Chapter 3. FIRE DEPARTMENT OPERATIONS and RESOURCES

There are *three limiting factors for capacity to properly protect life and property and have a positive outcome of fire related incidents: (1) number and size of department pumper apparatus; (2) firefighters available to provide the attack force; and (3) available fire water flow from the community water system* (Dallessandro, p. 44).

OPERATIONS

Staffing

Both HFFD and MEND maintain active rosters with volunteers who are trained and credentialed in fire protection services.

Figure 3-1. is a table quantifying HFFD members by number and by functional assignment from June 2009 to June 2022 (HFFD, 11.7.22). As defined at our Committee meeting on November 9, 2022, “Probationary” is the status assigned to a new firefighter for a 12-month period to assess basic skills comprehension and evaluate functional performance. As represented on the line graphics, the total active force is declining, while “Interior and Exterior” staffing fluctuates.

Figure 3-2. shares a table that reveals “Cumulative Recruitment from 2009 – 2022.” With the exception of year 2022 (as noted through June 1st), each year has gained firefighters. However, retaining these recruits is a different story. As indicated the average retention of members for “years of operational service over the last five (5) years in 2.01” (HFFD, 11.7.22). At our November 9, 2022 meeting, Department members attributed retention to multiple influences including: aging-out; mobility; career and family obligations; academic pursuits; local housing options; cost-of-living; training requirements; and, social changes.

Figures 3-3. (HFFD) and 3-4. (MEND) are historical perspectives on Department retention of active firefighters with notes on their functional assignments as “Interior” and/or “EMT” (HFFD, 11.7.22).

New York State and State-credentialed Monroe County Instructors, deliver training to firefighters in addition to Department-led training requirements. Figures 3-5. (HFFD) and 3-6. (MEND) provide more detail on individual member training achievement and functional status. The table highlights member training achievements with these credentials:

* *Fire Fighter 1*…128 hours
* *Fire Fighter 2*…42 hours
* *Emergency Vehicle Operations (EVOC)*…18 hours
* *Pump Operations*…24 hours
* *Aerial Operations*…24 hours
* *Accident Victim Extrication (AVET)*…20 hours
* *Rescue Technician Basic (RTB)*…24 hours
* *Surface Water*…16 hours
* *Ice Water*…16 hours
* *Hazmat Operations*…16 hours (NYS Fire Training Programs, Course Catalog, 11.21.22)
* *Fire Officer 1*…63 hours
* *Fire Officer 2*…40 hours
* *Fire and Emergency Service Instructor 1*…40 hours
* *Fire and Emergency Service Instructor 2*…40 hours (NYS Fire Training Programs, Course Catalog, 12.8.22).

The “Red Alert” reporting system used by both departments is a data entry platform that captures information about Department response across multiple call types. Departments utilize this reporting system for logging activity and for file retrieval to observe data profiles and patterns of behavior associated with any reportable field of entry. Both HFFD and MEND have researched years of Red Alert reportable data for Committee review and use.

Red Alert reporting catalogs calls for service across a Series of nine (9) titles, which are then further detailed and numbered for identity. Both Departments agreed to consolidate the Series titles into generic call types and upload their average Department staff response to these call types from 2105 – 2022. As described at our Committee meeting on November 9, 2002, “Hazardous Condition,” is a non-fire condition that may include Carbon Monoxide, natural gas and/or noxious fumes.

Figures 3-7.\* and 3-8.\* express tables and graphs for HFFD and MEND response to five (5) general types of calls for the years 2015 – 2022: Structure Fires; EMS; MVAs; Alarms; and Hazardous Conditions. The column titled, “M/asst Request,” represents critical incident planning within the Department to secure the number of personnel they want to integrate with their Department in response to these call types (HFFD, 11.7.22 and MEND, 11.7.22).

Mendon’s average staffing response on Figure 3-8. is a statistical analysis and reveals that the overall staffing level has decreased and that the EMT response has been steady. This “skews the numbers making it [appear that] more EMTs are responding when in reality it is the same long-term Department members” (Meeting Minutes, 11.9.22).

Mutual Aid and Mutual Assistance

*A pioneer of mutual aid fire response since 1941, the fire service in Monroe County has a renowned history of collaboration and cooperation. Each department recognizes the value of a reciprocal exchange of resources in times of need* (Monroe County DRAFT, p. 1).

