensive biodiversity study as a part of this comprehensive plan effort. Mr. Mickelson's study encompassed many elements, including hydrology, slopes, habitat potential, potential for animal and plant species, and recommendations for areas to be protected based on potential for existence of various plant or animal species.



Local Flora

### Flora

The Mickelson study indicates that relatively small areas of undisturbed vegetative communities remain in the Town because of extensive development and conversion of natural woodland or grassland areas to residential uses (Figures 11 & 12). The study describes three general terrestrial groups, those being:

Forest, consisting of upland oak forest areas and forested wetlands comprised of a variety of deciduous varieties. The former are, as a result of development, limited to the outer fringe of the Town, while the latter are found in several large wetland areas which have remained more undisturbed or have been protected through the development review process. These areas currently contain high quality mature second growth hardwood with good size and age diversity observed. However, two concerns for the future of these areas are development and growth of invasive species and the uncontrolled deer population which will consume the lower successive plants necessary to the long term viability of these areas.

Grass and Shrub, composed of former farm, pasture and orchard areas formerly common to the rural and agricultural character of the Town. Intact grass and shrub areas are now limited to approximately 60 acres in five total parcels within the Town. The loss of these areas over time has undoubtedly reduced the populations of grassland birds and reptiles dependent on this habitat. Maintenance of these areas can serve to improve both the vegetative community and its habitat value.

Crest, Ledge, Talus and Cliff areas, existing on the easterly and southerly perimeters of the Town along the Palisades Ridge formation. This area holds the highest potential for rare and endangered plant species, and has been designated as important by several agencies or organizations which are listed in the Mickelson report.

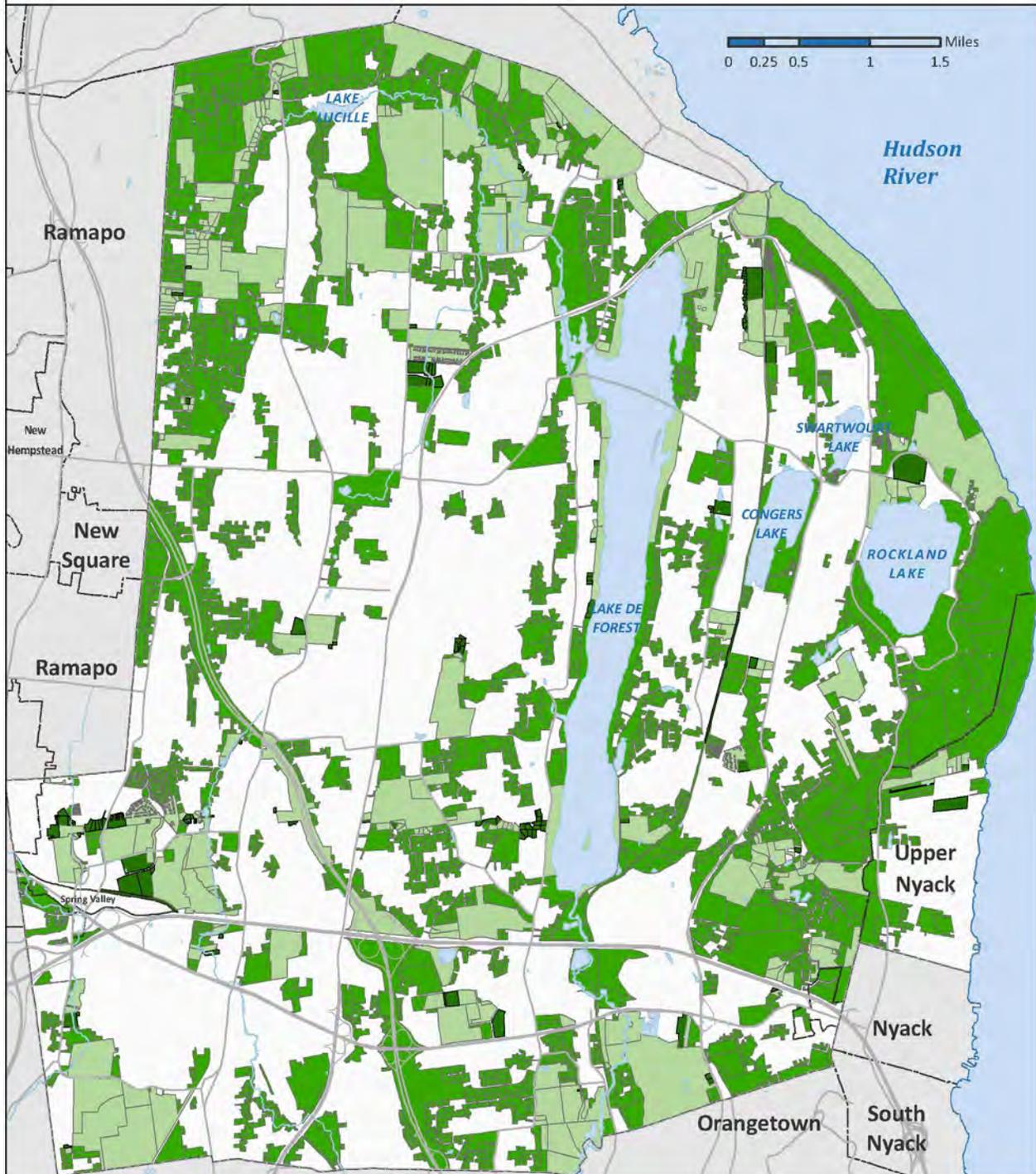
Mickelson also describes five aquatic habitat types (Figures 13 & 14), some of which are described above, and others that are particular more for habitat than vegetation:

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Important Terrestrial Features

-  Lakes and Streams
-  Agriculture, Grass, Shrub
-  Town and Village Boundary
-  Forest, Agriculture, Grass, and Shrub
-  Major Road
-  Forest



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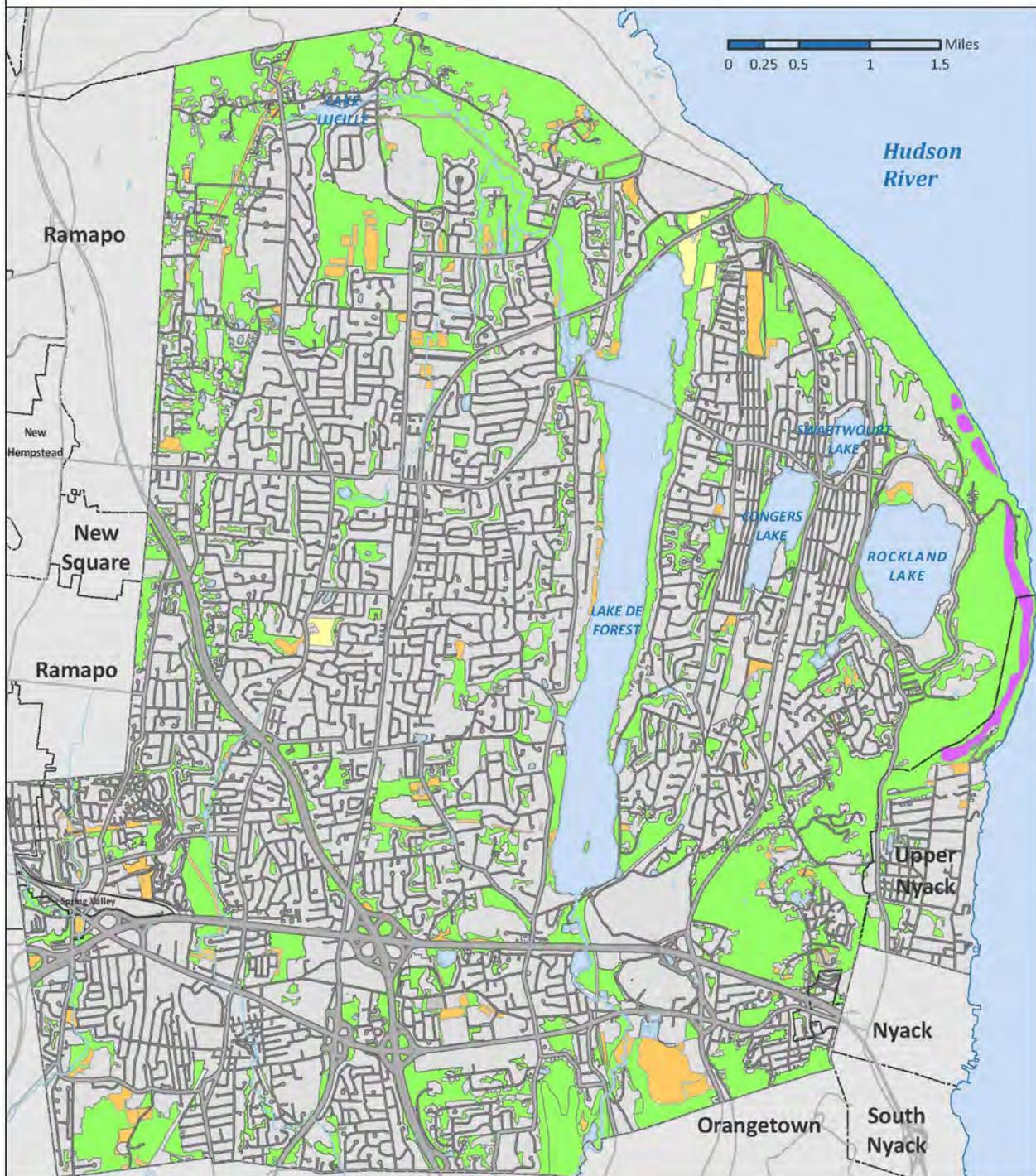
Figure 11

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Terrestrial Habitats

- |   |  |  |
|---|--|--|
|  Lakes and Streams         |  Grass and Shrubland    |  Barren    |
|  Town and Village Boundary |  Hardwood Forest        |  Developed |
|  Agricultural              |  Crest, Ledge, or Talus |  Roads     |



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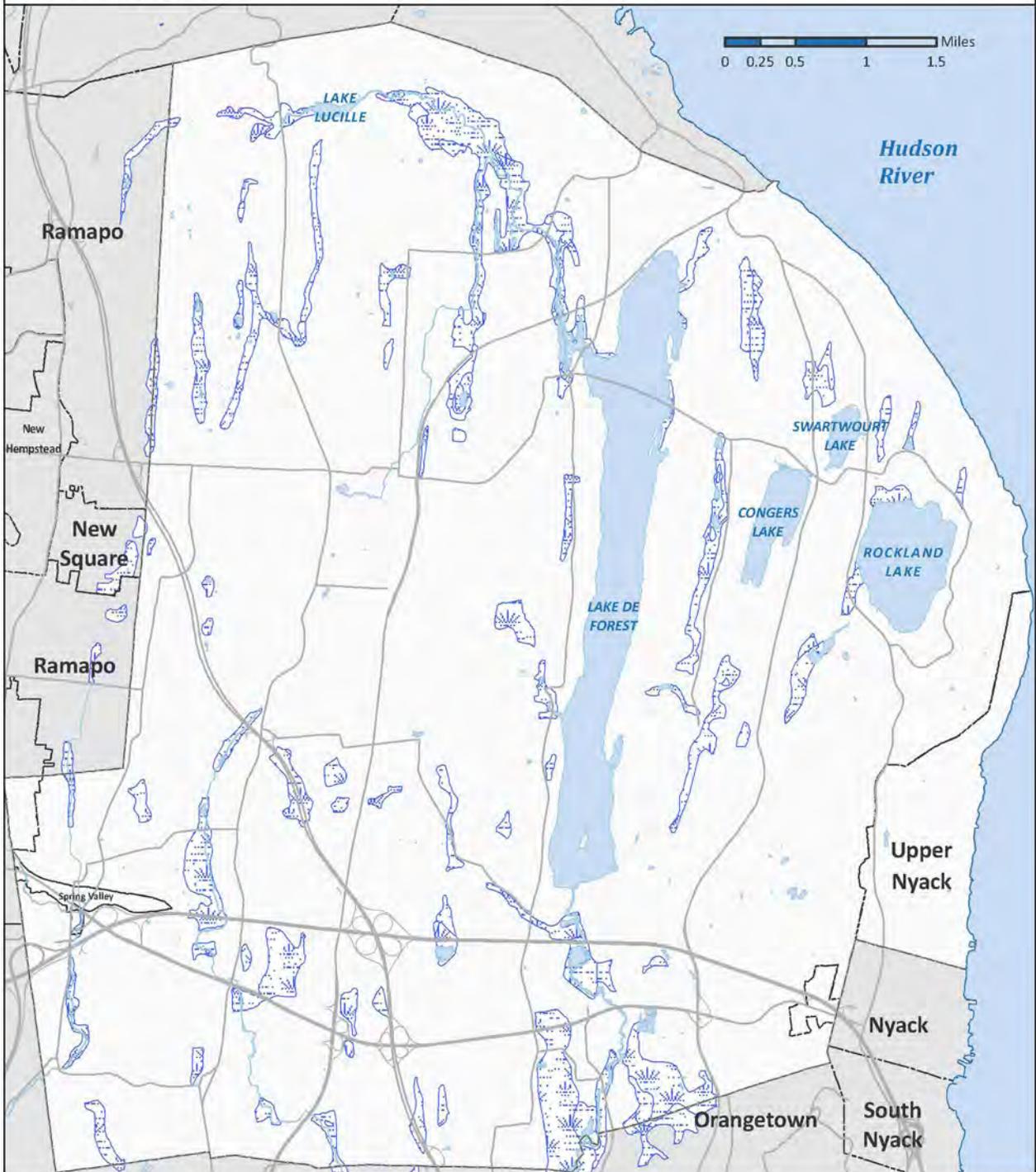
Figure 12

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Hydric Soils

-  Lakes and Streams
-  Hydric Soils
-  Town and Village Boundary
-  Major Road



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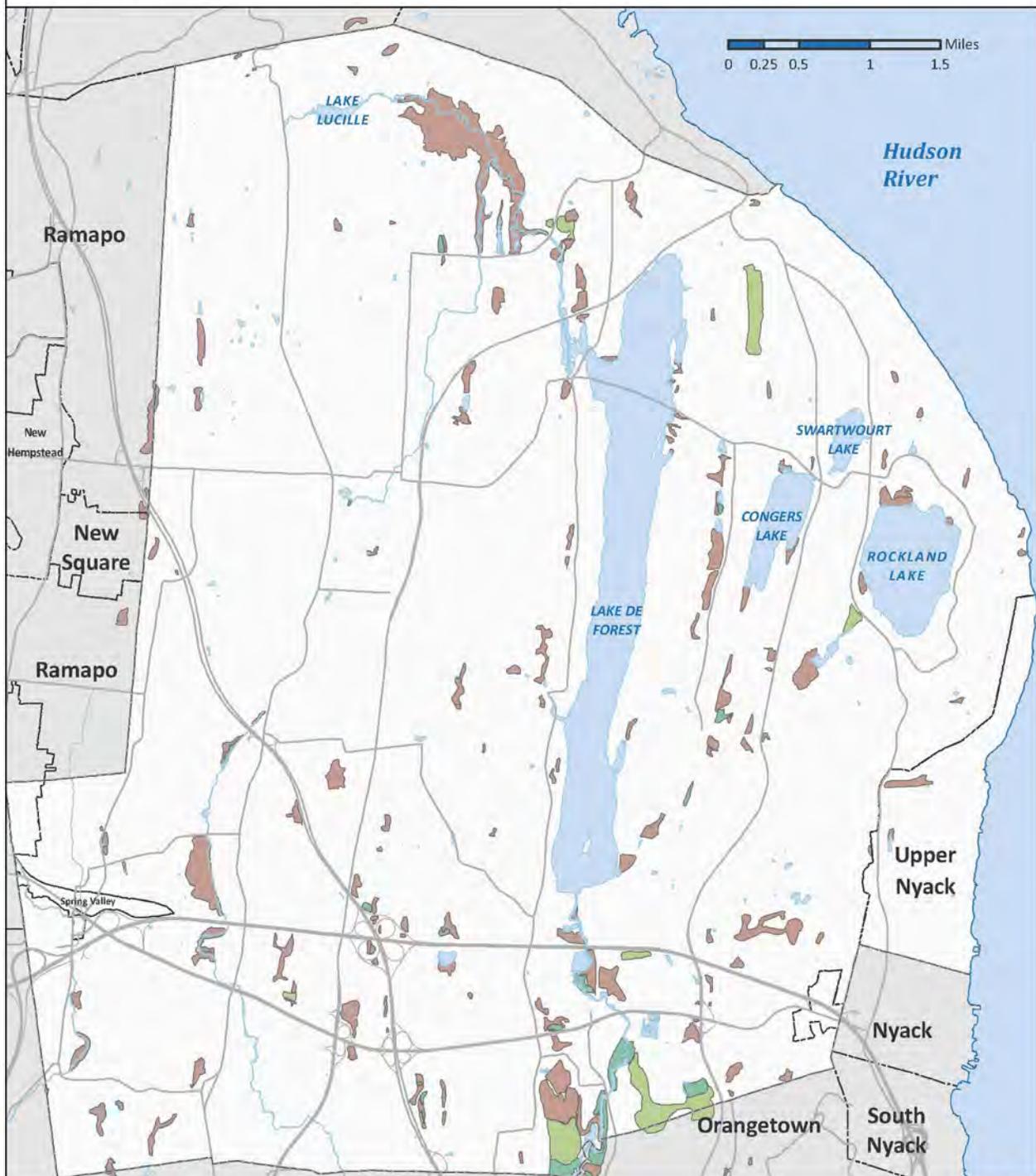
Figure 13

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Aquatic Habitats

-  Lakes and Streams
-  Emergent Marsh
-  Scrub\Shrub Swamp
-  Town and Village Boundary
-  Forested Wetland
-  Shrub Swamp
-  Major Road



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Figure 14

Forested Swamp, described above as forested wetland, containing a variety of vegetation types, and being the predominant wetland type within the Town.

Scrub/Shrub Swamp, generally thought to be an early stage of forested swamp lacking woody canopy species of plants. Varied and numerous shrub species can be found, as well as herbs and ferns.

Emergent Marsh, characterized by low growing (1 to 3 meter heights) grass, herb and other plant species. These habitats can be found at the edges of forested or scrub/shrub wetlands, and can be found as independent areas such as the “Celery Farm” area in Congers.

Lakes and Ponds are a self-explanatory habitat area. Significant to those in Clarkstown is the high algae and aquatic vegetation growth found in many of the lakes due to nutrient enrichment. This is directly attributable to the run-off of excess fertilizers used in the suburban landscape.

Rivers, Streams and Riparian Zones. Streams and Rivers are also simple habitat areas, following the course of defined streams through the Town. Not as easy to envision are the riparian corridors as a whole, which include both the waterbody and the area adjacent to it. These riparian areas provide valuable functions for water quality and protection of the natural stream-side floral and faunal communities.

The complete description of the floral and vegetative communities found or described can be found in the Environmental Resource Assessment prepared by Mr. Mickelson, attached hereto in the Appendix Section V. It is evident from that assessment that the development of the Town over the last 50 plus years has had a dramatic impact on the natural plant communities which once dominated the landscape.

### Fauna

Mammal populations within the Town are those that prefer access to a range of habitats and conditions, such as forest, forest edge and open fields. While there is little information on direct population counts, it is generally thought that these populations are relegated to the remaining undisturbed habitat areas around the perimeter of the Town. Some smaller or more adaptive species can be found within urban or edge habitats, such as squirrel, raccoons, and deer. While potential habitats for black bear and bobcat exist in the Town, it is not thought that breeding populations exist.

Data from several sources indicate that over 250 different bird species can be found in Rockland County. Based on Mickelson’s assessment of habitat, he concludes that a majority could be present in Clarkstown. Of these, approximately 75 potential species are listed by the National and State Audobon Society as declining rapidly with small populations or limited range, or as declining or rare. Loss of habitat is one of the leading causes for the decline of these species.

