PART II. NEEDS ASSESSMENT

PART II. contains Chapters 4 and 5 to address the Committee Charge to: “2. Complete a needs assessment for Fire Protection within the Town of Mendon” (Resolution 22-150).

Chapter 4. DEMOGRAPHICS, EXPOSURES and EXPERIENCE

*Decision makers must minimize the* [adverse] *consequences of emergencies by aligning fire department resources with community risks/hazards* (Urban Fire Forum, p. 11).

DEMOGRAPHICS

The Town of Mendon was organized in 1813 and annexed from Ontario County when Monroe County was formed in 1821 (Town of Mendon Website, 10.5.22).

Approximately 39 square miles, the Town of Mendon has contiguous boundaries with both Ontario and Livingston Counties. Mendon is bordered on the north by the Town of Pittsford, on the west by the Towns of Rush and Henrietta, on the south by the Towns of Lima (Livingston County) and West Bloomfield (Ontario County) and on the east by the Town of Victor (Ontario County).

Like the Village of Honeoye Falls, there is no direct access to the Town from an Interstate highway. Regional access is provided by Interstates 390 and 490, and then via NYS, County and local roads. The New York State Thruway (I-90) passes through the northeast corner of the Town. NYS Routes 64 and 251 intersect at the 4-corners of the Mendon Hamlet.

The Village of Honeoye Falls, located in the southwest portion of the Town, has the highest density in the Town and is a retail center. The Hamlet of Mendon, on the east side of the Town, also serves as a commercial and residential area. Both areas are the historic centers of population and commerce (Mendon Comprehensive Plan, p. 2).

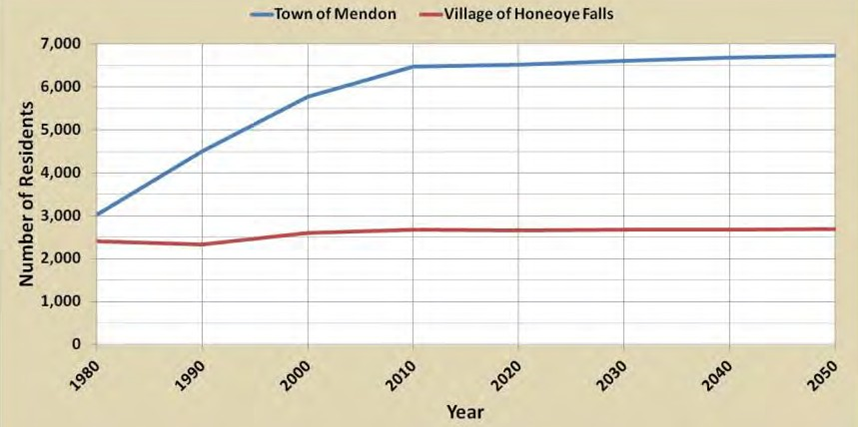
The Village of Honeoye Falls was Incorporated in March, 1838 by an Act of the New York State Legislature. Named for the waterfall on Honeoye Creek, it is 2.6 square miles within the Town of Mendon, in southeast Monroe County. Regional access is provided by Interstate 390. In the greater Rochester Metropolitan area, access to the 4-corners at the center of the Village is via NYS Routes 15A, 65 and 251.

Basic demographic information is relative in discussions about Fire Protection. These factors are rated by the New York State Comptroller’s 2021 *Environmental Stress Report.* Both the Village of Honeoye Falls and the Town of Mendon achieved a score titled, “No Designation” (NYS Comptroller, 10.24.22), meaning there is no problem with the action of either local government. The *Environmental Stress Reports* are in Appendix 4-1.

Several categories included in the scoring rank are relevant for our consideration. They influence our collective ability to sustain community expectations for Fire Protection Services. In this chapter, we detail factors related to:

* Staffing…population, age
* Equipment; and,
* Financing…poverty, tax base, income, unemployment, State and Federal Aid.

Population and Age



“Population history for the Village was obtained from the Genesee Finger Lakes Regional Planning Council and the 5-Year American Community Survey (ACS) as shown [above]. The Village’s population has been relatively steady since 1980 and is expected to remain steady over the next few decades. By comparison, the Town of Mendon’s population nearly doubled between 1980 and 2010. From 2010 to 2019, the Town of Mendon’s population continued to increase from 8,982 to 9,203. Unlike many local villages, Honeoye Falls has nearly 450 undeveloped acres within its corporate limits. Based upon the available land and the desirability of the community, it is reasonable to assume there will be additional growth in the number of residents living in the Village over the next decade (2022 Village Comprehensive Plan, p.17”.

“Population: Village of Honeoye Falls, 2000 – 2019”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Age** | **2000** | **2010** | **2019** | **New Change** | **% Change** |
|  |  |  |  |  |  |
| 19 and under | 679 | 734 | 700 | + 21 | + 3.1% |
| 20 – 34 | 373 | 365 | 435 | + 62 | + 16.6% |
| 35 – 54 | 817 | 829 | 690 | - 127 | - 15.5% |
| 55 – 64 | 245 | 340 | 396 | + 151 | + 61.6% |
| 65 and over | 481 | 406 | 538 | + 57 | + 11.9% |
|  |  |  |  |  |  |
| **TOTAL** | **2,595** | **2,674** | **2,759** | **+ 164** | **+ 6.3%** |
|  |  |  |  |  |  |
| **Median Age** | **41.2** | **41.9** | **41.2** |  |  |

Source: US Census (2022 Village Comprehensive Plan, p. 18).