The Monroe County Plan organizes the local departments into five Battalions, keeping the City of Rochester as a separate and distinct department. Each department within the five Battalions is identified by a department number. And, numbers 0 – 9 are assigned to fire apparatus and Command personnel as recognizable standards for use in radio communications and as apparatus labels for ease of identity in the field with Public Safety operations.

For example, Figure 3-9.:

* HFFD is in the 5th Battalion, Department #6; and,
* MEND is in the 3rd Battalion, Department #6 (Monroe County DRAFT, pp. 18, 19).

Mutual Aid is initiated in concert with the Monroe County 9-1-1 Center. Fire Command requests “Mutual Aid” response for additional staff and/or apparatus. Dispatch conveys this request and responding departments(s) become part of the requesting department’s assets as defined by NYS General Municipal Law, Section 209 (FASNY, pp. 256-269).

Mutual Assistance…varies from Mutual Aid in that it is not a temporary, one-time request for assistance. It is a planned approach prescribing pre-determined, automatic response from another department incorporating their resources to augment local department staff and/or apparatus. It is established by agreement and considers specific call types, time-of-day, department staffing patterns, and/or department experience with response times and equipment requirements. For example, “Mendon has a Mutual Assistance (automatic dispatch) agreement with Fishers Fire Department to cover the hours of 8:00 p.m. to 8:00 a.m. for overnight EMS calls because of a number of unanswered EMS calls by the Mendon Fire Department” (Meeting Minutes, 11.9.22).

Both HFFD and MEND have established Mutual Assistance agreements with neighboring departments. These operations are standing protocol assignments with the 9-1-1 Center for dispatch on their respective call types. Figure 3-10. is a table depicting Mutual Assistance arrangements for both Departments naming the involved departments, the prescribed arrangement and the governing jurisdiction for each assisting department.

Figure 3-11. depicts both Mutual Aid and Mutual Assistance calls for HFFD and MEND as shared Fire Service calls within the (municipal boundary) of the Town of Mendon.

Figure 3-12.\* depicts Mutual Aid and Mutual Assistance, both given and received by HFFD for 2015 – 2022. The number quoted for “Aid Given” on this Figure, represents one (1) truck, whereas the “Aid Received” number represents the total number of units responding to the request for assistance (Meeting 11.9.22).

Figure 3-13.\* depicts Mendon’s data for the same period of time. The original data used to create the table is Appendix 3-1\*.

Given that Mutual Assistance is a prescribed protocol establishing an agreed automatic dispatch by the Departments, Fire Service jurisdictions, and some counties, may require a formal, written agreement to stipulate the arrangement and define jurisdictional responsibilities for liability, compensation and other administrative needs associated with contractual services. Jurisdictional authority may be necessary to ensure the Department’s expectation for continuity of assistance.

Apparatus and Equipment

Apparatus identified in the accompanying Figures is assigned to call types based on its primary purpose and the equipment it carries. Functional capacity, maintenance and financing are all part of the calculation in determining life expectancy of fire apparatus. In many cases, the cost of apparatus must be financed: the loan period can not exceed the probable useful life of the vehicle.

Figure 3-14. is an apparatus roster and equipment inventory for HFFD that provides the unit number together with the vehicle’s functional capacity and special equipment. Financial information about purchase, life-expectancy for its use and a replacement estimate are also recorded. Further details on each unit are provided on subsequent pages of this Figure.

Figure 3-15. is a similar format for MEND. Mendon indicated the sale price of the previous unit when it was retired and replaced.

Calls For Service

Dispatch and Radio Communications. Both HFFD and MEND are subscribed by their respective jurisdictions for primary dispatch services from the Monroe County 9-1-1 Center. When an emergency call for fire service within the Town of Mendon is received, the fire department assigned to the location is alerted and dispatched. Based on the call type, fire department response may be accompanied by law enforcement and/or ambulance service.