Reptiles and amphibians are present in the Town, but the diversity of species is the lowest in the county. Habitats for most of these species are intact moist forest, field or wetland areas. These areas have been impacted by the development of the Town, by a combination of habitat loss, degradation of water quality by urban stormwater run-off, and changes in hydrologic patterns. Protection and improvement of available habitat would be essential to these species.

Surveys by NYSDEC indicate 20 different species of fish in lakes and ponds within the Town. Rare or endangered species have not been encountered over the past 30 years, and the potential for their existence in the Town is low. Threats to remaining fish populations include sedimentation of ponds and lakes, high “flash” storm flows, and nutrient enrichment of waterbodies which can lead to eutrophication, rapid growth of algae which deplete the water of oxygen.

### **Aesthetic Resources**

As the old saying goes, “beauty is in the eye of the beholder.” For this reason it is difficult to determine what aesthetic characteristics of the Town might be most important to the diverse resident and business population which currently make up the Town overall. In addition, there are differing views on the aesthetic characteristics of the Town that are dependant on the length of time that the individual may have been living in Clarkstown. However, if the environmental elements are the yardstick for determination of aesthetic value, the task is simplified.

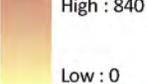
Views of the Town, from both within its borders and as viewed from surrounding areas are integral parts of the aesthetic value of Clarkstown (Figure 15). There are many areas of the Town which provide views of the surrounding Palisades Ridge. Lake DeForest, Rockland Lake and Congers Lake are also major aesthetic elements adding to the attractiveness of the area. Several local roadways (e.g. the Central Highway overlook) provide wonderful views of the valley area of the Town, which from this vantage still appears to be a heavily natural wooded suburban area. In addition, there are scenic views from the several major roadways (PIP, NYS Thruway, Routes 59, 303 and 9W) which look toward the Ridge, across the Hackensack River, or provide a general view of the forested areas or fauna that make up the local landscape. The Long Path, a hiking trail extending from the George Washington Bridge to Albany, passes through the eastern part of Town, generally following the Palisades Ridge. This trail offers many views of the areas within Clarkstown, as well as spectacular views of the Hudson River.

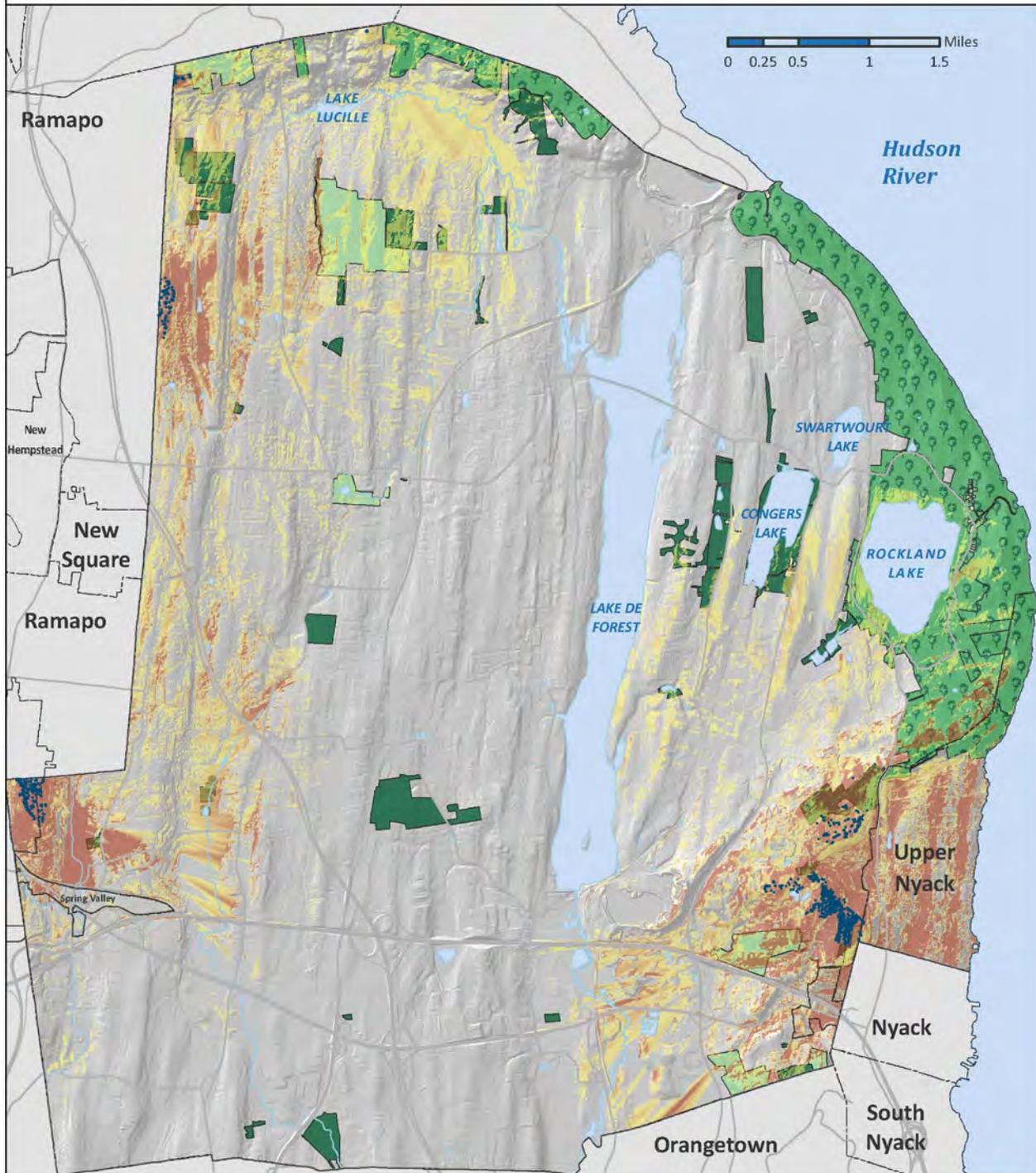
However, the aesthetics of the Town of Clarkstown are not limited to the natural features or the views within or outside town boundaries. The Town developed from a rural farming community to a summer retreat from the proximate urban area, and finally to a suburban, residential and business community, each neighborhood having its character. There are many historic sites and structures in the Town, such as the Dutch House, Storms Tavern, the Davenport Property and many others. There are also many roadways which began as wagon paths, and still retain the fieldstone walls and stone culverts of the 1800’s. Finally, the various hamlet centers, New City, Congers, Valley Cottage, West Nyack, Central Nyack, and Nanuet, all possess unique combinations of building styles and businesses which add to the diverse nature of the Town. Clarkstown has taken a lead position in protection of natural and aesthetic resources with its Open Space program, Hamlet revitalization and zoning bulk reductions for wetlands and watercourse areas as well as steep slopes.

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Viewshed Analysis

-  Lakes and Streams
-  Clarkstown Parks and Open Space
-  Visibility Sample Locations
-  Town and Village Boundary
-  Rockland County Parks
-  High : 840  
Low : 0
-  Major Road
-  New York State Parks



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Figure 15

### **Critical Environmental Areas**

Critical Environmental Areas are specific areas having “exceptional or unique character” (6NYCRR Part 617.14(g)). Designation of Critical Environmental Areas must follow a detailed process of boundary identification, public notice, public hearing and notification to the NYSDEC and other review or regulatory agencies. To date the Town has not designated any CEA’s. The benefit of designating a Critical Environmental Area is to strengthen the SEQRA review of projects, which requires that the potential impact of a proposed action on the particular characteristics of the CEA be thoroughly evaluated.

### **Energy**

Current residential energy usage figures provided by Orange & Rockland Utilities for the period January 2007 to October 2008 show a pattern of higher usage of electric during peak winter and summer periods, most likely due to more lighting during winter and more air conditioning use during summer. For commercial electric consumption, the peak use occurs from June to September, with lesser use during the period of February to May. Current construction generally includes higher amperage services than were installed in previous years, and this construction also incorporates more amenities such as central air conditioning, and more appliances demanding more electricity. As a result, Orange & Rockland Utilities is currently looking at upgrading or adding several transmission facilities in the Town to provide adequate service for the level of demand for electricity. Gas usage follows a similar pattern, where both commercial and residential use is higher during winter months. This is most likely attributable to the demands of heating. Current construction of larger residences has also placed a greater demand for heating fuel.

### **Quality of Life**

Quality of life issues cause the greatest concern for residents in any area, but because of their very subjective nature are also the hardest to regulate or control. Generally, noise issues relate to residential uses abutting commercial or other business uses, where the commercial use noise level is affecting the residential use. The Town has a noise ordinance in place to limit both intensities and times of noise over certain limits. Redevelopment applications are reviewed for potential noise impacts, and in the past the Town has employed screening or buffers to prevent impact beyond the subject lot. However, noise studies have not been employed to a large extent due to the numerous variables (screening, wind direction, other atmospheric conditions) which affect noise propagation and measurement, and make such studies somewhat inaccurate in representing the actual conditions which may have led to a complaint or concern.

Dust complaints have also been addressed by the Town’s enactment of soil and erosion control ordinances, which mirror the requirements set by the NYSDEC with regard to “fugitive” dust from construction sites. In addition, the Town Board has hired a consultant to evaluate dust generation from the mining and stone processing operations at the West Nyack quarry site. Again, it is difficult to measure direct contributions to dust generation, as it requires both upwind and downwind sampling to definitively isolate the source. For the most part, evaluations of dust issues are best handled on an inspection basis for fugitive dust from construction activities and on an individual complaint basis for other causes.

Odor again is a very subjective issue, and one for which it is difficult to establish parameters. The potential range of odors which might be encountered is far too wide to establish criteria, and odors do not make up a large number of complaints received by the Town. However, there are a number of land uses which do have the potential to generate significant odors, such as garbage transfer, composting, vehicle repair and several others. These uses impact different areas depending on climatic conditions such as wind direction.

## RECOMMENDATIONS

### Land Resources

**Create protections for Clarkstown's unique natural features.** The various landforms in the Town add to its attractive semi-rural character. In particular, the Palisades Ridge is important to the viewshed both from within the Town and from the Hudson River and points east. A definition of ridgeline should be created and codified. Protections of the ridgeline should be implemented, including prohibition of the removal of wooded areas which would create an interruption in the appearance of the ridgeline, and the construction of buildings or other structures which would change the appearance of the ridgeline. Mickelson's work has laid a firm foundation to define the ridgeline area, which can be seen on Figures 6 and 7. These exhibits also show that the ridgeline is defined by that point at which the steep slope of the embankment flattens to form the more level area at the top of the ridge. Using these two figures, it recommended that the ridgeline be defined as that area where the slope below the point is over 40% and the slope above the point is less than 15%, and including the area from that point to an elevation 20 feet lower.

**Continue the acquisition of open space lands to protect sensitive environmental areas, as well as farmland.** Open space acquisition should proceed according to the amended Town of Clarkstown Open Space guidelines as described in the Recreation, Parks and open Space section. Open space should be used to protect high elevation areas (both hilltops and hillsides), steep slopes, wetlands, historic sites and scenic areas, as well as farmland.

**Continue enforcement of sediment and erosion control measures, both during and after construction.** Protection of existing soils should also be a focus of the Town's efforts in the future. If needed, ordinances could be revised to lower thresholds for mandatory erosion controls, or to increase penalties for violations of those ordinances.

## **Water Resources**

**Protect and conserve both the sources and supply of potable water and the natural features which add to water quality.** As the entire Town and County rely on surface and well water for water supply, and as the water cycle is wholly consumptive, it is imperative these sources be protected and utilized responsibly. Not only does this limited resource need to be protected at its source, but property owners must also work to avoid wasteful water usage.

**Enact limits on total development coverage for all zoning districts.** This measure will increase stormwater infiltration, increase well water supplies, and reduce total run-off to wetlands and watercourses.

**Require stormwater management to a higher extent than is currently applicable where development is proposed in watersheds which experience flooding.** To protect both life and property, Town land use Boards reviewing development in these areas should be authorized to require stormwater management to a higher extent than the currently applicable requirement that there be “no net increase” in stormwater flow from the development and stormwater facilities that can handle 100-year storm events.

**Install protections on and around stream corridors.** (Figure 16) These corridors should be protected from encroachment by adjacent development to maintain the natural buffers and shading of waters. This will serve to improve aquatic habitat by reducing the removal of shading vegetation and reducing stream warming detrimental to aquatic life. Corridor protection widths should be established based on the size and importance of the stream, and may vary between 25 and 100 feet in width. Within these areas, development should be limited, and natural areas should be maintained. Where existing watercourses have been impacted, re-development projects should be required to improve stream corridors by the installation of buffer areas or improvement of the stream area by plantings and other best management practices.

**Enact a wetland protection ordinance (subject to the procedures required by State Law).** It is crucial that the Town protect existing wetland areas from filling or other degradation which impacts the natural function of those wetlands in detaining run-off and providing water quality benefits.

## **Air Resources**

**Lobby for air quality monitoring in the Town and County.** The predominant cause of reduced air quality in the Town of Clarkstown is vehicular traffic in and through the Town on major highways (NYS Thruway, NYS Routes 59, 9W, etc.) Through additional studies focusing on the sources and areas of concentration of this pollution, the Town can gain a better understanding of what steps can be taken to reduce the pollution.

**Continue to enforce regulations controlling dust and other airborne pollutants due to operations within the Town.** These include general construction activities and the exposure of soils to wind erosion, and the mining and crushing operations of the Town's two mining sites. To address these causes, the Town should continue to enforce proper erosion control measures as required under Town Code Chapter 249A, and continue to monitor the Tilcon operations and work with that company to improve process methods to reduce generated dust.

### **Plants and Animals**

**Require more detailed flora and fauna surveys during reviews of development proposals on properties which might contain species of concern.** Protection of land and water resources as indicated above will provide some protections to natural habitat areas. The biodiversity study identified potential natural habitats that could support a diversity of animal and plant species. More detailed surveys are needed on properties as they are proposed for development to ensure the protection of species of concern.

**Continue the acquisition of open space to preserve natural habitats.** (Figures 17 & 18) Preservation of habitat and potential habitat is critical to the continued viability of several plant and animal species within the Town, as well as the ability of those habitat areas to support transient migratory bird species. The Town should acquire properties that support biodiversity, habitat corridors and any Critical Environmental Areas established by the Town. The preservation of these areas not only benefits wildlife, but it also protects residents from potential hazards such as flooding.

### **Aesthetic Resources**

**Protect views of wooded and natural areas from the removal of vegetation or other native materials which add to the character of the area.** Clarkstown should not risk experiencing the replacement of hillside woodland areas with "McMansion" views like those visible from the Palisades Parkway Exit 13. The Town's open space acquisition program has and can continue to be used to help in this effort, as can additional protections for sensitive areas, such as more stringent reductions in bulk area for slopes and wetlands and watercourses. The views from, and the Long Path itself, should also be carefully protected, to maintain the underlying purpose of that trail, celebrating the rich natural resource diversity which the area and particularly the Town has to offer. Where possible, the various Town land use Boards should be empowered to secure easements for the permanent location of the trail away from roadways and other less than ideal trail locations.

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Hydrological Corridors

-  Lakes and Streams
-  Hydric Zones
-  Town and Village Boundary
-  Stream Corridor
-  Major Road



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Figure 16

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Primary Conservation Targets

-  Lakes and Streams
-  Ecological Corridors
-  Town and Village Boundary
-  Large, Intact Forest Blocks
-  Major Road



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Figure 17

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Primary Conservation Parcels with Permanently Protected Lands

- Lakes and Streams
- Priority Conservation Parcels
- Incidental Conservation Parcels
- Town and Village Boundary
- Secondary Conservation Parcels
- Edge\Adjacency Parcels
- Major Road
- Valuable Conservation Parcels
- Permanently Protected: Town, County, or State



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Figure 18

**Preserve the suburban and remaining semi-rural character of the Town.** A sense of community has been an integral part of the development of the Town, enhancing the Town's attractiveness to potential new residents and businesses. This includes maintaining density of existing developed residential areas, or where increasing density is warranted (i.e. active adult or volunteer housing) enhancing the appearance of new development or screening the new development to lessen its impact on the surrounding area.

**Implement design standards for future commercial construction.** Commercial development does not have to detract from the aesthetic nature of the Town; the needs of businesses and industry can be served without destroying the character of the Town. Recently the Town has attracted several commercial projects which have utilized materials superior to typical commercial construction. These projects have even elevated the aesthetic level of major highways along which they are located.

### **Critical Environmental Areas**

**Designate Critical Environmental Areas in Clarkstown.** This action may provide benefits beyond those achieved by zoning and land use regulations alone. While the latter apply directly to a particular parcel proposed for development, the former can establish a framework for more detailed review of the potential development impact on areas which are not closely proximate to the development. For example, the area of the Hackensack River in West Nyack is prone to chronic flooding due to high storm intensity. If the Hackensack River area were designated as a Critical Environmental Area, any development in the Hackensack River Basin would be subject to a more extensive review of potential impacts on stormwater contributions to that area under the provisions of SEQRA. This would assure that cumulative impacts of development over a wider area would be evaluated, and would allow the Town to implement additional regulations to avoid the exacerbation of existing conditions. Similarly, the designation of the Palisades Ridge would raise the level of review for any proposed project affecting the characteristics of the Ridge, adding a level of protection to the existing views, and to important vegetation and habitat areas which are detailed in the Environmental Resource Assessment. Major wetland areas might also benefit from the additional designation, allowing more detailed review of water quality and habitat impacts. Areas with the potential for high biodiversity, particularly the island at the southern end of Lake De Forest, which is home to a wide diversity of bird species, should also be designated.

### **Energy**

**Implement programs which require and/or encourage environmentally sound building design.** While current construction is more energy efficient than the earlier construction of the rapid growth period in the Town (c.1960-1980), the total use of energy could be reduced through adoption of current Energy Star or LEED. Higher standards, such as LEED should be imposed on new construction. In addition, LEED standards are also available for overall site development, addressing stormwater as well as other issues. The Town, working with the Energy Conservation Committee as the lead group, should encourage additional efforts to reduce energy consumption

and increase efficiency through public education. Other methodologies and programs such as streamlining the permit approval process for photovoltaic panels, geothermal heating and cooling applications should also be supported by the Town.

### **Quality of Life**

**Continue investigation of and action against complaints of noise, dust and odor.** Noise issues should be dealt with on an individual basis as they are now. For existing facilities, or those over which the Town does not exercise land use review, noise complaints can be evaluated under the Town's noise ordinance. Consultants can be retained to perform necessary studies.

Dust concerns should continue to be addressed under the provisions of the Town's soil and erosion control ordinances. Penalties for failure to conform to the ordinance requirements should be strengthened to provide a greater incentive for compliance. Consultants may be retained by the Town as needed to evaluate individual situations.

Odors are generally too varied and transitional to establish hard parameters or standards for review. It is best to treat odor issues when they are raised via complaint. Further, the Rockland County Health Department currently addresses issues related to air quality including odors, and that agency should continue to investigate odor issues and determine whether the particular situation investigated rises to the level of nuisance which would mandate corrective actions.

**Continue to assess the potential for noise, dust and odors in projects under review; require the elimination or mitigation of these pollutants as a condition of approval.** Reviews by land use Boards of potential nuisance-generating uses should require studies to establish baseline conditions, with subsequent studies to determine actual impacts after the proposed facility is in full operation. Boards should also establish the range of additional mitigation measures prior to the final approval of such a project.

## c) Health, Safety & Welfare

### SUMMARY OF SERVICES

The Town of Clarkstown benefits from a robust and dedicated system of emergency services and facilities. Many of these services are provided by volunteers from the community. Figure 19 shows the locations of the Town's police, fire, and ambulance facilities.

#### Police

The Clarkstown Police Department provides protection throughout the Town of Clarkstown and portions of the Villages of Nyack and Spring Valley. The Police Department is currently comprised of 173 police officers and 25 civilian employees.



Clarkstown Police

#### Fire

Ten volunteer fire departments provide protection throughout their individual districts within the Town of Clarkstown. These departments often rely on one another for mutual aid.

