

R

**UNIVERSITYAT** ALBANY State University of New York

This page was purposefully left blank to accommodate printing.

#### University at Albany, Master in Regional and Urban Program, Planning Studio

The 48-credit, two-year Master in Urban and Regional Planning (MRP) degree program at the University at Albany was established in 1982 and is fully accredited by the Planning Accreditation Board, the sole national accrediting body for planning. The MRP program is interdisciplinary, student-centered and participative, emphasizing the importance of creativity, public involvement, social justice, professional ethics, and environmental sustainability. With a strong oriented towards professional practice, an MRP provides a thorough foundation in land use planning, a range of technical skills and internship opportunities, and the opportunity to specialize in one of three alternative fields:

- Environmental and Land Use Planning
- Community Planning
- Transportation Planning

Alumni of the MRP program include university faculty, professional consultants, PhD students, and planners practicing in several regions of the United States and many foreign countries. Near the end of the degree program, students participate in the MRP Planning Studio, which provides them with an opportunity, working as a collaborative team, to apply the skills and knowledge obtained during their degree program to a real-world project.

The fall 2017 and the spring 2018 MRP Planning Studios supported the development of a comprehensive plan for the Village of Menands, NY. The fall Studio conducted initial public engagement and background research on the community. The spring 2018 Studio worked closely with Village of Menands officials and other stakeholders to complete a public engagement process and opportunity analysis, which can be used for the development of the future comprehensive plan. The spring 2018 MRP Planning Studio included:

Students:Dhaval Dhamelia, Jad Edlebi, Aneisha Samuels, Eric Stotsky, Zeynep Tas,<br/>Sean Taylor, Ketura VicInstructor:Marcia Kees

# Table of Contents

| Introduction                                   | 7  |
|--|----|
| Menands History                                | 8  |
| Community Services                             | 14 |
| Recreation                                     | 17 |
| Menands School District                        | 20 |
| Population and Demographics                    | 24 |
| Race Distribution                              | 26 |
| Land Use                                       | 26 |
| Zoning   | 27 |
| Housing  | 28 |
| Economic Base                                  | 47 |
| Employment                                     | 50 |
| Transportation Infrastructure                  | 56 |
| Existing land use                              | 57 |
| Intersections                                  | 62 |
| Transit Services                               | 66 |
| Bicycling Infrastructure                       | 68 |
| Pedestrian Accessibility                       | 69 |
| Natural Resources                              | 70 |
| Slope  | 71 |
| Land Cover                                     | 71 |
| Watershed and Stream Classification            | 73 |
| Water Quality                                  | 73 |
| Wetlands                                       | 76 |
| FEMA Flood and Flood Check Zones               | 78 |
| Soils  | 79 |
| Stormwater Management and Pollution Prevention | 86 |
| Appendix                                       | 88 |

#### List of Figures

| Figure 1 Location of Menands, NY                                     |    |
|--|----|
| Figure 2 Home and Greenhouse of Louis Menand                         | 11 |
| Figure 3 Louis Menand in late 1890's                                 | 12 |
| Figure 4 Menands Passenger Station (no longer standing)              | 12 |
| Figure 5 Montgomery Wards. June 2, 1948.                             | 13 |
| Figure 6 Scenic and Recreational Development Report (1970)           | 13 |
| Figure 7 Village of Menands Municipal Office at 280 Broadway         | 14 |
| Figure 8 Village Fire Department and Police Department.              | 15 |
| Figure 9 Bethany Presbyterian Church                                 | 16 |
| Figure 10 Ganser-Smith Memorial Park                                 | 17 |
| Figure 11 Sage Estates   |    |
| Figure 12 Mohawk-Hudson Bike-Hike Trail                              | 19 |
| Figure 13 Front entrance of Menands School                           | 20 |
| Figure 14 Side view of Menands School                                | 23 |
| Figure 15 Single Family detached housing                             | 29 |
| Figure 16 Single Family detached housing                             | 29 |
| Figure 17 Apartment Complex  |    |
| Figure 18 Apartment Complex  | 29 |
| Figure 19 Albany Lofts at One Broadway                               | 30 |
| Figure 20 Houses for Sale and Recently Sold                          | 39 |
| Figure 21 Formula for Housing Affordability Index (HAI)              | 46 |
| Figure 22 Inflow/Outflow Job Counts - Menands, NY                    |    |
| Figure 23 Transportation Access and Land Use Improvement Study       |    |
| Figure 24 Route 32 Linkage Study                                     | 58 |
| Figure 25 Menands Municipal and Census Tract Boundaries              |    |
| Figure 26 NYSDOT Traffic Map   |    |
| Figure 27 Exit 6 from 787 and The Riverview Center                   |    |
| Figure 28 Menand Road Intersection                                   |    |
| Figure 29 Wolfert Avenue   |    |
| Figure 30 CDTA Route 22  | 66 |
| Figure 31 BRT Proposed Route   |    |
| Figure 32 Menands Bike Friendly Areas 2015                           |    |
| Figure 33 Broadway South of 378                                      |    |
| Figure 34 Broadway North of 378                                      |    |
| Figure 35 Water Quality in the Lower Hudson Watershed.               |    |
| Figure 36 Stream Classification Map.                                 |    |
| Figure 37 Wetlands   |    |
| Figure 38 FEMA Flood Zones   |    |
| Figure 39: Soil Characteristics - Menands Union Free School District |    |
| Figure 40 Soil Suitability   | 81 |

#### List of Tables

| Table 2 Age Distribution in Village of Menands  | 25 |
|---|----|
| Table 3 Race Distribution in Village of Menands:  |    |
| Table 4 Menands Land Use Classifications  |    |
| Table 5 Housing Tenure by Number of Units in Menands, Albany County and New York State    | 33 |
| Table 6 Prices of Homes sold in Menands December 2014-October 2017. Source: Zillow        | 40 |
| Table 7 Percent of Owners and Renters Who Spend More Than 30 Percent of Income on Housing | 43 |
| Table 8 Median Household Income   | 47 |
| Table 9 Annual Household Income Distribution in Menands and Albany County                 | 48 |
| Table 10 Employment by Industry   | 50 |
| Table 11 Inflow/outflow of Jobs in 2015   | 52 |
| Table 12 Means of Transportation  | 54 |
| Table 13 Route 32 Linkage Study - Menands Portion   |    |
| Table 14 Route 32 Linkage Study - Colonie Section   | 61 |
| Table 15 Route 32 Linkage Study - Watervliet Portion                                      |    |
| Table 16 Land Cover in Menands  | 72 |
| Table 17 Soil Characteristics   | 82 |
| Table 18 Acreage of Soil by Classification  | 83 |

#### List of Charts

| Chart 1 Menands School Annual Student Enrollment in Previous 20 Years                            | 21 |
|--|----|
| Chart 2 Student Enrollment by Ethnicity  |    |
| Chart 3 Village of Menands Population  | 24 |
| Chart 4 Percentages of Land Use Classifications  | 27 |
| Chart 5 Year Structure Built   | 28 |
| Chart 6 Housing Units  | 30 |
| Chart 7 Single-family and Multi-family Units in Menands, Albany County and New York State        | 31 |
| Chart 8 Housing Vacancy in Menands   |    |
| Chart 9 Housing Tenure by Percentage in Menands, Albany County and New York State                | 32 |
| Chart 10 Housing Tenure in 2010 and 2015 Comparison in Menands, Albany County and New York State | 33 |
| Chart 11 Tenure by Household Size  | 34 |
| Chart 12 Tenure by Age of Householder  | 35 |
| Chart 13 Median Housing Value in Menands, Albany County and New York State                       | 36 |
| Chart 14 Median Home Price Change  | 37 |
| Chart 15 Value of Owner-Occupied Housing Units in Menands, Albany County and New York State      | 38 |
| Chart 16 Median Monthly Rent in Menands, Albany County   | 42 |
| Chart 17 Percent of households who spend more than 30% of their income on housing costs          | 44 |
| Chart 18 Housing-Cost Burden for Menands, Albany County and New York State                       | 45 |
| Chart 19 Annual Household Income Distribution in Menands and Albany County                       | 48 |
| Chart 20 Village of Menands Income Distribution.   |    |
| Chart 21 Employment by Industry  | 51 |
| Chart 22 Employment in Menands and Albany County   |    |
| Chart 23 Employment by Occupation in Menands   |    |
| Chart 24 Residents of Menands Travel Time to Work  | 54 |

## Introduction

The comprehensive plan, also known as a general plan, master plan or land-use plan, is a document designed to guide the future actions of a community. It presents a vision for the future, with long-range goals and objectives for all activities that affect the local government. This includes guidance on how to make decisions on public and private land development proposals. Most plans are written to provide direction for future activities over a 10- to 20-year period after plan adoption. This report provides basic data for a community profile to be used in the future development of a comprehensive plan for the Village of Menands, in Albany County, New York.

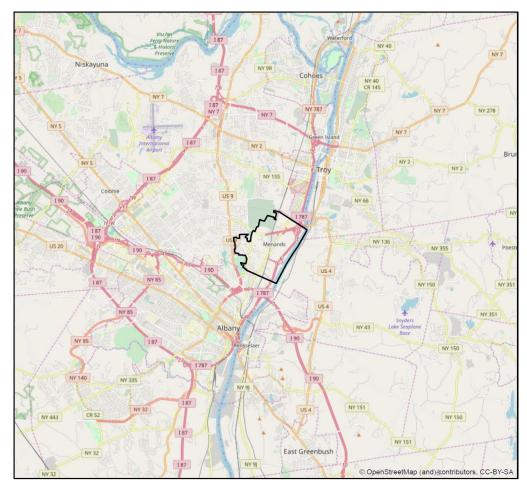


Figure 1 Location of Menands, NY

#### **Menands History**

The Village of Menands shares an early history with other communities that were a part of the Manor of Rensselaerswyck, a patroonship established in 1630 by Kiliaen van Rensselaer under the auspices of the Dutch West India Company. This patroonship included much of the land of current-day Albany and Rensselaer counties, as well as parts of Columbia and Greene counties. The Van Rensselaer family retained ownership of most of the region until the anti-rent wars of 1839-1845, when many tenant farmers refused to continue to pay rent to what they viewed as an outmoded feudal system. Following the tenant uprising, the last remaining heirs of the van Rensselaer patroonship slowly sold off their lands to private owners.

Louis Menand settled in the area in 1842 and established a successful horticultural business. He established a variety of nurseries and greenhouses on his property. One rail line constructed through the area in the 1850s named a station stop "Menand's Crossing." A railroad station constructed at a later date was called "Menands Station." (The station was located in the present-day Ganser-Smith Park but is no longer standing.) Louis Menand died in 1900 and when the Village of Menands incorporated in 1924, they adopted the name Menands, in honor of their influential resident.

While neighboring communities such as Albany and Watervliet grew into larger cities with street grid patterns, sidewalks and higher populations densities, Menands began as, and remained, an agricultural area for many years. But by the late nineteenth century, along with much of the Capital District region, Menands developed as its own center of industry and commerce, in large part due to major transportation corridors that ran through Menands. These included the Hudson River, the historic Broadway Turnpike (current-day New York State Route 32); the Erie Canal, during the early and mid-nineteenth century; the railroads, particularly in the mid and late-nineteenth century but also up to today; and the modern highway transportation network that is in existence today. All of these modes of transportation have collectively left a deep imprint on the landscape of Menands.

The original Broadway Turnpike, which runs north-south, parallel to the Hudson River, is a wide street that serves, in places, as the village's "Main Street." The Erie Canal was built along the original Broadway

Turnpike, but the canal was filled in after the construction of the New York State Barge Canal re-routed the canal terminus from Albany to Waterford in the early 1900s. A slight indentation in the grass on the east side of Broadway along Canal Street provides an indication of the location of the original bed of the Erie Canal.

The large expanses of open farmland made Menands an enticing location for industries to build large warehouses and factories. Many businesses and manufacturers moved into the village throughout the early twentieth century, building the large buildings and warehouses that still exist along the Broadway corridor in Menands. A rail line located along the waterfront prior to the construction of Interstate 787 provided transportation access for the industry and business that developed along the waterfront. Construction of Interstate 787 in the 1960s displaced some industry and business but others remained. Today, one major freight line continues to run through Menands.

One of the largest industries in Menands was the Albany Felt Company. This company built their first building in Menands in 1902 and continued in operation in Menands until the 1980s, when the increase in computer usage began to affect the paper industry. The company moved its headquarters to Rochester, New Hampshire in 2011. Today, this former industrial complex is listed on the National Register of Historic Places and has been renovated into apartments which started leasing in 2016.

In the early twentieth century, an electric trolley ran on Broadway, providing easy access into the city of Albany, and allowing Menands to promote itself as a "Garden Suburb." The trolleys ended when buses were introduced in the 1930s. Bus service has continued to this day and will soon be improved by the addition of a CDTA Bus Rapid Transit line through Menands.

The growth of industry and commerce in Menands influenced the nature of residential development in the village. Many of the village's residential neighborhoods were built as Menands grew in the early and midtwentieth century. Former large land holdings and estates were subdivided into lots for single-family homes on several streets on the hillside west of Broadway. Some examples of these bungalow and prairiestyle homes, built primarily between 1910-1930, are represented in the Menand Park Historic District. Several apartment complexes have also been constructed in Menands, starting as early as 1938 with Dutch Village apartments. Several of these apartment complexes are on, or close to, Broadway. This historic village landscape form continues today with businesses located along Broadway or east of Broadway, and residential areas located almost entirely west of Broadway.

One of the most impactful developments in the history of Menands was the construction of Interstate 787 along the Hudson River waterfront in the late 1960s. The construction of this interstate drastically changed the waterfront landscape of Menands and cut off access to the waterfront from the village. The highway was built over a series of islands in the Hudson River and the water in-between the islands was filled in. The highway was basically built in the Hudson River and construction of this highway required the banks of the river to be pushed out several hundred yards. The original west bank of the river can still be seen near the location of the Little River Lake, which is the last remaining section of the original Hudson River in this area. This has now become a marshland and the vast majority of the in-filled land is now a wetland.

In 1970, a report called the *Scenic and Recreational Development Plan* was written for the village to address how the waterfront could be reclaimed. The plan attempted to find uses for the 200 acres of land available after the construction of Interstate 787, with suggestions such as a marina, boat launch, recreational fields, pedestrian walkways, and biking areas. The only part of this plan that came to fruition was the Mohawk-Hudson Hike-Bike Trail. The other recommended facilities were never constructed. Currently, there is no way for a person to get to the waterfront while in Menands, except from the Mohawk-Hudson Bike-Hike Trail, which cannot be accessed from any point within Menands. Plans are underway to remedy this situation, as described in this report.

Another State road affecting the original development patterns of Menands is NY 378. This is an eastwest route connecting US 9 in Colonie with US 4 in Troy. It originally followed Menand Road from US 9 to NY 32. It was realigned in the 1950s to follow the new highway connecting US 9 to the Troy-Menands Bridge (then numbered as part of NY 2). When NY 2 was truncated to US 4 in Troy in 1978, the bridge and road connecting to US 4 became an extension of NY 378. While this road network and interchange provides ease of access in and out of Menands, it erected visual and physical barriers between the northern and southern sections of Menands that divide the community.

Menands developed as an extension of north Albany, as one of the city's earliest suburbs. Even today, except for the new entrance gateway signs that the Village has erected, it is difficult to discern exactly where the Village boundaries are located. Several transportation corridors through Menands serve

community, causing Menands to be somewhat of a drive-through community. Yet Menands has its own community networks, strong school system, residential enclaves and a growing job base. The village has much to offer residents, commuters and visitors. This report presents existing conditions in Menands to set a baseline to allow further exploration of future opportunities.

Ed. note: Thank you to Village Historian Kevin Franklin for much of the information included in this section.