Excluding the Village, the Town of Mendon is currently home to 6,498 people. Population within the Town (excluding the Village) increased 12.2 % between 2000 and 2010, but remained fairly stagnant between 2010 and 2017, while the Village population steadily increased by 6% between 2000 and 2017 (Mendon Comprehensive Plan, p. 10).

These numbers are estimated by the Genesee-Finger Lakes Regional Planning Council and reported in the 2021 Town of Mendon Comprehensive Master Plan, p.11:

|  |  |  |  |
| --- | --- | --- | --- |
| **U.S. Census** | | | |
| Year: | 1990 | 2000 | 2010 |
|  |  |  |  |
| Town outside Village | 4,505 | 5,775 | 6,478 |

The U.S. Census Bureau’s 2000 and 2010 SF1 Decennial Censuses, and the American Community Survey 2013 – 2017, report the Median Age of Residents (Mendon Comprehensive Plan, p. 11):

|  |  |  |  |
| --- | --- | --- | --- |
| **Median Age of Residents** | | | |
| Year: | 2000 | 2010 | 2017 |
|  |  |  |  |
| Town outside Village | 39.8 | 43.6 | 45.8 |

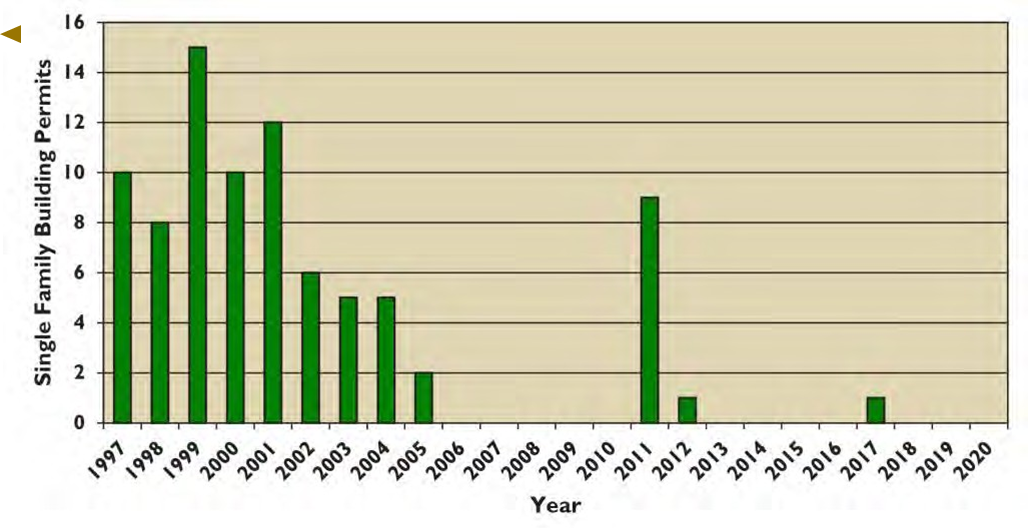
Housing Stock

The majority of the housing stock in the Town outside the Village (52.6 %) was built after 1979. In the Village of Honeoye Falls, the majority (51.2 %) was built in 1959 or earlier. These are the American Community Survey, 2013 – 2017 estimates (Mendon Comprehensive Plan, p. 18):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Percentage of Housing Stock by Age** | | | | | |
|  | 1939 or earlier | 1940 -59 | 1960 - 79 | 1980 – 99 | 2000 or later |
|  |  |  |  |  |  |
| Town outside Village | 27% | 5.3% | 15.1% | 36.8% | 15.8% |
| Village of HF | 33.1% | 18.1% | 26.5% | 15.9% | 6.4% |

Residential building activity is administered independently by each local government. Pending and projected development should be considered in real time by parties directly involved in discussions about Fire Protection as land use impacts exposures relating to apparatus requirements and staffing complements.

**Page 17**



As indicated in the graph above, the Village “has issued a total of 84 permits for new homes from 1997 to 2020. The number of permits issued started a five year decline in 2002. This decline continued through 2006, when the number of permits issued dropped to zero. This inactivity continued for four years from 2006 through 2010.

“There were a total of 10 Certificates of Occupancy (C of Os’) issued by the Village for single-family homes from 2003 to 2013. Only one was issued from 2006 through 2010. C of O’s differ from building permits in that they are an indication of homes built and occupied. Whereas, the issuance of a building permit does not necessarily mean construction was realized“ (2022 Village Comprehensive Plan, p.20).

Similar information for the Town of Mendon, outside the Village, is expressed on Figure 4-1. (Gates, 10.12.22).

Financial Capacity

Residential income is a valid indicator of the population’s ability to sustain local government services and should be a priority consideration as the Town discusses Fire Protection. The majority of revenue for the delivery of Fire Service is the property tax levy and summary data across multiple years of the NYS Comptroller’s annual “Environmental and Fiscal Stress” reports may suggest trends and indicate patterns related to our population’s age and income.

Figure 4-2. is the Real Property “Classification Listing” (Town Assessor, 8.29.22).

Appendix 4-2. contains detail for the Village on the aggregate and individual Assessed Value of these parcels: by their Major Classification Type; by their individual Classification Number Classification; for County/Town, School and Village Tax levies; and, for certain Exemptions. Appendix 4-3. is a like presentation for the Town outside the Village (Town Assessor, 8.29.22).