Rockland Lake	Nanuet
Valley Cottage	Central Nyack
Congers	Hillcrest
New City	East Spring Valley
West Nyack	Nyack Joint

#### Ambulance

Five volunteer ambulance corps provide emergency service within the Town.

Congers/Valley Cottage Volunteer Ambulance Corps  
New City Volunteer Ambulance and Paramedic  
Nanuet Community Ambulance Corps  
Nyack Community Ambulance Corps  
Spring Hill Ambulance Corps

In addition, several private ambulance services are in operation in the Town.

Rockland Paramedic Service  
New Hempstead Ambulance  
Village of New Square Emergency Service  
Rockland Ambulette Service

## **Hospitals**

There are no hospitals in the Town of Clarkstown. Three hospitals are located within Rockland County in close proximity to the Town.

Nyack Hospital – Nyack (~1.0 miles)

Helen Hayes Hospital – West Haverstraw (~1.5 miles)

Good Samaritan Hospital – Suffern (~5.0 miles)

## **Other Services and Facilities**

In addition to the Clarkstown Mini Trans, paratransit is provided by Rockland County via T.R.I.P.S. (Transportation Resources, Intra-county, for Physically disabled and Senior citizens). This bus service provides curbside pickup for physically and mentally challenged individuals throughout the County. Rockland County also offers an array of health services at locations throughout the County. These services include immunization, infectious disease, pediatric, mental and women's health clinics, as well as a number of other programs focusing on the health of Rockland County's residents. Their main facility and department offices are located at the Robert L. Yeager Health Center in Pomona.

## **STATE OF SERVICES**

Consideration of emergency services must continue to play an important role in the site plan development review process. It is crucial that sites be developed in a manner that allows for proper access of emergency vehicles and personnel. Through the distribution and review of development plans and proposals, unsafe designs and impediments to emergency access can be removed and potentially dangerous situations avoided.

With a large transportation network and several high volume county, state and federal highways, the Town of Clarkstown must constantly assess and address transportation safety issues. As part of the Comprehensive Plan, a detailed transportation study, the Town of Clarkstown Comprehensive Transportation Plan, was created. This study offered a series of recommendations to improve pedestrian, bicycle and automotive safety throughout the Town. Portions of this study and its recommendations on transportation safety issues are reflected in the Transportation section of this Comprehensive Plan. The full Comprehensive Transportation Plan is located in the Appendix.

Volunteer emergency service participation in Clarkstown is at risk. As the demand for fire and ambulance service has increased, the number of active volunteers in these organizations has diminished. The high cost of housing has made the Town of Clarkstown unaffordable for volunteers. Specific recommendations for the creation of additional housing can be found in the Housing section of this Comprehensive Plan.

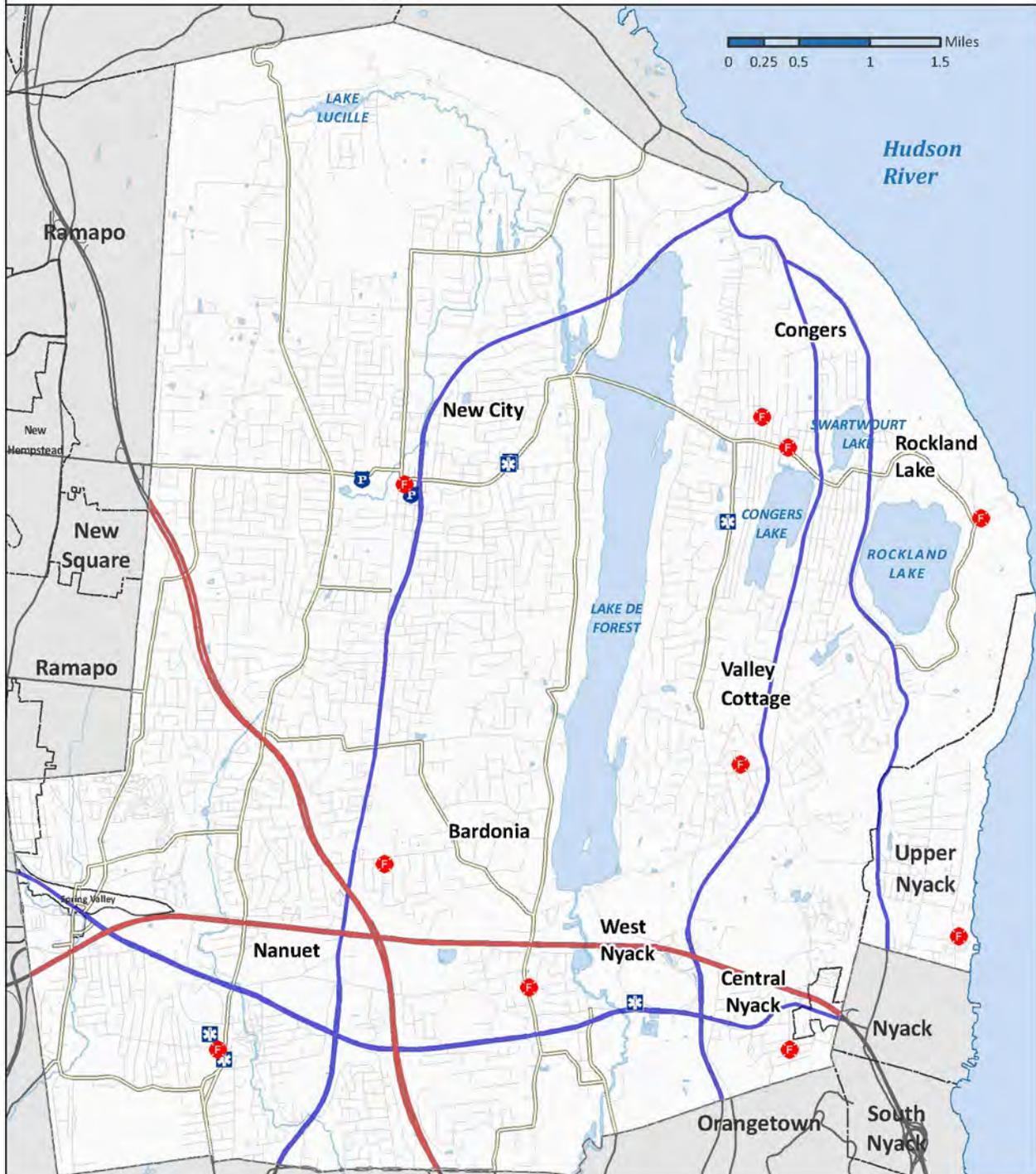
Clarkstown's population is not only growing, but aging, causing an increased demand for certain emergency services and healthcare infrastructure. It is crucial that the Town remain attentive to

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Public Health

-  Lakes and Streams
-  Interstate Highway
-  Fire House
-  Town and Village Boundary
-  State Highway
-  Emergency Medical Services
-  County Highway
-  Police Station
-  Local Road



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Figure 19

current demographic trends and projections to preemptively address the impacts of such change in the demand for these services.

## RECOMMENDATIONS

### **Emergency Services:**

**Ensure the efficient provision of emergency services.** The commercial and residential growth and development in the Town has created specific situations where providing police, fire, ambulance and other emergency services may be hampered or delayed because of obstructions or inaccurate address information. The Town should remove obstructions, such as curbing or poles, by working with the responsible parties. The Town should also work to improve address information sent to 911 through the use of its GIS system.

**Create zoning to encourage income adjusted housing for emergency service volunteers.** The high cost of market rate housing in Clarkstown adversely impacts volunteerism. The reduced number of eligible volunteers creates ‘staff’ shortages, which have the potential to affect the quality of services and could threaten the existence of volunteer services. The recommendations of the Housing section need to be implemented to address this problem.

### **Zoning/Building Code Development and Enforcement:**

**Ensure that Town building and fire codes are current and enforced.** All site plans and subdivisions approved by the Planning Board are reviewed by the Fire Inspector for compliance with the building and fire codes before being endorsed by the Chairperson of the Planning Board. This practice will be continued; however, commercial and residential growth may outpace the current building and fire codes and may require increased enforcement efforts to protect resident safety. Town building and fire codes will need to be updated and regular enforcement increased.

**Develop zoning and building regulations that reduce and eliminate potential drainage or flooding problems resulting from new construction.** New commercial and residential construction, by its very nature, will, if left unchecked, create conditions that either exacerbate existing drainage and flooding concerns or create new ones. The cost to the Town and the tax payer of addressing and resolving those concerns after construction to protect the property and safety of residents is far more than the cost of addressing those concerns through preventative measures at the time of construction. Zoning and building regulations should be developed to ensure that site plan and subdivision designs reduce and eliminate potential drainage or flooding problems.

**Develop zoning and building regulations that reduce or restrict odors, sounds, commercial traffic and other adverse environmental impacts on residential areas.** Land use regulations must be applied in a manner which considers the adverse impacts one use may have upon another. Zoning and building regulations should be developed to ensure that incompatible uses are properly located to avoid any such conflicts.

**Develop zoning that encourages and protects the safety of pedestrian and bicycle traffic.** The Town and the public have a vested interest (health, environmental, quality of life, sense of community) in discouraging vehicular traffic and encouraging increased walking and bike riding. To effectively encourage pedestrian and bicycle traffic, sidewalks, bicycle paths and proper street lighting will be developed on existing public roadways and required on proposed roadways as described in the Transportation section.

## d) Historic & Cultural Resources

Preservation of Clarkstown’s valuable historical resources and support for current cultural organizations and activities should be a shared responsibility between the public and private sectors of our community. A very modest investment on the part of the Town can yield a great return in civic pride and maintenance of the Town’s historical importance as well as providing education to the community as a whole. Ensuring proper protective measures are in place to preserve those areas which stand as totems in Clarkstown’s rich historic timeline is essential to the preservation of the Town’s unique identity.

There are currently thirty-one sites in Clarkstown that have been designated by the Clarkstown Town Board as historic (Figure 20). The list of those sites appears below:

**Table 3  
Clarkstown Historic Sites**

#	Site Name
1	John William Hill House
2	Coe Homestead
3	Haramus Tallman House
4	Henry Varnum Poor House
5	Solon House
6	Cushner House
7	John Van Houten House
8	Melvin Knapp House
9	Blauvelt-Secor House
10	Smith-Gilchrest House
11	Mount Moor Cemetery
12	Bardon Farm
13	Jacob Blauvelt House
14	Blenker-Vanderbilt-Duffy Barn
15	Dutch Gardens
16	Roberts Farmhouse
17	DePew House
18	James Blauvelt House
19	Martinus Hogencamp Cemetery
20	Germonds Rd Cemetery
21	Hopper House
22	John Storms House
23	J. Stephens House (Teaberryport House)
24	Joseph Turnure House and Barn
25	Schueler-Paul House
26	Ice House No. 3

27	Johannes Snedecker Farmhouse
28	Major John Smith Barn
29	Blenker-Vanderbilt-Duffy House
30	Demarest - Evans House
31	Tournier-Debaun Grist Mill and Mill Tender House

The Clarkstown Town Board authorized the creation of the Historical Review Board when they approved Local Law #9 in 1967. The Historical Review Board consists of seven members inclusive of the Town Historian. This law went through slight modifications in 1967, 1974 and 1996. The purpose of this local law was to preserve the historical character of certain areas to be designated within the Town of Clarkstown and to prevent the impairment of or injury to their architectural and cultural value. The law allowed a reasonable degree of control over the architectural design, construction, alteration and repair of buildings, signs or other structures erected at designated historic areas. This was done so that these buildings and structures would remain in harmony with the style and spirit of the historical property presently situated there.

Maintaining and updating information on the Town's list of historic and cultural resources is an important part of their upkeep and protection. A database should be established to collect information on historic sites and cultural organizations and programs within the Town. Access to information on the historical background as well as ownership and condition of these sites is a key element to their upkeep. This database should be integrated with the Town's Geographic Information System (GIS) to alert Town personnel involved in building and development when a historic site may be affected by a project. Information on the Town's cultural institutions and organizations can be maintained in a similar manner.

During an analysis of potential historic sites within Rockland County, the Rockland County Historical Society identified 299 potential sites within the Town of Clarkstown. These sites should be further investigated by the Town to examine their actual historic significance for possible addition to the Town designated list. Furthermore, any site determined to hold historic significance should be documented and added to the aforementioned historic database.

To protect the Town's historic resources proper legislation must be in place. The Historic Review Board and the Town Attorney's office are working to finalize a new Historical Preservation Law for Clarkstown. This new Preservation Law is being introduced in response to the recent losses of some very important historic properties in Clarkstown and the near loss of the Storms Tavern in Valley Cottage. This new Preservation Law will provide the Town Board and the Historic Review Board with the tools they need to ensure that the important historic sites that showcase Clarkstown's rich history will be here for future generations to enjoy.

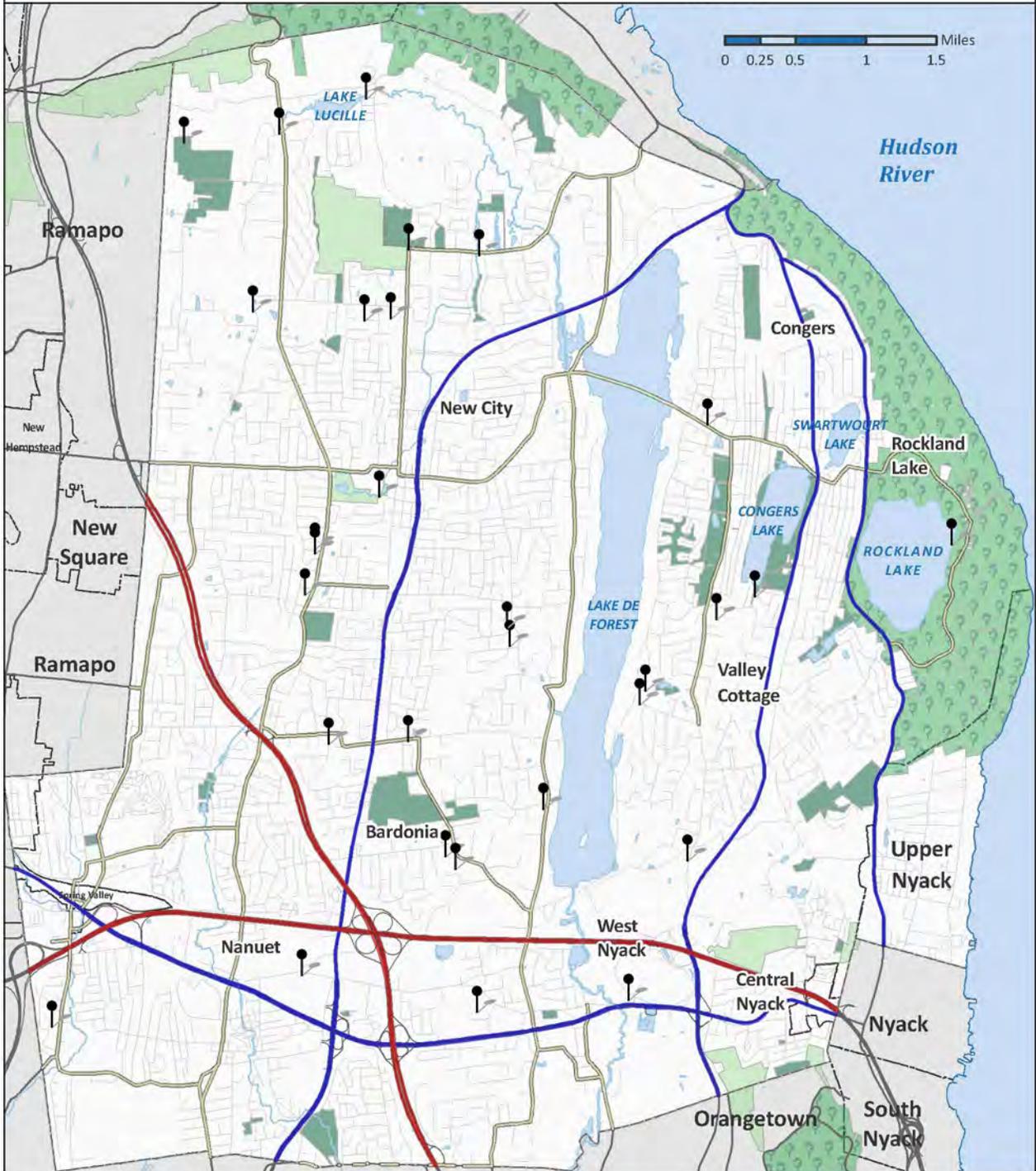
Education and promotion of Clarkstown's historic and cultural resources increase awareness and stress the importance of these community assets. The comments received at the Religious and Cultural Outreach meeting emphasized the promotion these resources. The Town may consider dedicating a location on its website for such uses. The Town should also encourage its local

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Historic Sites

- |                           |                                 |                    |
|---------------------------|---------------------------------|--------------------|
| Lakes and Streams         | Clarkstown Parks and Open Space | Interstate Highway |
| Town and Village Boundary | Rockland County Parks           | State Highway      |
| Historic Site             | New York State Parks            | County Highway     |
|                           |                                 | Local Road         |



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Figure 20

historical societies to make efforts to provide their knowledge to local school districts for incorporation into the school curricula.

## RECOMENDATIONS

### **Identify:**

**Identify and maintain an up-to-date inventory of historic resources.** The current historic property list should be cross referenced with the County Historical Society's list of 299 potential historical sites in Clarkstown. The list should also be compared with State and Federal government information to ensure inclusion and accuracy. The Historical Review Board must develop a formal nomination process for officially designating historic sites.

### **Preservation, Protecting and Partnering:**

**Enact legislation to ensure those historic properties in private hands are not destroyed, or so renovated by subsequent owners as to lose their historic status.** The new Historical Preservation Law will provide the Town Board and the Historic Review Board with the ability to protect and preserve the Town's most important historic sites.

**Establish a mechanism which notifies the Historic Review Board when development is proposed on a historic property.** The Town Geographic Information System (GIS) should be used to develop integrated work flow processes between and among departments in the Town that automatically notifies the Historic Review Board when a permit of any kind is requested for a designated historic site. Preservation planning should be integrated throughout all the other necessary departments within the Town to ensure that no significant site is destroyed through lack of information. Applications for permits that in any way alter the identified structures should require oversight by the Historic Review Board.

### **Restoration:**

**Establish a plan to improve the maintenance of all publicly owned historic properties and abandoned cemeteries within the Town.** A department within the Town should be given the responsibility for maintaining these properties and an adequate annual budget to do so. The Town may also consider adopting a vacant and abandoned buildings ordinance where the Town can condemn property and resell it in an effort to have it restored. The Town should consider creating partner programs to help finance needed restorations and improvements such as matching grants or low interest loans historic designated sites.

## **Education:**

**Create a plan to communicate, promote and educate Clarkstown residents of the historic and cultural resources within the Town.** Information on designated historic sites should be displayed on a plaque at the site, posted on the town web-site, maintained on the Town and County's Geographic Information System (GIS) and shown on the Town Zoning Map. The Town's website should provide detailed historical descriptions of designated sites throughout the Town. In the same manner, the Town's website should provide a listing of all the Town's not-for-profit cultural organizations. A registry of historical sites and not-for-profit cultural organizations should be made available at the Town Clerk's office. The Historical Review Board should create a presentation on Clarkstown's history to share with schools.

The Town should consider legislation to create an "Arts in Public Places" program similar to that of the County whereby a certain percentage of all Town capital project expenditures, up to a to-be-determined reasonable limit, would be set aside to finance the creation and placement of public art. The Town should create an Arts Council responsive to the Town Board to advise it in supporting the arts.