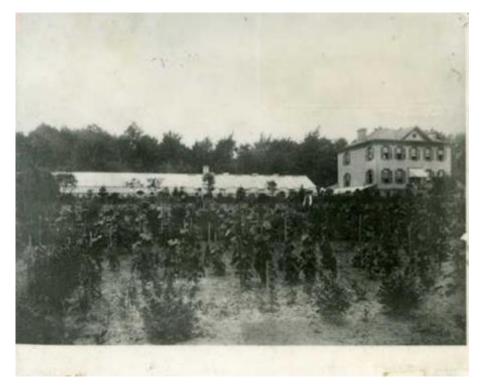


Figure 2 Home and Greenhouse of Louis Menand <a href="http://villageofmenands.com/our-village/history/historical-gallery/">http://villageofmenands.com/our-village/history/historical-gallery/</a>



Figure 3 Louis Menand in late 1890's

http://villageofmenands.com/our-village/history/historical-gallery/



PASSENGER STATION BUILT IN 1877. ENLARGED AND REMODELED IN 1887

Figure 4 Menands Passenger Station (no longer standing)

http://villageofmenands.com/our-village/history/historical-gallery//villageofmenands.com/our-village/history/historical-gallery/



Figure 5 Montgomery Wards. June 2, 1948.

 $\label{eq:nystarchives.b1598-99. https://www.google.com/search?q=menands+historic+photos&client=firefox-b-1-ab&tbm=isch&source=iu&iictx=1&fir=qGhMFIIh-qSd- M%253A%252CawKdVmpZDhGTHM%252C & usg= _qITsgARj-OGK36CeErf av-k0uo%3D&sa=X&ved=0ahUKEwjl6uDe8Z7ZAhWPwFMKHVK9BBwQ9QEIMTAD#imgdii=uqxujfVIbnFOGM:& imgrc=qGhMFIIh-qSd-M:$ 

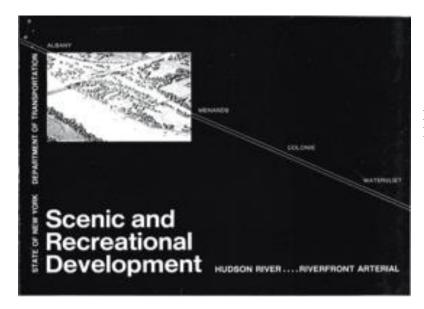


Figure 6 Scenic and Recreational Development Report (1970)

## **Community Services**

### Village Municipal Office and Village Clerk

Figure 7 Village of Menands Municipal Office at 280 Broadway Source: Google Maps

Municipal Offices are located at 280 Broadway. Offices were moved here in 2017 from 250 Broadway when the village purchased and renovated a former bank office. The village clerk's office provides access to information on births and deaths as well information available to the public that is provided under the Freedom of Information Law. The clerk also maintains public information on the village budget, planning board minutes, zoning ordinances and other public records.

#### **Village Police and Fire Departments**



Figure 8 Village Fire Department and Police Department. Google Maps

The Menands Police Department is located at 250 Broadway. Currently, it employs 10 officers in the department. The Village Fire Department is located in the same building. Menands Fire Co. #1 is an all-volunteer fire department. Currently, there are ten department officers and six civil officers in the department.

## **Village Court**

Village Court is held in the Menands Municipal Building at 250 Broadway. The courtroom is located on the 2<sup>nd</sup> floor. The village justice is elected every four years.

## **Menands Senior Citizens Club**



Figure 9 Bethany Presbyterian Church. Google Maps

The Menands Senior Citizens club meets at 21<sup>1</sup>/<sub>2</sub> North Lyon Avenue. Members meet socially every Thursday at Bethany Presbyterian Church on Lyons Avenue. Everyone age 55 and over is welcome. Every summer a picnic is held, and a very active Tour Committee works hard to plan trips. During the year, there are different speakers who talk about issues that are facing seniors.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Village of Menands. (n.d.). Departments. Retrieved from <u>http://villageofmenands.com/departments</u>

## Recreation

#### **Ganser-Smith Memorial Park**

Ganser Smith Memorial Park is a Menands park that has a children's playground, baseball field, and basketball court. Located on Menand Road, near the Village center, this 3-acre park is the epicenter of nearly all village-sponsored events. Ganser-Smith Park plays host to a series of picnics and musical events throughout the summer. The park amenities include a large open pavilion and BBQ, a children's playground, baseball field, basketball and volleyball courts as well as horseshoe pits.



Figure 10 Ganser-Smith Memorial Park Source: <u>http://www.ihavekids.com/attractions/234/NY/Menands</u> /Ganser-Smith-Memorial-Park

## **Hutton Street Park**

This small "pocket" park located at the corner of Hutton Street and Amsterdam Avenue in the south end of the Village is largely used by neighborhood children for pickup ball and other activities.

### **Polk Switzer Park**

This quiet park located on Elmwood Avenue in the north end of the Village is 7.2 acres of open green space and includes a basketball court.

#### **Sage Estates**

This land was bequeathed to the Village by the family of the late Senator Henry M. Sage as land to be kept forever wild. This 63.38-acre property contains over a mile of hiking and jogging trails that meander through fields and along a ravine and pond. The parcel address is 255 Van Rensselaer Blvd.



Figure 11 Sage Estates Source: Google maps

## Mohawk-Hudson Bike-Hike Trail

This extensive biking/walking trail traverses the Village of Menands along the Hudson River and is part of the state-wide Erie Canalway Trail that extends from Albany to Buffalo. This trail connects many points of historical and cultural interest such as Schuyler Flatts Park, located just north of Menands in the Town of Colonie, and the NYS Barge Canal flight of locks in Waterford. This trail is a segment of the newly designated Empire State Trail, which will ultimately connect trails in the Hudson, Mohawk and Champlain Valleys. Plans are underway by the Capital District Transportation Committee to provide physical access to this trail in Menands, which does not currently exist.



Figure 12 Mohawk-Hudson Bike-Hike Trail <u>http://brian.carr.name/albany11/albny107.htm</u>



https://www.ny.gov/programs/empire-state-trail

## **Menands School District**



Figure 13 Front entrance of Menands School

The Menands Union Free School District covers the area of the Village of Menands east of Van Rensselaer Boulevard. The district consists of one K-8 school, the Menands School, which is off Wards Lane. Student enrollment over the past two decades has fluctuated from 223 to 278 students with an average of 244 students. The staff consists of 31 teachers, 14 non-instructional personnel, a superintendent, and a principal. Currently, the teacher-to-student ratio is approximately 1 to 8. However, school enrollment projections tend to vary throughout the school year due to Menands School enrolling students from homeless shelters during the school year.<sup>2</sup>

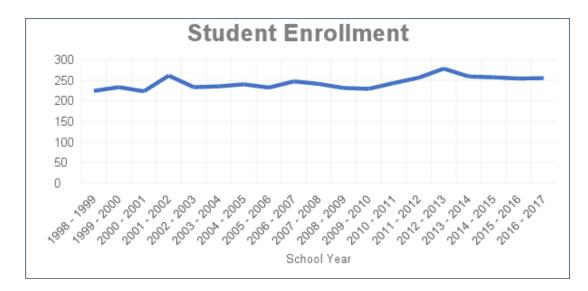


Chart 1 Menands School Annual Student Enrollment in Previous 20 Years<sup>3</sup>

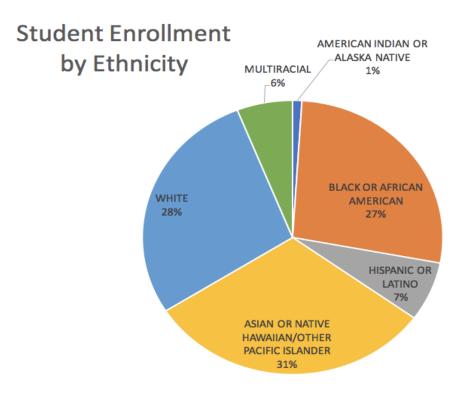
Since Menands School only serves Kindergarten to 8<sup>th</sup> grade, the school pays tuition for an additional 120 Menands students to enroll in the following high schools: Shaker High School in North Colonie Central School District, Colonie Central High School in South Colonie, Watervliet High School, Heathy High School in Green Island, and Tech Valley High School. <sup>4</sup>

<sup>&</sup>lt;sup>2</sup> About Menands School - Menands School District, Menands, NY. (n.d.). Retrieved from http://www.menands.org/AboutUs/aboutus.cfm

<sup>&</sup>lt;sup>3</sup> Archive - MENANDS UFSD | NYSED Data Site. (n.d.). Retrieved from https://data.nysed.gov/archive.php?instid=800000055344

<sup>&</sup>lt;sup>4</sup> About Menands School - Menands School District, Menands, NY. (n.d.). Retrieved from http://www.menands.org/AboutUs/aboutus.cfm

The budget vote for the 2017 - 2018 fiscal year was passed on May 16, 2017 with expenditures totaling \$8,548,159; this is an increase of \$211,723, or 2.54%, from the 2016 - 2017 budget. A total of \$6,772,374 was dedicated to their program component, which consists of general core education, transportation, health services, special services, and employee benefits. A total of \$941,358 was dedicated to their administrative component, which consisted of the Board of Education, supervisory services, and funding for their Business Office and Chief School Administrative Office. A total of \$834,427 was dedicated to their capital component, which consisted of debt service, operation and maintenance of all facilities, and employee benefits. <sup>5</sup>



#### Chart 2 Student Enrollment by Ethnicity<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Budget information - Menands School District, Menands, NY. (n.d.). Retrieved from http://www.menands.org/BoardofEd/budget.cfm

<sup>&</sup>lt;sup>6</sup> 2017 | MENANDS SCHOOL - Report Card | NYSED Data Site. (n.d.). Retrieved from https://data.nysed.gov/reportcard.php?instid=800000055345&year=2017&createreport=1&enrollment=1

The Menands School offers a strong academic program. Their program consists of many beneficial learning environments for students. This includes a full-day Kindergarten, accelerated courses in 8<sup>th</sup> grade math and science, and Spanish learning starting in Kindergarten. For every grade, Menands School provides computer technology, art, music, library, physical education, and health courses. Menands School sets a great example for what any primary school program should consist of. Menands School District is committed to excellence by encouraging cultural diversity, preparing students to excel in all areas of learning, expecting students to become valued members of society, and creating innovative, well-balanced programs that challenge unique abilities all while providing a safe, nurturing, and supportive environment for all students.<sup>7</sup>



Figure 14 Side view of Menands School<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> About Menands School - Menands School District, Menands, NY. (n.d.). Retrieved from http://www.menands.org/AboutUs/aboutus.cfm

<sup>&</sup>lt;sup>8</sup> Academics - Menands School District, Menands, NY. (n.d.). Retrieved from <u>http://www.menands.org/aspnet\_client/Academics/academics.cfm</u>

## **Population and Demographics**

Over the past ninety years, the population of the Village of Menands has increased from 1,522 in 1930, to 3,990 in 2010. The village experienced peak population of 4,333 in 1990. The 2011-2015 American Community Survey 5-Year Estimates produced estimates that the population of Menands in 2015 was  $4,004.^9$ 

The U.S. 2010 Census states that 46.4% of the population of Menands is male, and 53.6% is female. The median age is 41.5 years.

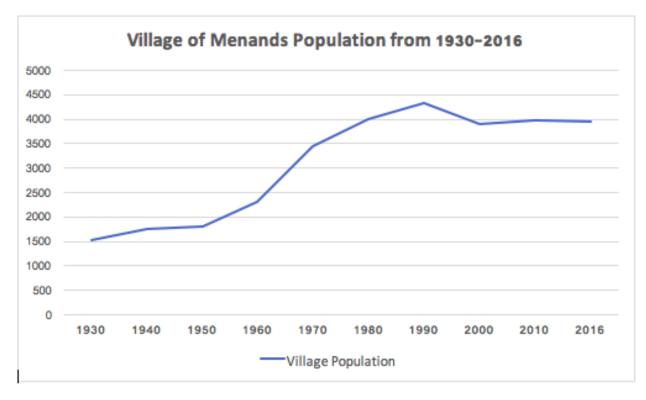


Chart 3 Village of Menands Population Source: US Census Data 2010

<sup>&</sup>lt;sup>9</sup> The 2011-2015 American Community Survey 5-Year Estimates. U.S. Census Bureau. Retrieved January 31, 2018 at: https://factfinder.census.gov/bkmk/table/1.0/en/ACS/15\_5YR/DP05/1600000US3646536

| Age               | Number | Percent of Total |  |
|-------------------|--------|------------------|--|
| Total Population  | 3,990  | 100.0            |  |
| Under 5           | 196    | 4.9              |  |
| 5-9 years         | 201    | 5.0              |  |
| 10-14 years       | 204    | 5.1              |  |
| 15 to 19 years    | 193    | 4.8              |  |
| 20 to 24 years    | 272    | 6.8              |  |
| 25 to 29 years    | 346    | 8.7              |  |
| 30 to 34 years    | 276    | 6.9              |  |
| 35 to 39 years    | 233    | 5.8              |  |
| 40 to 44 years    | 233    | 5.8              |  |
| 45 to 49 years    | 281    | 7.0              |  |
| 50 to 54 years    | 303    | 7.6              |  |
| 55 to 59 years    | 276    | 6.9              |  |
| 60 to 64 years    | 289    | 7.2              |  |
| 65 to 69 years    | 178    | 4.5              |  |
| 70 to 74 years    | 138    | 3.5              |  |
| 75 to 79 years    | 131    | 3.3              |  |
| 80 to 84 years    | 104    | 2.6              |  |
| 85 years and over | 136    | 3.4              |  |

Table 1 Age Distribution in Village of MenandsProfile of General Population and Housing Characteristics:2010 Demographic Profile Data.<sup>10</sup>

According to the 2010 U.S. Census, there were 2,047 total housing units in the village, with 1,888 of these housing units occupied and 159 vacant. Of the 1,888 number of occupied housing units, 966 (51.2%) were family households, and 922 (48.8%) were non-family households.<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> Profile of General Population and Housing Characteristics: 2010 Demographic Profile Data. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

<sup>&</sup>lt;sup>11</sup> U.S. Census, <u>2010 Census Summary File 1</u>. Retrieved January 31, 2018 at: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

## **Race Distribution**

| Population by Race              |  |
|---------------------------------|--|
| <br>White: 68.1%                |  |
| <br>Black: 13.0%                |  |
| <br>Asian: 11.5%                |  |
| <br>Some Other Race Alone: 4.7% |  |
| <br>Two or More Races: 2.7%     |  |

Table 2 Race Distribution in Village of Menands:2015 American Community Survey 5-year estimate

## Land Use

Menands consists of six land use classifications. These include Commercial, Public/Community Services, Industrial, Recreation/Entertainment, Residential, and Vacant. Residential accounts for the most land area in the village, totaling at approximately 420 acres (30%). Public/Community Services and Commercial ties up, each roughly 25%. Vacant land accounts for about 224 acres (16%).

| Land Use Classifications  | Acreage | Percentage |
|---------------------------|---------|------------|
| Commercial                | 354.6   | 25.36%     |
| Public/Community Services | 357.2   | 25.55%     |
| Industrial                | 27.5    | 1.96%      |
| Recreation/ Entertainment | 15.1    | 1.08%      |
| Residential               | 419.8   | 30.03%     |
| Vacant                    | 223.8   | 16.01%     |
| Total                     | 1398.0  | 100.00%    |

Table 3 Menands Land Use Classifications

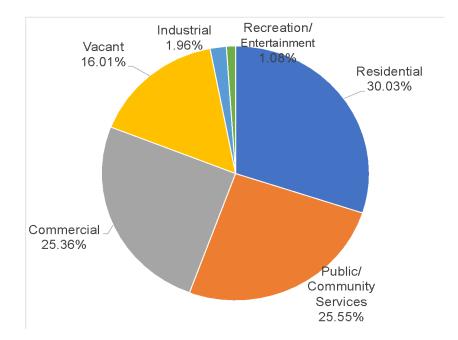


Chart 4 Percentages of Land Use Classifications Source: Capital District Regional Planning Commission

## Zoning

The Village of Menands consists of 15 zoning districts. Eight of the districts, beginning with the letters 'A' and 'R', indicate residential zoning districts and include single-family dwellings along with various mixtures of permitted uses. The only zoning district that does not include single-family dwellings would be R-4. Zoning district(s) T4/T5 include places of worship, parish houses, rectories, convents, retail stores, and restaurants. Zoning district B consists of primarily recreational and commercial purposes, including parks and storefronts. Zoning district BBD, which stands for the Broadway Business District, includes retail spaces, parks, offices, medical clinics, hotels/motels, and light industry. The light industrial (LI) district includes wholesale distribution facilities, light manufacturing, newspaper establishments, and parcel/package distribution services. The high industrial (HI) district include, television/radio stations, garages, gas stations, car washes, heavy manufacturing, construction facilities, and storage yards. The last two are zoning district C, which accounts for Albany Rural Cemetery, and zoning district LC, which is

the area dedicated as land conservation south-southwest of Sage Estates. Fire stations and police stations are incorporated in every zone except for A, C, and LC. Please see the appendices for further information on zoning classifications in the Village of Menands.

