Joint Fire & EMS District Feasibility Study

for the

Dresden Fire Department and Frazeysburg Fire Department

by

The Ohio Fire Chiefs’ Association

August 2016
Executive Summary

At the request of the Dresden Fire Department, the Ohio Fire Chiefs’ Association (OFCA) performed a feasibility study to determine if the formation of a joint fire/EMS district involving the village of Dresden, the village of Frazeysburg and surrounding townships in northwestern Muskingum County would be beneficial to their respective communities. The study included an analysis of the current fire and EMS delivery in the area, risk analysis, examination of equipment and facilities, and creation of a budget based on projected operational expense of a new fire/EMS district.

The Dresden Volunteer Fire Department (DFD), which is a village-operated agency, provides fire protection and emergency medical services (EMS) to the village of Dresden, Jefferson Township, Cass Township and a large portion of Madison Township. Additionally, the department provides fire protection and EMS to Washington Township, which is located in Coshocton County. The DFD is primarily a volunteer agency with 43 volunteer personnel. While this study was being completed, the department implemented in-station staffing utilizing part-time personnel to improve response capability. The station is staffed 12 hours each day from 6:00 am to 6:00 pm. The volunteer personnel respond to all significant incidents and provide response coverage during the non-staffed hours.

Over the past five years, the department has experienced a 15% increase in calls for service. In 2015, the department responded to 636 calls for service. There are also incidences when the department cannot muster enough volunteer personnel to respond to a call. This is occurring with increasing frequency, with 34 occurrences in 2015. Operating expenditures in 2015 were $276,129, with debt service on apparatus purchases and fire station construction accounting for 55% of the total expenditure amount. Operating revenues are generated from contractual fees from the townships served and EMS billing. There also is a bond levy in the village for one of the apparatus purchases.

The Frazeysburg Volunteer Fire Department (FFD), which is a non-profit, private fire company, provides fire protection and emergency medical services (EMS) to the village of Frazeysburg and Jackson Township. Additionally, the department provides fire and EMS service to Pike Township, which is located in Coshocton County. The FFD is a combination department with two full-time, 13 part-time and nine volunteer personnel. The department has two personnel in-station from 7:00 am to 5:00 pm seven days-a-week. The volunteer personnel provide response coverage after 5:00 pm and also respond to all significant incidents.

Over the past five years, the department’s calls for service have remained relatively steady, with a slight increase in EMS demand. Even though the EMS demand has only slightly increased
overall, the number of EMS mutual-aid requests have increased, with a notable increase to assist or cover calls for Dresden. EMS mutual aid responses to Dresden have increased 98% over the past five years. Overall, the department responded to 410 calls for service in 2015. There were also incidences when the department could not muster enough volunteer personnel to respond to a call. This is occurring with increasing frequency, with 18 occurrences in 2015. Operating expenditures in 2015 were $319,831, with debt service on apparatus purchases accounting for 24% of the total expenditure amount. Operating revenues are generated from contractual fees from the village, the townships served and EMS billing.

For the purposes of this feasibility study, the service area of the proposed fire/EMS district included the villages of Dresden and Frazeysburg, and the townships of Cass, Jackson, Jefferson and most of Madison. Additional areas can be added to the district at a later time if desired, or the district can continue to provide services to the current areas served (Pike and Washington Townships) in Coshocton County via contractual agreement.

A conceptual joint fire/EMS district was created in which the Dresden and Frazeysburg Fire Departments were combined into one agency with a two-station configuration to service the area. Two budget scenarios were developed. Scenario A included using the two existing full-time personnel from the FFD as first line supervisors. The full-time personnel would work 10 hours each day, one at each station, Monday through Friday. In addition, each station would have two part-time personnel in-station 24 hours a day, seven days-a-week. The projected operating budget for this scenario, including debt service, was $1,072,255.

Scenario B included having two personnel on duty at each station around-the-clock. This would be accomplished with four full-time personnel working 10 hours each day Monday through Friday and staffing the remaining time and weekends with part-time personnel. The projected operating budget for this scenario, including debt service, was $1,056,228.

An analysis was performed on potential revenue based on several tax levy scenarios along with projected income from ambulance billing and service contracts. These revenue scenarios were then analyzed versus the project operating cost of each staffing scenario. Included in the analysis were three-year projections with inflationary increases of operating expenses and accumulation of reserve funds.

After analysis, the assessment team determined that a joint fire/EMS district was feasible and could provide improved response reliability and improved response times. While creation of joint district would not lower current expenditures, it would provide the citizens with improved response reliability and participating entities long-term financial stability and control over operations and expenditures.
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Introduction

The Ohio Fire Chiefs’ Association received a request from the Dresden Fire Department to perform a feasibility study to determine if the formation of a joint fire/EMS district involving the village of Dresden, the village of Frazeysburg and surrounding townships would be beneficial to their respective communities. To conduct the feasibility study, a review of the two fire departments, including their operations and service areas, was performed.