## e) Housing

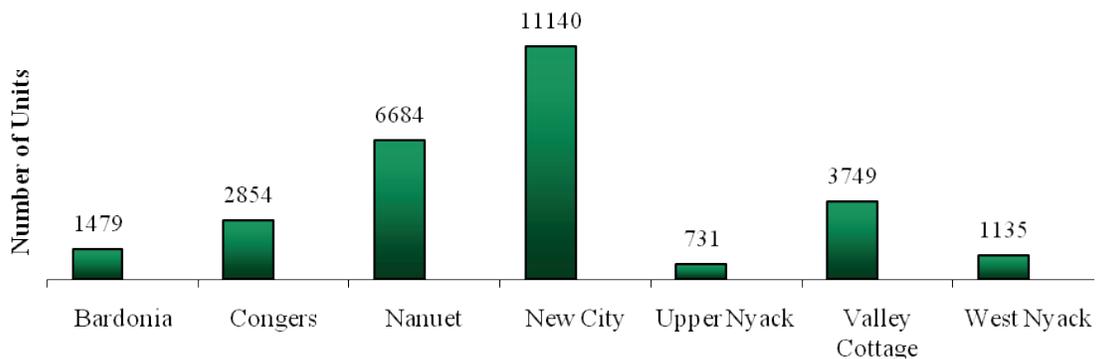
The 2008 U.S. Census population estimate for the Town of Clarkstown is 82,376 persons. This population resides in over 27,000 households spread among a number of diverse and unique neighborhoods (Chart 4). Clarkstown's proximity and accessibility to New York's Metropolitan Area was a driving force in the large scale housing development of the 1970's and 1980's which formed the core residential component of the Town. Regional prosperity is evident in the income trends for the Town and County, and has led to housing prices which are difficult for all residents, both current and potential, to afford. As older residents consider new housing for retirement, and



The Hamlets, Nanuet

Clarkstown's youth begins seeking housing of its own, the Town's housing stock offers limited affordable housing options. Moreover, vacant land has become a scarce resource within the Town and solutions for dealing with current housing issues will need to focus more on areas already developed rather than lands unoccupied. Awareness of Clarkstown's distinctive neighborhoods and places must be applied as new housing initiatives are undertaken, as it is these spaces that make the Town unique. With care, the Town can provide for a wider range of housing alternatives integrated into its existing spaces in a manner that not only addresses a need, but creates a better community.

**Chart 4**  
**Housing Characteristics,**  
**Subsets of Clarkstown: 2000-2006**  
 (Source: U.S. Census Bureau, EASI Demographics)



### Affordable Housing

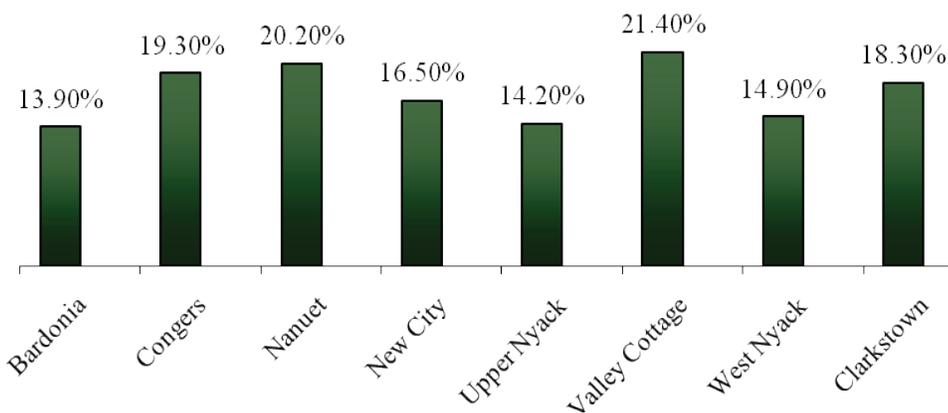
As the Town's population expands and ages, new housing types are needed. Older individuals may seek smaller residences, often within housing communities, and may find their options restricted as they rely on fixed incomes. On the other end of the spectrum, younger persons may find their housing options limited as they begin establishing careers. Between these groups is also a large number of workforce families contributing an extensive portion of their income to housing costs; if

alternative housing types are not available, portions of the Town’s population will be unable to remain. Ensuring that a wide range of housing options exists to suit the needs of current and future residents must be a high priority for the Town of Clarkstown as the state of housing is directly linked to the vitality of the Town.

The Town of Clarkstown Economic Development Strategy prepared by Saratoga Associates contains an analysis of middle income households in the Town of Clarkstown (Chart 5). The study examined those households earning between 80% and 120% of U.S. Housing and Urban Development - Area Median Family Income (HAMFI). Within Rockland County this range includes those households which earn between \$57,040 and \$85,560 per year. In the Town of Clarkstown there were found to be 5,300 households earning a yearly income within this range. The Saratoga Associates study further concluded that in no area of Clarkstown was the median home price low enough for a middle income household to reasonably afford, thus these households would theoretically need to rely on the limited rental housing market and spend more for housing than is fiscally prudent. The study found median rental prices compatible with middle income households in all but the hamlets of Bardonia, Nanuet and West Nyack.

**Chart 5**  
**Households earning between 80% and 120% of the HAMFI,**  
**Town and Subsets of Clarkstown; 2007**

(Source: 2007 HUD-Area Median Family Income; EASI Demographics - Saratoga Associates Town of Clarkstown Economic Development Strategy)



In September of 2002 the Citizens Advisory Board for Housing in the Town of Clarkstown completed its Final Report in which the state of the Town’s housing situation was carefully analyzed (see Appendix Section V). This report recommended the consideration of a series of policies and actions to better prepare the Town to meet current and future housing needs. Among these recommendations was support for the permission of regulated accessory apartments and the contemplation of mixed-use development within hamlet centers. Both of these measures have the potential to add affordable housing options within the Town and already new land use policies are adding opportunities for housing in Clarkstown’s hamlet centers under the Hamlet Center Overlay Districts.

During the winter of 2008 over 1,300 11<sup>th</sup> and 12<sup>th</sup> grade high school students from Clarkstown schools completed the Town of Clarkstown Student Community Survey (see Appendix Section IV), which provided a unique insight into their plans for the future and their opinions on issues ranging from volunteer emergency service participation to municipal park use and environmental concerns. The survey also provided crucial information on the student's plans for housing after high school and college graduation. Of the 97.3% of students who reported that they planned on attending college after high school graduation, 53.2% responded that they were planning on returning to Clarkstown after college. 76.4% of those students who planned on returning after college also stated that they would prefer to live on their own upon returning. These numbers would seem to suggest that housing for younger persons will continue to constitute a sizable share of the housing demand for the Town.

The need for affordable senior housing is most striking as reflected in the 2002 and 2008 housing surveys. Currently, approximately 400 residents are on the waiting list for affordable rental housing at Squadron Gardens, Monterrey Gardens and Middlewood Village. These three subsidized senior housing developments currently provide 318 total units with less than twenty openings per year. In 2007 the Town Board adopted a floating zone, the Adult Active Residential (AAR) zone, which will allow for the development of over 55 age restricted housing. The intent of the AAR zoning is to address the needs of the growing elderly population throughout the entire economic spectrum which exists in Clarkstown. The floating zone allows for the development of up to 800 units across the town and provides a density bonus incentive for developing affordable units if the applicant so desires.

### **Neighborhood Preservation**

During the Comprehensive Plan public meetings many residents expressed concern over out-of-scale development occurring within their neighborhoods. The cohesion of the Town's neighborhoods is vital to the well-being of the community. Land use regulations should establish maximums to limit development to meet the healthy carrying capacity of the land. When over-development occurs local infrastructure is overburdened, the aesthetic quality of neighborhoods is damaged and environmental harm can occur.

While permitting residential units above businesses in hamlet centers and allowing for accessory apartments in the Town's neighborhoods may open new opportunities for affordable housing, this process could potentially alter the character of Clarkstown's neighborhoods. Through proper architectural oversight the Town can accommodate new development, residential and otherwise, without jeopardizing the traditional composition of its neighborhoods. The Hamlet Center Overlay Districts, which currently exist for Congers, New City and Valley Cottage can be modified to adapt to the current needs and desires of the community, and can be employed in new areas when necessary. Through the application of proper planning policy, comprised of public outreach, the analysis of spatial data and the application of innovative planning principles, new areas can be developed and older areas re-adapted in a responsible manner.

## **Green Building**

The Town of Clarkstown has had a long standing commitment to environmental protection. In May of 2007 the Town Board authorized the membership of Clarkstown in the ICLEI – Local Governments for Sustainability “Cities for Climate Protection” program. ICLEI is an international organization with over 800 members in 68 countries which supports local environmentally sustainable initiatives. In 2008 the Clarkstown Energy Conservation Committee was formed to explore current energy use within the town and research policies and practices which can be applied to reduce consumption. Green building practices have been among the major topics of the Energy Conservation Committee and representatives from several communities and businesses have presented both polices and products the town can consider to conserve energy in buildings already constructed and those to be built. As the Clarkstown Energy Conservation Committee continues meeting, ideas for new, energy conscious programs and legislation will be presented to the Town Board.

## **RECOMMENDATIONS**

### **Affordable Housing:**

**Permit apartments over businesses.** The elevated cost of housing in Clarkstown is making the Town a difficult place for younger persons and those with lower or fixed incomes. Permitting apartments over businesses, specifically in the town’s hamlet centers, would also increase density in the areas of Town best equipped to handle such an influx.

**Permit accessory apartments.** Similar to the permitting of apartments over businesses, accessory apartments would increase the available housing rental stock, providing affordable rental units that would appeal to younger persons and those who cannot afford, or do not desire to purchase a home. However, accessory apartments will address only a portion of the need for affordable housing in Clarkstown. Accessory apartments must be well regulated to insure they do not violate their permits. Additional enforcement is needed as there are innumerable illegal multi-family residences in the Town.

**Create a mechanism for providing tax relief to volunteer emergency service personnel.** Many members of Clarkstown’s volunteer fire and emergency departments are having difficulty affording the high cost of housing in the town. Also, younger individuals, who make up a substantial portion of the active membership in these organizations, are moving out of the Town upon high school and college graduation to escape these costs. In the 2008 Student Community Survey housing incentives, including tax breaks, were shown to significantly boost interest in the town’s volunteer emergency services.

**Create a comprehensive database of affordable housing units, potential affordable housing units and lands that could be used for affordable housing.** A well maintained and monitored database will assist the town in providing residents the opportunity to be made aware of existing affordable rental options. In addition the Town should maintain an inventory of existing residentially zoned institutional properties and consider obtaining the right of first refusal for any property that may become available for future residential development.

**Adopt zoning that requires a set aside of new units for workforce and volunteer housing.** Since 2000 a total of 495 new residential units have been developed within the Town of Clarkstown, resulting in 62 new units per year according to the Economic Development Strategy prepared by Saratoga Associates. The Town may consider a policy requiring a minimum number of units be set aside on all new development, or an equivalent payment to an affordable housing fund, to enable the development of appropriate housing options for seniors and volunteer emergency service workers.

**Plan for and develop additional subsidized-affordable units for seniors.** The Town has a list of nearly four hundred seniors seeking affordable housing that cannot be addressed by the mostly market rate housing that has currently been proposed through the AAR floating zone. The Town needs additional affordable rental complexes similar to Middlewood. Efforts should be made to create an affordable housing fund that can be used to subsidize affordable housing development. Partnerships with private developers can be used to reduce the cost of construction in developing Town owned property that is not designated parkland.

### **Neighborhood Preservation:**

**Expand initiatives to safeguard neighborhoods from inappropriately scaled development.** Development whose density or bulk far exceeds those of surrounding established residential neighborhoods should be discouraged. Through strict interpretation of zoning laws and outreach and education for officials and developers, the Town can protect its neighborhoods from the environmental and aesthetic damage out-of-scale development can cause.

### **Green Building:**

**Implement programs which require and/or encourage environmentally sound building design.** These programs result in the construction of structures that require less energy, are comprised of building materials derived from recycled products, and are produced in a more environmentally sensitive manner. Not only do these practices bear a reduced environmental burden, but they can help manage the increasing demand for water and energy which accompany development. More importantly, they reduce utility bills, helping to lower overall housing costs.

## f) Recreation, Parks & Open Space

Clarkstown enjoys a premier system of parks, recreational facilities and open space lands (Figure 21). The recreational programs which have developed over the past 48 years reflect vision, sound planning and responsible funding.

### Recreation and Parks

Formally established in 1960, the Clarkstown Parks Board & Recreation Commission has grown and evolved the Town's parks and recreation facilities and programs into one of the best systems in Rockland County. The Recreation and Parks Commission is the administrative body of the town of Clarkstown that is formally charged with the oversight, administrative and operational duties of the town's parks and recreation facilities. Currently, the Commission is comprised of a seven member Board and a Superintendent.

Initially run as a part time Town department, the Parks Board & Recreation Commission has grown from an initial staff of two persons in 1960 into a full fledged department of over fifty full time and 400+ part-time/seasonal employees. Today's Recreation and Parks Commission has an operating budget of approximately \$6.2 million and oversees the operations and maintenance of a 700 acre town-wide park system that encompasses twenty-three parks and preserves, four major community centers, three large outdoor pools, twelve improved ball fields, numerous playgrounds, basketball and tennis courts, and other recreational amenities and parks operations facilities.



Rockland Lake State Park



Waterslide at Germonds Park

The Parks Board & Recreation Commission also oversees the administration of approximately 100 different recreational and civic oriented programs as well as 13 senior citizen clubs and groups. In 2007, the Commission oversaw the administration of sixteen cultural and special events for youth, three events for adults and ten events for senior citizens. In addition to these civic events, there were approximately seventeen sports and athletic special events for youth and five events for adults that were directly supported and/or administered by the Commission. The Commission also operates approximately thirty-five seasonal and year-round instructional programs for youths,

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Open Space and Recreation

- Lakes and Streams
- Clarkstown Parks
- Interstate Highway
- Greenway Trail
- Town and Village Boundary
- Clarkstown Open Space (O.S.)
- State Highway
- Long Path
- Rockland County Parks
- County Highway
- New York State Parks
- Local Road



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Figure 21

adults and senior citizens. The Commission's administrative offices are housed at the Zukor Park/Street Community Center complex on Zukor Road in New City. A central maintenance facility is located at the Town Central Warehouse located on Burnside Avenue in Congers. In addition, other parks maintenance operations are located individually at Germonds Park, Zukor Park and Congers Lake Memorial Park.

Outdoor recreational facilities in Clarkstown are largely in line with identified priority needs. A few new recreational facilities, primarily athletic fields, are needed. In addition, upgrades to certain aging facilities have been identified and should be targeted as priority projects over the next five years. There is also opportunity to focus on trails, bikeways, waterfront access and other linkages as well as provisions for passive recreation. There is also a need for new indoor recreational facilities. A consensus among town officials and potential users appears to be emerging on the nature, sizes, and quantities of indoor facilities with potential options for location of a new domed facility and indoor ice rink and continued use, upgrade and expansion of the existing Community Centers.

### **Open Space**

In 2000, the Town of Clarkstown Planning Board adopted Open Space Guidelines for the acquisition of property to specifically protect environmentally sensitive resources, farms, historic and cultural places, rivers and streams and watersheds (see Appendix Section V). Additionally, open space was to connect existing parks and provide opportunities for passive recreational activities. In furtherance of these goals, the Clarkstown Open Space Citizens Advisory Committee, comprised of members



Cropsey Farm

representing each hamlet of Clarkstown, developed a prioritized list of properties for acquisition. This report was published on June 22, 2001 (see Appendix Section V). In 2002, the Town of Clarkstown was authorized by permissive referendum to bond \$22 million for open space purchases. Over 190 acres were protected at a cost of approximately \$11 million (Table 4). In 2005, a Staff Advisory Committee on Clarkstown Open Space Acquisition was formed to guide the remainder of the acquisition process. This committee, comprised of Clarkstown staff from several Town departments, recommended additional guidelines for open space acquisition emphasizing the importance of protecting high elevation areas (both hilltops and hillsides), scenic areas, properties that support biodiversity, habitat corridors and Critical Environmental Areas (see Appendix Section V). The Staff Advisory Committee also developed an evaluation formula for ranking parcels. The Planning Board's guidelines along with those recommended by the Staff Committee were formally adopted by the Town Board. Open space lands and resources throughout the Town continue to be proposed and evaluated for acquisition into Clarkstown's existing parks, recreation and open space system.

**Table 4  
Town of Clarkstown - Open Space Acquisitions**

<b>Former Property Owner</b>	<b>Hamlet</b>	<b>Acreage</b>	<b>Funding</b>
Conlon	West Nyack	2.72	Town
Kempton	New City	17.90	Town
Zacharakis	Valley Cottage	19.30	Town
Afarian & Kazanjian	Central Nyack	2.30	Town
Rockland County (Celery Farm)	Congers	14.60	Town
Rockland County (6 Route 304)	Bardonia	0.67	Town
Rockland County (38 Rose Rd)	West Nyack	0.47	Town
Rockland County (355 Germonds Rd)	West Nyack	0.06	Town
Estate of Zacharakis	Valley Cottage	4.90	Town
Blake	Central Nyack	9.36	Town
Alimanestianu	Valley Cottage	35.30	Town
Perrineau	Valley Cottage	4.27	Town
Goldman	New City	6.80	Town
Mazzuca*	Valley Cottage	25.03	Town
MacGuffie	New City	22.39	Town
Torsoe (South Highvew Avenue)	Nanuet	3.81	Town
Cropsey Farm	New City	23.85	Town/County w/ NYS Grant
HighTor Vineyard	New City	52.95	PIPC**
Karen Bryant	New City	42.33	PIPC**

\* conservation easement

\*\* Palisades Interstate Parkway Commission

## **RECOMENDATIONS**

### **Updates to Existing Town Parks and Recreational Facilities:**

**Upgrade the pool at Germonds Park.** The original Germonds Pool Facility was constructed in the early 1970's and is very popular with Town residents. To bring the pool into compliance with present safety codes some upgrades are required. A study has already been conducted by the Town of Clarkstown Parks Board and Recreation Commission which inventories the necessary upgrades in detail.

**Replace the existing soccer field at Zukor Park with artificial turf.** The soccer field at Zukor Park is currently shut down from November thru March. By replacing the field with artificial turf the field can remain open year round. In addition, portable goals will allow for the use of the field for sports other than soccer, such as lacrosse.

**Update the playground at Zukor Park.** The playground at Zukor Park was constructed in 1991 and requires updates to meet present safety codes. This playground sees heavy use during Little League games, and by the mini-camp and preschool.

**Construct a comfort station at King's Park.** The King's Park baseball fields are currently used for girl's softball, adult softball and by Clarkstown schools. The playground at King's Park also sees heavy use. King's Park is the only park of its kind in Clarkstown that does not have restroom facilities, which are now required by code.

#### **New Town Parks and Recreational Facilities:**

**Construct a multi-use, domed sport and recreational facility.** Nearly all outdoor sports organizations, many of which rent space at commercial facilities throughout Rockland County have requested an indoor synthetic turf practice and game field(s). The organizations indicate they would be willing to pay for use of indoor turf space in Clarkstown. A domed facility would provide year-round recreational space.

**Construct a regulation sized ice rink.** There is currently no regulation-sized ice rink in the Town of Clarkstown. Several hockey leagues, including the school teams in Clarkstown are in need of a facility for competitive play, complete with locker rooms and other necessary amenities. An ice rink would also provide open skating for Clarkstown residents along with special instruction for children, adults and seniors.

#### **Town Trails:**

**Develop walking trails at Davenport Preserve.** The Davenport Preserve Master Plan Update published in January 2009 recommends a series of trail and site improvements at Davenport Preserve. The addition of trails, along with other improvements to the property, will create a unique asset within the Town which will provide new recreational and educational opportunities for residents.

**Provide a complete trail around Conger's Lake.** A complete trail around Conger's Lake would be a great recreational resource to the Town. The Town already owns most of the land needed for this project.

### **Intra- and Inter-Town Trails**

In addition to regional trails such as the Long Path and Greenway Trails, local trails are needed to connect the parks within the Town as well as the parks and trails of other adjacent municipalities. For example, a portion of the Palisades Interstate Parkway trail in the Town of Orangetown could be extended into and through the Town of Clarkstown.