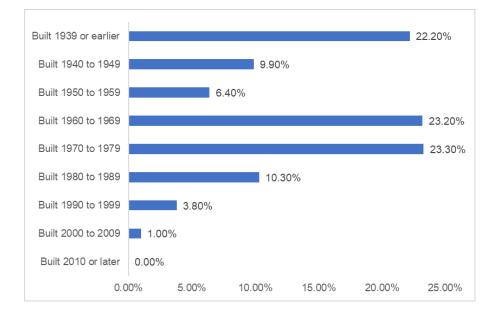


Chart 5 Year Structure Built.

Source: ACS 2015

## Housing

This section analyzes data from the 2010 and 2015 American Community Survey (ACS) and highlights housing types, characteristics, tenure, value, and affordability in the Village of Menands, and compares the village data with Albany County and New York State.

Residential land uses occupy roughly 546.48 acres of the Village's total land area, just over 37%. According to the 2015 ACS, there are a total of 1,990 housing units within the Village, 61.7% of which were constructed prior to 1969 (Chart 5). Housing includes historic and more recent single-family detached homes, several traditional style apartment complexes, and new loft-style apartments at One Broadway (Figures 15, 16, 17, 18, 19). Source: Google Imagery.

Figure 15 Single Family detached housing



#### Figure 16 Single Family detached housing



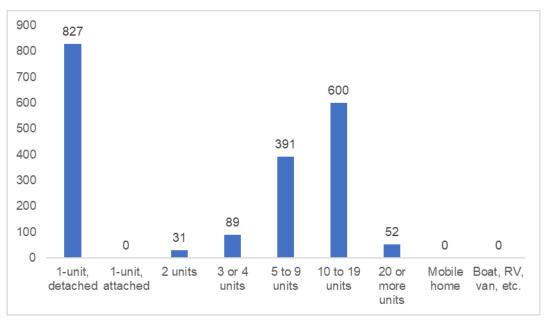
Figure 17 Apartment Complex



Figure 18 Apartment Complex



Figure 19 Albany Lofts at One Broadway





According to the 2015 American Community Survey, there are 1,990 housing units in the village. Of these, 827 are single family detached housing units and 1,163 are multi-family housing units. As of the 2015 ACS, there are no single-family attached housing units or mobile homes in the Village (Chart 6).

As shown on Chart 7, single family attached housing units represent 41.6 percent of all housing units. Multi-family residences make up 58.4 percent of the housing units in Menands. These include two family residences, three or four family residences, and five or more family residences. When compared to Albany County and New York State, the Village has a smaller proportion of single-family housing units (41.6 percent versus 54.6 percent, and 46.8 percent respectively), and a greater proportion of multi-family units (58.5 percent versus 44.1 percent and 50.8 percent respectively.

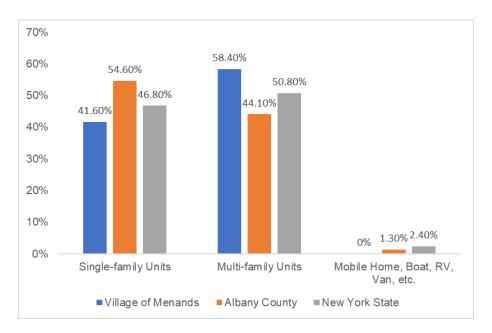


Chart 7 Single-family and Multi-family Units in Menands, Albany County and New York State



Chart 8 Housing Vacancy in Menands

According to the 2015 ACS data, a total of 1,990 housing units are located within the Village. Of this number, 1,670 housing units are occupied, while 320 housing units are classified as vacant. This represents a vacancy rate of approximately 16.1%, which is 5.5% over the Albany County vacancy rate of 10.6% and 5% over the State's vacancy rate of 11.1%. There is a higher percentage of renter-occupied housing units than owner-occupied units in the Village of Menands. In Albany County and in New York State, owner-occupied housing is more prevalent than renter-occupied housing. Thirty-six percent of occupied housing units are owner-occupied in the Village of Menands, while 58.3 percent and 53.6 percent of occupied housing units are owner-occupied in Albany County and New York State, respectively (Chart 9.) Refer to Table 4 for the number of vacant, owner-occupied, and renter-occupied housing units in the Village of Menands, Albany County and New York State).



Chart 9 Housing Tenure by Percentage in Menands, Albany County and New York State Source: ACS, 2015

|                   |                           | Vacant Units    |   | Owner-Occupied Units        |   | Renter-Occupied Units        |   |
|-------------------|---------------------------|-----------------|---|-----------------------------|---|------------------------------|---|
| Area              | Total<br>Housing<br>Units | Vacant<br>Units | Percent<br>of Total<br>Housing<br>Units | Owner-<br>Occupied<br>Units | Percent of<br>Total<br>Housing<br>Units | Renter-<br>Occupied<br>Units | Percent of<br>Total<br>Housing<br>Units |
| Menands           | 1,990                     | 320             | 16.1                                    | 602                         | 30.2                                    | 1,068                        | 53.7                                    |
| Albany<br>County  | 138,081                   | 14,630          | 10.6                                    | 72,000                      | 52.1                                    | 51,451                       | 37.3                                    |
| New York<br>State | 8,171,725                 | 909,446         | 11.1                                    | 3,894,722                   | 47.7                                    | 3,367,557                    | 41.2                                    |

Table 4 Housing Tenure by Number of Units in Menands, Albany County and New York State Source: ACS, 2015

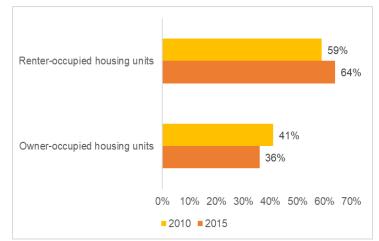
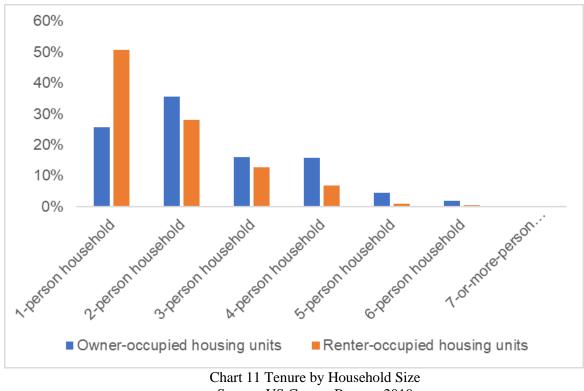


Chart 10 Housing Tenure in 2010 and 2015 Comparison in Menands, Albany County and New York State Source: ACS, 2015 and US Census Bureau, 2010

ACS data from 2015 indicates that approximately 36 percent of residential units are owner-occupied, 64 percent are renter-occupied. 2010 Census data indicates that 41 percent of residential units were owner-occupied, while 59 percent of all residential units were renter-occupied (Chart 10). This illustrates that there was a five percent drop in owner-occupied units, and a five percent increase in renter-occupied units between the 2010 Census and the 2015 ACS data.



Source: US Census Bureau, 2010

According to the 2010 Census, 50% of the 1-person housing units in Menands are renter-occupied housing units, while 25.8% of 1-person households are owner-occupied housing units. (Chart 11).

According to the 2010 Census, approximately half of all owners were between 45 and 64 years of age, while about 19 percent were under 44 years, and 32 percent were 65 years and older. Approximately half of the renters were less than 44 years old, 31 percent of renters were between the ages of 45 and 65, and only 18 percent were 65 years of age or older. The youngest householder age group (under 24 years old) had the lowest level of home ownership (3 percent). Home ownership rates increase steadily by age and peak for householders 65 to 74 years of age, reaching about 63 percent. Homeownership rates decline for householders in older age groups with 47 percent of householders 75 to 84 years (Chart 12).

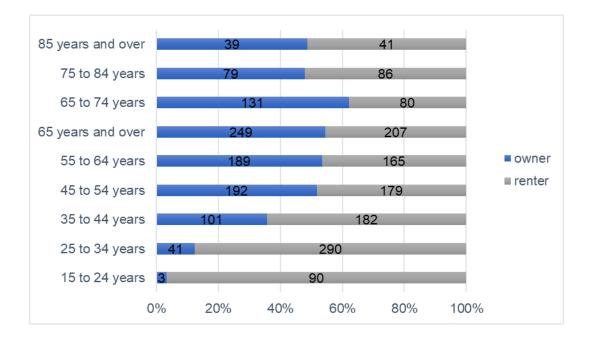


Chart 12 Tenure by Age of Householder Source: 2010 US Census Bureau

# **Housing Value**

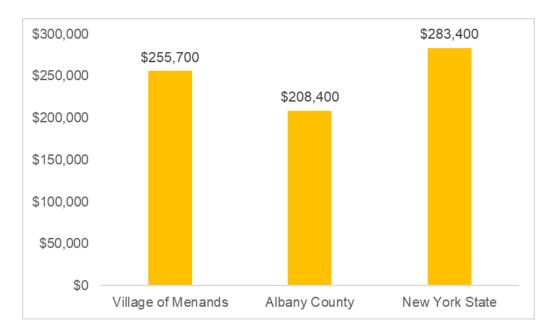


Chart 13 Median Housing Value in Menands, Albany County and New York State Source: ACS, 2015

According to the 2015 American Community Survey, the median value for owner-occupied housing in the Village was \$255,700. Comparisons with Albany County indicate that Village owner-occupied housing values are considerably higher than the County as a whole, and less than those for the State.

The median value of owner occupied residential units in the Village in 2010 was \$211,100; in 2000 it was \$124,300 (Chart 14)

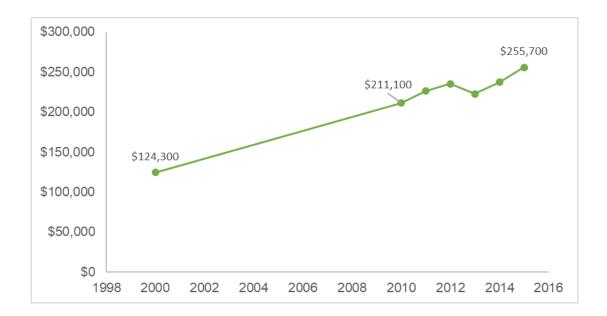


Chart 14 Median Home Price Change Source: ACS, 2000, 2010 and 2015

The majority of owner-occupied housing units in the Village has a value between \$150,000 and \$499,999 (80.2%). Menands is notable for its higher share of housing units with a price range of \$150,000 to \$199,999 (28.7%) and \$300,000 to \$499,999 (29.1%). (Chart 15).

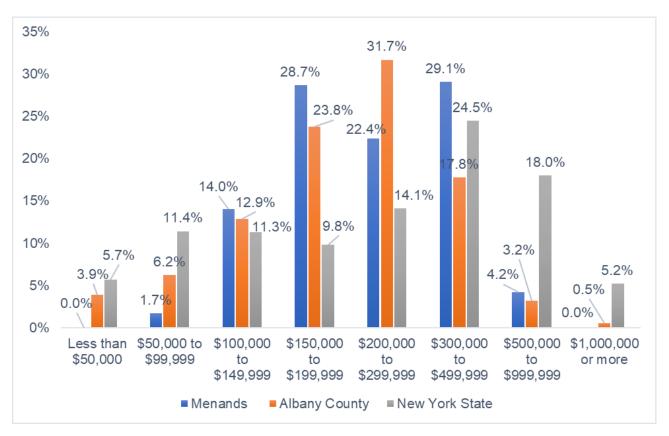


Chart 15 Value of Owner-Occupied Housing Units in Menands, Albany County and New York State. Source: ACS, 2015

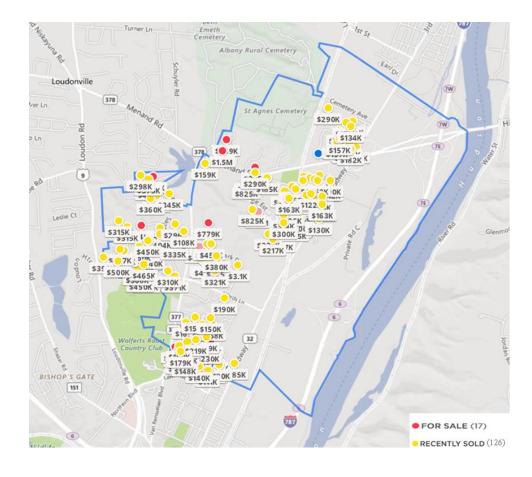
As of November 2017, there were 17 homes listed for sale in Menands at a median price of \$490,000. The listing prices ranged from \$112,000 to \$3,000,000. From 2014 through October 13, 2017, 126 homes were sold in Menands with sales prices ranging from \$18,000 to \$2,975,000 (see Figure 20). The volume of home sales in Menands has been declined in the past three years, with 53 homes sold in 2015, as compared to a total of 44 in 2016 and 41 in 2017. The median sales price of these homes was \$199,750.

Figure 20 Houses for Sale and Recently Sold

## Source: Zillow







| #  | Date       | Price             | #  | Date       | Price     |
|----|------------|-------------------|----|------------|-----------|
| 1  | 12/5/2014  | \$290,000         | 33 | 9/9/2015   | \$220,000 |
| 2  | 12/22/2014 | \$85 <i>,</i> 000 | 34 | 9/22/2015  | \$321,000 |
| 3  | 12/30/2014 | \$95,000          | 35 | 9/28/2015  | \$155,000 |
| 4  | 12/30/2014 | \$95,000          | 36 | 9/30/2015  | \$130,000 |
| 5  | 12/30/2014 | \$190,000         | 37 | 10/1/2015  | \$70,000  |
| 6  | 12/30/2014 | \$257,000         | 38 | 10/5/2015  | \$169,000 |
| 7  | 1/7/2015   | \$404,000         | 39 | 10/5/2015  | \$155,000 |
| 8  | 1/7/2015   | \$275,000         | 40 | 10/5/2015  | \$112,000 |
| 9  | 1/8/2015   | \$133,600         | 41 | 10/9/2015  | \$371,000 |
| 10 | 1/8/2015   | \$290,000         | 42 | 10/15/2015 | \$330,000 |
| 11 | 1/13/2015  | \$157,000         | 43 | 10/21/2015 | \$157,000 |
| 12 | 1/21/2015  | \$78,500          | 44 | 11/5/2015  | \$190,000 |
| 13 | 1/22/2015  | \$330,000         | 45 | 11/10/2015 | \$320,000 |
| 14 | 1/26/2015  | \$152,500         | 46 | 11/10/2015 | \$166,420 |
| 15 | 2/18/2015  | \$310,000         | 47 | 11/16/2015 | \$374,900 |
| 16 | 3/27/2015  | \$182,500         | 48 | 11/19/2015 | \$450,000 |
| 17 | 3/27/2015  | \$182,500         | 49 | 11/25/2015 | \$480,000 |
| 18 | 4/2/2015   | \$825,000         | 50 | 12/3/2015  | \$111,000 |
| 19 | 4/9/2015   | \$385,000         | 51 | 12/14/2015 | \$132,000 |
| 20 | 4/15/2015  | \$250,100         | 52 | 12/14/2015 | \$159,000 |
| 21 | 5/20/2015  | \$360,000         | 53 | 12/24/2015 | \$132,000 |
| 22 | 5/27/2015  | \$180,000         | 54 | 1/13/2016  | \$140,000 |
| 23 | 5/28/2015  | \$290,000         | 55 | 2/23/2016  | \$325,000 |
| 24 | 6/9/2015   | \$115,000         | 56 | 2/24/2016  | \$190,000 |
| 25 | 7/8/2015   | \$387,500         | 57 | 2/26/2016  | \$190,000 |
| 26 | 7/24/2015  | \$78,000          | 58 | 3/15/2016  | \$148,000 |
| 27 | 7/27/2015  | \$152,000         | 59 | 3/23/2016  | \$172,000 |
| 28 | 7/31/2015  | \$825,000         | 60 | 4/13/2016  | \$340,000 |
| 29 | 8/6/2015   | \$163,000         | 61 | 4/25/2016  | \$169,070 |
| 30 | 8/12/2015  | \$130,000         | 62 | 5/5/2016   | \$177,500 |
| 31 | 8/12/2015  | \$130,000         | 63 | 5/31/2016  | \$225,000 |
| 32 | 8/27/2015  | \$335,000         | 64 | 6/6/2016   | \$450,000 |