Dresden Fire Department

The Dresden Volunteer Fire Department (DFD) is located in the village of Dresden, which is located in the north central portion of Muskingum County. The department provides fire protection and emergency medical services (EMS) for the village of Dresden, Jefferson Township, Cass Township and a large portion of Madison Township, all located in Muskingum County. Additionally, the department provides fire protection and EMS to Washington Township, which is located in Coshocton County. All combined, the department is providing service to a population of approximately 3,500 in 109 square miles. A map of the department’s response area is displayed in Figure 1.

Figure 1

Cass Township

Cass Township is located in Northwestern Muskingum County between the village of Frazeysburg and the village of Dresden. Its northern border is the county line separating
Muskingum and Coshocton Counties. Cass Township surrounds the village of Dresden on three sides and adjoins Jefferson Township on its southeast boarder and Muskingum Township to the south. Cass Township has a population of 1,600 and is 28.1 square miles in area. State Route 16 runs east and west through the entire length of the northern portion of the township while the Muskingum River runs from the north to the south, essentially creating the eastern boarder of the Township. Cass Township is home to the Longaberger Homestead and several of their manufacturing facilities and warehouses. The DFD provides fire and EMS service to the entire township through a written agreement at an annual cost of $76,728. Cass Township voters have approved a 2.50 mill tax levy for the purposes of fire protection. In 2015, this levy will collect at an effective (residential) rate of 2.305 mills generating $132,797.

Jefferson Township

Jefferson Township is located in northwestern Muskingum County directly south of Dresden. The southern boundary line of the village of Dresden makes up the northern boundary of Jefferson Township, while the Muskingum River creates the entire eastern boundary of the township. Jefferson Township abuts Cass Township on both the west and southern borders. Jefferson Township has a population of 1,837 and is 1.071 square miles in area. There is one rail line that runs through the township which hauls coal from southern Ohio to the Conesville Power Plant twice a day. The Dresden Generating Facility, owned by American Electric Power is also located in Jefferson Township. The DFD provides fire and EMS service to the entire township through a written agreement at an annual cost of $24,385. Jefferson Township voters have approved a 2.50 mill tax levy for the purposes of fire protection. In 2015, this levy will collect at an effective (residential) rate of .9907 mills generating $30,051.

Madison Township

Madison Township is located in north central Muskingum County bordering Cass Township and a small portion of Coshocton County to its north. The village of Dresden, Jefferson Township and Cass Township make up the western boundary, while Muskingum and Washington Townships make up the southern boundary. Both Adams and Salem Townships make up the eastern border. Madison Township has a population of 445 and is 28.776 square miles in area. The Muskingum River runs from the north to the south creating the entire western and most of the southern border of the Township. There is also a large wildlife area located in the center of the township. The DFD provides fire and EMS service to approximately 75% of the township area through a written agreement at an annual cost of $9,666. Madison Township voters have approved a 2.50 mill tax levy for the purposes of fire protection. In 2015, this 3.0 mill levy will collect at an effective (residential) rate of 2.52 mills generating $30,131.
Washington Township

Washington Township is located in Coshocton County and abuts Cass Township (Muskingum County) on its northern border. Washington Township has a population of 760 and is 24.07 square miles in area. The DFD provides fire and EMS service to the entire township through a written agreement at an annual cost of $24,214. In 2012, voters in Washington Township approved a 2.0 mill property tax levy for the purposes of fire protection. In 2015, this 2.0 mill levy will collect at an effective (residential) rate of 1.587780 mills generating $25,086.

Village of Dresden

The village of Dresden is located in northwestern Muskingum County directly east of Frazeyburg. The village is situated inside of Cass Township and is bordered by Jefferson Township on the south and Madison Township to the east. A portion of the Muskingum River runs along the entire eastern border of the village. Dresden has a population of 1,529 and is 1.307 square miles in area. The village is governed by a Mayor-Council form of government that includes six council members, with the Fire Chief reporting directly to the Mayor. It is interesting to note that four of the council members are members of the fire department.

The village is home to three different schools; Tri Valley High School, Tri Valley Middle School and Dresden Elementary. A single rail line runs through the village which hauls coal from southern Ohio to the Conesville Power Plant twice a day. State Routes 60 and 208 both travel through the village as well.

Funding

As previously identified, the village of Dresden provides services to the townships via a written contractual agreement. Currently, the annual fees collected from those contracts total $134,993, which provide a large percentage of the funding necessary to operate the DFD on an annual basis. The annual contractual fees from each entity are as follows:

- Cass Township: $76,728
- Madison Township: $9,666
- Jefferson Township: $24,385
- Washington Township: $24,214

Additionally, the village provides $52,880 annually to the department. Funds allocated to the fire department come from revenue received from a 2.8 mill bond issue for the purchase of a new fire apparatus for the department. Thus, no general funds monies are allocated for fire department services.
The department also bills for EMS that result in the transportation of a patient to the hospital. Billing is handled by a third-party billing service, Paumier Medical Management Group, Inc., Granville, OH. Annual revenue from EMS billing is approximately $120,000.

Annual expenditures of the fire department were reviewed over a three year period (2012-2015). The type and amount of expenditures appeared to be in order and consistent with the structure and operation of the organization. Debt service for capital purchases accounted for 55% of the total expenditure amount. Those include loan obligations for the fire station construction, an ambulance purchase, and the bond for a fire truck. Each member receives an annual $80 clothing allowance to be used toward the purchase of uniform attire.