Radio communications between the Dispatcher and responding units proceed per protocol established in the, *Rules and regulations governing fire service communications within Monroe County as authorized by the Federal Communications Commission, the Monroe County Fire Advisory Board and the Monroe County Fire Coordinator’s Office.*

*The Fire Service Communications plan provides a uniform directive for fire-based radio system communications, and addresses the operation of…[all] systems that are used to facilitate public safety radio operations in an all-hazards environment.*

*The proper and professional use of the radio and our ability to have clear and concise communications…is paramount in today’s modern fire service. Our ability to communicate resource needs and situational updates is imperative to our ability to maintain an atmosphere of control and stability.*

*Our collective approach to public safety communications in Monroe County includes other relevant documents* that guide Emergency Service deployment and interoperable communications (Monroe County DRAFT, p. 1).

Call Types. As previously stated, both HFFD and MEND have defined their Call Types, and both have graphed their “Fire, Rescue and Total Calls.” HFFD Figure 3-16.\* and MEND Figure 3-17.\* chart these calls from 2015 – 2022.

Time of Calls. The total numbers of calls are further defined by each Department according to:

* Month of the year, Figure 3-18.\*;
* Day of the week, Figure 3-19.\*; and,
* Time of day, Figure 3-20.\*.

Box #s/Emergency Service Zones. Each Department divides their bounded protection territory to plan their response protocol. They consider “Natural and Target” features in each zone, together with anticipated staffing response and travel time to establish each zone. As provided by each Department:

* Figure 3-21. is the HFFD territory and its geographic assignments for Box/Zone numbers; and,
* Figure 3-22. is the MEND territory and its geographic assignments for Box/Zone numbers.

Call Locations. Both Departments reported their number of calls to each of their Boxes/Zones:

* Figure 3-23.\* charts HFFD response from 2015 – 2022 to each area and the number of hours ascribed to these calls.
* Figure 3-24.\* summarizes these calls for their jurisdiction and their contract territories with an additional entry specific for Mendon Ponds Park. Mutual Aid given by the Department is noted as a separate category.
* Figure 3-25.\* ascribes Mendon’s call volume for the same period of time, with the addition of data for 2000, 2005 and 2010.

Response Times. “Response Times” as a general category may be a subjective measure, and should be further defined into finite terms.

Figure 3-26.\* is HFFD “cumulative averages for enroute and on-scene times” to two (2) of their protection territories, with “Average Response Times” for their total call volume including Mutual Aid given by HFFD.

Mendon’s graphic will be referenced here as Figure 3-27.\* when it is available. Based on the Village location of the Ambulance Base, and the inherent travel time to the Mendon Fire District, MEND is dispatched for first response on EMS calls.

RESOURCES

*Every emergency is local.*

The majority of fire service calls to 9-1-1 are considered “High Risk – Low Impact,” meaning they may present a high risk to an individual or a small number of people, but the adverse impact is a small scale footprint, i.e. one building, one property, without consequence to the greater community surrounding the scene. These are what the Departments’ describe as “Routine Calls” – they have members who are appropriately trained for response to these call types, and they have apparatus specifically designed and equipped for response. As verified by Department data, these calls are the majority of their total call volume.

Fire Protection assets are augmented when the nature of the call type exceeds local staffing and/or apparatus capacity. This is already apparent in Department standard operating practices for Mutual Aid requests and with automatic dispatch for Mutual Assistance.

There are additional levels of assistance available to local Departments to integrate specialized resources based on the call type, the duration of the response, the impact of the call beyond the immediate scene, the impact on the financial resources of the community, the lingering period of time required for community recovery from the incident, and the magnitude of the call on social and economic resources.

Special Operations Teams.

Teams are available from the County, the Region and New York State to respond with assistance: specialized equipment, situation experts, asset coordination, Incident Command Staff, communications, staffing for shift change continuity and public information interface are among other aspects that may be necessary for a safe and effective response.

We are familiar with these resources as they have assisted us across at least three decades with:

* County Special Operations teams for HAZMAT, Swift Water and Ice Water Rescue, Lost Person searches, air crashes;
* County-wide resource availability through the Emergency Operations Center (EOC) for community-wide response and asset management, mostly for weather-related events;
* The “NYS Fire Mobilization and Mutual Aid” Plan empowering the State Fire Administrator to implement the Plan and move fire protection assets within the state (FASNY, p. 261);
* New York State asset assistance with National Guard deployment and other State department resources, i.e. NYS Police, DOT, Health; and,
* Federal assistance, primarily with recovery efforts that focus on monetary reimbursement to public treasuries, and sometimes individual assistance with uninsured losses and business recovery.