Table 5 Prices of Homes sold in Menands December 2014-October 2017. Source: Zillow

| Date       | Price     | #   | Date       | Price       |
|------------|-----------|-----|------------|-------------|
| 6/13/2016  | \$126,875 | 96  | 11/9/2016  | \$150,000   |
| 6/15/2016  | \$122,500 | 97  | 12/19/2016 | \$296,000   |
| 6/17/2016  | \$450,000 | 98  | 1/13/2017  | \$158,000   |
| 6/24/2016  | \$125,000 | 99  | 1/27/2017  | \$107,500   |
| 7/11/2016  | \$327,000 | 100 | 2/8/2017   | \$300,000   |
| 7/13/2016  | \$18,000  | 101 | 3/10/2017  | \$198,500   |
| 7/14/2016  | \$337,500 | 102 | 3/28/2017  | \$175,500   |
| 7/15/2016  | \$345,000 | 103 | 3/31/2017  | \$535,000   |
| 7/15/2016  | \$148,500 | 104 | 4/23/2017  | \$215,000   |
| 7/27/2016  | \$315,000 | 105 | 4/25/2017  | \$157,500   |
| 7/29/2016  | \$500,000 | 106 | 5/1/2017   | \$185,000   |
| 7/31/2016  | \$315,000 | 107 | 5/4/2017   | \$465,000   |
| 8/9/2016   | \$217,000 | 108 | 5/10/2017  | \$211,000   |
| 8/9/2016   | \$179,100 | 109 | 5/11/2017  | \$178,000   |
| 8/12/2016  | \$169,500 | 110 | 5/11/2017  | \$350,000   |
| 8/22/2016  | \$410,000 | 111 | 5/19/2017  | \$180,000   |
| 8/25/2016  | \$188,000 | 112 | 5/23/2017  | \$336,735   |
| 8/29/2016  | \$74,000  | 113 | 5/25/2017  | \$169,500   |
| 9/1/2016   | \$314,000 | 114 | 6/13/2017  | \$380,000   |
| 9/12/2016  | \$185,000 | 115 | 6/20/2017  | \$208,000   |
| 9/19/2016  | \$410,000 | 116 | 7/13/2017  | \$230,000   |
| 10/5/2016  | \$190,000 | 117 | 7/24/2017  | \$390,000   |
| 10/7/2016  | \$90,000  | 118 | 7/31/2017  | \$259,000   |
| 10/7/2016  | \$340,000 | 119 | 8/3/2017   | \$225,000   |
| 10/12/2016 | \$162,900 | 120 | 8/14/2017  | \$1,300,000 |
| 10/17/2016 | \$84,000  | 121 | 9/1/2017   | \$2,975,000 |
| 10/18/2016 | \$219,000 | 122 | 9/5/2017   | \$268,000   |
| 10/25/2016 | \$169,000 | 123 | 9/11/2017  | \$395,000   |
| 10/27/2016 | \$367,500 | 124 | 9/12/2017  | \$100,000   |
| 10/31/2016 | \$242,000 | 125 | 9/26/2017  | \$445,000   |
| 11/6/2016  | \$245,000 | 126 | 10/13/2017 | \$201,000   |

The median monthly rent in the Village is \$1,073. Comparisons with Albany County and New York State indicate that the Village's median monthly rent is higher than the Albany County's value of \$919, and slightly less than the New York State's value of \$1,132 (See Chart 16).

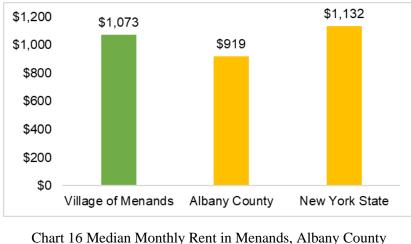


Chart 16 Median Monthly Rent in Menands, Albany County and New York State Source: ACS, 2015

#### Housing Affordability

The conventional public policy indicator of housing affordability in the United States is the percent of income spent on housing. Housing expenditures that exceed 30 percent of household income have historically been viewed as an indicator of a housing affordability problem. <sup>12</sup> According to the 2015 American Community Survey, 35 percent of owners with mortgages and 17 percent of owners without mortgages spend 30 percent or more of their income on housing costs.

In Menands 100% of the renters who earn less than \$35,000 annually spend 30% or more of their income on rent, 32% of the renters who earn between \$35,000 and \$49,999 annually spend 30% or more of their income on rent, while none of the renters who earn \$50,000 or more spend 30% or more of their income on rent. When compared to the Albany County and New York State, Menands has a greater proportion of

<sup>&</sup>lt;sup>12</sup> "Housing Affordability: Myth or Reality? "Wharton Real Estate Center Working Paper, Wharton Real Estate Center, University of Pennsylvania, 1992

renters who earn less than \$35,000 annually pay 30% or more of their income on rent, and has a smaller proportion of renters who earn \$50,000 or more annually pay 30% or more of their income. This shows that it is relatively harder for the people who earns \$35,000 or less annually to find affordable housing in the Village of Menands, then people in Albany County or in New York State.

|                               | Village of Menands                      |  | Albany                                  | County                                   | New York State                          |  |  |
|-------------------------------|---|--|---|--|---|--|--|
| Annual<br>Household<br>Income | Owner-<br>occupied<br>housing<br>units: | Renter-<br>occupied<br>housing<br>units: | Owner-<br>occupied<br>housing<br>units: | Renter-<br>occupied<br>housing<br>units: | Owner-<br>occupied<br>housing<br>units: | Renter-<br>occupied<br>housing<br>units: |  |
| Less than<br>\$20,000:        | 100%                                    | 100%                                     | 85%                                     | 87%                                      | 84%                                     | 88%                                      |  |
| \$20,000 to<br>\$34,999:      | 100%                                    | 100%                                     | 54%                                     | 76%                                      | 61%                                     | 79%                                      |  |
| \$35,000 to<br>\$49,999:      | 100%                                    | 34%                                      | 41%                                     | 37%                                      | 45%                                     | 57%                                      |  |
| \$50,000 to<br>\$74,999:      | 28%                                     | 0%                                       | 27%                                     | 9%                                       | 34%                                     | 32%                                      |  |
| \$75,000 or<br>more:          | 8%                                      | 0%                                       | 5%                                      | 2%                                       | 16%                                     | 9%                                       |  |

Table 6 Percent of Owners and Renters Who Spend More Than 30 Percent of Income on HousingSource: 2011-2015 American Community Survey 5-Year Estimates

Chart 17 shows those households considered housing-cost burdened for the three areas mentioned, split out by owners and renters. Owners in the Village of Menands pay a higher percent of household income than owners in Albany County or in the State of New York, while fewer renters in the Village pay 30 percent or more of their income than renters in Albany County or in the State.

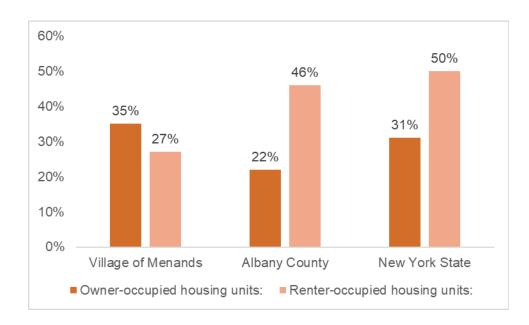


Chart 17 Percent of households who spend more than 30% of their income on housing costs Source: 2011-2015 American Community Survey 5-Year Estimates

Chart 18 indicates those households considered housing-cost burdened for the three areas mentioned, split out by moderately (30.0 to 49.9 percent of income spent on housing costs) and severely (50% or more of income spent on housing costs) housing-cost burdened. Renters in the Village of Menands pay a smaller percent of household income than renters in Albany County or in the State of New York. Menands has a higher percentage of owners paying more than 50% of their household income on housing than those owners with severe burden in the County or State. Menands also has a higher percentage of owners with moderate housing-cost burden than those owners with moderate burden in the County or State.

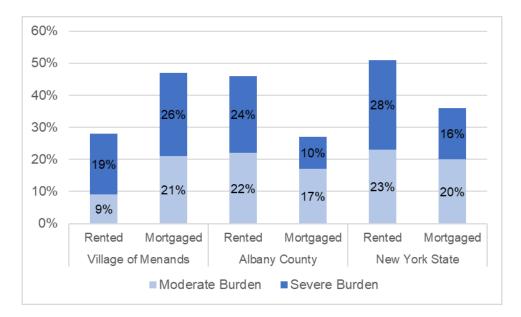


Chart 18 Housing-Cost Burden for Menands, Albany County and New York State Source: 2011-2015 American Community Survey 5-Year Estimates

Another way to measure housing affordability is to use a Housing Affordability Index (HAI) which measures whether a typical family earns enough income to qualify for a mortgage loan on a typical home at the national and regional levels, based on the most recent price and income data. A HAI of 100 represents an area that, on average, has sufficient household income to qualify for a loan on a home valued at the median home price. An index greater than 100 suggests homes are easily afforded by the average area resident. A HAI less than 100 suggests that homes are less affordable. Since HAI is at **211** for the Village of Menands, it can be suggested that homes are easily afforded by the average area resident in Menands (see formula and calculations).

Monthly Mortgage Rate – The effective mortgage rate is reported by the Federal Housing Finance Board on a monthly basis and reflects the amortization of initial fees and charges (the rate is 3.92 for New York State in 2015).

Principle & Interest Payment – Monthly Payment Formula: MEDPRICE\*.8 \* (IR/12)/(1-(1/(1+IR/12)^360)) 182500\*0.8\*(3.92/12)/(1-(1/(1+3.92/12) ^360))=\$47,693 Median as % of Income = Necessary monthly income Formula: ((PMT\*12)/MEDINC)\*100=((\$47,693\*12)/\$76,277)\*100=\$750 Median Family Income –Income data from the Census Bureau Decennial Survey. Qualifying Income – Income necessary to qualify for a loan for the median priced home Formula: PMT \* 4 \* 12=\$750\*4\*12=\$36,000 Housing Affordability Index(Composite)- Measures the degree to which a typical family can afford the monthly mortgage payments on a typical home. Formula: (MEDINC/QINC)\*100=(\$76,277/\$36,000)\*100=**211** 

Key: IR = Interest Rate MEDPRICE = Median price of existing single-family home sale PMT= Monthly payment MEDINC = Median Family Income MINC = Necessary Monthly Income QINC = Qualifying Income

# **Economic Base**

## Income

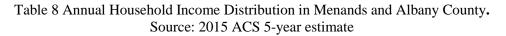
The estimated median *household* income for the Village of Menands, according to the 2015 American Community Survey (ACS), was \$62,683. Comparatively, the median household income in Albany County was \$59,887 in the 2015 ACS. Albany County's 2015 estimated median household income was about 4.5% lower than Menands. The median household income for the entire state of New York was \$59,269 in 2015. The 2015 ACS estimates for median household income in Menands are 5.4% greater than the estimates for New York State. The 2015 ACS estimated median *family* income in Menands to be \$76,277 per year. In Albany County, the median family income was \$83,085 in the 2015 ACS. In the state of New York, median family income was estimated to be \$100,984 in the 2015 ACS. The same survey shows that the poverty rate in Menands is 6.4%. This is 7.1% lower than Albany County (13.5%) and 9.3% lower than the poverty rate in all of New York State (15.7%). Table 7 compares median family and household income figures.

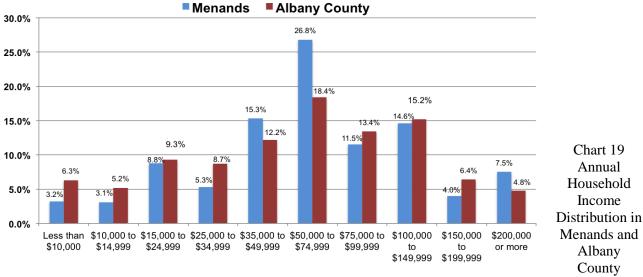
| Median Household Income |   |                 |               |                |         |  |
|-------------------------|---|-----------------|---------------|----------------|---------|--|
| Village                 | Village of Menands Albany County New York State |                 |               |                |         |  |
| 2015                    |   | 2015            |               | 2015           |         |  |
| \$                      | 62,683  | \$ 59,887 \$ 59 |               |                | 59,269  |  |
|                         |   | Median          | Family Income |                |         |  |
| Village                 | of Menands                                      | Alb             | any County    | New York State |         |  |
| 2015                    |   |                 | 2015          |                | 2015    |  |
| \$                      | 76,277  | \$              | 83,085        | \$             | 100,984 |  |

Table 7 Median Household Income.Source: 2015 ACS 5-year estimate

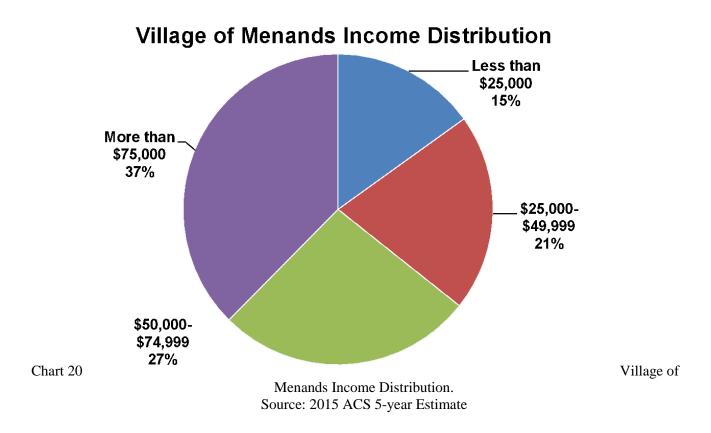
According to the 2015 ACS, 15.1% of working residents earned less than \$25,000 annually. In the same survey year, 20.6% earned between \$25,000 and \$49,999, 26.8% earned between \$50,000 to \$74,999, and 37.6% of the population earned over \$75,000 annually. Table 8 shows the annual household income distribution in Menands in 2015. Chart 19 and 20 offer visual representations of the income distribution.

| Annual Household Income Distribution in Menands and Albany<br>County |                                  |         |         |         |  |  |
|--|----------------------------------|---------|---------|---------|--|--|
|  | Village of Menands Albany County |         |         |         |  |  |
|  | Number                           | Percent | Number  | Percent |  |  |
| Total Households   | 1,670                            | 100%    | 123,451 | 100%    |  |  |
| Less than \$10,000   | 53                               | 3.2%    | 7,777   | 6.3%    |  |  |
| \$10,000 to \$14,999   | 52                               | 3.1%    | 6,419   | 5.2%    |  |  |
| \$15,000 to \$24,999   | 147                              | 8.8%    | 11,481  | 9.3%    |  |  |
| \$25,000 to \$34,999   | 89                               | 5.3%    | 10,740  | 8.7%    |  |  |
| \$35,000 to \$49,999   | 256                              | 15.3%   | 15,061  | 12.2%   |  |  |
| \$50,000 to \$74,999   | 448                              | 26.8%   | 22,715  | 18.4%   |  |  |
| \$75,000 to \$99,999   | 192                              | 11.5%   | 16,542  | 13.4%   |  |  |
| \$100,000 to \$149,999   | 244                              | 14.6%   | 18,765  | 15.2%   |  |  |
| \$150,000 to \$199,999   | 67                               | 4.0%    | 7,901   | 6.4%    |  |  |
| \$200,000 or more  | 125                              | 7.5%    | 5,926   | 4.8%    |  |  |









# Employment

| Employment by Industry in Menands, Albany County, and New York State                           |        |                          |               |                          |           |                          |
|--|--------|--------------------------|---------------|--------------------------|-----------|--------------------------|
| Location   | Men    | ands                     | Albany County |                          | New York  |                          |
| INDUSTRY   | Number | % of Total<br>Population | Number        | % of Total<br>Population | Number    | % of Total<br>Population |
| Agriculture, forestry, fishing and hunting, and mining:  | 0      | 0.0%                     | 526           | 0.3%                     | 55,439    | 0.6%                     |
| Construction   | 12     | 0.6%                     | 7,282         | 4.7%                     | 520,223   | 5.6%                     |
| Manufacturing  | 66     | 3.1%                     | 8,005         | 5.1%                     | 592,969   | 6.3%                     |
| Wholesale trade  | 19     | 0.9%                     | 2,911         | 1.9%                     | 229,666   | 2.5%                     |
| Retail trade   | 251    | 11.7%                    | 17,336        | 11.1%                    | 1,003,363 | 10.7%                    |
| Transportation and warehousing, and utilities:   | 62     | 2.9%                     | 5,602         | 3.6%                     | 489,578   | 5.2%                     |
| Information  | 123    | 5.7%                     | 3,565         | 2.3%                     | 274,060   | 2.9%                     |
| Finance and insurance, and real estate and rental and leasing:                                 | 319    | 14.9%                    | 11,277        | 7.2%                     | 752,488   | 8.1%                     |
| Professional, scientific, and management, and<br>administrative and waste management services: | 277    | 12.9%                    | 16,648        | 10.6%                    | 1,083,408 | 11.6%                    |
| Educational services, and health care and social assistance:                                   | 624    | 29.1%                    | 42,240        | 27.0%                    | 2,561,790 | 27.4%                    |
| Arts, entertainment, and recreation, and accommodation and food services:                      | 140    | 6.5%                     | 14,380        | 9.2%                     | 893,814   | 9.6%                     |
| Other services, except public administration   | 43     | 2.0%                     | 7,575         | 4.8%                     | 465,669   | 5.0%                     |
| Public administration  | 208    | 9.7%                     | 19,017        | 12.2%                    | 427,441   | 4.6%                     |
| Total:   | 2,144  | 100%                     | 156,364       | 100%                     | 9,349,908 | 100%                     |

Table 9 Employment by Industry

#### Source: 2015 ACS 5-year estimates

According to the 2015 ACS estimates for the Village of Menands, the top five industry types are educational, health, and social services (29.1%), finance (14.9%), professional, scientific, and management, and administrative and waste management service (12.9%), retail (11.7%) and public administration (9.7%). In Albany County, professional services (27.0%), public administration (12.2%), retail, (11.1%) finance (10.6%), and education and health services (9.2%) are the top five industries for employment. In the entire state of New York, the top industries are educational, health, and social services (27.4%), professional, scientific, and management, and administrative and waste management service (11.6%), and retail trade (10.7%), arts and recreation services (9.6%) and manufacturing (6.3%). Table 9 compares these figures. The top three industries for each selection area are shown in Chart 23. In Charts 23, "Other" includes industries such as, but not limited to, construction, manufacturing, transportation and warehousing, and information. The full list of employment industries can be seen in Table 9.