**Operations**

The department is an all-volunteer organization with a current roster of 43 personnel. The organizational chart for the department is consistent with what would be expected for organizations of this size and type. The department is led by the Fire Chief, who is responsible for overseeing the entire operation. There are two assistant Chiefs, three line captains, and an EMS captain and EMS lieutenant. Each officer has been assigned an area of responsibility within the operation of the organization. An organizational chart of the department is depicted in Figure 2.

![Organizational Chart](image)

*Figure 2*

There are currently 43 personnel on the department’s roster, with two of those currently enrolled in basic training. Of the 41 active personnel, 24 are cross-trained as firefighters/EMTs. Thirteen are certified as firefighters and four are certified as EMTs. Personnel have various levels of firefighter training. Twenty-five personnel are trained to the Firefighter II (FFII) level, one is certified as a FF I, and 11 are trained to the volunteer firefighter level. Of those personnel
with EMT certification, six are certified as an EMT-P, five are certified as an EMT-I, and 17 are certified as an EMT-B. Please see Appendix A for a complete description of training and certification requirements for the state of Ohio.

Over the past several years the department has experienced an increase in call volume. As a result, the department has been struggling with consistent volunteer availability and response to emergency incidents. According to the Chief, less than half of the current 43-person roster responds to approximately 10% of the calls. This means that 20 members are handling roughly 90% of the call volume. In fact, every third Tuesday is known in the department as “Terrible Tuesday”, due to the fact that the pool of volunteers is diminished so much. This is due to the work schedules of several volunteer members that work as full-time firefighters at other agencies and all have the same shift schedule. Other members work Tuesday’s at a local ambulance service. On those “Terrible Tuesdays”, the staffing for EMS personnel is severely limited or non-existent.

When a 9-1-1 call for service is received, the communication technician at Muskingum County Sheriff’s Office dispatches the run by activating the pagers carried by the volunteers and announcing the run. A text message is also sent to the member’s cell phone at the same time. Those available respond to the fire station, assemble a crew, and then respond with the appropriate equipment to the call. Duty crews have been established to cover EMS calls that occur between the hours of 7:00 pm and 7:00 am. Personnel are assigned to a duty crew that is on duty every sixth night and therefore, are expected to be available to respond to any EMS call occurring during those specific hours.

The department has policies in place that dictate which apparatus or equipment is to be taken to which types of call. Those policies take into consideration areas that have hydrants as opposed to the areas that do not. Additionally, the DFD also automatically receives a mutual-aid engine response from Frazeysburg or Adamsville on any reported structure fire.

Emergency Medical Service is delivered at both the Basic Life Support (BLS) and Advanced Support Level (ALS). The department’s EMS vehicles are equipped with a full complement of ALS equipment including LIFEPAK 12 heart monitor/defibrillators. However, depending on the turnout of volunteers at the time of the call and their level of certification, ALS service may not always be available. Most patients requiring transport are taken to Genesis Hospital in Zanesville. The department operates under the EMS protocol from the Muskingum County Advisory Council.

The DFD has experienced an increased demand in calls for service. In 2011, the department responded to 557 calls for service. In 2015, that number had increased to 636, which reflects a 15% increase in calls for service. During the five-year time period examined, fire responses
have increased 24% while EMS calls have increased 12%. The department’s calls for service over the past five years are displayed graphically in Figure 3.

![Dresden Calls for Service](image)

**Figure 3**

The department’s calls for service are broken down by jurisdiction in Figure 4.

<table>
<thead>
<tr>
<th></th>
<th>Dresden</th>
<th>Cass</th>
<th>Jefferson</th>
<th>Madison</th>
<th>Washington</th>
<th>Mutual-aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>247</td>
<td>152</td>
<td>31</td>
<td>32</td>
<td>49</td>
<td>78</td>
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<tr>
<td>2012</td>
<td>241</td>
<td>152</td>
<td>39</td>
<td>14</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>2013</td>
<td>257</td>
<td>205</td>
<td>32</td>
<td>26</td>
<td>36</td>
<td>44</td>
</tr>
<tr>
<td>2014</td>
<td>261</td>
<td>158</td>
<td>32</td>
<td>37</td>
<td>34</td>
<td>54</td>
</tr>
<tr>
<td>2015</td>
<td>297</td>
<td>198</td>
<td>32</td>
<td>36</td>
<td>48</td>
<td>76</td>
</tr>
</tbody>
</table>

**Figure 4**

As with many volunteer departments today, the DFD may struggle at times to put a crew together as quickly as they would like. With minimal employment opportunities available locally, volunteer personnel frequently must work at jobs some distance away from the area. At certain times of the days or week, assembling a crew for response can be challenging at best.