Water Supply.

The Monroe County Water Authority (MCWA) sources Hemlock Lake and Lake Ontario for our local public purposes, provides any treatment and distributes the water via a system they maintain and expand including hydrants for fire suppression. Figure 3-28. is a MCWA map of water mains and hydrants in the Town of Mendon, including the Village.

 *Community Fire Protection. The same system of water mains, pumps and storage tanks that reliably provides clean tap water to your home also provides excellent fire protection for the community.  We are proud to provide this important service to our entire customer base.*

 *Always at the ready. While firefighters primarily handle hydrants in an emergency, MCWA takes responsibility for day-to-day hydrant operation and maintenance.  This means keeping clean water flowing — at the right pressure — to working hydrants around the clock all year long.*

 *An extensive challenge. In MCWA’s service area, we properly tend to more than 27,000 public fire hydrants strategically placed along our 3,400 miles of water mains.  Having a hydrant relatively close to a home or building can be a factor in fire insurance premiums* (MCWA Website, Fire Protection, 9.11.22).

New York State Town Law, Section 198.3.(b) authorizes, “The town board [to] contract with any person or corporation, municipal or otherwise, or with a town or county on behalf of a water district, for a supply of water, for a term not to exceed forty years” (FASNY, p. 670). The current “Retail Lease Agreement for Operation of Water Districts” between the Town of Mendon and the MCWA, expires in March, 2042 (MCWA Agreement, p. 1).

The Town of Mendon has one water district - District #1, with separate and distinct sub-areas for capital costs and consumption billing. They are known as: “District #1, Extension 1; District #1, Extension 2; District #1, Extension 3; District #1, Extension 4; and, District #1, Extension 5” (Parmelee, 8.23.22). The MCWA owns, operates and maintains a Reservoir in the Town of Mendon as part of its supply and distribution system (Gates, 8.23.22). All capital costs are typically financed by a 30-year Bond secured by the Town of Mendon, with annual principal and interest charges reimbursed by each District property owner. This charge appears as a separate “Water District” line item on their annual /County Tax Bill.

The Town Board is vigilant in in its role with public water supply as a Public Health measure and to benefit fire protection. The most recent MCWA extension study is a May, 2018 update to previous studies. In its *Preliminary Construction Water Main Estimates Town of Mendon* report, LaBella was commissioned to, “Estimate the cost of District extensions…by road, geographic area…including installation costs, rate projections and financing costs” (May, 2018). At the time of this Study, Labella “Estimated 425 lots [households]” were not served by a public water supply (page not numbered for reference).

New York State Village Law, Section 11-1100 authorizes the Board of Trustees to, “…contract, in the name of the village, with an individual or corporation for supplying water to the village for extinguishing fires or for other public purposes; but such contracts shall not be made for a longer period than forty years” (FASNY, p. 759). The current “Retail Lease Agreement for Operation of Water Districts” between the Village of Honeoye Falls and the MCWA, expires in August, 2042 (MCWA Agreement, p. 5).

Per the Agreement, Section 2.6.e., “Extensions to the existing Village distribution systems by a developer or others, at no expense to the Village, will be owned by the Authority upon completion of the installation” (MCWA Agreement, p. 5).

Finances .

Assessment. Property value is the basis for the community’s municipal tax levy and therein, its capacity to support and sustain public services. In the 1980’s, the Town of Mendon was established as a single Assessing authority for the Town and the Village of Honeoye Falls. In accordance with NYS Law and regulations, the Town Assessor determines property values, establishes parcel assessments, authorizes exemptions, applies equalization rates in computations and adjudicates the appeal process with the Town Assessment Review Board. All actions follow calendar requirements that are determinate dates impacting municipal budgets, exemption filings, and property tax payment schedules.

The property tax levy is calculated at a rate per thousand determined by dividing the municipal budget by the total taxable assessed value of the municipality. The Tax Roll closes on July 1st each year and establishes the Real Property Assessments for the tax levy beginning January 1st of the next year. For example, the Final Roll established July 1, 2021 is the basis for the 2022 levy.