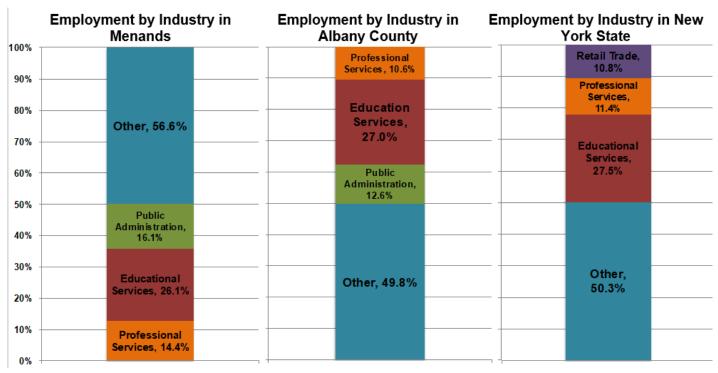
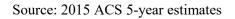


Chart 21 Employment by Industry



## **Residential and Non-Residential Work Force**

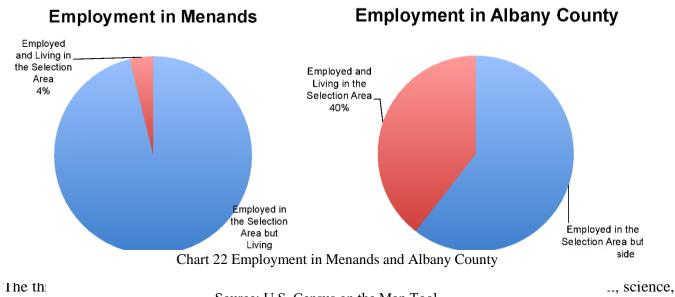
The U.S. On the Map tool indicates that there were 4,163 people employed in Menands. Of this 4,163, only 158 employees both lived and worked in Menands while the remaining 4,005 employees commuted into Menands. The same tool indicates that of the 1,832 employed eligible workers in Menands, 1,674 were employed outside of the village. This means that just 8.6% of employed eligible residents of Menands live and work in their community and 91.4% of eligible workers employed in the Village of Menands do not reside in the community. These figures are shown in Table 10.

| Inflow/Outflow of Jobs in 2015            |        |         |         |         |  |
|---|--------|---------|---------|---------|--|
|   | Mena   | ands    | Albany  | County  |  |
|   | Number | Percent | Number  | Percent |  |
| Employed in the Selection Area            | 4,163  | 100.0%  | 236,496 | 100.0%  |  |
| Employed in the Selection Area but Living |        |         |         |         |  |
| Outside                                   | 4,005  | 96.2%   | 143,167 | 60.5%   |  |
| Employed and Living in the Selection Area | 158    | 3.8%    | 93,329  | 39.5%   |  |
|   |        |         |         |         |  |
| Living in the Selection Area              | 1,832  | 100.0%  | 143,697 | 100.0%  |  |
| Living in the Selection Area but Employed |        |         |         |         |  |
| Outside                                   | 1,674  | 91.4%   | 50,368  | 35.1%   |  |
| Living and Employed in the Selection Area | 158    | 8.6%    | 93,329  | 64.9%   |  |

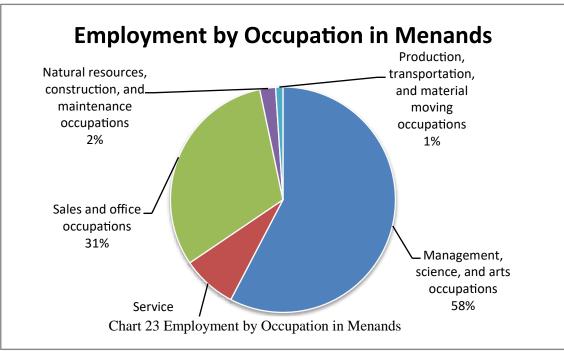
Table 10 Inflow/outflow of Jobs in 2015

Source: U.S. Census on the Map Tool

Comparatively, in all of Albany County, there are 234,496 employed eligible workers. Of those workers, 39.5% (93,329) were both employed and lived in Albany County while 60.5% (143,167) commuted into Albany County from an outside municipality. Of the 143,697 residents living in Albany County, 64.9% (93,329) worked within county lines and 35.1% (50,368) were employed outside of the county. These figures are compared below, in Chart 22.



Source: U.S. Census on the Map Tool and art occupations (58%), sales and office occupations (31%), and service occupations (8%). Following, natural resources, construction, and maintenance occupations, (2%) and production, transportation, and material moving occupations (1%) are the fourth and fifth most common occupations. Chart 22 visually represents this information.



Source: 2015 ACS 5-year estimate

# **Commuting Characteristics**

In the 2015 ACS the average commute time in Menands was 16.1 minutes, with 15.8% of the workforce commuting less than 10 minutes to work, 53.7% commuting between 10 and 20 minutes, and 30.4% commuting more than 20 minutes. Of those who commuted to work from Menands, 85.0% reported traveling by car, van, or truck, 79.0% of commuters using these vehicles drove alone, and 6.0% reported that they car pool to work. Following, an estimated 7.6% of the population was reported to use public transportation (excluding taxicabs), 1.3% of employed eligible workers were said to walk to work, 0.8% used taxicab, motorcycle, or other means to travel to work, and the remaining 5.2% were reported to work from home. Table 11 shows means of transportation to work in Menands in 2015 and Chart 24 shows travel time figures.

| Means of Transportation to Work           | % of<br>Workng<br>Population |
|---|------------------------------|
| Car, truck, or van                        | 85.0%                        |
| Drove alone                               | 79.0%                        |
| Carpooled                                 | 6.0%                         |
| Public transportation (excluding taxicab) | 7.6%                         |
| Walked                                    | 1.3%                         |
| Bicycle                                   | 0.0%                         |
| Taxicab, motorcycle, or other means       | 0.8%                         |
| Table 11 Means of Transportation          |                              |

Source: 2015 ACS 5-year estimate

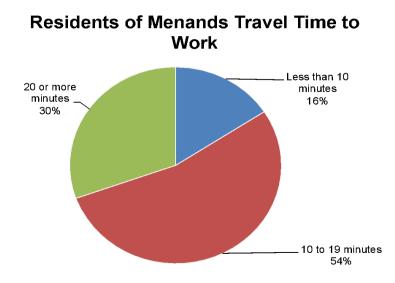


Chart 24 Residents of Menands Travel Time to Work

Source: 2015 ACS 5-year estimate



4,005 - Employed in Selection Area, Live Outside
1,674 - Live in Selection Area, Employed Outside
158 - Employed and Live in Selection Area

Overlay arrows do not indicate directionality of worker flow between home and employment

Figure 22 Inflow/Outflow Job Counts - Menands, NY

2015 U.S. Census on the Map Tool https://onthemap.ces.census.gov/

# **Transportation Infrastructure**

Transportation infrastructure in Menands needs several improvements. These different improvements involve changes to the bicycling infrastructure, pedestrian accessibility, bus services and public transportation, and intersection improvements. There have been several studies done in the past that focus on transportation issues or that mention these types of issues as crucial to the future success of the village. The **Transportation Access and Land Use Improvement Study** and the **Route 32 Linkage Study** are two studies that have indicated many of the transportation needs in the village. These studies were published in 2006 and 2011, respectively.

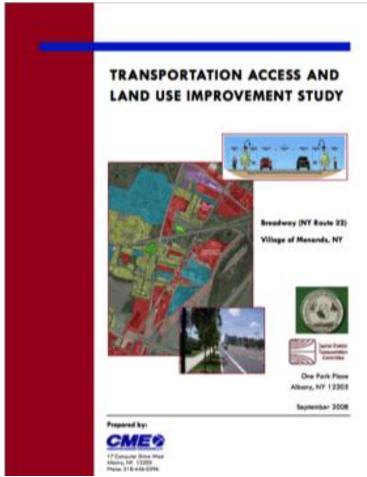


Figure 23 Transportation Access and Land Use Improvement Study

# The Transportation Access Land Use Study

This study focuses on Broadway, in Menands, and discusses issues with the road, pedestrian and bicycling issues, and provides recommendations for the village.

This study focuses specifically on the Broadway corridor in Menands. The goals of this study are to help preserve and manage, develop the region's potential, link transportation and land use, and plan and build for all modes. A well-functioning transportation infrastructure cannot function properly if it does provide not accommodations for all modes of travel.

# Existing land use

This study defines the northern section of the corridor as primarily commercial and light industrial, with a small amount of residential and recreational use north of Route 378. The southern section of Broadway includes a mixture of commercial, industrial, residential, and institutional land uses. The road is generally a four-lane facility providing two lanes in each direction. Flooding is a concern, as Broadway is within the flood plain or close to it in places. Sidewalks are not continuous. Signalized intersections are spotty and street parking is not allowed.

#### **Focus areas**

#### • Broadway (NY Route 32)/Menands Road/Market Road

This intersection is south of the Route 378 overpass and it has a traffic signal. All modes
of transportation exist at this intersection, except for ADA ramps for visually impaired
people. This intersection is busy and needs access improvements to make businesses more
accessible and to strengthen the place in the regional and local market.

#### • Broadway (NY Route 32)/Route 378 WB Off Ramp

 This is a "T" intersection with a traffic signal. The only pedestrian accommodations are limited sidewalks on the west side of Broadway. There are several vacant properties that need redevelopment. There are several curb cuts that create confusion for drivers and conflict points where accidents may occur.

Levels of compatibility concerns for places along Broadway are at a B or C. C means there is concern and B means concern is growing. This needs to be repaired. The rest of the study examines different traffic flows, transit access, and safety concerns. Traffic is heavy on Broadway as it travels through Menands. Pedestrian and bicycling access is limited because the waterfront trail is cut off for bicycles and sidewalks are limited. The Broadway corridor is designated as State Bike Route 9 with on-street bike lanes. These are unsafe, however, as there are many curb cuts. Pedestrians have the same problem with curb cuts. Existing transit services are provided by CDTA. Fixed bus route service extends along <section-header>Boute 32 Linkage StudyConceptual Plan Development<br/>& Transportation AnalysisSina Para Portation AnalysisFinal Report – January 2011<br/>Sorthe Village of Menands,<br/>Town of Colonie, City of<br/>Matervliet and Capital District<br/>Transportation CommitteeSina Para Portation ConstitueSina Para Portation Constitue

within the study area.

Figure 24 Route 32 Linkage Study

## The Route 32 Linkage Study

The Route 32 Linkage Study is an allencompassing study of the entire Broadway Corridor. It discusses what needs to be done to specific nodes along the corridor, where there may be opportunity for development or where there may be excessive traffic congestion issues. Route 32 is the original turnpike from Albany to Watervliet, and beyond. It is the site of accidents. congestion, business. residential developments, and entertainment. The study states that it is a densely populated corridor and needs improvements to be able to manage the population and congestion.

"The goal of the planning process is to identify ... transportation and land use

treatments that respect and strengthen the residential neighborhoods, encourage appropriate development and redevelopment including expansion at the Arsenal and provide for a safe and convenient corridor for walkers, cyclists and transit services as well as motorists."

Broadway, all the way to Troy. Bus Route 22 is one of the busiest routes, with about 500 daily riders

# The Route 32 Corridor plan involves nine goals

- 1. Complete Streets
- 2. Safe Travel Speeds
- 3. Pedestrian Friendly
- 4. Bicycle Friendly
- 5. Transit Oriented
- 6. New Development/Redevelopment
- 7. Streetscapes
- 8. Stormwater Management
- 9. Connections

## **Recommendations to achieve goals**

- 1. Inter municipal zoning overlay district for Route 32
- 2. Uniform design guidelines for commercial development
- Streetscape Enhancements: Pedestrian and bicyclist accommodations vary throughout the Route 32 corridor
- 4. Bicycle/Trail Connections and bicycle parking standards
- 5. Drainage Improvements
- 6. Pedestrian Access/ADA enhancements
- 7. Access management standards to improve traffic flow
- 8. Local safety campaign to improve awareness and safety for motorists as well as cyclists and pedestrians

The plan also includes also geographic study areas, or sub-sections, with individual descriptions of land use, transportation conditions and specific recommendations relating to their own specific conditions. Sub-sections include Menands to Colonie, Colonie to Watervliet, and Watervliet.

*Menands to Colonie* represents the southern sub-section of the study area. There are several different plazas with businesses like Price Chopper (now gone), Rite Aid, Save More, and other stores. The traffic volumes here, at the time of this study, were the highest in the study area.

| Transportation Summary Route 32 Corridor – Village of Menands |   |  |  |  |  |
|---|---|--|--|--|--|
| Pavement Width  | Vary from 45' to over 70' with 50 to 53 feet common and 10' wide travel lanes           |  |  |  |  |
| Travel Lanes  | 4   |  |  |  |  |
| Posted Speed Limits   | 30 MPH  |  |  |  |  |
| Traffic Volumes   | 21,530 vehicles in Colonie and Menands  |  |  |  |  |
| Sidewalks   | 4' to 6' sidewalk along much of the west side of Route 32; no sidewalk on the east side |  |  |  |  |
| Con Street Darking Tak  | le 12 Route 32 Linkage Study - Menands Portion  |  |  |  |  |

Table 12 Route 32 Linkage Study - Menands Portion

General recommendations include redevelopment at four different sites. Zoning regulations should be reviewed for the corridor to determine land development guidelines. A limited amount of access to commercial developments is recommended. Land use recommendations are plentiful for this area. It offers the most potential, as there is a considerable amount of commercial land area.