Demographic factors have a role in determining a community’s capacity to functionally delivery and sustain effective Fire Protection services. “Community demographics such as employment types and availability, population age and makeup, population density, tax base, and other local factors define what particular incentives may elicit and sustain increased numbers of volunteers from a given community” (NYSDHS, *Volunteer Firefighter Recruitment & Retention Task Force Report*, p. 12).

Land Use

“Residential and agricultural land uses dominate the Town of Mendon landscape. Together, these two land uses account for 71 percent of the land use within the Town by acreage. Outside of the Village, the only commercial center is in the Hamlet, and just 0.4% of land within the Town is classified as commercial. Commercial and mixed-use properties are clustered within the Hamlet and generally include a variety of small scale independently-owned shops, restaurants, and office space. Together, vacant land and wild / parkland (including Mendon Ponds Park) account for just over 25% of land use.

“The land uses are based on real property data from Monroe County and can be described briefly based on information from the New York State Office of Real Property Services and sourced to Monroe County GIS. The quoted percentages include the Village:

• 49.7% Residential – property used for human habitation (single family, multi-family housing) but not including hotels/motels.

• 21.6% Agricultural – property used for the production of crops or livestock.

• 14.9% Vacant Land – property that is not in use, is in temporary use, or lacks permanent improvement.

• 10.5% Wild/Parkland – Reforested lands, preserves and private hunting/fishing clubs.

• 3.3% Other – all other uses, including commercial and industrial uses, that represented a small share of land acreage in the Town” (Mendon Comprehensive Plan, p. 19).

With few exceptions reserved to New York State, land development and Plat division is governed by Local Law. Figure 4-3. is a map of the *Town of Mendon Zoning Districts* (Gates, 10.12.22). Figure 4-4. is a map of the *Village of Honeoye Falls Zoning Districts, Adopted August 19, 2019* (Village website, 12.16.22).

EXPOSURES and EXPERIENCE

The Committee identified and developed a menu of likely and potential risks associated with our natural and built landscapes. We label them in two (2) categories: Target Features and Natural Features. The Committee did not prioritize the risks. We name them, define them for our purpose, state their exposure and identify the service demand required to terminate the inherent emergent condition(s).

Our local Fire Departments are trained and equipped to respond to emergency calls associated with these risks. Their capacity can grow through Mutual Assistance agreements, Mutual Aid, Special Operations Teams, and/or municipal forces as prescribed in Department protocol, at the request of the (Department) Incident Commander, or the Chief Elected Official with A State of Emergency Declaration.

Target Features

Our built landscape includes “Target Features,” defined simply as generally acceptable risks incorporated in our everyday routine and valued as necessary to support our lifestyle. Examples are noted in transportation modes for people and products, population centers like schools and retail centers, and in workplace environments associated with manufacturing and business locations.

“Built” into our landscape as areas for: drainage retention/detention; recreational pursuits; and, reservoirs for specific purposes, water has a prominent presence in the Town of Mendon as both a Target and a Natural Feature.

The Target Features considered as risks by the Committee are presented in a brief narrative and, in some cases, supported by accompanying data to quantify emergency response and/or measure the emergency response. Response experience is also useful to gauge the probability of adverse exposures related to the feature. Figure 4-5. follows the narrative ordering with a graphic, summary account of these features, the exposures they present and the emergency resource response capabilities defined by the Committee.

Target Features are:

A. Transportation Systems

1. Highway Corridors:

* Roads
* Intersections
* Bridges
* Culverts

Figure 4-6. is a Highway Corridor map for the Town of Mendon, including the Village of Honeoye Falls (Gates, 8.11.22).

Figure 4-7. is the *Village of Honeoye Falls Street Map, Revised October 19, 2005* locating: schools, Public Safety facilities, Village and Town Halls, Churches, Cemeteries, and the corporate boundary (Village website, 12.16.22). The Village road system, “… is the most important component of our transportation needs for not only our residents and visitors, but also for economic development. The Village has 14.2 center line miles of roads.” The Village’s roads are a combination of [nine] 9 center line miles on:

* *New York State Rights-of-Way*: Route 65 - North Main Street and Ontario Streets; Monroe Street; and,
* *Monroe County Rights-of-Way*: West Main Street, East Street and Maplewood Avenue.
* The remaining 5.2 center line miles are Village Rights-of-Way (Village 2022 Comprehensive Plan Update p.24).

Outside the Village, the Town has a similar combination of State, County and Town roads:

* *New York State Rights-of-Way*: 24.32 center line miles (includes Village);
* *Monroe County Rights-of-Way*: 36.68 center line miles (includes Village); and,
* *Town Rights-of-Way*: 44.12 center line miles (Caschetta, 10.17.22).

The table below indicates “Commuting Patterns in 2015,” provided by the U.S. Census Bureau *OnTheMap*, *2015* (Town of Mendon Comprehensive Plan, p. 16), as an example of motorist travel related to work-related use our local highway system.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Commute Into** | **Live & Work in Town (including Village)** | **Commute Out** |
|  |  |  |  |
| Town of Mendon | 2,610 | 669 | 3,957 |
| Village of HF | 1,536 | 211 | 1,182 |

To aid night-time travel, the Village highway system has street lights to illuminate the roads and sidewalk systems. The Town has a Lighting District in the Hamlet. There are overhead lights at many intersections throughout the Town to improve driver safety. And, there are numerous public and private sites that are lit at night.