A sampling of EMS response data from 2015 was analyzed in which a total of 400 calls were reviewed. Specifically, the length of time to get a unit enroute to the call, or turnout time was reviewed. Turnout time is measured from the time personnel are “toned out” or notified for an emergency response to the time the first unit is enroute to the call. Turnout time is a measurement normally used for personnel who are “in-station”. However, in this case, it provides a glimpse if the department is able to muster enough personnel to respond to calls.
The time to get a unit in-service is consistently better that what would be expected of a department located in a somewhat remote area. The department was able to get the first unit enroute to the call within five minutes of receiving the call in 82% of the responses. For 96% of the calls, the EMS unit was enroute to the call within eight minutes of receiving the call. However, there were 16 responses that were in excess of eight minutes to get a unit enroute to the call. The table in Figure 5 shows the turnout time for the EMS calls received in 2015.

<table>
<thead>
<tr>
<th>Turnout Time</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 minutes</td>
<td>329</td>
</tr>
<tr>
<td>6-8 minutes</td>
<td>55</td>
</tr>
<tr>
<td>9-10 minutes</td>
<td>10</td>
</tr>
<tr>
<td>11+ minutes</td>
<td>6</td>
</tr>
</tbody>
</table>

*Figure 5*

It should be noted that there have been times when no one has shown up for a call and the department was unable to respond. There were eight incidences in 2013 when the department was unable to respond to call, 18 incidences in 2014 and 34 incidences in 2015. It is also important to note that in the cases where the turnout time was in excess of eight minutes, the response provided was a limited response. In these situations, mutual aid was utilized in order to get a sufficient number of personnel on the scene to successfully manage the call.

The experience of the OFCA across the state is that volunteer organizations have been struggling for the last 10 years with having sufficient numbers of personnel available to respond. Work commitments, family obligations and some training requirements all affect each organization’s ability to recruit and retain volunteer personnel. The impact on that availability of personnel varies for each local community.

Since the inception of this study, the DFD has taken steps to improve their response time and ensure a crew is available by implementing part-time staffing. There will now be two personnel on-station from 6:00 am to 6:00 pm every day. These personnel will be trained to the EMT (basic) level. At the beginning of this new program, 16 personnel from within the department will provide this coverage, with more soon to be hired from outside of the organization. These members will be paid at the following rate; $9.00 per hour for an EMT, $10.00 per hour for a firefighter/EMT, and $12.00 per hour for a firefighter/paramedic.

**Fire Prevention & Public Education**

The DFD provides a limited fire inspection program, averaging 10 inspections per year. Target hazards, such as places of assemblies, have been identified and efforts are made to conduct these inspections on an annual basis. There are four Certified Fire Safety Inspectors (CFSI) on the
department. The inspectors receive continuing education training through the Zanesville Fire Department and by other neighboring departments. Occasionally, other department members will assist in conducting inspections.

The department has adopted the Ohio Fire Code and utilizes Firehouse Software for their record keeping. The department enjoys a good working relationship with the Muskingum County Building and Zoning Department. The Fire Chief is provided a cursory e-mail from the Building and Zoning Department on any new project. This e-mail will contain the construction plans and the Chief has input on any major concerns.

The department conducts an investigation of all fires, routinely drawing upon three investigators within the department. If additional assistance is required, the department may request support from the State Fire Marshal’s office. The department maintains an excellent working relationship with the Muskingum County Sheriff’s Department and the Dresden Police Department, as the Assistant Fire Chief is the Police Chief of Dresden. Training for investigation of fires is conducted in-house by the Chief and Assistant Chief. The Fire Chief is the program manager and all record keeping is recorded in Firehouse Software.

The DFD provides some public education, including fire extinguisher and CPR classes. These services are provided on an as-needed basis. There are formal activities provided to the schools during fire prevention month. Each year, approximately 125 children will visit the fire station for a fire prevention talk and tours through the fire station. The department also provides a fire prevention presentation to senior citizens. This presentation includes fire extinguisher training and information on fall prevention. The department gives out smoke detectors as part of Project Safe. These detectors are free and offered to village residents. The 2nd Assistant Chief is the manager of these programs and uses Firehouse Software to manage the records.

The department stays very involved in the community. The department hosts a monthly baked steak fry in the fire station, which is a very popular event. The department also participates in the annual Dresden Village Homecoming. The department runs the bingo booth and collects all proceeds, which benefits the fire department. Marketing for recruitment and fire prevention is conducted through the local newspaper, State of Ohio 1-800-Volunteer, and by visiting the local high school.

**Hiring**

The hiring process at the DFD consists of the applicant completing a written application and submitting it for consideration. The applicant is then interviewed by a committee consisting of fire department officers, firefighters and a council member. Upon successful completion of the interview, the Dresden Police Department conducts a background investigation on the applicant.
After successful completion of the interview and background investigation, the applicant’s name is submitted to Dresden Village Council for appointment. Once appointed to the fire department, the applicant is then placed in the department’s mentorship program and assigned to a “mentor” for his or her orientation and training.

**Risk Assessment**

In Dresden, the department faces typical occupancies normally found in a town of this size. The village has a small “downtown” area which contains several multi-story buildings and various small commercial occupancies. These properties individually would pose a moderate risk. However, with the age of the buildings and the features of what is classified as “ordinary construction” methods, any fire gaining headway in one of these buildings would endanger numerous adjacent structures.