### **Open Space:**

**Continue the acquisition of open space lands following the amended Town of Clarkstown Open Space guidelines.** Open space lands and resources throughout the Town will continue to be evaluated for acquisition into Clarkstown's existing parks, recreation and open space system, based on Clarkstown's Open Space Guidelines as amended by the Staff Advisory Committee. Open space acquisitions should provide linkages between existing conservation and recreational areas, protect sensitive natural features and scenic viewsheds and preserve cultural resources, particularly historic properties and the Town's last remaining farms.

## **g) Transportation**

The Town of Clarkstown is at a crossroads of regional change. Growth is straining and blurring the boundaries between once rural and suburban neighborhoods, and global economic and environmental forces are changing expectations placed on public services and infrastructure. The Clarkstown Comprehensive Transportation Plan prepared by Cambridge Systematics addresses transportation goals and strategies to improve and make available all modes of travel.

### **Roadway Network**

The roadway network in Clarkstown is straining to keep pace with growth in the region, including automobile, truck, bus, and non-motorized traffic (Figure 22). Clarkstown's 300 miles of roads are largely suburban in nature, where it is common to find winding residential streets, cul-de-sacs, and dead ends. Clarkstown has two Interstate Highways, including I-287, which traverses the Hudson River via the Tappan Zee Bridge, and the Palisades Interstate Parkway. Other highways in Clarkstown include U.S. Route 9W and State Routes 59, 303 and 304. Thirteen roads are maintained by the Rockland County Highway Department, serving as collector routes from smaller local streets. There are three roadways in Clarkstown with restrictions on vehicle heights, 12 roads with weight restrictions in place, traffic counters in 61 locations, and 21 locations with a high number of vehicle crashes.



Tappan Zee Bridge

### **Public Transportation Services**



Nanuet Train Station

Public Transportation services operating within the Town of Clarkstown serve a vital function for local residents, workers and other travelers (Figure 23). Many Clarkstown residents depend on local transit services such as Transport of Rockland (TOR) and Clarkstown Mini-Trans for work, school, shopping, and entertainment trips. Line haul bus services such as COACH USA carry New York City-bound commuters to the Port Authority Bus Terminal or the George Washington Bridge Bus Terminal in Manhattan, or to employment locations in Northern New Jersey. The TAPPAN ZEE Express carries commuters from Rockland County across the Tappan Zee Bridge to employment locations and to Metro-North Railroad stations in Westchester County. New Jersey Transit and Metro-North operate commuter rail service from Nanuet to New Jersey and Manhattan.

Clarkstown continues to increase its numbers of residents and businesses, which in turn has increased travel demand. With fuel prices expected to rise, the population of older adults growing, “baby boomers” nearing retirement, and commercial centers expected to expand along Route 59 and I-287, a strong public transportation network is essential to reducing congestion, minimizing pollution, and providing mobility to residents who need and want to be less dependent on their cars.

### **Sidewalk and Pedestrian Facilities**

The Town’s street network, diverse population, mix of land uses and transit system provide a foundation for a walkable town, especially in hamlet centers such as in New City, Nanuet and Congers. The sidewalk network generally provides a safe location for pedestrians to walk within a small geographical area, but robust connectivity between hamlets or residential areas and the denser commercial districts is lacking. Recently, resident requests for infrastructure and facilities related to walking and biking have surpassed requests for roadway intersection improvements.

### **Bicycle Facilities**

Clarkstown’s bicycle facilities are predominantly located on the eastern side of the Town (Figure 24). There are two recreational bicycle trails in this portion of the Town; the Hudson Valley Greenway, which connects Haverstraw to Upper Nyack, and the loop trail around Rockland Lake. Route 9W provides a north-south bike route which also connects to sections of the Hudson Valley Greenway. However, recreational trails do not provide a viable means of transportation for would-be bicycle commuters. As a transportation system, there is no designated network of bicycle routes, on street or off, connecting hamlet centers or other travel generators throughout Clarkstown.

### **Quality of Life**

Clarkstown’s suburban development encourages vehicular traffic. Approximately one-third of the air pollution in the region results from motorized travel. Other environmental effects of driving include excessive ambient noise, water runoff from roadways and parking lots, loss of nighttime darkness from street lighting, and waste from automobile maintenance. Further development has the potential to exacerbate these environmental problems.

### **Land Use**

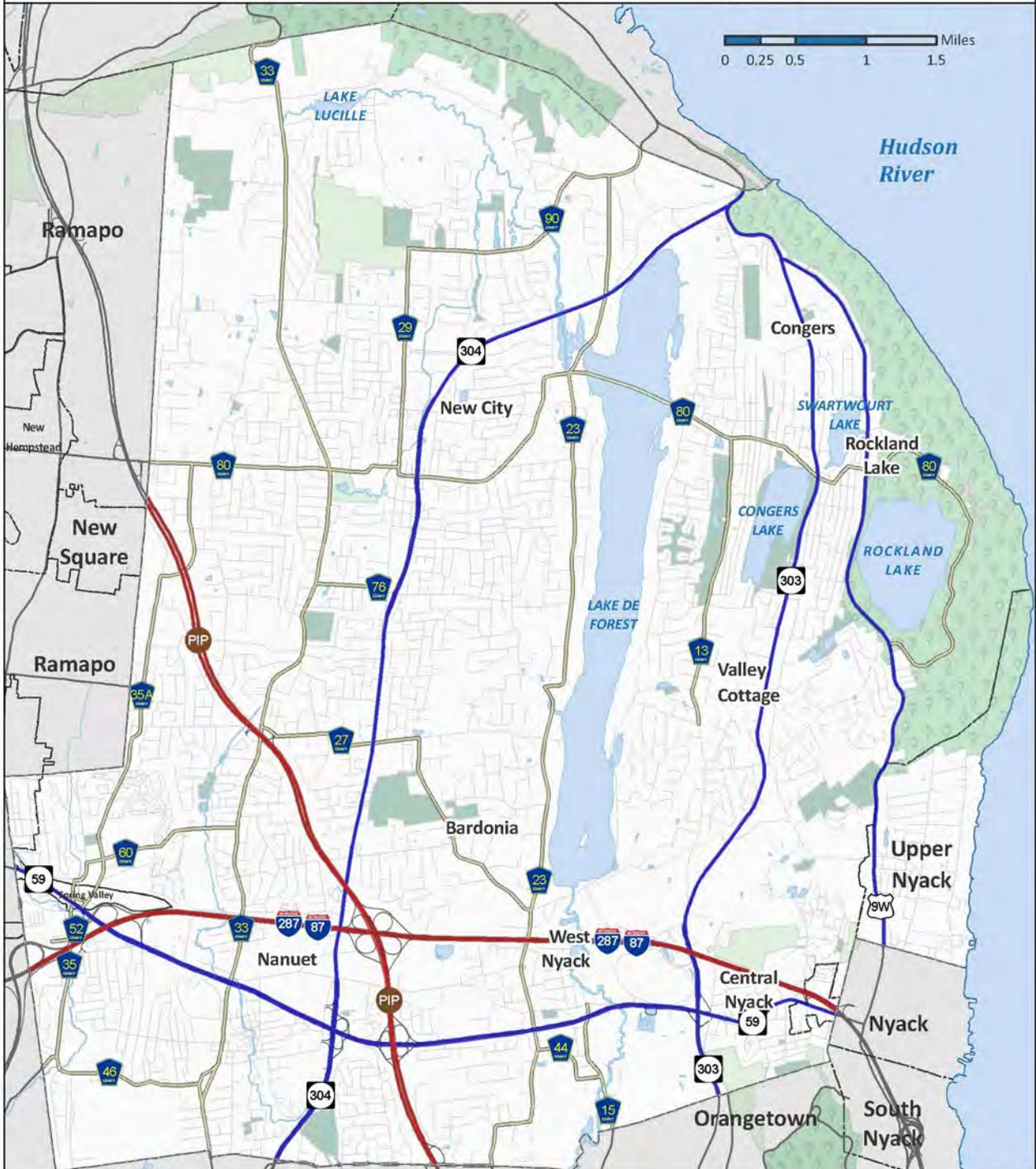
Land use in Clarkstown is comprised largely of low-density housing. Small, winding suburban roadways, often ending in cul-de-sacs, provide access to homes surrounded by private yards. These areas are punctuated by centers of more dense suburban development, often anchored by moderate intensity retail and other commercial uses. There are a number of government properties in the area, as well as land designated for public utilities and industrial activities. The main areas of commercial use are located near I-287 and Route 59 near the southern side of the Town, and along Route 304 near the hamlet of New City. Informal analysis suggests that about a third of the commercial properties in each area are devoted to parking. While traditionally suburban or even semi-rural, Clarkstown has opportunities to create centers of development that provide convenience, local character, and sustainable design, while maintaining the quality of life residents expect (Figure 25).

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Roadway Network

-  Lakes and Streams
-  Clarkstown Parks and Open Space
-  Interstate Highway
-  Town and Village Boundary
-  Rockland County Parks
-  State Highway
-  New York State Parks
-  County Highway
-  Local Road



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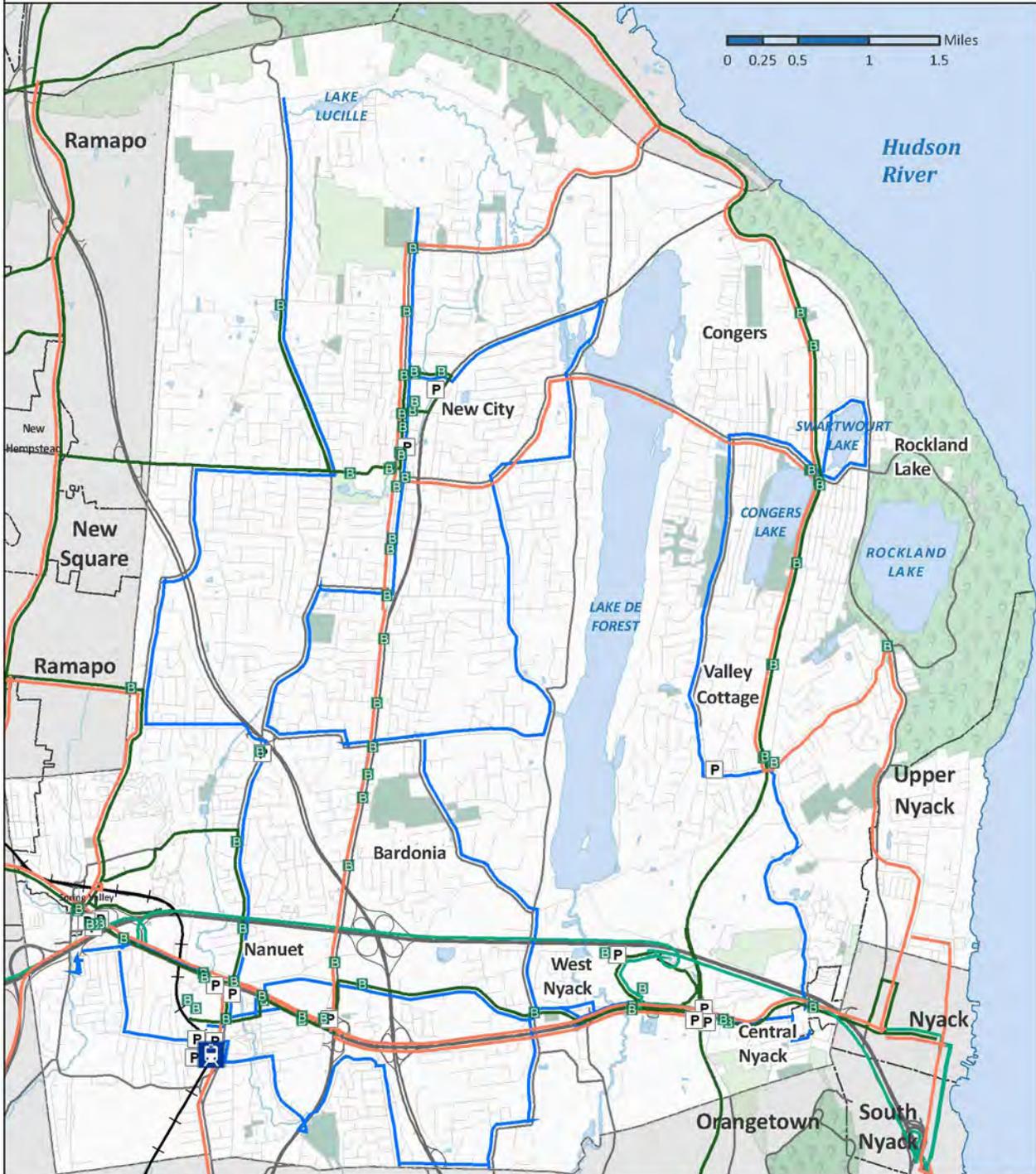
Figure 22

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Public Transportation Services

- Lakes and Streams
- Town and Village Boundary
- Clarkstown Parks and Open Space
- Rockland County Parks
- New York State Parks
- Pascack Valley Line
- Local Road
- Major Road
- Bus Services**
- Mini Trans
- Transport of Rockland (TOR)
- Tappan Zee Express
- Red And Tan
- Bus Shelters
- Rail Station
- Commuter Lots



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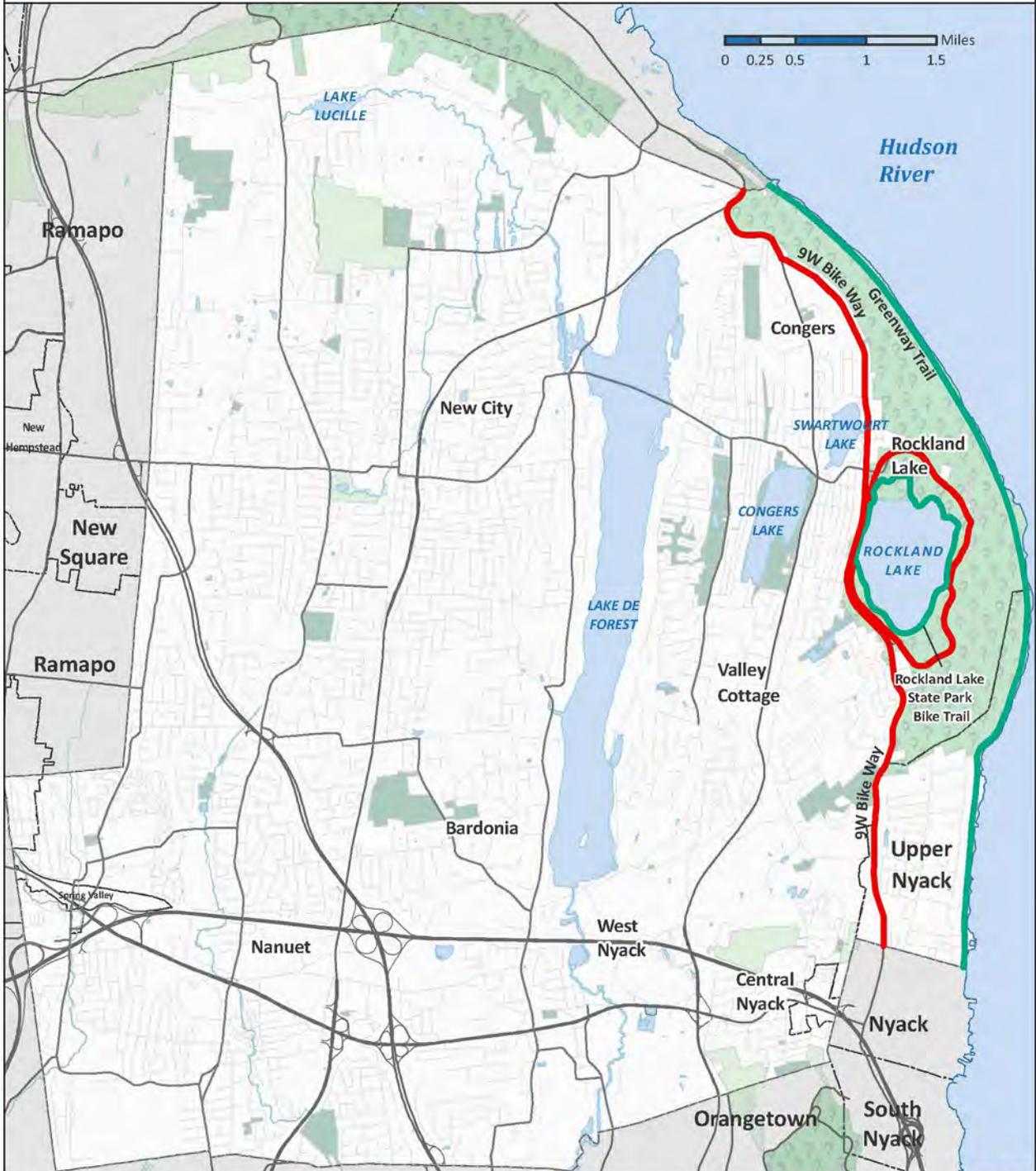
Figure 23

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Bicycle Facilities

- Lakes and Streams
- Town and Village Boundary
- Local Road
- Major Road
- Clarkstown Parks and Open Space
- Rockland County Parks
- New York State Parks
- Existing on Street: Bridge/Park/Separated
- Existing on Street: Striped



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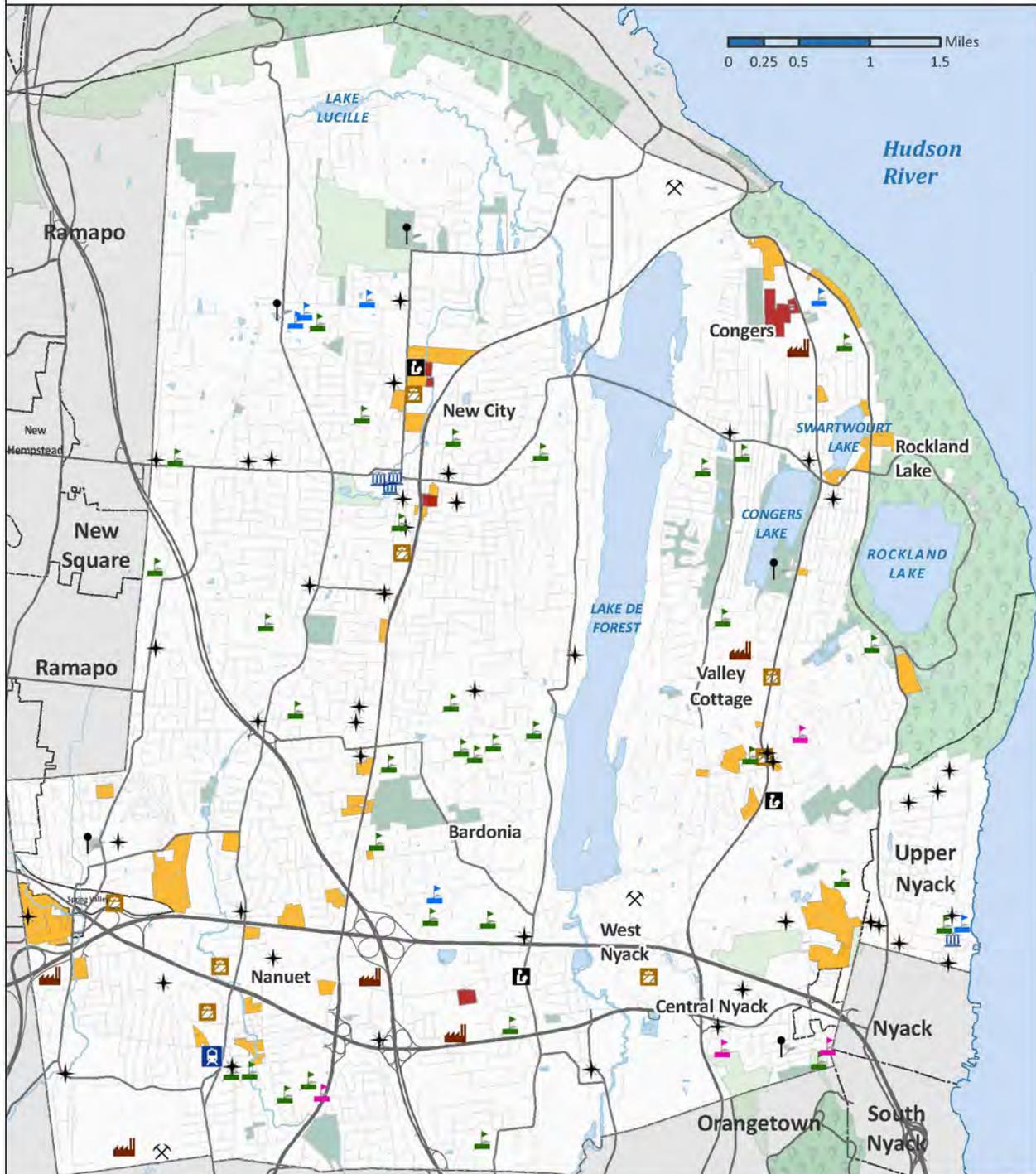
Figure 24

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Pedestrian and Traffic Generators

- |                                 |                     |                      |                             |                                |
|---------------------------------|---------------------|----------------------|-----------------------------|--------------------------------|
| Lakes and Streams               | Local Road          | Other Education      | Quarry                      | Active Adult Residences Zoning |
| Town and Village Boundary       | Major Road          | Religious Facilities | Retail Center               | Multi Family Zoning            |
| Clarkstown Parks and Open Space | Schools             | Libraries            | Rail Station                |                                |
| Rockland County Parks           | Special Schools     | Community Center     | Warehouse/Industrial/Office |                                |
| New York State Parks            | Government Facility |                      |                             |                                |



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Figure 25

## **RECOMENDATIONS**

While the Clarkstown Comprehensive Transportation Plan proposed numerous transportation improvement projects for the Town, the availability of funding and other resources make it necessary to prioritize projects. Over 100 discrete transportation projects were categorized and ranked. In addition to how each of the projects satisfied the pre-defined goals within its category, projects received a score based upon how they responded to the following Town-wide transportation goals.