These highway corridors intersect as north-south meet east-west motorists. Traffic control devices include: 1-way STOP signs – mostly at “T” intersections; 2-way and 4-way STOP signs; YIELD signs to merge with oncoming traffic; a “Round About” at the intersection of NYS Routes 251 and 65; a flashing red STOP light signal in the Hamlet at the intersection of NYS Routes 251 and 64; and two conventional Traffic Signals (the Village 4-corners, and the intersection of NYS Route 15A and West Main Street).

Figure 4-8. is a New York State Department of Transportation (NYSDOT) table of “Reported Crashes [Motor Vehicle Accidents] in the Town of Mendon,” from 2013 to May 31, 2022.” These crashes are reported by Law Enforcement agencies and have occurred on any highway jurisdiction and/or intersection (NYSDOT, 9.21.22). The Freedom of Information request to NYSDOT, and their reply to the Town Supervisor is Appendix 4-4.

There are three (3) bridges on New York State Route 65 within the Village. They cross Honeoye Creek on North Main Street, Ontario Street and East Street.

Outside the Village bridges cross:

* Honeoye Creek on Sibley Road and Plains Road;
* Spring Creek on Honeoye Falls #6 Road, NYS Route 15A and Monroe Street; and,
* Irondequoit Creek on NYS Routes 251 and 64 in the Hamlet of Mendon, and then with box culvert crossings on tributaries throughout the Town.
* The NYS Thruway (Interstate 90) has three (3) overpass bridges in the Town: West Bloomfield Road, Pittsford-Mendon Road (NYS Route 64), and Mile Square Road (refer to Figure 4-6.).

Culverts are pipe conveyances engineered to preserve the flow of water when the natural pathway is obstructed. They appear on public and private property across the geography of the entire Town, and convey drainage and small tributaries along their respective pathways assisting drainage beneath driveways, trail systems, parking lots and other travel corridors.

Some culverts are defined by the State’s Municipal Storm Water Management regulations as “Outfalls.” This program is administered by the Town Building Department. Figure 4-9. is a map of the Outfall Locations in the Town of Mendon, outside the Village (Gates, 10.12.22).

1. Trails.

In conjunction with Monroe County, the Town of Mendon constructed the Lehigh Valley Trail which follows the former Railroad Right-of-Way in a linear pathway east and west across the mid-section of the Town. Various products define its pathway. There are multiple at-grade intersections with the highway system and overpasses at water crossings. It is used by hikers, bikers, equestrians and snow mobiles as conditions permit. There are parking areas as points-of-entry and there are various accommodations primarily in the Hamlet and at Rochester Junction. Both Fire Departments are familiar with this trail system and have off-road apparatus and equipment to facilitate emergency response.

“Norton Trail” parallels Honeoye Creek from Harry Allen Park in the Village center to Rotary Park. There is a grade crossing with North Main Street (NYS Route 65). The trail is used for access to Honeoye Creek, to hike, for Nature and Environmental Classroom study, and as an optional pedestrian access to both parks. HFFD is familiar with this trail and the exposures it presents.

1. Flight Pathways.

The Frederick Douglass Greater Rochester International Airport, the National Guard Flight Facility and the (private) flight facility on Scottsville Road, bring a compliment of passenger, cargo and Military air traffic to the skies over the Town of Mendon.

*ROC features a modern two-story terminal, enclosed parking garage and a two-level roadway with separate avenues for arrivals and departures. It is a small hub airport which handles approximately 120 flights per day with 19 non-stop destinations, serves approximately 2.4 million passengers annually, and houses the operations of 6 commercial air transportation providers and their affiliates* (rocairport.com/info, 12.16.22). The Federal Aviation Administration (FAA) manages operations for air traffic control. Our geography is in the flight path for small fixed wing craft, private jet service, commercial jet service, Military air assets and helicopter traffic.

The former private air strip on West Main Street in the Village was the site of several private plane crashes. HFFD was the First Response on each occurrence, assisted by Mutual Aid and Monroe County Airport Crash Rescue resources. To the best of our knowledge and belief, there are no remaining private air strips in the Town.

1. Pipelines:

* Water
* Natural Gas
* Drainage
* Sanitary Sewer

The universal number 8-1-1 is tagged “Call Before You Dig.” It is a subscriber service for underground carriers and functions as a central answering point for the public and contractors who are planning to dig. The service alerts underground carriers to dispatch field representatives to identify their respective mains, curb box interfaces and lateral structure feed lines in an attempt to restrict utility disruptions, infrastructure damage and emergent conditions during excavation.

As shown on Figure 3-28. the MCWA owns and maintains public water mains and a hydrant system in the Village and in portions of the Town. There are also yard hydrants and standpipes for Fire Department use. And, there are private water connections to various sources.

Figure 4-10. maps Natural Gas transmission from National Fuel and RG&E within the Town (*Town of Mendon Utilities Master Plan*, p.2.7). The Empire Pipeline is also shown on this map. They have a transfer facility located in the Mendon Fire District. Liquid Propane is also used as a fuel source for home and business purposes and above ground storage tanks dot the landscape.

Underground drainage systems in the Village are indicated by the presence of drop inlets and catch basins in road rights-of-way. These systems generally convey storm run-off and ground water to prevent road damage from ponding water and the freeze-thaw cycle. Retention ponds to eliminate inundation of downstream systems are recent additions to some of these drainage systems. Underground drainage systems are also part of the Town’s infrastructure although most storm water collection is open, ditch-style conveyance from the roadway shoulder or via concrete gutters at the edge of the paved travel lane.