Several significant risk properties were identified within the department’s response area. The Longaberger manufacturing facility is located on Raiders Road in Cass Township. The complex is comprised of multiple, large, steel-engineered buildings used to manufacture and assemble their products (baskets). The AEP- Dresden Generating Facility is a natural gas-fired power plant located in Jefferson Township, which has a large number of hazardous materials on site. There are three different schools located in Dresden; Tri-Valley High School, Tri-Valley Middle School and Dresden Elementary School. Schools always pose a risk due their size and high number of students; however, these buildings are relatively new, fully sprinklered, and feature noncombustible construction.

There are two railroads that run through a large portion of the response district. One line runs through Jefferson Township, Cass Township and Dresden, which hauls coal from southern Ohio to the Conesville Power Plant twice a day. The second line runs east and west through Cass Township and is operated by Genesee & Wyoming Railroad (known locally as the Ohio Central Railroad).

The Muskingum River runs in a north-south direction through Muskingum County between Cass and Madison Township. The river separates Dresden and Jefferson Township from Madison Township. There is considerable river traffic during the summer along with a low-head dam just south of the coverage area in Madison Township.

**ISO Classification**

Insurance Services Office, Inc. (ISO) is the leading supplier of statistical, underwriting, and actuarial information for the property/casualty insurance industry. ISO conducts field evaluations in an effort to rate communities and their relative ability to provide fire protection.
and mitigate fire risk. This evaluation allows ISO to determine and publish the Public Protection Classification (PPC). The published classification is based on a scale of 1 through 10, with 1 being the highest rating and 10 indicating no recognized fire department. The PPC rating for the DFD district is broken down as follows:

- Village of Dresden – Class 4
- Cass Township – Class 4/9
- Jefferson Township – Class 4/9
- Madison Township – Class 9/10
- Washington Township – Class 9/10

How the PPC for each community affects business and homeowners can be somewhat complicated because each insurance underwriter is free to utilize the information as they deem appropriate. Most underwriters in Ohio utilize what’s called in the industry, the “suburban rule.” For example, Jefferson Township has a split rating of 4/9. What this means is that businesses and residents in the township who are located more than 1,000 feet from a fire hydrant, but not over five road miles from the fire station receive a rating between 4 and 9, usually a rate over an 8 but under a 9. The reason that the rating is generally not more favorable is due to the lack of a dependable water supply. When the ISO field evaluation is conducted on communities, the overall water system, including pumping capacity, storage capacity, distribution system and system maintenance, carries a weight of 50% of the total evaluation. Thus, most township areas do not have the benefit of a water system and as a result, a higher PPC. The residents and businesses in Dresden carry a PPC of 4. This is in part due to the village’s existing water distribution system.

For many insurance underwriters, the difference for homeowners between a 6 PPC and an 8 PPC is fairly minimal. However, the difference between an 8 PPC and a 9 PPC can be significant and is realized by higher insurance premiums for homeowners’ insurance. Most underwriters consider properties over five miles from a recognized fire station to receive a 10 PPC and would be subject to higher premium rates for coverage.

**Training**

Most of the training is delivered in house under the direction of one of the Assistant Chiefs, a captain and the EMS captain. The members of the department meet every other Wednesday to discuss the business of the organization and conduct training. Every other meeting is dedicated to fire training while the remaining sessions are dedicated to EMS training. The fire station has a more than adequate room to conduct the training sessions, and there are many hands-on “props” available for use by the department members. Of particular note was an entire sprinkler system that was set up in the apparatus bay floor area that is used for training purposes. The system can be pumped, activated and shut down under live conditions in the training setting.
The Dresden Volunteer Fire Department has one station located at 21 W. 9th Street in Dresden. Built in 1998, this fire station is a 17,400 square foot facility with six drive-thru apparatus bays with 12’ x 14’ doors. This facility blends well with surrounding community. Walking through the administration portion of the building, it is filled with pictures telling the rich and proud history of the department. There are few concerns related to maintenance, public access, staff facilities, safety and efficiency. The station was given a physical on-site review for the general condition, maintenance, size, efficiency, and staffing capability. Particular emphasis was placed on the ability of the station to support the mission of the department now, as well as into the future.

- Design

The size of this facility is adequate for the staffing. It was noted during the inspection there were no bunk rooms if the staffing plan calls for 24-hour operation. There is ample room to construct or redesign areas for sleeping quarters.
• **Safety** Building is not sprinklered, but is equipped with a fire alarm system that is tied into the county dispatch center. The kitchen is equipped with a commercial range with an Ansul hood system. The station is equipped with a diesel-powered emergency back-up generator.

• **Environmental** Building has an apparatus exhaust removal system. The turnout gear is stored in a separate room with a functional exhaust system in place.

• **Code Compliance** Does not appear to be fully ADA compliant.

• **Staff Facilities** Adequate amount of space for rapid response and to work around apparatus. There is plenty of general storage space. The far bay is a dedicated bay for apparatus washing and maintenance. The bay has separate rooms for turnout gear cleaning, a tool room, breathing air compressor and a storage room for fire hose. The station has a dedicated training room equipped with modern audio-visual equipment and several training props. There is adequate office space for the administrative staff and other related functions.