Colonie to Watervliet represents the middle section of the corridor. There are stores along this section as well. It maintains a low speed limit and a high amount of traffic. Lighting along this section is limited, especially around Schuyler Flatts. The road surface and sidewalks need improvement here.

| Transportation Summary Route 32 Corridor - Town of Colonie           |   |  |  |  |
|--|---|--|--|--|
| Pavement Width Approximately 50 to 55 feet and 10' wide travel lanes |   |  |  |  |
| Travel Lanes   | 4   |  |  |  |
| Posted Speed Limits  | 30 MPH  |  |  |  |
| Traffic Volumes  | 21,520 vehicles in Colonie and Menands  |  |  |  |
| Sidewalks  | Narrow and marginal along the west side of Route 32; no sidewalk on the east side |  |  |  |
| On-Street Parking  | No  |  |  |  |

General recommendations include transportation and streetscape improvements. Industrial, multi-family residential, conservation, commercial, and single-family residential uses are all potential development types. An inter-municipal zoning overlay is suggested also.

#### Table 13 Route 32 Linkage Study - Colonie Section

*Watervliet's* section is the northern part of the study area. The land use here is mixed residential and small businesses. This part of Broadway developed differently. It is an urban pattern in grid form.

| Transportation Summary Route 32 Corridor – City of Watervliet |   |  |  |  |  |
|---|---|--|--|--|--|
| Pavement Width  | Pavement width varies from 46 feet between 1 <sup>st</sup> and 2 <sup>nd</sup> Streets to 37 to 42' for much of the remainder of 3 <sup>rd</sup> Avenue |  |  |  |  |
| Travel Lanes  | 2   |  |  |  |  |
| Posted Speed Limits   | 30 MPH  |  |  |  |  |
| Traffic Volumes   | 10,160 in the northern part of the study area in Watervliet   |  |  |  |  |
| Sidewalks Generally along both sides of the street            |   |  |  |  |  |
| On-Street Parking Yes   |   |  |  |  |  |

General recommendations include rezoning to allow for the building uses that actually exist in the area.

Table 14 Route 32 Linkage Study - Watervliet Portion

Many of the businesses are permitted by use variance or preexisting use. As inter-municipal zoning overlay is recommended with uniform design guidelines for commercial development. Sidewalks and streetscape need repair.

The map in Figure 25 shows an outline of the Menands municipal boundary (in black), plus the census tract boundary (in pink). The bicycle trail travels parallel to the waterfront. The railroad heads across Broadway and through the center of the village. There was once a railroad station located on Menand Road. Could this station stop return to the village to offer another mode of transportation? Menands is in a convenient location for transportation access. The village is a centrally located community, sharing

boundaries with Albany, Colonie, and Troy. Transportation improvements could be more focused on the infrastructure of the transportation networks that require attention. Accessibility exists for walking, bicycling, driving, railroad, water travel, and public transit. There are many opportunities for the village to improve the infrastructure for even more accessibility.

#### Intersections

Several intersections in Menands are in need of improvement. The **Transportation Access and Land Use Improvement Study** and **Route 32 Linkage Study** describe these major intersections. They include the Route 378 interchange with Broadway, the intersection at Menand Road, Broadway, and the access road, the two gateways connecting Interstate 787 to Broadway.

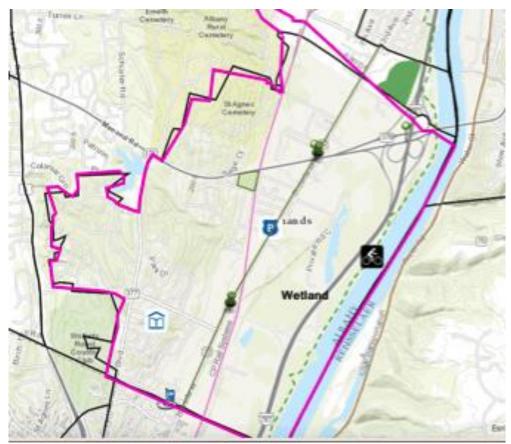


Figure 25 Menands Municipal and Census Tract Boundaries

Source: Google Maps

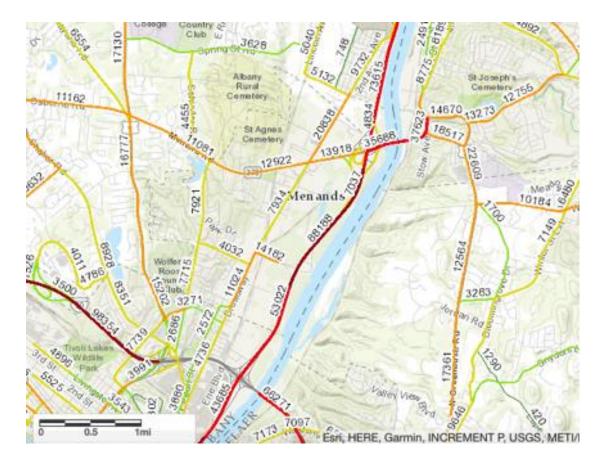


Figure 26 NYSDOT Traffic Map

Based on conversations with stakeholders and DOT data, Menands roads are overcrowded much of the time, making commutes longer than expected for proximity. Traffic volumes are high on Interstate 787, Broadway, and Route 378 every day. As the New York State Department of Transportation traffic volume map shows, the busiest part of Interstate 787 is through Menands. Broadway is the most congested through southern Menands and also northern Menands and Schuyler Flatts. The Route 378 interchange is also congested, heading into Troy.

Route 378 and Broadway is a large interchange that occupies a vast amount of land in Menands. Concerns raised by stakeholders are that this interchange is impeding opportunities for development in Menands.

Menands occupies a small land area and much of the land within the interchange cannot be developed because it is surrounded by on-ramps and off-ramps. Based on stakeholder interviews, а significant percentage want to rebuild this interchange to gain land area and to make four-way with intersections the surrounding roads.



Figure 27 Exit 6 from 787 and The Riverview Center

Source: Google Maps



Figure 28 Menand Road Intersection Source: Google Maps



Figure 29 Wolfert Avenue Source: Google Maps

The two gateways connecting Interstate 787 were heavily criticized by Menands stakeholders. The northern gateway onto Broadway is not appealing and many of the residents expressed a desire for repairs. There is an intersection with Wolfert Avenue and North Pearl Street and another with Broadway and Wolfert Avenue. This intersection should continue to be monitored. Menand Road, Elmwood Road, and the connector road are all in an area that is loosely an intersection. They are located near to each other, but not directly across. Broadway connects all these roads. Residents desire a safe intersection for this area because it is a busy focal point of the village. There needs to be a more balanced intersection to allow for automobile and other modes of transportation to be able to travel through the area safely.

#### **Transit Services**

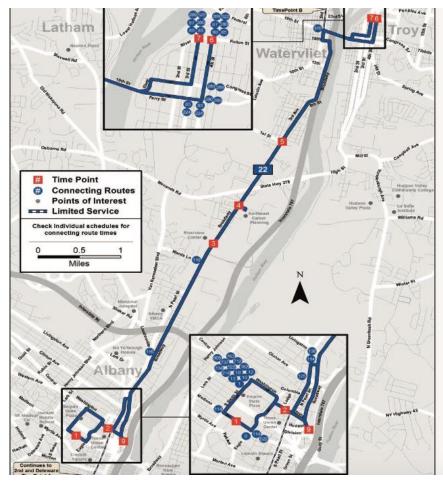


Figure 30 CDTA Route 22

The CDTA Bus Route 22 makes several stops in Menands (Figure 30. CDTA website). Bus services in the village are fine, but there is a perception of issues of safety and accessibility. It is difficult for pedestrians to walk to and from bus sidewalks. stations because crosswalks, and buildings are not located at bus stations. Concerns about bus stops involve possible relocation of bus stops to accommodate pedestrian and bicycle traffic more effectively, and/or improved crosswalk treatments.

The Capital District Transportation Authority provides bus service to

the entire Capital Region. The main route through Menands is Bus Route 22. There are two stops on Broadway in Menands. One is located at the Riverview Center. The other is farther north at the intersection of Menand Road and Broadway. There should be more study on additional bus stops, especially in southern Menands, and off of Broadway. A new Bus Rapid Transit route (BusPlus) is currently planned for implementation along Broadway. Buses will run from 4am to 2am every day of the week. These buses will arrive every ten minutes.



Figure 31 BRT Proposed Route

A Bus Rapid Transit stop will be located in southern Menands, near the Riverview Center. This will be a good location for a stop because the Riverview Center has a high need for transit opportunities. The Riverview Center currently holds around one-third of all employees in Menands. It will be very useful for this location to have as much accessibility as possible. People who are commuting in and through the village from other municipalities will be able to utilize this bus service and avoid rush-hour congestion on I-787 and Broadway.

#### **Bicycling Infrastructure**

There is limited bicycle infrastructure within the village. It exists on Van Rensselaer Boulevard, the southern portion of Broadway, and the Mohawk-Hudson Bike-Hike Trail. The bike trail travels along the waterfront, but there are no connections in the village to this trail, making it inaccessible from Menands. Broadway does have a shared use lane for bicyclists, but there are very few riders willing to travel down Broadway on a bicycle during rush hour. This could be improved with some of the regular implementation strategies to add bike lanes. Part of Broadway has been improved to allow for shared use, but the northern half of Broadway has not been redone. The road is sufficient for the future traffic expectations for the village.

Van Rensselaer Boulevard is another road that has had a shared use lane added in recent years. The State upgraded the road to make it more accessible for all modes of transportation.

The Mohawk-Hudson Bike-Hike Trail will be designated as a part of the newly branded Empire State Trail. This trail route will span from Buffalo to Albany, and from Albany south to New York and north



to the Canadian border. Menands will be receiving a new bicycle/pedestrian connection over Interstate 787 in the near Funding future. has been committed from NYSDOT and construction will commence in 2018 or 2019. This will provide another mode of transportation to the village and allow bikers from other municipalities to travel to Menands, via bicycle.

Figure 32 Menands Bike Friendly Areas 2015

## Pedestrian Accessibility

Sidewalk continuity is an issue because pedestrian access is limited with the lack of sidewalks in certain areas. Another problem addressed by stakeholders for pedestrians is the effectiveness of street lighting along much of Broadway. Pedestrian accessibility and walk-ability are some of the major issues within the village.



Figure 33 Broadway South of 378

Source: Google Maps

There are no sidewalks in many places. This image shows Broadway with sidewalks on one side, but not the other side. For such a wide road, it would be useful to have sidewalks on both sides. It is not as safe as it could be without adequate sidewalks. Sidewalks are necessary because they allow pedestrians to walk without being in traffic.

Another problem is the lack of street lighting. This is an issue on its own,

but it is important mainly for the use of pedestrian transportation. Pedestrians are less safe at night without street lighting. There are many warehouses, factories, open areas, and other locations that are very dark at night. Menands is a small village in size and if it had adequate pedestrian accommodations, it could be entirely accessible without driving. There should be a comprehensive street lighting study performed for the village of Menands.

Areas that have poor street lighting include northern Broadway. There are streetlights along the entire length of the Broadway corridor in Menands, but these lights are far apart at times, or blocked by leaves from surrounding trees. The image shows Menands with trees along the side of the road, which look very nice and create an aesthetically pleasing streetscape, but the trees reduce the usefulness of the streetlights.



Figure 34 Broadway North of 378

Source: Google Maps

The streetlight in this image is barely visible because it is almost entirely covered by the trees. Menands is a safe community, with a strong police force and low crime rate. Streetlights contribute to safety. The streetlights need to be designed to create an aesthetically pleasing, yet safe and effective streetscape. Road improvements and implementations could narrow the road, provide space for sidewalks and bicycle lanes, and allow for a complete street.

# **Natural Resources**

The future success of cities will most likely be judged by their ability to adapt and meet the challenges presented by global climate change and the need to become more sustainable in their form and function to address demographic change and the effects of technological advancement. Making an informed decision is highly dependent on gathering accurate baseline data. The environmental characteristic plays a significant role in policy design and the capabilities of the municipality in terms of the direction, rate and extent of development and land use change. This document provides the baseline data or inventory analysis of the existing environmental conditions in the Village of Menands. The factors being considered include: Topography. Hydrology, Soils, Green Infrastructure assets and existing recreation facilities. According to the United States Census Bureau, the village has a total area of 3.4 square miles (8.8 km2).

#### Slope

It is important to note it is generally accepted that development along slopes of 15 percent or greater is more likely to result in accelerated erosion processes from storm water runoff. As such, development along such slopes is often discouraged. Menands is along the Hudson River on the west bank. The village is within the town of Colonie which is also to the north and west, with the city of Albany to the south. The village is mostly flat with a gentle slope to the west.

#### Land Cover

Open Water consists of the Hudson River and two identified tributaries that stretch westward away from the Hudson; this accounts for approximately 6% of the total land cover of Menands. Developed land takes up much of the land cover. The developed land in the Village of Menands is divided into four land cover classifications: Developed, Open Space; Developed, Low Intensity; Developed, Medium Intensity; and Developed, High Intensity. The total Developed area accounts for approximately 68% of the land cover. Undeveloped areas are identified by the following nine land cover classifications: Deciduous Forest, Evergreen Forest, Mixed Forest, Shrub/Scrub, Grassland/Herbaceous, Pasture/Hay, Woody Wetlands, and Emergent Herbaceous Wetlands. All forest types totaled together make up approximately 12% of the total land cover with the bulk of it being Deciduous Forest. The wetlands along the waterfront of Menands total approximately 11% of the total land cover. Land cover classifications are shown in Table 15.

| Land Cover Classifications   | Acreage | Percentage of Total<br>Acreage |
|------------------------------|---------|--------------------------------|
| Open Water                   | 133.5   | 6.29%                          |
| Developed, Open Space        | 594.5   | 28.00%                         |
| Developed, Light Intensity   | 345.6   | 16.28%                         |
| Developed, Medium Intensity  | 299.8   | 14.12%                         |
| Developed, High Intensity    | 202.4   | 9.53%                          |
| Deciduous Forest             | 218.8   | 10.30%                         |
| Evergreen Forest             | 31.4    | 1.48%                          |
| Mixed Forest                 | 1       | 0.05%                          |
| Shrub/Scrub                  | 27      | 1.27%                          |
| Grassland/Herbaceous         | 1.3     | 0.06%                          |
| Pasture/Hay                  | 40.1    | 1.89%                          |
| Woody Wetlands               | 87.5    | 4.14%                          |
| Emergent Herbaceous Wetlands | 140.1   | 6.60%                          |
| Total                        | 2123.5  | 100.00%                        |

Table 15 Land Cover in Menands

# Watershed and Stream Classification

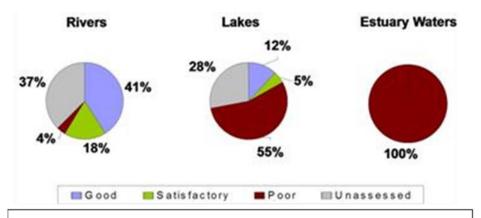
The communities' water resources include the Hudson River. Menands is a part of the lower Hudson, Sub basin, Wynants Kill-Hudson River Watershed and Rensselaer Lake-Hudson River Sub watershed.

A watershed is an area of land that drains all the streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel. The word watershed is sometimes used interchangeably with drainage basin or catchment. Ridges and hills that separate two watersheds are called the drainage divide. The watershed consists of surface water--lakes, streams, reservoirs, and wetlands--and all the underlying groundwater. Larger watersheds contain many smaller watersheds

In the entire Lower Hudson Watershed, about 63% of river/stream miles, 72% of lake, pond and reservoir acres and 100% of estuary acres have been assessed.

#### Water Quality

Water quality in the Lower Hudson Watershed varies widely and is influenced by a wide range of pollutants and sources. Sources of include pollutants Municipal wastewater, combined sewer overflows (CSO), urban/stormwater runoff and industrial impacts are associated with population numerous centers along the Hudson



Good water quality: Fully supports designated activities and uses Satisfactory: Fully supports designated activities, but with minor impacts Poor (Impaired): does not support designated activities and uses Unassessed: Insufficient data available

Figure 35 Water Quality in the Lower Hudson Watershed.

Source: <u>http://www.dec.ny.gov/lands/48367.html</u> (NYS Department of Environmental Conservation)

Valley, including one of the most densely populated areas in the world: New York City. Commercial and residential development increase impacts from runoff and wastewater discharges. In the considerable rural parts of the watershed, agricultural activities and other nonpoint sources generate less severe but also widespread impacts. Impairments related to the legacy PCB contamination of the Upper Hudson River are restrict fish consumption and commercial fishing.