By Inter-municipal Agreement, the Town of Mendon is a participant in the Monroe County *Stormwater Management Program Plan* (Adopted, 8.20.09), and is a member of the County’s “Stormwater Coalition” whose mission is “to reduce the discharge of pollutants to the maximum extent possible. “NYSDEC regulates stormwater discharges from Municipal Separate Storm Sewer Systems. This Plan provides policy and management guidance to Coalition members. The purpose is to maintain or improve water quality” (*Plan*, p.1). This Plan is functionally administered by the town’s Building Department for interface with developers, Engineers and the Town Planning Board (Gates, 8.29.22).

Sanitary Sewers are part of Village infrastructure. Sewer mains, manholes and pump stations are owned and maintained by the Village. All connecting laterals are owned and maintained by the property owner. Maps of the system are available from the Village. This system is separate from the Storm Water collection system, although it is susceptible to ground water infiltration. The Village routinely tests the system to eliminate water infiltration that does not require sanitary treatment. The Village has a Local Law for appropriate use, connections to the system and a user fee schedule.

B. Population Centers

1. Honeoye Falls-Lima Central School District.

As depicted on Figure 4-11. the HF-L campus comprises three (3) academic buildings (Elementary, Middle and High Schools), a Transportation/Fleet Center and extensive Athletic Fields (Town of Mendon Comprehensive Plan, Town website, 12.17.22). Campus acreage is located in the Village and in the Town outside the Village. School driveways and parking facilities are accessed from Church Street, East Street and Paper Mill Streets in the Village, and from Quaker Meeting House Road in the Town. The original 1927 building that fronts East Street is three stories. The remaining High School building is a combination of two-story and one-story sections. The Elementary and Middle School buildings are one-story. Both the High School and the Middle School have Auditoriums. All buildings have gymnasiums, and there is a swimming pool at the High School. Each building has a main entrance with additional point-of-entry. Building occupancy varies by day of the week, time of day and the school calendar of holidays and events. The buildings and athletic fields are occupied year-round with community uses.

Public spaces are rated by the Municipal Fire Marshal for occupancy limits. School District land development and site plan review are outside local government jurisdiction: oversight is through the NYS Education Department. The District’s Board of Education is the local authority, and the District Superintendent is responsible for daily operations and community interface.

1. Retail Centers:

* Village
* Mendon Hamlet

The Village and the Hamlet of Mendon are the traditional centers of retail trade within the Town.

The business center of the Village is concentrated at the 4-corners, with several store fronts across the East Street Bridge. Some store fronts are occupants at street level, with residential occupancy on the upper floors. Some of the buildings are “Blocks” meaning they share adjoining walls while others are individual, side-by-side, single structures. Their construction is a mix of brick, wood-frame and cut stone. They have masonry foundations of concrete block, cobblestones and cut stone. Some foundations sit on bedrock, and some basement spaces extend under the sidewalk with hatch openings to facilitate delivery below the street grade. The “Blocks” are separated by alleys and/or driveways. Access is not available to all buildings on all sides. A few of the structures along Honeoye Creek are built to the stream bank and/or over the natural bank, leaving their “C” side exposure inaccessible to direct access by apparatus.

Beyond the business center, and the adjacent residential neighborhood, there is a plaza surrounded by individual retail and commercial buildings that front on West Main Street. This area has become the “hub” of retail business within the Village. This area is built to accommodate motorists with traffic configurations designed for vendor deliveries, customer parking, drive-up services and the movement of consumer purchases from store to home. Building code requirements for fire detection & suppression systems, standpipe connections, fire-stop construction, perpetual access to “Fire Lanes” and other fire safety measures act in-concert with design features that offer multiple points of vehicle ingress and egress, wider travel corridors, marked parking spaces and paved surfaces surrounding the buildings that afford greater fire protection measures and better site characteristics for fire suppression operations.

The 4-corners of the Hamlet has a concentration of individual buildings zoned for business. They are a combination of former residential houses, stores/buildings constructed for commercial purposes, and retro-fits that have survived several iterations of commercial enterprise. They are a mix of old and new construction, one and two-story, wood-frame and various masonry products. Like the Village center buildings their foundations and basements, HV/AC, electric and plumbing systems are a mixture of products and mechanics across a time line of building practices, Municipal Building Codes and Inspections and maintenance practices by the owners/occupants. Similarly, fire protection devices, suppression systems and building congestion present restrictions that challenge fire fighter operations.

The plaza/mall center, and the business development that surrounds it, are newer construction with features that support fire detection & suppression systems and have construction and design characteristics to facilitate the delivery of fire services.

1. Multi-Family Occupancy:

* Village apartment and condominium complexes
* Pinehurst Senior Living Center

Across the Town, there are multiple family dwellings: duplexes, single family houses converted into apartments, apartment units above retail and commercial spaces, In-Law apartments and others. However, multi-family occupancies defined for our purpose are multiple apartment units contained within a single building, either accessible through a common exterior entrance with separate access doors to each dwelling unit, or with each unit having private access from the exterior. These individual units are conventional apartment rentals and privately-owned condominiums. The buildings are two and three-stories. Individual units are either one level or townhouse-style two-story with a basement lower level. Some buildings are masonry and some are wood-frame construction. One development has separate garage structures while all others are outdoor parking only.