**Apparatus & Equipment**

The DFD has a large fleet of apparatus. An overall general impression of the fleet is that it is well-maintained and is more than appropriate in size to meet the department’s service needs. The assessment team reviewed the maintenance records and inventories for each piece of apparatus and found them to be in order. All fire apparatus are equipped to NFPA and ISO standards. The department’s apparatus fleet consists of three engines, one rescue, two medic units (EMS transport vehicles) one tower, and two grass/brush units. The following is a brief description of each piece of apparatus and equipment.

*Engine 202* is a 2011 Pierce pumper with a 1,500 GPM pump and carries 1,000 gallons of water. The unit has a 30 gallon class “A” foam tank and is equipped with a compressed air foam system (CAFS). The vehicle is equipped with the necessary equipment required by NFPA 1901: *Standard for Automotive Fire Apparatus*. This vehicle is in excellent condition and has 5,246 miles.
**Engine 205** is a 2005 Pierce pumper with a 1,500 GPM pump and carries 1,000 gallons of water. This apparatus is well-equipped with the necessary equipment required by NFPA 1901. The apparatus is in good condition and has 13,814 miles.

**Engine 201** is a 1993 Sutphen pumper with a 1,500 GPM pump and carries 1,000 gallons of water. This apparatus is a reserve engine and carries the equipment necessary to meet NFPA 1901. The apparatus is in good condition and has 22,913 miles.

**Tower 208** is a 1983 Sutphen 100’ aerial tower platform with a 1,250 GPM pump and carries 300 gallons of water. The apparatus meets the requirements of NFPA 1901 for equipment needed for a ladder truck. This apparatus was purchased used from another department. The apparatus is in fair condition and has 11,525 miles.

**Rescue 206** is a 1991 International walk-in rescue apparatus. This rescue apparatus can be used as a third EMS vehicle but is considered as a non-transport unit. This apparatus meets the requirements for NFPA 1901. This apparatus carries specialized equipment such as a MARCS mobile radio with a repeater, and a “patch” system to tie the department’s VHF portable radios to the MARCS system. There also is a command center with desk and radios in the walk-in box. The apparatus carries hydraulic rescue tools and other equipment for auto extrication and other rescue situations. This apparatus is in good condition and has 27,698 miles. This apparatus was purchased used approximately 10 years ago.

**Tanker 203** is 1997 International water tender that carries 3,800 gallon of water. It also carries two 2,000 gallon drop tanks that allow fire crews to establish water shuttles to provide a temporary water reservoir with sufficient capacity to sustain water application in lieu of hydrants in rural areas. This apparatus was donated to the department from a local oil company. The apparatus was retrofitted to meet the needs of the department, but does not meet the requirements in NFPA 1901 for mobile water supply apparatus. This unit is in good condition and has 375,508 miles.

**Grass 204** is a 2005 Ford F-350, 4 wheel-drive truck. The unit has a skid-mounted 300 GPM pump and carries 300 gallons of water. The apparatus also has a 30 gallon class “A” foam cell tank. The apparatus is well-equipped with brush firefighting equipment. This unit is in fair condition and has 5,994 miles.

**Grass 208** is Kawasaki Mule ATV. This unit is equipped with a skid-mount portable pump and carries 90 gallons of water. This is a versatile unit which can be used for fighting grass fires, remote EMS patient transport, and used in the winter to plow snow on the fire station’s driveways and pads. This unit is transported on a trailer hauled by Grass 204. This unit is in good condition.
Command 207 is a 2008 Ford F-150 pick-up truck that is used as a utility vehicle. It can be used by members traveling to offsite training programs or utilized as a command vehicle. The vehicle is in good condition and has 40,578 miles.

Medic 210 is a 2014 PL custom medium-duty, modular ambulance on a Ford F-450 chassis. This unit is configured and equipped to deliver ALS care and transport service, including a LIFEPAK 12 heart monitor/defibrillator. The unit is in excellent condition and has 15,388 miles.

Medic 209 is a 2003 McCoy Miller medium-duty, modular ambulance on a Ford F-350 chassis. This unit is configured and equipped to deliver ALS care and transport service, including a LIFEPAK 12 heart monitor/defibrillator. The unit is in good condition and has 93,008 miles.

The department also is equipped with two boats; one is inflatable and the second is a v-bottom boat. Both are carried on the same trailer and are set up for rescue and recovery. The boats are hauled by Grass 204 or Command 207. Both boats are considered to be in good condition.

The department’s apparatus and equipment maintenance programs are delivered through a number of different scenarios. While weekly inspection and minor maintenance are performed by the volunteer staff, the more complex and heavier repairs are completed by Finley Fire Equipment. Department personnel who have the background and experience perform the preventive maintenance work.

There is no document or formal plan for an apparatus replacement schedule. There is an informal plan to replace engines and medic units every 10 years. The utilization of a replacement program would enable the department to plan an adequate long-term resource strategy designed to meet future monetary obligations.

**Equipment Maintenance & Self-Contained Breathing Apparatus**

Pump testing and subsequent repairs are performed on an annual basis by Finley Fire Equipment Co. The ISO, NFPA and pump manufacturers recommend or require annual pump testing of all in-service fire department pumper.