Major water quality concerns in the watershed are:

- Municipal Wastewater and Combined Sewer Overflow
- Urban/Stormwater Runoff and Industrial Impacts in population centers
- Agricultural and Other Nonpoint Sources of nutrients and various other pollutants
- Impacts from Legacy Industrial PCB Discharges to Upper Hudson currently being remediated
- Declining Fishery Stocks from habitat loss, power generation withdrawals and other causes

While this reach of the Hudson River in Menands is not used very actively for recreation, there are water quality concerns for the overall watershed related to the historic PCB discharges into the Hudson River, acid rain, and mercury deposition. Regarding water quality, rivers, creeks, and streams are classified by their overall water quality into the following stream classifications: AA, AA-S, B, and C. The stream classifications are defined as follows:

AA or A: waters that are a source of drinking water (also considered a "protected stream")

**B:** used for swimming and contact recreation but not for drinking water (also considered a "protected stream")

**C:** waters that support fisheries and are suitable for non-contact activities (also considered a "protected stream")

**D:** the lowest classification

A, B, and C, with (T): indicates supporting a Trout population

A, B, and C, with (TS): indicates supporting a Trout spawning population

There are three types of streams in the study area which run 8 miles total and are classified as Non- Contact Activities such as fishing but not good for swimming, these stream feed from Littles Lake, North Pond and an unnamed creek. One stream is classified as a trout Habitat. Another classification found in the study area is D, the lowest classification. See map on the following page.

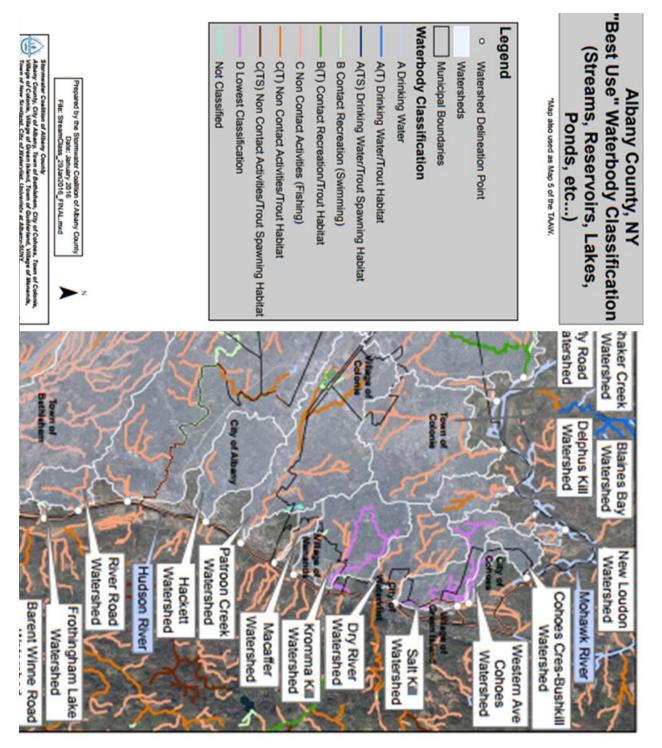


Figure 36 Stream Classification Map.

Source: Albany Stormwater Coalition

## Wetlands

Wetlands are known by many names, such as marshes, swamps, bogs, and wet meadows. Wetlands are transition areas between uplands and aquatic habitats. Standing water is only one clue that a wetland may be present. Many wetlands only have visible water during certain seasons of the year. For many years, people did not recognize the many diverse benefits and values of wetlands. Consequently, New York has lost almost half of its historic wetlands to such activities as filling and draining. There is a significant amount of acreage of wetlands within the Village of Menands. According to the land cover analysis provided by the National Land Cover Database approximately 11% of Menands is wetlands; this includes freshwater emergent and freshwater forest wetlands.

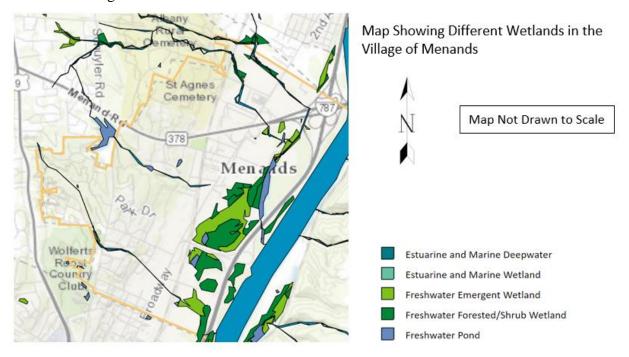


Figure 37 Wetlands

Source: <u>http://www.dec.ny.gov/gis/erm/</u> (New York State Department of Environmental Conservation)

Wetlands are valuable to the people and environment of New York State. Some of the functions and benefits that wetlands perform are described here.

## **Flood and Storm Water Control**

Wetlands provide critical flood and stormwater control functions. They absorb, store, and slow down the movement of rain and melt water, minimizing flooding and stabilizing water flow.

## **Surface and Groundwater Protection**

Wetlands often serve as groundwater discharge sites; maintaining base flow in streams and rivers; and supporting ponds and lakes. In some places, wetlands are very important in recharging groundwater supplies. Wetlands also improve water quality by absorbing pollutants and reducing turbidity.

## **Erosion Control**

Wetlands slow water velocity and filter sediments, protecting streams, lakes, reservoirs and navigational channels. They also buffer shorelines and agricultural soils from water erosion.

# **Pollution Treatment and Nutrient Cycling**

Wetlands cleanse water by filtering out natural and many manmade pollutants, which are then broken down or immobilized. In wetlands, organic materials are also broken down and recycled back into the environment, where they support the food chain.

# Fish and Wildlife Habitat

Wetlands are one of the most productive habitats for feeding, nesting, spawning, resting and cover for fish and wildlife, including many rare and endangered species.

# **Public Enjoyment**

Wetlands provide areas for recreation, education and research. They also provide valuable open space, especially in developing areas where they may be the only green space remaining.

## **Freshwater Wetlands Act**

The State Legislature passed The Freshwater Wetlands Act in 1975 with the intent to preserve, protect and conserve freshwater wetlands and their benefits, consistent with the general welfare and beneficial economic, social and agricultural development of the state. The Act identifies wetlands on the basis of vegetation because certain types of plants out-compete others when they are in wet soils, and so are good indicators of wet conditions over time.

# FEMA Flood and Flood Check Zones

Through Federal Emergency Management Agency (FEMA)'s flood hazard mapping program, Risk Mapping, Assessment and Planning (MAP), FEMA identifies flood hazards, assesses flood risks and partners with states and communities to provide accurate flood hazard and risk data to guide them to mitigation actions. Flood hazard mapping is an important part of the National Flood Insurance Program (NFIP), as it is the basis of the NFIP regulations and flood insurance requirements. The FEMA map used is from the most up to date sources. FEMA maintains and updates data through Flood Insurance Rate Maps (FIRMs) and risk assessments. FIRMs include statistical information such as data for river flow, storm tides, hydrologic/hydraulic analyses and rainfall and topographic surveys. A variety of audiences ranging from homeowners to engineers and mapping professionals can benefit in learning more about flood hazard mapping. The map below shows the sections of The Village that are prone to flooding. As seen on the map these areas are restricted towards the north eastern and eastern section of the area. With some areas having up to a 0.2% chance of an annual flood event.

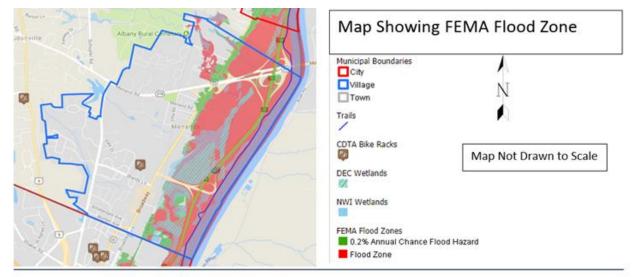


Figure 38 FEMA Flood Zones

Source: <u>http://gismap.albanycounty.com/gisviewer/</u> (Albany County Interactive Mapper)

# Soils

The chart represents the soil infiltration rates within the Village of Menands Union Free School District.



Figure 39 Soil Characteristics - Menands Union Free School District Source: (the National Land Cover Database, https://app.wikiwatershed.org/)

This data was provided by the *WikiWatershed* modeling tool and was limited to showing the Menands School District boundaries. It may be appropriate to manually establish village boundaries through another source for future reference.

Category A represents a high infiltration rate with land coverage of a little over 20 percent of the area.

This soil type has a high infiltration rate and low runoff potential when thoroughly wet. These areas consist

mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate

of water transmission

Category B signifies moderate infiltration with a land coverage of 5 percent. This soil is moderately deep

and moderately well drained. Moderately fine texture to moderately coarse texture. These soils have a

moderate rate of water transmission

*Category B/D* characterizes medium/very slow infiltration. This covers approximately 8 percent of the area. This category is a combination of soil types B and D.

*Category C* denotes a slow infiltration rate covering 47 percent of the area. This classification has a slow infiltration rate when thoroughly wet. This consists predominantly of soils having a layer that impedes the downward movement of water or soils from moderately fine texture to fine texture. These soils have a slower rate of water transmission.

*Category C/D* exemplifies medium/ very slow infiltration. This covers about 15 percent of the area of scope. This is a combination of soil types C and D.

*Category D* represents slow infiltration with land coverage of about 3 percent. These soils have a very slow infiltration rate when thoroughly wet, which has a potential for a high runoff rate. This contains primarily clay that have a high shrink-well potential, soils that have a high-water table, soils that have a clay layer at or near the surface, and soils that are shallow over nearly impermeable material. These soils have a very slow rate of water transmission.

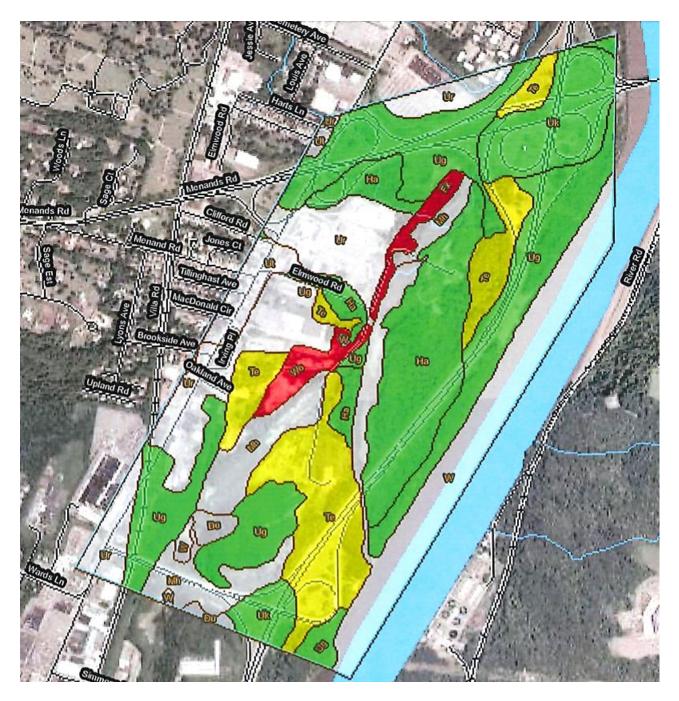


Figure 40 Soil Suitability

Source: Menands Nature Feasibility Report. (2008) Natural Resources Conservation Service https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm The image in Figure 40 represents three different degrees of limitations for development as it pertains to the Menands Waterfront area. Green is rated as not limited, yellow is rated as somewhat limited, and red is rated as very limited.

| Soil Suitability - Menands NY - Summary by Rating Value |       |                  |  |
|---|-------|------------------|--|
| Rating  | Acres | Acres in percent |  |
| Not limited   | 308.0 | 45.4%            |  |
| Somewhat limited  | 94.7  | 14.0%            |  |
| Very limited  | 19.0  | 2.8%             |  |
| Null or Not rated                                       | 256.3 | 37.8%            |  |
| Total Acreage   | 678.1 | 100.0%           |  |

Table 16 Soil Characteristics

Source: Menands Nature Feasibility Report. (2008) Natural Resources Conservation Service https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

| Soil Suitability - Menands, New York - Summary by Map Unit (classification) |  |       |                  |  |
|---|--|-------|------------------|--|
| Map Unit<br>Symbol  | Map Unit Name  | Acres | Acres in percent |  |
| Du  | Dumps  | 6.1   | 0.9%             |  |
| Fx  | Fluvaquents-Udifluvents complex, frequently flooded        | 7.9   | 1.2%             |  |
| На  | Hamlin silt loam   | 92.8  | 13.7%            |  |
| Mh  | Medihemists and<br>Hydraquents, ponded                     | 47.4  | 7.9%             |  |
| Те  | Teel silt loam   | 94.7  | 14.0%            |  |
| Ug  | Udorthents, loamy  | 163.0 | 24.0%            |  |
| Uk  | Udorthents, loamy-urban land complex                       | 52.3  | 7.7%             |  |
| Ur  | Urban land   | 96.9  | 14.3%            |  |
| Ut  | Urban land-Udorthents<br>complex, 0 to 8 percent<br>slopes |       | 2.4%             |  |
| W   | Water  | 89.6  | 13.2%            |  |
| Wo  | Wayland silt loam  | 11.2  | 1.6%             |  |
|   | Total Acreage  | 678.1 | 100.0%           |  |

Table 17 Acreage of Soil by Classification

Source: Menands Nature Feasibility Report (2008) Natural Resources Conservation Service https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm Soil suitability survey maps contain information that can be used in land use planning. These maps contain predictions of soil behaviors for selected land uses. This assessment is designed for various users such as foresters, agronomists, city officials and community stakeholders to properly analyze and evaluate the potential of soil and the management needed in the area of focus. Planners, community officials, engineers, developers and builders can use this analysis to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use this assessment to help them understand, protect, and enhance the environment.

Areas along the waterfront in Menands are home to wetlands, ponds and tidal areas that are a part of the Hudson River Estuary. These areas serve as a part of the river's natural flow management, flood protection, flyway and aquatic ecological system. With this comes different types of soils that are important to know to plan for the future of this area.

Approximately 24 percent or 163 acres in the area of interest along the waterfront is labeled Ug. This represents Udorthents, loamy soil. This soil type encompasses very deep, nearly level, gently sloping areas that are well drained and moderately well drained. This area has a rating of "not limited" which most specifically indicates that the solid comprises features that are very much favorable for the specific use. Good performance and very low maintenance can be expected.

It is estimated that 14.3 percent of the area of scope or approximately 96.9 acres is classified as Ur is categorized as urban land. This has no rating in terms of limitation.

The ratings that were used in this assessment are based on soil properties that affect trafficability and erodibility. These properties are stoniness, depth to water table, ponding, flooding, slope, and texture of the surface layer.

*Soil type Ha* is referred to as Hamlin silt loam. It encompasses 13.7 percent or 92.8 acres of the area of interest. This nearly level soil is very deep and well drained. The main limitation of this soil for local roads and streets is flooding. This soil has a rating of not limited which indicated that the soil has features that are very favorable for the specific use. Good performance and very low maintenance can be expected. *Soil type Te* is denoted as teel silt loam which encompasses 14 percent of the area. This zone estimated to be 94.7 acres. It is very deep, moderately well drained, and typically found in floodplains along major streams and rivers. This soil is subject to occasional flooding for brief periods from November to May. Permeability is moderate, while surface runoff is slow. The main limitations of this soil for local roads and streets are flooding and frost action potential. Frost action consists of an upward swelling of soil during freezing conditions caused by an increased presence of ice as it grows towards the surface, upward from the depth in the soil where freezing temperatures have penetrated into the soil. This area has a rating of "somewhat limited", which indicates that the soil has features that are moderately favorable for the specified uses. The limitations can be overcome or minimized by special planning and design or installation.

*Soil type Uk* is classified as Udorthents, loamy-Urban land complex, encompasses 7.7 percent or 52.3 acres of this area. This consists of very deep, level to gently sloping areas of well drained and moderately well drained loamy soil material and areas of urban land. This area is rated as "not limited", indicating that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Onsite investigation is needed on each individual site for any proposed use.

*Soil type Wo* is referred to as Wayland silt loam. This area is only 1.1 percent or 11.2 acres in the area of interest. This nearly level soil is very poorly drained. It is rated as "very limited". This soil has one or

more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedure. Poor performance and high maintenance can be expected.