The Pinehurst Senior Living Center is part of a continuum of residential options within the Episcopal Senior Life Community. The two-story, brick building houses one and two-bedroom apartments for independent seniors. There is a common reception area for indoor access to all units. The first floor apartments have outdoor access at ground level, and the second floor apartments have outdoor balconies (most without exterior access to the ground level). The backside of the building above the underground parking garage is higher in elevation, giving the appearance of almost three stories. This area has some exterior staircases that serve multiple unit balconies. Each unit has a fully equipped kitchen, but rental fees require and include a daily evening meal prepared in the commercial kitchen and served restaurant style by wait staff. There is also outdoor parking for resident vehicles and visitors, a building generator and a loading dock. There is one elevator in the central reception foyer.

1. Gathering Venues:

* Churches/ Church Halls
* Restaurants
* Municipal Buildings
* Event spaces: indoor and outdoor
* Parks
* Recreation

The venues enumerated above appear throughout the Town. They are private and public operations with various amenities geared to their primary purpose(s). All indoor spaces where the public gather are rated for maximum capacity by the Village or Town Fire Marshal. And, some have required, annual, fire safety inspections by the Municipal Fire Marshal or the Fire Department.

Some of the Churches have “Halls” in their basement space, some are separate buildings on their property, and some are constructed additions to their sanctuary space. One church is in a former private recreation building, and one former church and its hall is now a privately-owned Wedding Chapel and party venue. Several halls are used by the community for pre-school, fund-raising, and/or to augment amenities during festivals, concerts and other events.

The food service/restaurant businesses are diverse in menu options, dining space capacity, indoor/outdoor accommodations, business hours, take-out, curb service and delivery options. Some offer single food products, like ice cream or pizza, some are seasonal, and some have a Liquor License. These businesses occupy buildings that share the same fire safety components that have already been presented.

Municipal buildings include Town Hall, Village Hall, two Fire Stations, the Public Library, the Mendon Youth Center, the Community Center, the Ambulance Base, the Museum, the Village Public Works and Waste Water Treatment Plant and the Town Highway Garage. (The School District buildings are presented separately.) These buildings house administrative offices and functions for the municipal governments and the Mendon Fire District. Some are also operational headquarters for personnel and equipment that deliver public services. The structures accommodate personnel needs associated with office requirements, house equipment and apparatus, and provide maintenance/repair facilities. Some have public meeting space, specialized communication equipment and various modes of technical infrastructure to facilitate their respective operations.

Event spaces are privately owned – some indoor and some outdoor. Aside from parks, outdoor spaces include the Mendon Carnival site, the HFFD Training Ground (leased from the Village), the pavilion at the Community Center and the Mendon Youth Baseball Fields in the Hamlet. The majority of indoor spaces are covered in other sections.

Parks are owned, managed and maintained by the Village, the Town, the County and in one park by a private organization, the Mendon Foundation. As shown on Figure 4-12. the *Village of Honeoye Falls Parks/Open Space Map, October 8, 2013* (Village website, 12.16.22) Village Parks are:

* **Harry Allen Park**, in the Village Center featuring a Gazebo, the Scout Hall, School House and a playground with access to the Norton Trail;
* **Monroe Street Village Park**, outside the Village, with athletic fields, restrooms and a skateboard facility;
* **Clover Meadows Park**, at the corner of Clover Street (NYS Route 65) and Cheese Factory Road, is naturalized except for an area that is rented to residents for garden spaces; and,
* **Rotary Park**, off North Main Street along the Creek with athletic fields, a pavilion and other amenities. The winding driveway access may present a challenge to large vehicles. This property is within the flood plain.

As shown on Figure 4-13. Town of Mendon Parks and Private Recreation Facilities include:

* **Dreisbach Park** (Semmel Road), adjacent parcels both east and west of the Highway Garage, with athletic fields, tennis courts, a new Splash Park, and a Military Memorial;
* **Mendon Center** featuring tennis courts;
* **Great Bend Park** (Plains Road), featuring nature trails and scenic vistas; and,
* **Mendon Station Park**, in the Hamlet, and **Rochester Junction Park,** both along the Lehigh Valley Trail.

Monroe County Parks within the Town include:

* **Mendon Ponds** with extensive wild areas, multiple water features, trails, picnic spaces, open pavilions, cabin venues, grassed meadow spaces for year-round use and maintenance buildings for Parks personnel and equipment. The park also features an historic cobblestone house, a Nature Center, and the barn for the Sheriff’s Mounted Unit.
* The **Lehigh Valley Trail** crosses east- west from border to border of the Town. It is a linear trail on the old Lehigh Valley Railroad Right-of-Way. The trail surface has a variety of surfaces and multiple grade crossings with the road system. It is used rear-round. It connects with other trails and has multiple points of entry with parking accommodations. There are amenities at two primary locations – in the Hamlet at the Mendon Station Park and at Rochester Junction. There are bridge crossings with Honeoye Creek on the west side of Town and Irondequoit Creek in the Hamlet area. Park maintenance is substantially assisted by the Mendon Foundation.

Private recreation venues vary. Among them are:

* a Bowling venue in the Village;
* private horse stables and riding facilities;
* Sibleyville Nature Preserve;
* Mendon Racquet & Pool Club;
* Mendon Conservation League;
* Mendon Youth Baseball Fields;
* Mendon Country Club; and,
* The former Markus Park (*Town of Mendon Comprehensive* Plan, Town website, 12.17.22).

Water features are used for ice skating in the winter, and snowmobiles use trails and highway corridors as legally permitted. All recreational pursuits have the potential to require Emergency Services. Depending on the activity, the delivery of Public Safety Services may be a challenge to identify and access.