### **Roadway Network**

**Provide efficient travel between the Tappan Zee Bridge/I-287 corridor, Route 59 corridor, and other parts of Clarkstown.** (Figures 26 & 27) Congestion creates slower travel times for motorists to and from major destinations in Clarkstown, especially where traffic on major thoroughfares diverts onto local streets. The Town should maintain a good level of service on local roadways while providing access to major routes.

**Add to the economic strength and quality of life in Clarkstown by coordinating with Tappan Zee Bridge (TZB) reconstruction and other regional transportation initiatives.** Alternatives to expanding capacity of the TZB will be evaluated for many years. The Access to the Region's Core (ARC) commuter rail tunnel between New York and New Jersey will likely have implications for Clarkstown in the future as well. Clarkstown understands that transportation operates on a regional scale and the Town should be an active participant in of all regional transportation projects.

**Ensure that travel through Clarkstown enhances safety, lowering the number of vehicle crashes that occur in the area and minimizing conflict between travel modes.** (Figure 28) Most crashes in the Town do not result in human injury, but the incidents interfere with traffic flow and require costly response from municipal services. As population and businesses continue to grow in the area, personal and freight vehicles will require access to the roadways. The town should be prepared to improve points of conflict and designate appropriate uses of local roads.

### **Public Transportation Service**

**Provide local public transportation services that promote sustainable travel options for Clarkstown residents, businesses, and visitors.** Over half of local work trips are to places in Rockland County and nearby towns. Trends in demographics will place pressure on public transportation to meet the local and regional mobility needs – for work, shopping, and recreation.

**Provide for commuter transit services that are accessible, efficient and safe.** Clarkstown's proximity to major highways, the Tappan Zee Bridge and the Hudson River positions the Town to have excellent access to New York City and other major regional centers. Clarkstown will coordinate with other planning organizations and transit companies to ensure its development aligns with existing and future service.

### **Sidewalk & Pedestrian Facilities**

**Create a walking environment that is accessible, safe, and enjoyable.** Perhaps the simplest and most environmentally sustainable travel mode is walking. Creating a cohesive network of sidewalks and paths encourages the development of Hamlet Centers, the use of public transportation and access to parks. It also supports Clarkstown's changing demographics and economic structure.

### **Bicycle Facilities**

**Create a cycling environment that is accessible, safe, and enjoyable.** (Figure 29) Cycling is already popular in Clarkstown, with access for local residents and visitors centered on Route 9W. The Town aims to make the cycling environment even better by providing regular road maintenance, linking key neighborhoods and open spaces, and coordinating connections with Route 9W and neighboring communities.

### **Quality of Life**

**Improve residents' health by reducing air pollution related to motorized travel.** Clarkstown will improve air quality by reducing congestion, encouraging the use of public transportation, enhancing non-motorized travel and facilitating regular monitoring. Noise from vehicles can reach unhealthy levels in some areas, so Clarkstown will continually address sound levels on major roadways. While street lighting is a necessity for safety, it nevertheless should be controlled to protect the Town's semi-rural ambience.

### **Land Use**

**Develop Hamlet Centers with transportation options and connections.** Clarkstown has been innovative in enacting local land use and design regulations to create centers of more dense business and residential activity. These centers present the challenge of balancing spatial needs for walking, cycling, public transportation, on-street and lot parking, driving and deliveries.

**Create diverse mixed-use development areas that allow for walking and biking and are well-served by public transportation.** Clarkstown will align transportation with land use changes to create sustainable travel and development patterns, while minimizing congestion, and maximizing safety. While much of Clarkstown's land is currently developed, redevelopment continues that will create changes in and demand for the local transportation network.

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Access Management Prioritization

- |                           |                                 |                                |
|---------------------------|---------------------------------|--------------------------------|
| Lakes and Streams         | Clarkstown Parks and Open Space | <b>Prioritization Projects</b> |
| Town and Village Boundary | Rockland County Parks           | High Priority                  |
| Local Road                | New York State Parks            | Medium Priority                |
| Major Road                |                                 |                                |



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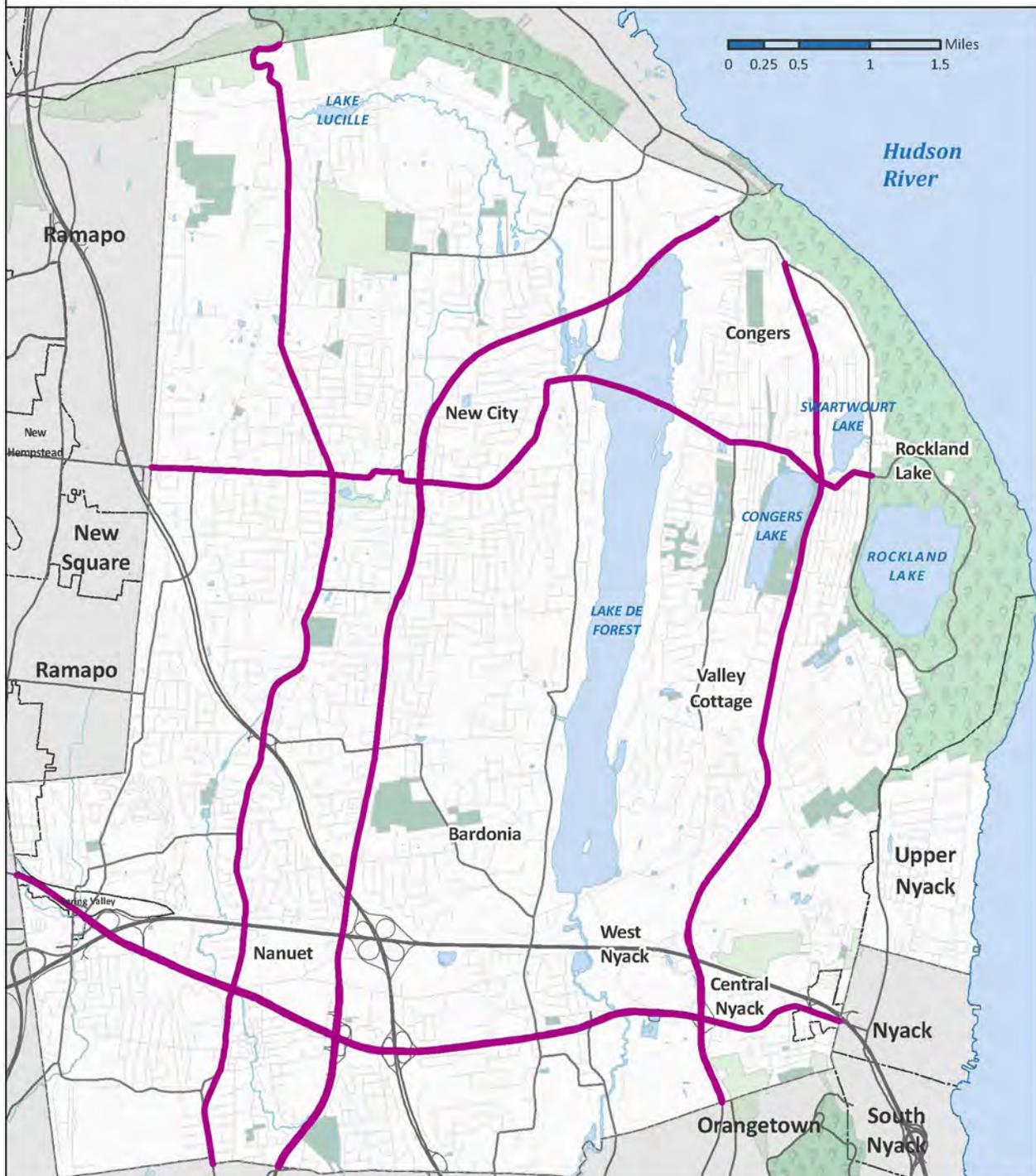
Figure 26

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Prioritized Signal Coordination Projects

- |                           |                                 |                                |
|---------------------------|---------------------------------|--------------------------------|
| Lakes and Streams         | Clarkstown Parks and Open Space | <b>Prioritization Projects</b> |
| Town and Village Boundary | Rockland County Parks           |                                |
| Local Road                | New York State Parks            | High Priority                  |
| Major Road                |                                 |                                |



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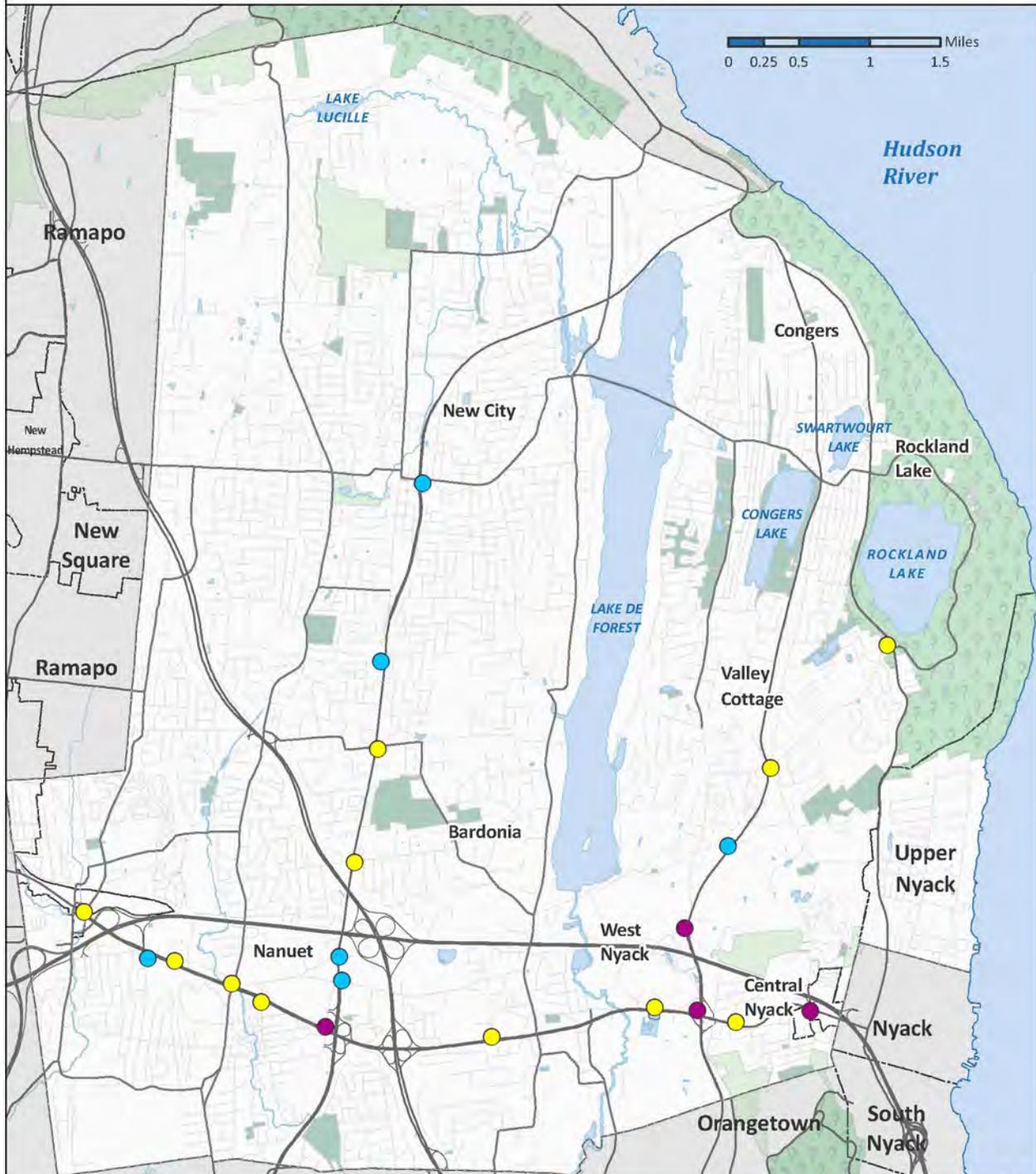
Figure 27

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Prioritized Accident Analysis Projects

- |                           |                                 |                                |
|---------------------------|---------------------------------|--------------------------------|
| Lakes and Streams         | Clarkstown Parks and Open Space | <b>Prioritization Projects</b> |
| Town and Village Boundary | Rockland County Parks           | High Priority                  |
| Local Road                | New York State Parks            | Medium Priority                |
| Major Road                |                                 | Low Priority                   |



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Figure 28

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Prioritized Bicycle Facility Projects

- |                           |                                 |                                |
|---------------------------|---------------------------------|--------------------------------|
| Lakes and Streams         | Clarkstown Parks and Open Space | <b>Prioritization Projects</b> |
| Town and Village Boundary | Rockland County Parks           | High Priority                  |
| Local Road                | New York State Parks            | Medium Priority                |
| Major Road                |                                 | Low Priority                   |



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Figure 29

## **VI – Implementation**

### **a) Policy Changes**

Many of the recommendations of the Comprehensive Plan do not require changes to the zoning code or zoning map of the Town. For example, there are recommendations to track the land development application review process, develop databases to record property characteristics, create new geographic information systems and publish an economic development handbook. The implementation of these and other similar recommendations can occur by instituting new or changing existing processes and procedures employed by various Departments of Town government. New computer software may be needed and specialized training for employees may be required. In general, these recommendations do not have a direct effect on the environment of the Town, but they are essential components to successfully implementing the overarching goals of the Comprehensive Plan and should not be overlooked.

### **b) Critical Environmental Area Designation**

Clarkstown has the ability to designate portions of Town as Critical Environmental Areas (CEA). CEAs are specific geographic areas having exceptional or unique environmental characteristics that should be protected. According to SEQRA, any action within a CEA is considered a Type I action, requiring more extensive full environmental review (SEQRA 617.2 (i)). The Town Board should consider designating environmentally sensitive areas highlighted in the Environmental Resources section, such the Hackensack River, Palisades Ridge and areas of high biodiversity, particularly the island at the southern end of Lake De Forest, which is home to a wide diversity of bird species.

### **c) Infrastructure Improvements**

The Comprehensive Transportation Plan developed by Cambridge Systematics identified over 100 discrete transportation projects in the categories of:

- Access Management
- Signal Coordination
- Accident Reduction
- Public Transit
- Sidewalks
- Bicycle Paths

Cambridge Systematics employed an analytical process to measure overall project benefits and developed suggested rankings of the projects organized by project type. While each of the projects will have some measure of positive benefit to the Town's transportation network, many issues and events factor into which projects are finally implemented, including location, cost, available

funding and public input. Aside from capital improvements, specific infrastructure development can be implemented through the use of the Town Official Map.

#### **d) Town Official Map Changes**

The Town Official Map provides another mechanism for embodying and implementing the goals of the Comprehensive Plan. The Town Board is empowered by New York State Law to establish an official map “to conserve and protect the public health, safety and general welfare” (New York State Town Law §270). Official Maps show the designated location and width of streets, highways, parks and drainage systems. The Town’s Official Map needs to be updated with respect to existing conditions and should be used to establish proposed infrastructure improvements, such as new parks, drainage systems, roadways and sidewalks along streets. In addition to illustrating needed infrastructure improvements and proposed parkland for the Town, the official map can also show areas where applicants for development will be required to set aside property for transportation improvements such as road widening and sidewalks.

In order to facilitate the updating and accessing of the information on the Official Map, it should be recreated in a geographic information system. Elements of the Official Map, such as roadways and parks, are already in a digital format. Additional digital information will be needed to complete the Official Map for formal adoption by the Town Board.

#### **e) Inter-Municipal Agreements**

Many of the recommendations of the Comprehensive Plan affect geographic areas outside of the Town’s municipal borders and are of County, regional, state and national importance. For example, the Comprehensive Plan recommends protecting the Palisades Ridge, which is a part of the Hudson Highlands geologic formation spanning four states, and installing sidewalks along portions of Route 304, a State highway. Similarly, the Town has experienced major flooding events that cross several municipal boundaries and affect multiple jurisdictions. Many of the projects recommended here require permits from multiple levels of government and can be too costly to be borne by just one municipality. Clarkstown should continue to participate in Inter-Municipal Agreements (IMAs), such the Rockland Riverfront Communities Council, and form new IMAs, when appropriate, to protect regional resources, promote public safety and reduce the Town’s financial burden.

#### **f) Zoning Text Amendments**

Several of the recommendations of the Comprehensive Plan can only be implemented by changing the Town Code. Rather than affecting the zoning of specific property, text amendments change the requirements or procedures for development and can affect entire zoning districts or the Town as a whole. Many of the recommendations from Environmental Resources are not site specific. For example, stream corridors and wetlands, which cross properties and zoning districts, can be protected by requiring buffers of a particular dimension around these environmentally sensitive features.

## **g) Land Use Changes**

There are two principle mechanisms by which land use can be changed in the Town: zoning map amendments and zoning text amendments. Implementing the land use recommendations of the Comprehensive Plan will require a critical analysis of the Town's land use chapters, especially Chapter 290 (Zoning) and accompanying bulk requirement tables, as well as the Town's Zoning Map. The Town of Clarkstown has developed well-established single family residential land use patterns that should not and, in many areas, can not be changed. Established neighborhoods should not be disrupted with zone changes that could adversely affect their stability, and in many areas of the Town realty subdivisions have made assemblage of properties for redevelopment difficult, if not impossible. In contrast, non-residential or underdeveloped high-density residential areas of the Town lend themselves more to change and have been the subject of multiple zone change requests in the past. These areas of the Town that are "subject to change" generally fall into one of the following two categories that require further analysis:

### **1) State Route Corridor Analysis**

The Comprehensive Plan specifically calls for providing efficient travel between the Tappan Zee Bridge/I-287 corridor, Route 59 corridor, and other parts of Clarkstown. It also recommends adding to the economic strength and quality of life in Clarkstown by coordinating with the Tappan Zee Bridge reconstruction and other regional transportation initiatives. State corridors, Routes 9W, 303, 304 and 59, support a majority of the Town's business and commercial activity centers, as well as act as major transportation linkages throughout Clarkstown. The Comprehensive Plan recommends that the land use along these corridors be analyzed and appropriate zoning be developed in line with the goals of the Plan. The Town should study specific business and residential needs in terms of land development and transportation infrastructure along the State Route Corridors. Flexible new zoning will be developed that addresses the operation of modern businesses in terms of building usage and parking requirements, recognizing that building size does not necessarily relate to parking usage. It will encourage reuse of existing buildings or the redevelopment of sites; and provide incentives for innovative development designs that reduce consumption of natural resources, via site layout, building construction or transportation alternatives.