The Mendon Assessor aligns property parcels within their designated Fire Protection boundaries to ensure the tax levy for the service areas are accurately assigned:

* The Mendon Fire District provides its annual budget to the Town. The Assessor calculates the rate per thousand on the taxable assessment and then, on behalf of the District, the Town levies the tax on its Real Property Tax Bill.
* The Village proposes its annual Fire Contract to the Town Board for the Mendon Fire Protection District #1. When the Town authorizes the contract, the Assessor calculates the rate per thousand on the taxable value of the Protection District, and the Town levies the revenue on its annual Property Tax Bill to cover the cost of the Contract.

Both Town and Village tax levies are guaranteed by Monroe County, meaning that neither municipality collects back taxes, nor are they responsible for the procedural process associated with collections. The County guarantees payment on both municipal Tax Warrants (Town Clerk, July 18, 2022).

Real Property Tax Exemptions in the Town of Mendon are established by New York State and by Local Law. These Local Laws are in Appendix 3-2. For FY 2023, Allowable Exemptions are enumerated on Figure 3-29. for the Town, Figure 3-30. for the Village. Wholly Exempted parcels are quantified by number and value on Figure 3-31.

Fire Protection Budgets. Revenue source estimates support, and must balance Appropriation estimates for contractual and personnel expenses within the municipal Fiscal Year (FY): January 1 to December 31 for the Town of Mendon and the Mendon Fire District; and, June 1 to May 31 for the Village of Honeoye Falls. Annual budgets are presented and proceed to adoption by their respective Legislative authority according to legal procedures and calendar requirements. Property tax levies on residents in the Mendon Fire District, Mendon Fire Protection District #1, and the Village of Honeoye Falls are noted respectively on Figures 3-32., 3-33. and 3-34.

Cost considerations include administration, equipment, staffing, property and building maintenance among others. Each governing authority has autonomy and control of its budget within the State’s legal parameters, i.e. Constitutional Tax Limitations, Debt Limitations and the State 2% Tax Cap on municipal budgets.

Indebtedness. Beyond daily and routine operational requirements there is expense associated with capital investment in equipment and property.

Mendon Fire District does not have debt expense. Unlike the sales revenue from Village fire apparatus which is deposited in the General Fund, the District Commissioners can directly apply the sales revenue of their apparatus to the replacement unit. MEND reports that, “the District averages 38% return on investment” of their apparatus (Meeting Minutes, 11.9.22).

Town debt service and Village debt service are expressed for their respective 2023, and 2022 – 2023 Budgets on Figure 3-35. Note:

* The quoted Village Bond for fire equipment was a $500,000 loan with principal and interest payments totaling $720,190.97 (“Final Dunbar Register, 6.7.13,” Village File). NOTE: The loan period for a vehicle can not exceed its probable useful life as defined for financing purposes.
* The quoted Village Bond for the Waste Water Treatment Plant (WWTP) was a $270,000 loan with principal and interest payments totaling $337,913.89 (“Final Dunbar Register, 6.7.13,” Village File).
* The quoted New York State Loan for the WWTP Filter was $180,000. The Interest payments over the period of the loan were subsidized reducing the interest amount to the Village. There are no interest payments required from the Village for FYs 2022-23, and 2023-24. The final payment in FY 2023-24 will be on the remaining principal balance of $30,000.00 and will satisfy the obligation (Anderson, 11.7.22).
* The quoted Town Bond for the Library was a $1,350,000 loan with principal and interest payments totaling $2,052,726.56 (Kelli Parmelee, Town Finance Director, 10.19.22 and 10.24.22).
* The capital expenses for Water Districts within the Town of Mendon are bonded by the Town and repaid by the Town across the life of the Bonds (Parmelee, 11.7.22). But, the cost of the loans is not a Town-wide property tax obligation. The respective Water District property owners are billed for the annual principal and interest cost thereby reimbursing the Town for the cost of these Bonds. Because the cost is not Town-wide, these Bonds are not included for Town indebtedness on Figure 3-35. NOTE. Town indebtedness is not directly attributable to fire protection service: Town debt is included in this Report to convey financial obligations as they relate to each of the three (3) governing jurisdictions.