C. Business & Manufacturing:

1. Mining
2. Fuel Storage
3. Hazardous Materials
4. Solar Farms
5. Agriculture

Gravel deposits have attracted mining operations on private property, but most sites are closed and naturalized over time, or more recently closed and restored according to NYSDEC regulations. Hanson Aggregates New York LLC, offers gravel, stone products, and asphalt materials to area contractors and Municipalities. This property is located in both the Town of Mendon and the Town of Rush, prompting dispatch of both HFFD and the Rush Fire Department to Fire Service calls.

Above and below ground fuel storage is regulated by NYSDEC. Sites include agricultural use, gas stations in the Village and the Hamlet, and Municipal facilities.

Hazardous Materials are present in chemicals used by local manufacturers, auto repair shops, gasoline and service stations, agriculture and in many household products. Most problems present in the storage and/or use of large volumes of these products. Federally regulated Hazardous Material users are required to file annual reports which are shared with local Fire Departments for response planning. Figure 4-14. is the *Town of Mendon EPOD #6, Waste Disposal Site Protection Overlay District* locating Municipal and privately owned waste disposal sites.

Solar Farms are applying for building permits and site plan review. There is an installation in the Town, accessible from Quaker Meeting House Road.

Agriculture use is prominent on tillable acreage within the Town. The number of farms continue to dwindle, but farmlands remain in active production through land rentals. In addition to traditional crop farms for grains, beans and hay production, there is a vineyard in Town, and fruit and vegetable production available through local farm stands.

D. Water (built features):

1. Drainage Storage
2. Recreation
3. Reservoirs

* Potable Supply
* Dams

Engineered as a protective measure for downstream properties, storm water storage in Retention and Detention Ponds are primarily engineered for use in subdivision developments and function in both the Village and the Town. They are more prevalent on the Town’s rural landscape. Figure 4-15. is a map of the “Town of Mendon Retention Ponds.” The roster of locations is Appendix 4-5. (Gates, 10.12.22).

Recreation activity focused on water is pursued rear-round. Detention Ponds can be filled with water and attract nature observers, ice skaters and others. As with natural water features, there is exposure to dangerous ice and water conditions; and, because these ponds are part of a drainage system, there are outlet structures and flow conditions to consider.

The MCWA has a reservoir at the highest elevation in the Town. It is covered with a tarp, reducing exposures to MCWA employees who are trained in appropriate facility inspection and maintenance practices. MCWA property is off-limit to public use.

NYSDEC classifies, inspects and regulates dams. Figure 4-16. is a 3-page roster of these dams noting their hazard classification and engineering specifications for storage capacity and discharge (Manning, 7.28.22). Please note that the dam structure locally referred as the “Lower Falls” on Honeoye Creek in the Village, is no longer viable for water storage, slightly increasing the flood potential on Hyde Park (Village Right-of-Way, one-way street) and for downstream properties.

Some of the dams on the roster are functional parts of drainage systems and are defined as “dams” by NYSDEC because the engineering and operational use of the containment is consistent with NYSDEC “Dam” regulatory identification and function (Manning, 7.28.22).

Natural Features

As with the Target Features, Natural Features also present a risk factor to the Committee. They too are identified with brief narratives and, in some cases, supported by accompanying data to quantify emergency response and/or measure the emergency response. Response experience is again useful to gauge the probability of adverse exposures related to the feature. Figure 4-17. follows the narrative ordering with a graphic, summary account of these features, the exposures they present and the emergency response capabilities required by these calls.

Some Natural feature are tracked, cataloged and calculated for the degree of risk they present to the public. Information and real-time data is gathered from weather stations, gauges, spotters and Emergency Responders for reports to Meteorologists and other agencies that assess conditions and assign a level of risk for public awareness and suggest appropriate action to minimize adverse exposure. We are most familiar with National Weather Service assignments for these conditions and their delivery by broadcasters as “Advisories, Watches and/or Warning” messages.

The history of Natural Feature emergency events for Monroe County and the Town of Mendon are catalogued, monetized and discussed in the *Monroe County Hazard Mitigation Plan, adopted May 9, 2017*, and currently under review and revision. Chapters 9.14 for the Village of Honeoye Falls and 9.16 for the Town of Mendon are Appendix 4-6. and Appendix 4-7. respectively.

Aside from the emergency threat potential, several of these features are identified as natural resources with local legislative protection designed “to provide special controls over land development in sensitive environmental areas to protect vital features and resources.

“[In the Village], the rules and regulations protecting these areas were enacted in 1991, updated in 2019 and are in Article 23 of the Zoning Code (Chapter 190 of the Village Code)” (2022 Village Comprehensive Plan, p.34). The extent and location of these five (5) Environmental Protection Overlay Districts (EPOD) is mapped on Figure 4-18. (Village map dated 3.4.22).

The *Town of Mendon Open Space, Parks & Recreation Master Plan* (Adopted 1.8.01), is an inventory of natural resources and features that provides a base for the Town’s EPOD designations and regulations. The EPOD Maps reflect local legislation to protect sensitive environmental areas. These maps each represent an individual feature and are noted in the narratives below.