The department has 30 Scott 4.5 self-contained breathing apparatus (SCBA). The air packs vary in age, but the department received an Assistance to Firefighter’s Grant (AFG) in 2002 to purchase SCBA units. The SCBAs are generally in good condition. General maintenance is performed in-house by one of the captains. Warren Fire Equipment Company conducts the annual flow testing on each unit. There are spare cylinders available for each of the units, which are carried on the apparatus. Warren Fire Equipment also conducts the hydrostatic testing of these cylinders.
Each member is fit-tested for facepieces annually by department personnel utilizing department owned equipment. Medium-sized facepieces are stored with each SCBA unit at the riding positions with extras located in the apparatus. Firefighters requiring a size other than medium are issued their own individual facepiece. These records are maintained appropriately.

The department has its own breathing air compressor to refill these cylinders. The compressor is housed in a separate room inside the fire station and includes an outside air intake. The compressor is a Bauer Eagle Cadet II. Breathing Air Systems of Reynoldsburg, OH, conducts annual compressor maintenance. The maintenance also includes air quality testing which is done on a biannual basis. The air quality testing is in accordance to NFPA 1989: Standard of Breathing Air Quality for Emergency Services Respiratory Protection. These records are appropriately recorded and maintained.

Hose testing is conducted annually by department personnel using a Delta hose tester in accordance with NFPA 1962: Standard on the Inspection, Care and Use of Fire Hose, Couplings, and Nozzles and Service Testing of Fire Hose. ISO also requires the proper testing and maintenance of fire hose and documentation retained for their analyses when conducting a public protection classification survey. The fire hose inventory varies in age but all appeared to be in good condition.

EMS supplies and storage appeared to be adequate. There is a separate room for backboards and CID equipment. This room also contains four oxygen cylinders that are cascaded to fill “D” size portable cylinders. The EMS supplies are kept in kitchen style cabinets in the hallway leading from the apparatus bay. The department utilizes a drug bag exchange program with the Genesis Health Care System. Each bag has sealed compartments using numbered seals. Each time the bags are used the drug bag is exchanged with a new bag.

The EMS division has two Physio-Control LIFEPAK 12 heart monitors/defibrillators in service. These units were purchased in 2009 and one is carried on each medic unit. These units appeared to be in fair condition. At the time of the site visit there were no service records for these units. There are two Zoll Automatic External Defibrillators (AED) carried on Rescue 206 and Engine 202.

**Personal Protective Equipment**

The department issues structural firefighting protective clothing and wildland firefighting gear to all of their members. Currently, the department uses turnout gear that is manufactured by Janesville. The outer shell is fusion (a blend of nomex and Kevlar) and features a liner comprised of E-89 araflo. All personnel were issued a traditional Cairns 1010 helmet. A review
of the personal protective clothing (PPE) indicated it was relatively new and in good shape. The gear is cleaned in-house utilizing the department’s extractor. The department is on a 10-year replacement cycle that is overseen by one of the captains.

Communications

The DFD is dispatched by the Muskingum County Sheriff’s Office, which is located in Zanesville. The communications center is housed in a secured facility that is equipped with a back-up generator. Staffing consists of two to three dispatchers on duty each day that provide dispatching services for the Sheriff’s personnel and all of the fire departments in Muskingum County. There is a computer-aided dispatch (CAD) software system in operation, but it is underutilized for fire dispatching or operations. The dispatchers do have the ability to dispatch multiple departments to the same event. DFD has requested that that the communications center dispatch Frazeysburg Fire Department simultaneously when Dresden is dispatched to a structure fire.

The department operates on a VHF band for both dispatching and tactical operations. They are also equipped with MARCS radios, which allow them to communicate with departments in Coshocton County. Recently, a repeater was installed in the rescue unit which will allow Dresden to “patch” their high band radio with the MARCS radio system.

Every officer on the department has been assigned a portable radio, and a portable radio is assigned to each riding position on each apparatus. These portables are Motorola 1250 radios that are approximately six-years old and appear to be in good condition. The radios in the vehicles are Motorola Radius mobiles that are the same age and in good condition. The radios are maintained by Commercial Electronics, an authorized Motorola dealer in Zanesville.
FRAZEYSBURG FIRE DEPARTMENT

The village of Frazeysburg Volunteer Fire Department (FFD) was established in 1944 and continues to serve today as a full-service agency. The FFD provides fire and EMS services to the village, Jackson Township, and Pike Township, which is located in Coshocton County. The department is incorporated as a non-profit, private fire company under regulations established by the state of Ohio. The department is governed by an association, which has an established set of by-laws and regulations. A map of the department’s response area is displayed in Figure 6.

Figure 6

JACKSON TOWNSHIP

Jackson Township is located in the northwestern corner of Muskingum County. Its northern border is Coshocton County (Pike Township) and Licking County is located on its eastern border. Jackson Township surrounds the village of Frazeysburg and adjoins Cass Township to the east and Licking Township to the south. Jackson Township has an area of 24.4 square miles and a population of 1,125, which does not include Frazeysburg. The FFD provides fire and EMS services to the township by through a contractual agreement at an annual cost of $19,463. Jackson Township has two 2.5 mill (5 mill total) fire and EMS levies. These levies run through 2017.
Pike Township

Pike Township is located in the southwestern corner of Coshocton County. Its southern border is Jackson Township and Licking County is located on its western border. Pike Township has an area of 24.6 square miles and a population of 700. The FFD provides fire protection services via contractual agreement at an annual cost of $31,392. Pike Township has a .75 mil and 1.75 mil (2.5 mill total) fire protection levies that run through 2016.