### **2) Hamlet Center Redevelopment**

The 1999 Comprehensive Plan encouraged revitalizing the Town's Hamlet Centers, particularly New City. Overlay districts were employed in Valley Cottage, Congers and New City to modify the underlying zoning requirements, but had limited success. Changes are needed to these overlays or new zoning districts need to be introduced for these and all the Hamlet Centers to accomplish the goals of the current Comprehensive Plan. The Comprehensive Plan recommends diverse mixed-use development in all of the Town's Hamlet Centers that supports walking, biking and transit use. The location of Hamlet Centers along the Town's arterial state roadways makes them natural candidates for transit oriented development (TOD) strategies. These development strategies aim to encourage growth that is environmentally, socially, and culturally sustainable in the long term. This includes,

for example, constructing low-energy buildings, reducing automobile use and creating vibrant “downtowns” with a mix of residential, business and retail uses.

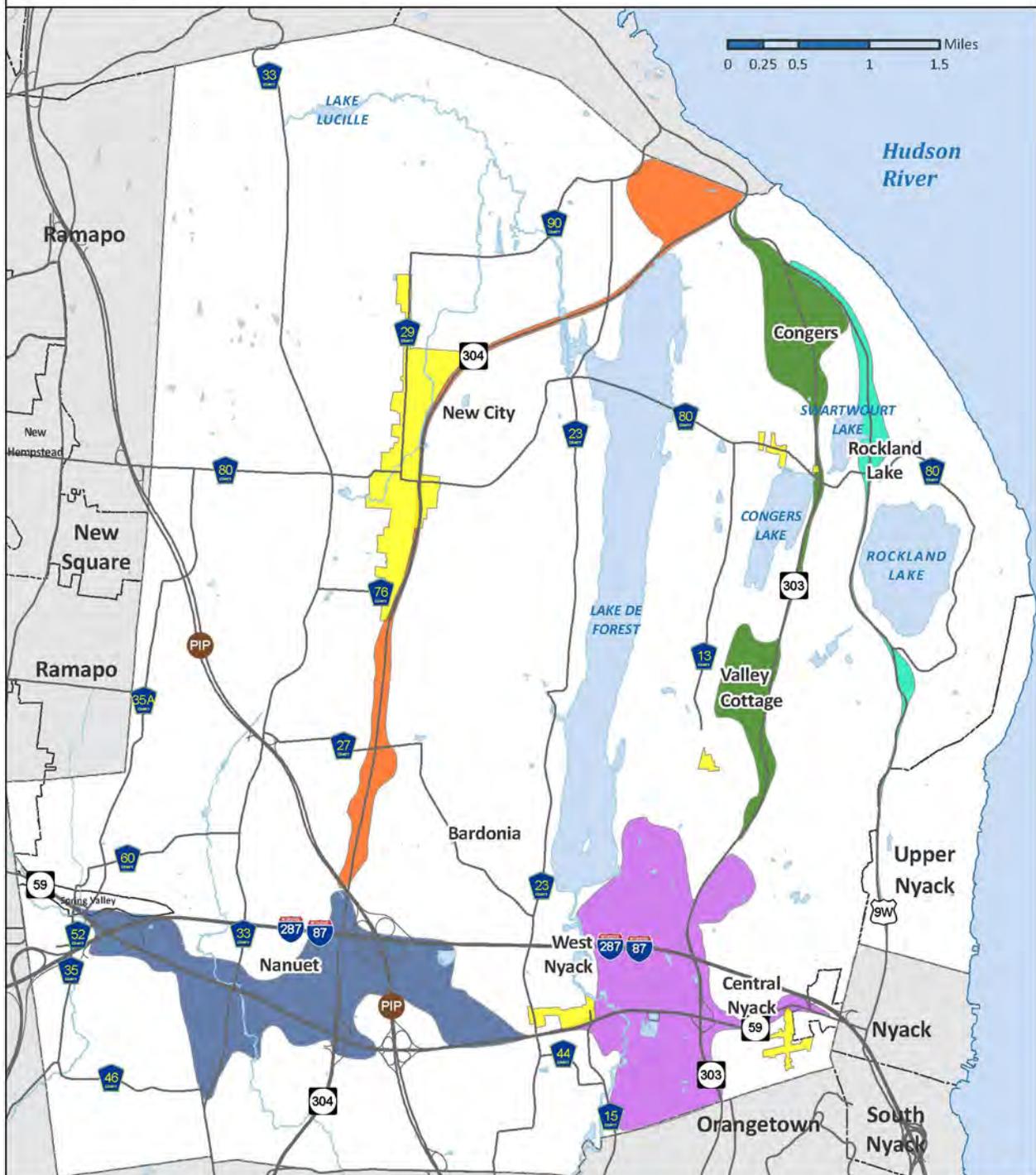
Together, the State Corridor Analysis and Hamlet Center Redevelopment will integrate transportation improvements and commercial and residential development. Figure 30 illustrates the land use changes recommended by the Comprehensive Plan Town-wide. These land use changes should be considered in light of local neighborhoods and site specific locations and will require further public participation. Environmental factors will need to be studied thoroughly and comprehensively as was done with the development of this Comprehensive Plan. Integrating environmental considerations into the land use decision making process will ensure that the Town will develop in a sustainable manner now and into the future.

# Town of Clarkstown, NY: 2009 Comprehensive Plan



## Land Use Change Study Areas

- |                           |                            |                                 |
|---------------------------|----------------------------|---------------------------------|
| Lakes and Streams         | <b>Corridor Study Area</b> | <b>Hamlet Center Study Area</b> |
| Town and Village Boundary | Rt 303                     | Hamlet Center                   |
| Major Road                | Rt 304                     | Rt 9W                           |
|                           | Rt 59E                     |                                 |



Prepared by: Clarkstown Data Processing Department, GIS.  
 Source: Clarkstown Data Processing Department, GIS; Rockland County Planning Department, GIS.  
 The Town of Clarkstown makes no warranties express or implied, as to the accuracy of the data on this map.  
 This map is for general information purposes and must not be relied upon for engineering or site specific purposes.

Figure 30

## VII - Evaluation of Potential Impacts of Recommendations

The defining characteristic of this document is its combined structure as both a Comprehensive Plan and Generic Environmental Impact Statement as specified by the State Environmental Quality Review Act. This format requires that all possible adverse environmental impacts be examined, and that means to mitigate these adverse effects also be explored. Many of the impacts that are identified are conceptual or hypothetical; they may not occur. As such, proposed mitigation is discussed in general terms. As recommendations are implemented, New York State Environmental Conservation Law 6 NYCRR Part 617.10 (c) will require further site or action specific detailed review of any additional potential adverse impacts. Many environmental impacts share the same mitigating measures, and, as each recommendation has been examined separately, there is some repetition in the following table.

### IMPACT ON LAND

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Land disturbance due to regrading for buildings, parking, etc.	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and that would not conflict with existing residential uses.	Enact legislation to protect ridgelines, continue enforcement of sediment and erosion control measures, both during and after construction, and revise ordinances to lower thresholds for mandatory erosion controls, and to increase penalties for violations of those ordinances.
Land disturbance due to regrading for buildings, parking, etc.	Economic Development	Ensure that a variety of housing options exists within the Town	Enact legislation to protect ridgelines, continue enforcement of sediment and erosion control measures, both during and after construction, and revise ordinances to lower thresholds for mandatory erosion controls, and to increase penalties for violations of those ordinances.
Land disturbance due to regrading for buildings, parking, etc.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers	Enact legislation to protect ridgelines, continue enforcement of sediment and erosion control measures, both during and after construction and revise ordinances to lower thresholds for mandatory erosion controls, or to increase penalties for violations of those ordinances.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Land disturbance due to regrading for buildings, parking, etc.	Housing	Permit apartments over businesses	Enact legislation to protect ridgelines, continue enforcement of sediment and erosion control measures, both during and after construction, and revise ordinances to lower thresholds for mandatory erosion controls, and to increase penalties for violations of those ordinances.
Land disturbance due to regrading for buildings, parking, etc.	Housing	Permit accessory apartments	Enact legislation to protect ridgelines, continue enforcement of sediment and erosion control measures, both during and after construction, and revise ordinances to lower thresholds for mandatory erosion controls, and to increase penalties for violations of those ordinances.
Land disturbance due to regrading for buildings, parking, etc.	Housing	Plan for and develop additional subsidized-affordable units for seniors	Enact legislation to protect ridgelines, continue enforcement of sediment and erosion control measures, both during and after construction, and revise ordinances to lower thresholds for mandatory erosion controls, and to increase penalties for violations of those ordinances.
Litter and debris generated around trails.	Recreation, Parks & Open Space	Develop walking trails at Davenport Preserve.	Begin anti-litter campaign and institute an educational program. Promote volunteer clean-up activities.
Land disturbance due to regrading for trails	Recreation, Parks & Open Space	Develop walking trails at Davenport Preserve.	Install and maintain sediment and erosion control measures, both during and after construction.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Litter and debris generated around trails.	Recreation, Parks & Open Space	Complete the trail around Congers Lake	Begin anti-litter campaign and institute an educational program. Promote volunteer clean-up activities.
Land disturbance due to regrading for trails.	Recreation, Parks & Open Space	Complete the trail around Congers Lake	Install and maintain sediment and erosion control measures, both during and after construction.
Litter and debris generated around facilities.	Recreation, Parks & Open Space	Construct a comfort station at King's Park.	Begin anti-litter campaign and institute an educational program. Promote volunteer clean-up activities.
Land disturbance due to regrading for trails.	Recreation, Parks & Open Space	Construct a comfort station at King's Park.	Install and maintain sediment and erosion control measures, both during and after construction.
Land disturbance due to regrading for buildings, parking, etc.	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Install and maintain sediment and erosion control measures, both during and after construction.
Land disturbance due to regrading for buildings, parking, etc.	Recreation & Parks/Open Space	Construct a regulation sized ice rink.	Install and maintain sediment and erosion control measures, both during and after construction.
Land disturbance due to regrading for roads, trails, etc.	Transportation	Ensure that travel through Clarkstown enhances safety, lowering the number of vehicle crashes that occur in the area and minimizing conflict between travel modes.	Install and maintain sediment and erosion control measures, both during and after construction.
Land disturbance due to regrading for roads, trails, etc.	Transportation	Provide local public transportation services that promote sustainable travel options for Clarkstown residents, businesses, and visitors.	Install and maintain sediment and erosion control measures, both during and after construction.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Land disturbance due to regrading for roads, trails, etc.	Transportation	Provide for commuter transit services that are accessible, efficient and safe.	Install and maintain sediment and erosion control measures, both during and after construction.
Land disturbance due to regrading for roads, trails, etc.	Transportation	Create a walking environment that is accessible, safe, and enjoyable.	Install and maintain sediment and erosion control measures, both during and after construction.
Land disturbance due to regrading for roads, trails, etc.	Transportation	Create a cycling environment that is accessible, safe, and enjoyable.	Install and maintain sediment and erosion control measures, both during and after construction.
Land disturbance due to regrading for buildings, parking, etc.	Transportation	Create diverse mixed-use development areas that allow for walking, biking and are well-served by public transportation.	Install and maintain sediment and erosion control measures, both during and after construction.

### **Impact on Water**

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased stormwater runoff from additional impervious surfaces as a result of buildings, parking, etc.	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and that would not conflict with existing residential uses.	Enact legislation that limits development coverage, establishes local wetland protection and requires stream corridor buffers. Require permeable pavement to reduce runoff, and water quality and quantity designs to treat runoff in excess of "zero net increase" in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.

Impact	Topic	Recommendation	Mitigation
Increased water consumption	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and that would not conflict with existing residential uses.	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.
Increased stormwater runoff from additional impervious surfaces as a result of buildings, parking, etc.	Economic Development	Ensure that a variety of housing options exists within the Town	Enact legislation that limits development coverage, establishes local wetland protection and requires stream corridor buffers. Require permeable pavement to reduce runoff, and water quality and quantity designs to treat runoff in excess of "zero net increase" in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.
Increased water consumption	Economic Development	Ensure that a variety of housing options exists within the Town	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased stormwater runoff from additional impervious surfaces as a result of buildings, parking, etc.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers	Enact legislation that limits development coverage, establishes local wetland protection and requires stream corridor buffers. Require permeable pavement to reduce runoff, and water quality and quantity designs to treat runoff in excess of "zero net increase" in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.
Increased water consumption	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.
Increased water consumption	Housing	Permit apartments over businesses	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.
Increased water consumption	Housing	Permit accessory apartments	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.
Increased stormwater runoff from additional impervious surfaces as a result of buildings, parking, etc.	Housing	Plan for and develop additional subsidized-affordable units for seniors	Require permeable pavement to reduce runoff and water quality and quantity designs to treat runoff in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased water consumption	Housing	Plan for and develop additional subsidized-affordable units for seniors	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.
Increased stormwater runoff from additional impervious surfaces as a result of trails etc.	Recreation, Parks & Open Space	Develop walking trails at Davenport Preserve.	Require permeable pavement to reduce runoff, and water quality and quantity designs to treat runoff in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.
Increased stormwater runoff from additional impervious surfaces as a result of trails etc.	Recreation, Parks & Open Space	Provide a complete trail around Congers Lake	Require permeable pavement to reduce runoff, and water quality and quantity designs to treat runoff in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.
Increased stormwater runoff from additional impervious surfaces as a result of buildings	Recreation, Parks & Open Space	Construct a comfort station at King's Park.	Require permeable pavement to reduce runoff and water quality and quantity designs to treat runoff in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.
Increased stormwater runoff from additional impervious surfaces as a result of buildings, parking, etc.	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Require permeable pavement to reduce runoff, and water quality and quantity designs to treat runoff in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased water consumption	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.
Increased stormwater runoff from additional impervious surfaces as a result of buildings, parking, etc.	Recreation, Parks & Open Space	Construct a regulation sized ice rink.	Require permeable pavement to reduce runoff, and water quality and quantity designs to treat runoff in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.
Increased stormwater runoff from additional impervious surfaces as a result of roads, sidewalks, trails, etc.	Transportation	Ensure that travel through Clarkstown enhances safety, lowering the number of vehicle crashes that occur in the area and minimizing conflict between travel modes.	Apply roadside and catchbasin designs which divert runoff in an environmentally sensitive manner. Apply water runoff treatments such as bioswales or permeable pavers that eliminate stormwater runoff.
Increased stormwater runoff from additional impervious surfaces as a result of roads, sidewalks, trails, etc.	Transportation	Provide local public transportation services that promote sustainable travel options for Clarkstown residents, businesses, and visitors.	Apply roadside and catchbasin designs which divert runoff in an environmentally sensitive manner. Apply water runoff treatments such as bioswales or permeable pavers that eliminate stormwater runoff.
Increased stormwater runoff from additional impervious surfaces as a result of roads, sidewalks, trails, etc.	Transportation	Provide for commuter transit services that are accessible, efficient and safe.	Apply roadside and catchbasin designs which divert runoff in an environmentally sensitive manner. Apply water runoff treatments such as bioswales or permeable pavers that eliminate stormwater runoff.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased stormwater runoff from additional impervious surfaces as a result of roads, sidewalks, trails, etc.	Transportation	Create a walking environment that is accessible, safe, and enjoyable.	Apply roadside and catchbasin designs which divert runoff in an environmentally sensitive manner. Apply water runoff treatments such as bioswales or permeable pavers that eliminate stormwater runoff.
Increased stormwater runoff from additional impervious surfaces as a result of roads, trails, etc.	Transportation	Create a cycling environment that is accessible, safe, and enjoyable.	Apply roadside and catchbasin designs which divert runoff in an environmentally sensitive manner. Apply water runoff treatments such as bioswales or permeable pavers that eliminate stormwater runoff.
Increased stormwater runoff from additional impervious surfaces as a result of buildings, parking, etc.	Transportation	Create diverse mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Enact legislation that limits development coverage, establishes local wetland protection and requires stream corridor buffers. Require permeable pavement to reduce runoff and water quality and quantity designs to treat runoff in excess of "zero net increase" in a more environmentally friendly manner, such rain gardens, bioswales, green roofs and artificial wetlands.
Increased water consumption	Transportation	Create diverse mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Require water conservation measures such as low flow fixtures, grey water systems, drip irrigation, drought resistant native plantings, rain barrels, etc.

## IMPACT ON AIR

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased building emissions	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses.	Require energy efficient designs.
Increased building emissions	Economic Development	Work to ensure that a variety of housing options exists within the Town	Require energy efficient designs.
Air pollution associated with vehicles	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses.	Increase public transportation options. Develop walking and bicycling options
Air pollution associated with vehicles	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers	Increase public transportation options. Develop walking and bicycling options
Increased building emissions	Housing	Permit apartments over businesses	Require energy efficient designs.
Air pollution associated with vehicles	Housing	Permit apartments over businesses	Increase public transportation options. Develop walking and bicycling options
Increased building emissions	Housing	Permit accessory apartments	Require energy efficient designs.
Air pollution associated with vehicles	Housing	Permit accessory apartments	Increase public transportation options. Develop walking and bicycling options
Increased building emissions	Housing	Plan for and develop additional subsidized-affordable units for seniors	Require energy efficient designs.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Air pollution associated with vehicles	Housing	Plan for and develop additional subsidized-affordable units for seniors	Increase public transportation options. Develop walking and bicycling options
Increased building emissions	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Require energy efficient designs.
Air pollution associated with vehicles	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Increase public transportation options. Develop walking and bicycling options
Air pollution associated with vehicles	Transportation	Ensure that travel through Clarkstown enhances safety, lowering the number of vehicle crashes that occur in the area and minimizing conflict between travel modes.	Increase public transportation options. Develop walking and bicycling options
Air pollution associated with vehicles	Transportation	Provide local public transportation services that promote sustainable travel options for Clarkstown residents, businesses, and visitors.	Use hybrid-electric or other alternative-fuel engines that operate with less air pollution than standard combustion engines.
Air pollution associated with vehicles	Transportation	Provide for commuter transit services that are accessible, efficient and safe.	Use hybrid-electric or other alternative-fuel engines that operate with less air pollution than standard combustion engines.
Increased building emissions	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Require energy efficient designs.
Air pollution associated with vehicles	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Increase public transportation options. Develop walking and bicycling options

## IMPACT ON PLANTS AND ANIMALS

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Tree Removal	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses.	Tree replacement programs.
Overpopulation of wildlife, increased human/wildlife conflicts	Environmental Resources	Continue the acquisition of open space to preserve natural habitats	Implement a wildlife population control program.
Tree Removal	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers.	Tree replacement programs.
Tree Removal	Housing	Plan for and develop additional subsidized-affordable units for seniors.	Tree replacement programs.
Tree Removal	Recreation, Parks & Open Space	Develop walking trails at Davenport Preserve.	Replant removed trees and vegetation. Re-route trail where possible.
Tree Removal	Recreation, Parks & Open Space	Complete the trail around Congers Lake.	Replant removed trees and vegetation. Re-route trail where possible.
Tree Removal	Recreation, Parks & Open Space	Construct a comfort station at King's Park.	Replant removed trees and vegetation.
Tree Removal	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Replant removed trees and vegetation.
Tree Removal	Recreation, Parks & Open Space	Construct a regulation sized ice rink.	Replant removed trees and vegetation.
Tree Removal	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Tree replacement programs.