The Village Bond and Loan payment schedules are in Appendix 3-3. The Town Bond payment schedule for the Library is Appendix 3-4.

Municipal indebtedness is limited by New York State Local Finance Law. As expressed on Figure 3-36. it is a prescribed, finite calculation utilizing the most current Assessment Roll (7.1.22), and four preceding Rolls to establish an average amount; and, then uses a percentage to establish allowable debt at 7%, 3% and 5% as shown on the Figure. This total allowable indebtedness is the sole responsibility of the jurisdiction’s taxpayers. They alone are responsible to satisfy the obligation. Please note that the loan amount may or may not include other costs associated with the debt, i.e. Bond Counsel, bank fees or other financial fees necessary to establish credit.

NOTE: “Total Assessed Value” of the jurisdiction is required for the calculation. This dollar amount was not available for the Mendon Fire District. Since the District does not carry debt, Figure 3-36. utilizes the District’s “Taxable Assessment” for illustrative and comparison purposes only.

Revenue. Other than real property tax, revenue sources may include: interest and earnings on investments, contracts, rentals, sales, refund of expenditures, gifts/donations, state and/or federal aid, transfers from Capital and/or Reserve Funds, grants, and sources available to the Town and the Village such as utilities receipts, payments in lieu of taxes, penalties on real property taxes, franchise fees, Court fees, shared services fees, ambulance service receipts, mortgage tax, and license and permit fees (Adopted 2022 Town and 2022-2023 Village Budgets).

Grant revenue is awarded on a case-by-case basis. The Mendon Fire District and the Village/HFFD have success with various public and private sources as represented on Figures 3-37. and 3-38.

Reserve Funds. The Town, the Village and the Mendon Fire District each maintain Reserve Funds. Their annual budgets identify the specific entitlement of each fund, designate appropriations from these funds for expenditure and identify transfer amounts for deposit. The Town does not have Reserve Account status for Fire Protection as it does not have Fire Protection assets; however, the Town does have a Reserve Account for the Ambulance Facility as it shares ownership of the building with the Village. The monetary balances in the Village and Mendon Fire District Reserve accounts are represented from their respective 2022-2023 and 2022 Budgets on Figure 3-39.

Contracts are mutually agreed by the participating parties and they generally involve the exchange of money or other tangible value for a service. For example: purchase orders to obtain goods and services; property and/or vehicle lease/rental for a specific purpose and designated time; and, for the Town of Mendon, an annual review and renewal of two long-standing contracts for Fire Protection and Ambulance Service with the Village.

Each contract document is prepared by the Village according to the joint Agreement adopted by the participating Legislative bodies. Each of these contracts proceeds through Town Board review and Public Hearing prior to authorization. Our focus is the Fire Protection Contract (2023 Contract is Appendix 3-5).

The Property Tax Levy expressed on Figures 3-34. and 3-33, reflect the Village’s all-inclusive cost to provide Fire Protection service within its corporate limits and within Mendon Fire Protection District #1. NOTE: The contract value (cost) is based on the previous Village FY expenditure with adjustment for overage and shortfall considered as credits and/or debits to the contract parties and the Village taxpayers. The Village Fire Protection Contract for the years 2000 – 2023 is represented on the update of a table originally prepared for another report and now represented in Appendix 3-6.

Although the Village FY does not coincide with the calendar year, the Fire Protection and Ambulance Contracts are written and subscribed for a 12-month period beginning January 1st of each year.

Real Property Assets. The Village of Honeoye Falls, the Mendon Fire District and the Mendon Fire Department, Inc. own real property within the Town of Mendon. These parcels and any improvements to the property, i.e. Fire Stations and ancillary buildings, support fire protection and/or fire department purposes as indicated on Figure 3-40. (LeGrette, 11.9.22). The Town Assessor report on each of these parcels is in Appendix 3-7. (LeGrette, 11.9.22).

Other. The New York State Comptroller issues annual “Fiscal Stress” and “Environmental Stress” scores for local governments. For FY 2021, both the Village of Honeoye Falls and the Town of Mendon received “No Designation” scores for both reports (NYS Comptroller, 10.24.22). The “Fiscal Stress” reports are in Appendix 3-8.

12.8.22