*Soil type Fx* which is classified as Fluvaquents-Udifluvents complex, is 1.2% or 7.9 acres of the area. This unit consists of very deep, very poorly drained soils. Brush and low-grade hardwoods such as cottonwood, red maple and poplar, will grow in many places on these soils and provide suitable habitat for wildlife. These soils are not suited to urban use because of periodic flooding and prolonged wetness

# Stormwater Management and Pollution Prevention

The Village of Menands is member of the Stormwater Coalition of Albany County formed in 2008 by local government in Albany County. The coalition is comprised of eleven municipalities including the University at Albany (SUNY) who each provide mutual support and assistance in implementation of the New York State Department of Environmental Conservation (NYSDEC) Municipal Separate Storm Sewer System (MS4) Permit requirements. Polluted storm water runoff is often transported to municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. EPA's Stormwater Phase II Rule establishes an MS4 stormwater management program that is intended to improve the Nation's waterways by reducing the quantity of pollutants that storm water picks up and carries into storm sewer systems during storm events. As a member of the stormwater coalition, Menands has worked to identify and implement strategies to reduce stormwater runoff volumes and increase water quality. Members collaboratively implement various components of a comprehensive stormwater

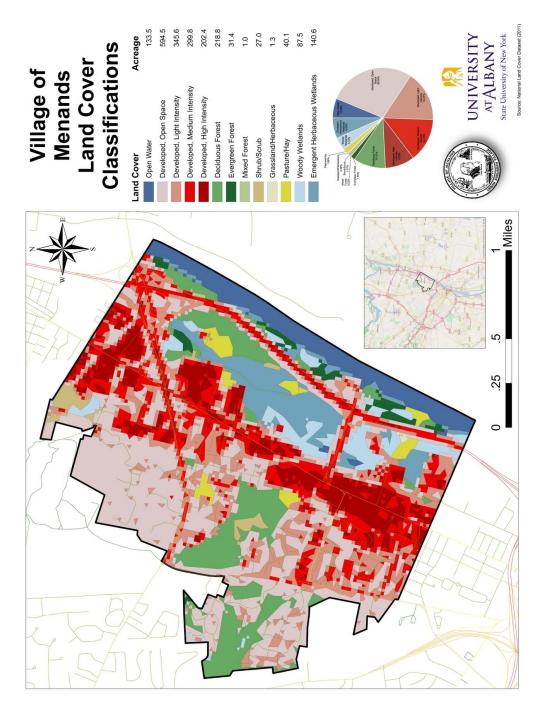
management program which addresses each of the following: public education and outreach, public involvement and participation, detection and elimination of illicit stormwater discharges, construction site stormwater runoff control, post- construction stormwater management, pollution prevention/good housekeeping for municipal operations.

The NYSDEC Water Quality Improvement Grant was awarded to Albany County Stormwater Coalition in December 2010 to fund storm system mapping, educate land use decision makers about green infrastructure, and develop Model Green Infrastructure Local Laws. It also provides funding assistance to carry out several elements of the NYSDEC MS4 Permit. Among those elements is that municipalities are encouraged to review and revise, where appropriate, local codes and laws which preclude green infrastructure and, to the maximum extent practical, consider the principles of Low Impact Development, Better Site Design, and Green Infrastructure when developing planning documents and updating regulations.

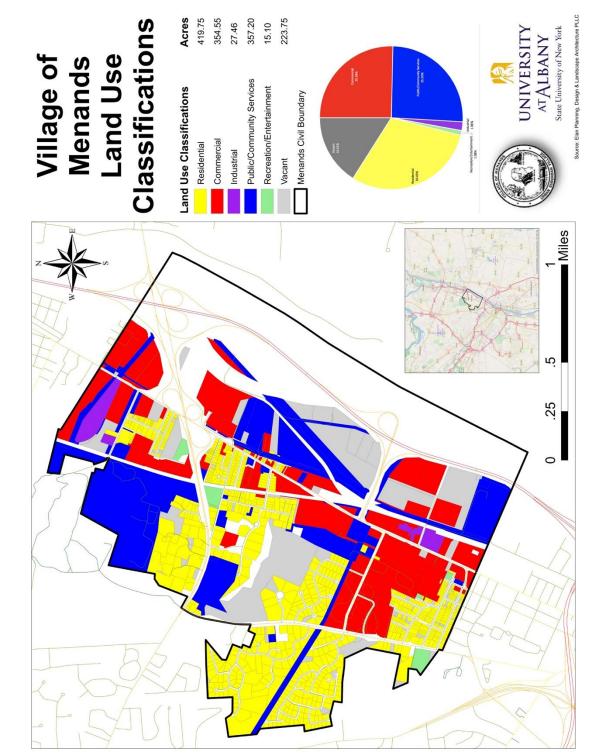
In October 2017, Governor Andrew M. Cuomo announced grant awards totaling \$2.3 million for urban forestry projects in communities across New York. The Urban Forest grants are funded through the state Environmental Protection Fund and are part of New York's ongoing initiatives to address invasive species, climate change and environmental justice. The Village of Menands was awarded \$25,000 for the Menands Street Tree Inventory Initiative. Development of a tree inventory includes locations, species, condition, and management needs. A survey will be necessary to develop a management plan.

# Appendix

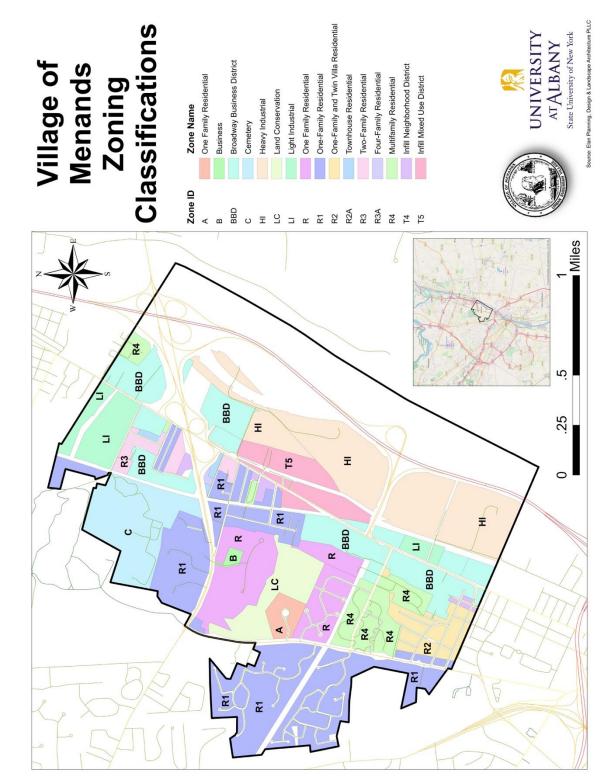
Map 1: Land Cover Map



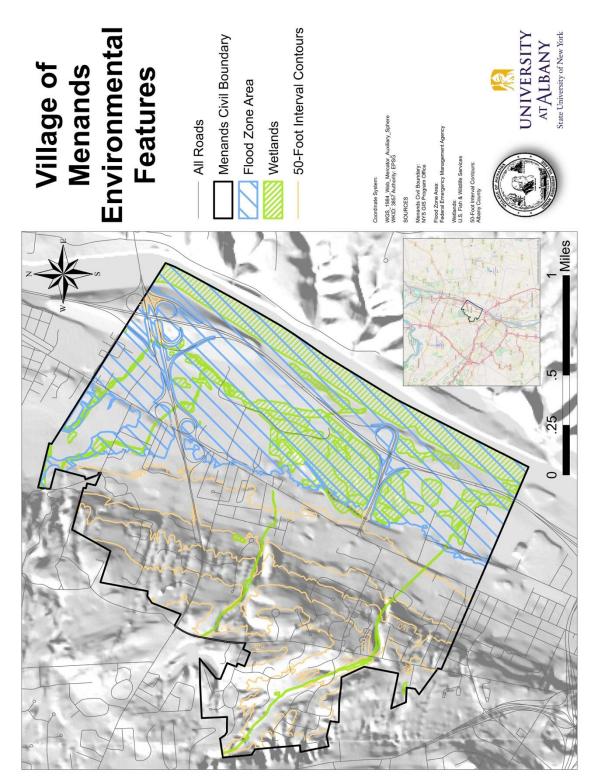
# Map 2: Land-Use Map



Map 3: Zoning Map



Map 4: Environmental Features Map



**Appendix B: Table of Zoning Regulations and Permitted Uses** 

| Zoning   | Principal Uses Permitted by Right  |
|----------|--|
| District |  |
| Α        | • Single-family dwellings  |
| R        | • Single-family dwellings  |
|          | • Public parks and playgrounds   |
|          | • Places of worship, parish houses, rectories and convents   |
|          | • Fire stations, ambulance stations, Village maintenance facilities, Village service   |
|          | facilities, Village office facilities and libraries  |
| R-1      | • Single-family dwellings  |
|          | • Public parks and playgrounds   |
|          | Places of worship, parish houses, rectories and convents   |
|          | • Fire stations, ambulance stations, Village maintenance facilities, Village service   |
|          | facilities, Village office facilities and libraries  |
| R-2      | • Single-family dwellings  |
|          | • Public parks and playgrounds   |
|          | • Places of worship, parish houses, rectories and convents   |
|          | • Fire stations, ambulance stations, Village, maintenance facilities, Village service  |
|          | <ul><li>facilities, Village office facilities and libraries</li><li>Twin villa</li></ul>   |
| R-2A     |  |
| R-2A     | <ul><li>Single-family dwellings</li><li>Public parks and playgrounds</li></ul>   |
|          | <ul> <li>Places of worship, parish houses, rectories and convents</li> </ul>   |
|          | <ul> <li>Fraces of worship, parish houses, rectories and convents</li> <li>Fire stations, ambulance stations, Village maintenance facilities, Village service</li> </ul> |
|          | facilities, Village office facilities and libraries  |
|          | Twin villa   |
|          | • Townhouse structures   |
| LC       | Land Conservation  |
| R-3      | Single-family dwellings  |
|          | • Public parks and playgrounds   |
|          | • Places of worship, parish houses, rectories and convents   |
|          | • Fire stations, ambulance stations, Village maintenance facilities, Village service   |
|          | facilities, Village office facilities and libraries  |
|          | • Twin villa   |
|          | • Townhouse structures   |
| R-3A     | • Single-family dwellings  |
|          | • Public parks and playgrounds   |
|          | • Places of worship, parish houses, rectories and convents   |
|          | • Fire stations, ambulance stations, Village maintenance facilities, Village service   |
|          | facilities, Village office facilities and libraries  |
|          | • Twin villa   |
|          | • Townhouse structures   |
|          | Multifamily dwellings  |
| R-4      | • Twin villa   |
|          | • Townhouse structures   |
|          | Multifamily dwelling units   |

|       | • Public parks and playgrounds  |
|-------|---|
|       | <ul> <li>Places of worship, parish houses, rectories and convents</li> </ul>                  |
|       | • Fire stations, ambulance stations, Village maintenance facilities, Village service          |
|       | facilities, Village office facilities and libraries   |
| B     | • Public parks and playgrounds  |
|       | <ul> <li>Places of worship, parish houses, rectories and convents</li> </ul>                  |
|       | • Fire stations, ambulance stations, Village maintenance facilities, Village service          |
|       | facilities, Village office facilities and libraries   |
|       | • Retail stores and shops, barbershops and beauty parlors, banks and offices                  |
|       | Radio and television stations   |
|       | Municipal recreational uses   |
|       | • Commercial agricultural uses to include only nurseries and greenhouses, orchards            |
|       | and growing other field crops   |
|       | <ul> <li>Newspaper establishments and job printing establishments</li> </ul>                  |
| С     | • Cemeteries  |
| BBD   | • Public parks and playgrounds  |
|       | • Places of worship, parish houses, rectories and convents                                    |
|       | • Fire stations, ambulance stations, Village maintenance facilities, Village service          |
|       | facilities, Village office facilities and libraries   |
|       | • Retail stores and shops, barbershops and beauty parlors, banks and offices                  |
|       | Radio and television stations   |
|       | • Restaurants, theaters and similar community services  |
|       | • Public, private and parochial schools and institutions of higher education                  |
|       | • Bowling alleys; health, tennis, swimming and other athletic clubs                           |
|       | • Private membership clubs and lodges not operated for profit                                 |
|       | • Professional office   |
|       | Medical and dental clinics  |
|       | <ul> <li>Newspaper establishments and job printing establishments</li> </ul>                  |
|       | • Hotels and motels   |
|       | • Light industry, including assembly, research and development, light manufacturing           |
|       | facilities and their related office and storage facilities                                    |
|       | • Retail sales of automotive parts and accessories  |
|       | Municipal recreational uses   |
| T4/T5 | • Places of worship, parish houses, rectories and   |
|       | • convents  |
|       | • Fire stations, ambulance stations, Village  |
|       | • maintenance facilities, Village service facilities, Village office facilities and libraries |
|       | • Retail stores and shops, barbershops and beauty parlors, banks and offices, excluding       |
|       | retail sales of automotive parts and accessories  |
|       | • Bowling alleys; health, tennis, swimming and other athletic clubs                           |
|       | Radio and television stations   |
|       | • Public, private and parochial schools and institutions of higher education                  |
|       | • Restaurants, theaters and similar community services  |
|       | <ul> <li>Medical and dental clinics and nursing homes</li> </ul>                              |
|       | • Hotels and motels   |

| Offices for persons engaged in providing professional services   |
|--|
| • Private membership clubs and lodges not operated for profit  |
| • Public parks and playgrounds   |
| Municipal recreational building and uses   |
| • Fire stations, ambulance stations, Village maintenance facilities, Village service facilities, Village office facilities and libraries |
| • Retail stores and shops, barbershops and beauty parlors, banks and offices   |
| Radio and television stations  |
| Municipal recreational uses  |
| • Newspaper establishments and job printing establishments   |
| • Light manufacturing and wholesale distribution facilities  |
| • Facilities for parcel and package distribution   |
| • Fire stations, ambulance stations, Village maintenance facilities, Village service facilities, Village office facilities and libraries |
| • Garages, filling stations, car washes and facilities for the sale of motor vehicles and accessories                                    |
| Radio and television stations  |
| Municipal recreational uses  |
| • Commercial agricultural uses to include only nurseries and greenhouses, orchards and growing other field crops                         |
| • Newspaper establishments, job printing establishments and other uses similar in character to those heretofore enumerated               |
| • Hotels and motels  |
| • Light manufacturing and wholesale distribution facilities  |
| • Heavy manufacturing, construction facilities or storage yards and other uses similar   |
| in character   |
| • Facilities for parcel and package distribution   |
|  |

#### <u>Bibliography</u>

- "Soil Hydrology of the United States." Soil Hydrology of the United States | ArcGIS Resource Center, Data from the Natural Resource Conservation Service's Soil Survey Geographic Data Base., resources.arcgis.com/en/communities/soils/02ms0000008000000.htm.
- 2. The Final Master Plan for The Menands Nature Feasibility Study. 2008.
- 3. "Stormwater Coalition." Albany County Stormwater Coalition, www.stormwateralbanycounty.org/stormwater-coalition/.
- Stormwater Coalition of Albany County Green Infrastructure Model Local Law Project. cdrpc.org/wp-content/uploads/2015/05/GI-07-Albany-Pool-Communities-Performance-of-a-Codes-and-Local-Law-Review-Appendix-A.pdf.
- Sutton, Michelle. "Michelle Sutton." New York State Urban Forestry Council, 9 Dec. 2017, nysufc.org/category/dec-grants/.
- CDTC. "Menands Bike/Ped Connector: Broadway to Mohawk Hudson Bike Hike Trail." NYSDOT. February 17, 2016. <u>http://www.cdtcmpo.org/planning/mar16/12.pdf</u>.
- 7. "Route 32 Linkage Study." CDTC. January 2011. http://www.cdtcmpo.org/link/ny32/ny32.pdf.
- 8. CME. Transportation Access and Land Use Improvement Study. CDTC. September 2008. http://www.cdtcmpo.org/images/linkage\_program/AlbCoFinal/menandsny32.pdf .
- 9. Vollmer Associates. "Scenic and Recreational Development." NYSDOT. 1970.
- 10. "Google Maps." Google. 2018. https://www.google.com/maps.
- 11. CDTA. "Albany Troy Watervliet." CDTA. 2018. <u>https://www.cdta.org/schedules-route-detail?route\_id=22</u>.
- 12. "NYS Data Traffic Viewer." NYSDOT. 2015. https://gis3.dot.ny.
- 13. gov/html5viewer/?viewer=tdv.