## IMPACT ON AESTHETIC RESOURCES

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased light pollution	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and that would not conflict with existing residential uses.	Use lighting design and policy that provides safe areas without excess glare.
Increased light pollution	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Use lighting design and policy that provides safe areas without excess glare.
Increased light pollution	Recreation, Parks & Open Space	Construct a regulation sized ice rink.	Use lighting design and policy that provides safe areas without excess glare.
Increased light pollution	Transportation	Create a walking environment that is accessible, safe, and enjoyable.	Use lighting design and policy that provides safe areas without excess glare.
Increased light pollution	Transportation	Create a cycling environment that is accessible, safe, and enjoyable.	Use lighting design and policy that provides safe areas without excess glare.
Increased light pollution	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Use lighting design and policy that provides safe areas without excess glare.

## IMPACT ON OPEN SPACE AND RECREATION

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Development of currently undeveloped land.	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses.	Require set aside for open space on site or acquisition of sensitive areas in the Town.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Development of currently undeveloped land.	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses.	Require cluster development and allow transferable development rights.
Development of currently undeveloped land.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers.	Require set aside for open space on site or acquisition of sensitive areas in the Town.
Development of currently undeveloped land.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers.	Require cluster development and allow transferable development rights.
Development of currently undeveloped land.	Housing	Plan for and develop additional subsidized-affordable units for seniors.	Require set aside for open space on site or acquisition of sensitive areas in the Town.
Development of currently undeveloped land.	Housing	Plan for and develop additional subsidized-affordable units for seniors.	Require cluster development and allow transferable development rights.
Development of currently undeveloped land.	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Acquire additional open space.
Development of currently undeveloped land.	Recreation, Parks & Open Space	Construct a regulation sized ice rink.	Acquire additional open space.
Litter and debris generated around trails.	Recreation, Parks & Open Space	Develop walking trails at Davenport Preserve.	Begin anti-litter campaign and institute an educational program. Promote volunteer clean-up activities.
Litter and debris generated around trails.	Recreation, Parks & Open Space	Provide a complete trail around Conger's Lake.	Begin anti-litter campaign and institute an educational program. Promote volunteer clean-up activities.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Litter and debris generated around facilities.	Recreation, Parks & Open Space	Construct a comfort station at King's Park.	Begin anti-litter campaign and institute an educational program. Promote volunteer clean-up activities.
Development of currently undeveloped land.	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Require set aside for open space on site or acquisition of sensitive areas in the Town.
Development of currently undeveloped land.	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Require cluster development and allow transferable development rights.

### **IMPACT ON TRANSPORTATION**

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased traffic congestion.	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses.	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.
Increased traffic congestion.	Economic Development	Work to ensure a variety of housing options exist within the Town	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased traffic congestion.	Economic Development	Work to ensure a variety of housing options exist within the Town	Site developments in or near hamlet centers where pedestrian and transit infrastructure is strongest.
Increased traffic congestion.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.
Increased traffic congestion.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers	Site developments in or near hamlet centers where pedestrian and transit infrastructure is strongest.
Increased traffic congestion.	Housing	Permit apartments over businesses.	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.
Increased traffic congestion.	Housing	Permit apartments over businesses.	Site developments in or near hamlet centers where pedestrian and transit infrastructure is strongest.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased traffic congestion.	Housing	Permit accessory apartments.	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.
Increased traffic congestion.	Housing	Permit accessory apartments.	Site developments in or near hamlet centers where pedestrian and transit infrastructure is strongest.
Increased traffic congestion.	Housing	Plan for and develop additional subsidized-affordable units for seniors	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.
Increased traffic congestion.	Housing	Plan for and develop additional subsidized-affordable units for seniors	Site developments in or near hamlet centers where pedestrian and transit infrastructure is strongest.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased traffic congestion.	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.
Increased traffic congestion.	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Promote public transit alternatives. Explore opportunities to expand roadway capacity (at the shoulder or median) to accommodate transit. Designate bus lanes. Create pull-offs for busses that minimize traffic conflicts at bus stops. Promote efficient travel through education and lane markings for cyclists and drivers.
Increased traffic congestion.	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Site developments in or near hamlet centers where pedestrian and transit infrastructure is strongest.

## **IMPACT ON ENERGY**

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased energy consumption.	Economic Development	Apply zoning changes to create and expand commercial and industrial development in areas that are best served by the Town's existing infrastructure and would not conflict with existing residential uses.	Require energy efficient designs.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased energy consumption.	Economic Development	Ensure that a variety of housing options exists within the Town	Require energy efficient designs.
Increased energy consumption.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers	Require energy efficient designs.
Increased energy consumption.	Housing	Permit apartments over businesses.	Require energy efficient designs.
Increased energy consumption.	Housing	Permit accessory apartments.	Require energy efficient designs.
Increased energy consumption.	Housing	Plan for and develop additional subsidized-affordable units for seniors	Require energy efficient designs.
Increased energy consumption.	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Require energy efficient designs.
Increased energy consumption.	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Require energy efficient designs.

## **NOISE AND ODOR IMPACT**

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Disturbances to adjacent property owners	Historic & Cultural Resources	Establish a plan to improve the maintenance of all publicly owned historic properties and abandoned cemeteries within the Town.	Direct public outreach to affected property owners.
Noise associated with additional vehicles	Transportation	Provide local public transportation services that promote sustainable travel options for Clarkstown residents, businesses, and visitors.	Use hybrid-electric or other alternative-fuel engines that operate with less noise pollution than standard combustion engines.
Noise associated with additional vehicles	Transportation	Provide for commuter transit services that are accessible, efficient and safe.	Use hybrid-electric or other alternative-fuel engines that operate with less noise pollution than standard combustion engines.

**IMPACT ON PUBLIC HEALTH**

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased injury risk associated with higher travel speeds.	Transportation	Provide efficient travel between the Tappan Zee Bridge/I-287 corridor, Route 59 corridor, and other parts of Clarkstown.	Conduct enforcement and education programs (i.e. "Street Smarts" program). Implement road designs that help calm traffic, such as "gateway" and "neck-down" treatments. Adjust traffic signal timing to moderate driving speeds.

**IMPACT ON GROWTH CHARACTER COMMUNITY OR NEIGHBORHOOD**

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Additional staff or staff time.	Economic Development	Construct a database of information about the Town's commercial sector.	Explore sources for grants, government incentives, private funding and venture capital.
Additional staff or staff time.	Economic Development	Enhance communication between the Town and the business community.	Explore sources for grants, government incentives, private funding and venture capital.
Additional staff or staff time.	Economic Development	Continue the Economic Development Office to attract new businesses and assist businesses already established within the community.	Explore sources for grants, government incentives, private funding and venture capital.
Additional staff or staff time.	Economic Development	Ensure that a variety of housing options exists within the Town.	Explore sources for grants, government incentives, private funding and venture capital.
Additional staff or staff time.	Economic Development	Create connections between the commercial sector and educational institutions.	Explore sources for grants, government incentives, private funding and venture capital.
Additional staff or staff time.	Economic Development	Implement new programs, and continue those already in place, that beautify the Town, making it an attractive place in which to live and conduct business.	Explore sources for grants, government incentives, private funding and venture capital.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Reduced development potential.	Environmental Resources	Create protections for Clarkstown unique natural features.	Require cluster development and allow transferable development rights.
Increased cost of construction.	Environmental Resources	Protect and conserve both the sources and supply of potable water and the natural features which add to water quality.	Provide incentives for water re-use. Identify funding sources to offset costs. Educate developers and property owners regarding potential long term cost savings.
Reduced development potential.	Environmental Resources	Enact limits on total development coverage for all zoning districts.	Modify Floor Area Ratio or building height to compensate for reduced bulk area.
Reduced development potential.	Environmental Resources	Enact limits on total development coverage for all zoning districts.	Require cluster development and allow transferable development rights.
Reduced development potential.	Environmental Resources	Enact limits on total development coverage for all zoning districts.	Offer incentives to developers for a reduction in impervious areas.
Increased cost of new construction.	Environmental Resources	Require stormwater management to a higher extent than currently applicable where development is proposed in watersheds which experience flooding.	Conduct a model study to compare the costs of additional stormwater management to the costs of property damage from flooding.
Reduced development potential.	Environmental Resources	Install protections on and around streams.	Modify Floor Area Ratio or building height to compensate for reduced bulk area.
Reduced development potential.	Environmental Resources	Install protections on and around streams.	Require cluster development and allow transferable development rights.
Reduced development potential.	Environmental Resources	Enact a wetland protection ordinance.	Modify Floor Area Ratio or building height to compensate for reduced bulk area.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Reduced development potential.	Environmental Resources	Enact a wetland protection ordinance.	Require cluster development and allow transferable development rights.
Increased cost of new construction.	Environmental Resources	Implement programs which require and/or encourage environmentally sound building design.	Prioritize building types/areas that would benefit the Town by using "green" designs. Identify funding sources to offset costs. Educate developers and property owners regarding potential long term cost savings.
Change in neighborhood character.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers.	Establish architectural guidelines and maximum height and bulk in proportion to surrounding areas.
Code violation.	Health Safety & Welfare	Create zoning to encourage income adjusted housing for emergency service volunteers.	Create strict zoning eligibility requirements and regular enforcement efforts.
Additional staff or staff time and technology resources.	Health Safety & Welfare	Ensure that town building and fire codes are current and enforced.	Establish higher fees and fines to pay for additional personnel. Coordinate with justice court to ensure violators pay maximum penalty.
Restricted use of property. Decreased property and resale values	Historic & Cultural Resources	Enact legislation to ensure those historic properties in private hands are not destroyed, or so renovated, by subsequent owners as to lose their historic status.	Create monetary incentives to offset the restrictions imposed on historic home owners by Town historic designation. Provide a real estate tax reduction by reducing the historical properties' assessed value by a to-be-determined percentage so that each owner receives the same relative financial consideration for accepting the imposition of historical property restrictions.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Tax increases associated with payments for maintenance and construction at historic sites.	Historic & Cultural Resources	Establish a plan to improve the maintenance of all publicly owned historic properties and abandoned cemeteries within the Town.	Seek grants. Institute incentive program such as "Adopt-a-Spot"
Change in neighborhood character.	Housing	Permit apartments over businesses.	Establish architectural guidelines and maximum height and bulk in proportion to surrounding areas.
Code violation.	Housing	Permit apartments over businesses.	Create strict zoning requirements and establish regular enforcement efforts.
Change in neighborhood character.	Housing	Permit accessory apartments.	Establish architectural guidelines and maximum height and bulk in proportion to surrounding areas.
Code violation.	Housing	Permit accessory apartments.	Create strict zoning requirements and establish regular enforcement efforts.
Change in neighborhood character.	Housing	Adopt zoning that requires a set aside of new units for workforce and volunteer housing.	Establish architectural guidelines and maximum height and bulk in proportion to surrounding areas.
Code violation.	Housing	Adopt zoning that requires a set aside of new units for workforce and volunteer housing.	Create strict zoning eligibility requirements and regular enforcement efforts.
Increased cost of new construction.	Housing	Implement programs which require and/or encourage environmentally sound building design.	Prioritize building types/areas that would benefit the Town by using "green" designs. Identify funding sources to offset costs. Educate developers and property owners regarding potential long term cost savings.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased taxes associated with payments for maintenance and construction.	Recreation, Parks & Open Space	Update the pool at Germonds Park.	Apply for State and Federal grants. Consider the creation of a special recreation district to fund programs and facilities.
Increased taxes associated with payments for maintenance and construction. Increase usage of park facility and infrastructure including parking and utilities.	Recreation, Parks & Open Space	Replace the existing soccer field at Zukor Park with artificial turf.	Charge leagues to use the fields.
Increased taxes associated with payments for maintenance and construction. Increase usage of park facility and infrastructure including parking and utilities.	Recreation, Parks & Open Space	Update the playground at Zukor Park.	Apply for State and Federal grants. Consider the creation of a special recreation district to fund programs and facilities.
Increased taxes associated with payments for maintenance and construction. Increase usage of park facility and infrastructure including parking and utilities.	Recreation, Parks & Open Space	Construct a comfort station at King's Park.	Apply for State and Federal grants. Consider the creation of a special recreation district to fund programs and facilities.
Increased taxes associated with payments for acquisition, maintenance and construction.	Recreation, Parks & Open Space	Construct a multi-use, domed sport and recreational facility.	Charge leagues and participants to use facility.
Increased taxes associated with payments for acquisition, maintenance and construction.	Recreation, Parks & Open Space	Construct a regulation sized ice rink.	Charge leagues and participants to use facility.
Increased taxes associated with payments for acquisition, maintenance and construction.	Recreation, Parks & Open Space	Develop walking trails at Davenport Preserve.	Apply for State and Federal grants. Consider the creation of a special recreation district to fund programs and facilities.

<b>Impact</b>	<b>Topic</b>	<b>Recommendation</b>	<b>Mitigation</b>
Increased taxes associated with payments for acquisition, maintenance and construction.	Recreation, Parks & Open Space	Complete the trail around Conger's Lake.	Apply for State and Federal grants. Consider the creation of a special recreation district to fund programs and facilities.
Relocation of residents or businesses due to acquisition of private property for new or widened roadways.	Transportation	Ensure that travel through Clarkstown enhances safety, lowering the number of vehicle crashes that occur in the area and minimizing conflict between travel modes.	Work with residents and businesses to create an acceptable relocation plan.
Increased taxes associated with payments for acquisition, maintenance and construction.	Transportation	Provide local public transportation services that promote sustainable travel options for Clarkstown residents, businesses, and visitors.	Seek creative funding for bus infrastructure that is part of regional developments.
Increased taxes associated with payments for acquisition, maintenance and construction.	Transportation	Provide for commuter transit services that are accessible, efficient and safe.	Seek creative funding for bus infrastructure that is part of regional developments.
Change in neighborhood character associated with the addition of sidewalks.	Transportation	Create a walking environment that is accessible, safe, and enjoyable.	Build consensus through outreach and education programs.
Change in neighborhood character.	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Establish architectural guidelines and maximum height and bulk in proportion to surrounding areas.
Code violation.	Transportation	Create mixed-use development areas that allow for walking, and biking and are well-served by public transportation.	Create strict zoning requirements and establish regular enforcement efforts.

## **VIII – Analysis of Alternatives**

### **a) No Update to Comprehensive Plan**

If the Town were to undertake no action with regard to updating the Comprehensive Plan, the 1999 Comprehensive Plan would continue to be the guiding document for land use development and zoning within the Town. Many of the goals of the 1999 Comprehensive Plan would actually remain unfulfilled. The goals of steep slope protection and historic preservation, for example, can only be accomplished through specific implementable actions, as outlined in this document. Programs for business retention and expansion, as recommended in this Comprehensive Plan, are needed to accomplish the goals of economic development from the 1999 Plan. This Comprehensive Plan advances the earlier Plan, and without it, the 1999 Plan could not be successfully implemented.

Without the adoption of this Comprehensive Plan, the needs of the public as identified in this report would be unmet and the recommended environmental protections would not be put into place. The Town would suffer from the impacts of continued development: an increase in air and water pollution associated with unchecked energy and water consumption and automobile use; the lack of emergency service volunteers and young people due to unaffordable housing; a reduction in the quality of life from the loss of cultural and historic sites and open space; and a decrease in the Town's standard of living from reduced business opportunities.

Aside from the impacts of continued development within the borders of the Town, there are also regional projects for which the Town needs to prepare. Clarkstown is potentially poised to host two train stations as part of the commuter rail portion of the I-287/Tappan Zee Bridge project. Similar to the original construction of the Tappan Zee Bridge, the reconstruction of the Bridge and Thruway could spur a wave of land development, which if left unchecked, could overwhelm the resources of the Town. Without this Comprehensive Plan, the Town will not be able to preemptively and adequately address the land use implications associated with such development.

### **b) Adoption of Committee Recommendations and Plans Independently of Each Other**

The Town of Clarkstown could simply carry out the plans it has developed since the adoption of the 1999 Comprehensive Plan, without updating and adopting a new Plan. The Town could take a piece-meal approach. As mentioned earlier, the 1999 Plan recommended studying various issues facing the Town such as diminishing open space, increasing housing costs, and decreasing affordable housing supply as well as protecting wetlands and revitalizing all hamlet centers.

Since 1999 numerous studies have been commissioned, and several committees have been formed to address the issues highlighted in the 1999 Comprehensive Plan:

- Citizens Advisory Board for Housing
- Open Space Citizen's Advisory Committee
- Staff Advisory Committee on Open Space Acquisition

- Drainage Task Force
- Hamlet Revitalization Overlay Districts for Congers, Valley Cottage and New City
- Town of Clarkstown Economic Development Committee
- Recreation and Parks Master Plan
- Congers Lake Road Ad Hoc Committee
- Energy Conservation Committee

The inter-relationships and potential conflicts between the recommendations of these committees and plans would not be addressed if they were acted upon independently. Other essential considerations were missing from the earlier recommendations: the impact on and relationship to transportation, environment, historic resources and public safety. For example, increasing the Town's housing stock could put undue strain on the Town's existing transportation system causing traffic congestion, and, conversely, reconstructing the Tappan Zee Bridge and Thruway could alleviate traffic congestion only to add pressure to develop more sprawling subdivisions. Without this Comprehensive Plan, the balancing of all of these elements would not be possible, which could result in ineffective or unintended outcomes and undue impact on the character of the Town's neighborhoods and environment, as well as an irresponsible and inefficient allocation of funds. Taking all of this into consideration, the most prudent action for the Town of Clarkstown would be to adopt this Comprehensive Plan of 2009.

## IX – Conclusion

Planning is concerned with space. People live, work, play and move not within the bricks and mortar of buildings or the xylem or phloem of the trees. People live, work, play and move in the spaces they frame. The space between is what matters. The same can be said of the planning process. What matters are the relationships that are formed: the intangible connections people have with their homes, their neighborhoods, their environment, their family and friends, their community and their government. These relationships are sometimes hard to form, but they are the most important. It is only through partnerships and connections that progress is made.

This Comprehensive Plan took into account varying, divergent and sometimes even conflicting issues. A balanced response to these issues was required, and has been provided in the Plan. Several mechanisms helped achieve this balance; the public outreach and surveying component worked to ensure recommended policy was aligned with the voice of the people of Clarkstown. The Special Board and Subcommittees of the Comprehensive Plan worked together to organize, analyze and respond to the input gathered during the public outreach phase of the Plan, as well as the vast amount of information provided by consultant studies and individual research. This Comprehensive Plan has presented a vision of the future that does not only address existing problems, but the problems that could arise through the accomplishment of the vision. Framing the Comprehensive Plan as a GEIS created an inseparable relationship between the Plan and the environment. All of these processes sought balance. This balance is reflected in the recommendations of the Comprehensive Plan, which strives to serve as a guide for the growth of the unique place that is the Town of Clarkstown.

## **X – Appendix** *(Materials bound separately)*

I. Verbatim Comments from Workshops

II. Subcommittee Matrices

III. Reports from Comprehensive Plan Topic Subcommittees

IV. Surveys

*Student Community Survey – Town of Clarkstown - 2008*

*Clarkstown Housing Needs Survey – GMRS – October, 2008*

V. Studies

*Town of Clarkstown Economic Development Strategy - Saratoga Associates - November, 2008*

*Environmental Resource Assessment – John Mickelson – November, 2008*

*Final Report - Citizens Advisory Board for Housing in the Town of Clarkstown – September, 2002*

*Recreation & Parks Master Plan – C.T. Male Associates - October, 2008*

*Town of Clarkstown Open Space Guidelines - Minutes of the Planning Board Meeting of March 22, 2000*

*Priority Recommendations of the Clarkstown Open Space Citizen's Advisory Committee – June 22, 2001*

*Report: Staff Advisory Committee on Clarkstown Open Space Acquisition  
– January 12, 2006*

*Clarkstown Comprehensive Transportation Plan - Cambridge  
Systematics, Inc with The RBA Group and Howard/Stein-Hudson  
Associates - July, 2009*

*New City Hamlet Center Vision Plan – Behan Planning Associates, LLC  
with Frederick P. Clark Associates, Inc. – February, 2007*

*Congers Lake Road Ad Hoc Committee Recommendations – June 20,  
2007*

*Comments on Congers and Valley Cottage Overlay Districts Memo – Jay  
A. Greenwell, PLS – March 28, 2009*