Natural Features are:

A. Water

1. Streams & Tributaries:

* Honeoye Creek
* Irondequoit Creek
* Spring Creek

1. Wetlands

The streams and tributaries within the Town flow north to Lake Ontario. As depicted on Figure 4-19. there are two watersheds within the geography of the Town: the Genesee River and Irondequoit Bay Watersheds (Town of Mendon Comprehensive Plan, Town website, 12.17.22). As natural features, these water courses are used for recreation by children and adults for activities such as hiking, fishing, ice skating, observing nature and watercraft adventure. These uses are accessed from the shores of both public and private properties. From season to season these courses change by volume and by current characteristics, and changes can be dramatic with rain swells, snow melt and ice thaw. Primary Fire Department calls are for rescue. Some calls become recovery events.

Figure 4-20. is the “Town of Mendon, EPOD #3 *Watercourse Protection Overlay District*” map (Gates, 8.11.22).

Wetland features attract bird watchers and other nature observers who are also subject to risks associated with the presence of water.

Figure 4-21. is the “Town of Mendon, EPOD #1 *Wetland Protection Overlay District*” map (Gates, 8.11.22).

B. Flooding

1. Flash Flood
2. Waterway Flooding:

* Flood Plains
* Floodways

Flash Flooding is a rapid occurrence when a surge of water presents in an unexpected location and poses a danger. For example, an ice jam or debris tangle on a stream interrupts the downstream flow, diverting water above the natural bank until the jam is breached and the water returns to the stream corridor. The major threats are to motorists along roadways that parallel the stream corridor, especially at night, and to children who may be drawn to the presence of water in an unusual location. Although the flooding inflow may seem to creep in elevation, the outflow of water can be swift and overcome a wader’s footing.

Waterway Flooding is more predictable given the usual occurrences of weather and local drainage behavior that feed the volume of our stream corridors. When there is too much water for containment within steam banks, our built retention and detention ponds, and/or for soil absorption, we experience degrees of flooding. Agricultural flooding varies with soil conditions as depicted on Figure 4-22. the “Town of Mendon, EPOD #9 *Soils Susceptible To Ponding Overlay District*” map (Gates, 8.11.22).

Floodways and Flood Plains are determined and mapped by the Federal Emergency Management Agency (FEMA). Figure 4-23. the “Town of Mendon, EPOD #8 *Flood Damage Prevention Overlay District*” map (Gates, 8.11.22), consolidates FEMA’s multiple map segments for the Town and targets the local threat potential for life safety, property damage and environmental harm. Please note that Honeoye Creek is tagged as a “USGS Stream,” meaning there is a Federal Gauge Station that continuously monitors and records the stream elevation. Stream elevations have downstream implications and they are considered by Hydrologists in calculating and predicting potential flood conditions. Readers should also be aware that the Lower Dam on Honeoye Creek no longer exists to provide storage capacity as a viable protective factor for the downstream landscape.

Flooding is New York State’s #1 hazard. Although events can be predicted, properties, agricultural production and businesses can be insured for loss, mitigation projects can be built to protect property, and public alerting and warning outreach is deployed, human behavior is a major determinate for life safety outcomes. Human behavior is the key to successful outcomes in every emergency condition.

C. Weather

1. Blizzard
2. Ice Storm
3. Wind
4. Hurricane

Significant weather events typically involve local municipal resources that may work in concert with Emergency Services to clear transportation corridors, other public rights-of-way and/or easements to allow access for Fire Departments and other First Responders.

Some of our weather events are seasonal and others can occur year-round as weather patterns present. “Blizzard” conditions are defined by the National Weather Service. Ice Storms and Wind events vary in magnitude and range anywhere from nuisance conditions to major events with power outages, prolonged debris clean-up and/or infrastructure restoration.

Aside from Hurricane Agnes (1972), our local experience with Hurricanes is generally fringe exposures to precipitation and wind.

Presidential Disaster Declarations deploy FEMA assets to affected areas. Figure 4-24. quantifies these declarations by Region and County from 1954 to September 2021. Figure 4-25. monetizes these declarations for Monroe County from 1992 to April 20, 2009 with a note about the March 1991 Ice Storm.

And, Figure 4-26. catalogs activations of the Monroe County Emergency Operations Center (EOC) from 1992 to January 12, 2010 to indicate Natural and Target Feature-driven emergencies that require significant local, County, State and Federal resources across the spectrum from readiness (planning, training, exercising), response, recovery (built and natural landscape restoration, monetary reimbursement) and mitigation (installation of protective measures, revision to readiness measures based on experience). This Figure also contains a chart that separates the duration of the EOC activations for Natural and Target (“Technological”) Features. Readers should note that of the 544.45 hours, 496 hours were in response to Natural Feature emergencies, while 48.45 hours responded to Target Feature emergencies. Although generally predictable, the Natural Features tend to be widespread and require cooperation and coordination of multiple public and private resources. Three of the six noted Target Features were local alarms with Special Operations Team request or protocol-driven EOC activation. The other three activations were requested by the County Executive (Monroe County OEM, 8.1.22).

D. Earthquake

Monroe County, and our local landscape, have measured Earthquake activity. We have not suffered widespread damage, but there has been glass breakage and foundation disturbance in some older buildings. Seismic activity is detected and registered locally by sensors at sensitive structures and at one of our Universities.

E. Woodlots/Woodlands

Figure 4-27. is the “Town of Mendon, EPOD #7 *Woodlot and Timber Harvesting Protection Overlay District*” map (Gates, 8.29.22).

These features overlay private and public property. Public access is usually via parkland and the trail system. These features draw people for recreational pursuits and they may be co-located with other Natural Features like stream corridors for example. The emergent conditions can be human needs like EMS or rescue, and/or fire sparked by natural causes, “wires down” or human behavior. 1.20.23