Village of Frazeysburg

The village of Frazeysburg is located within the boundaries of Jackson Township in the northwest corner of Muskingum County. It has an area of approximately 0.92 square miles and a population estimated at 1,600. The village is governed by a Mayor-Council form of government. The village is essentially rural with a mix of residential development, commercial occupancies, and light- and heavy-industrial properties. Main roadways in the area include State Route 16, State Route 586 and State Route 79. The east-west line of the Genesee & Wyoming Railroad (known locally as the Ohio Central Railroad) traverses the village, handling approximately 8-10 trains a day. The department provides services to the village by contractual agreement at an annual cost of $73,891. The village currently has a 5 mil fire and EMS levy that provides the revenue to pay the contract fee.

Funding

As previously identified, the FFD provides services to the village and Jackson and Pike Townships via a written contractual agreement. Currently, the annual fees from those contracts total $224,746, which provides a large percentage of the funding necessary to operate the FFD on an annual basis. The annual contract amounts are as follows:

<table>
<thead>
<tr>
<th>Township</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frazeysburg</td>
<td>$ 73,891</td>
</tr>
<tr>
<td>Jackson Township</td>
<td>$119,463</td>
</tr>
<tr>
<td>Pike Township</td>
<td>$ 31,392</td>
</tr>
</tbody>
</table>

Additionally, the fireman’s association conducts fund-raising efforts to support the department. In 2015, the association donated $1,181. The department also bills for EMS that result in the transportation of the patient to the hospital. Over the past two years, the department has averaged $82,000 annually in EMS revenue. The total income for the department in 2015 was $326,718.

Annual expenditures of the fire department were reviewed over a two-year period (2014-2015). The type and amount of expenditures appeared to be in order and consistent with the structure and operation of the organization. The total operating expense for 2015 was $319,831.
Operations

The department is a combination organization utilizing full-time, part-time and volunteer personnel. The department has a total of 24 members. The department maintains two personnel in-station seven days-a-week from 7:00 am to 5:00 pm. This staffing is accomplished with full-time and part-time personnel. Volunteer personnel provide response coverage between 5:00 pm and 7:00 am. The part-time personnel receive hourly compensation. There are two full-time, 13 part-time and nine volunteers. The current roster consists of paramedics, Emergency Medical Technician-Intermediate (EMT-I), Emergency Medical Technician-Basic (EMT-B) and members in various stages of certifications.

The department is led by the Fire Chief, who is responsible for overseeing the entire operation. There are two Assistant Chiefs, two captains and two lieutenants. Each officer has assigned areas of responsibility within the operation of the department. The organizational chart of the department is depicted in Figure 7.

![Organizational Chart](image-url)

**Figure 7**

The agency does not have any in-house technical rescue assets. Technical rescue responses are coordinated with Falls Township, Dresden, and Zanesville Fire Departments, as well as the Licking County and Muskingum County EMAs.

The department has established procedures that outline the promotional process and service and certification requirements for each of the positions. The department has a complete set of by-
laws, code of conduct, and rules and regulations that govern employee expectations and responsibilities. This includes comprehensive job descriptions for each position, including roles and responsibilities for officers.

The calls for service over the last five years have remained relatively steady, with a slight increase in EMS demand. In 2011, the department responded to 380 calls for service. In 2015, the department responded to 410 calls for service, which is an 8% increase in demand. In 2013 however, the department responded to 476 calls for service. The calls for service over the past five years are displayed graphically in Figure 8.

![Frazeysburg Calls for Service](image)

**Figure 8**

The department’s calls for service are broken down by jurisdiction in Figure 9.

<table>
<thead>
<tr>
<th></th>
<th>Frazeysburg</th>
<th>Jackson</th>
<th>Pike</th>
<th>Mutual-aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>151</td>
<td>95</td>
<td>47</td>
<td>87</td>
</tr>
<tr>
<td>2012</td>
<td>182</td>
<td>124</td>
<td>53</td>
<td>103</td>
</tr>
<tr>
<td>2013</td>
<td>184</td>
<td>126</td>
<td>56</td>
<td>110</td>
</tr>
<tr>
<td>2014</td>
<td>207</td>
<td>100</td>
<td>37</td>
<td>101</td>
</tr>
<tr>
<td>2015</td>
<td>183</td>
<td>80</td>
<td>31</td>
<td>116</td>
</tr>
</tbody>
</table>

**Figure 9**

As noted previously, the department has experienced an increase in EMS demand. Of particular interest is the increase in EMS mutual-aid responses to assist Dresden Fire Department. EMS calls to the village of Frazeysburg have also seen a steady increase. The EMS responses are broken down by jurisdiction in Figure 10.
As identified previously in this section, FFD staffs two people in-station from 7:00 am till 5:00 pm daily. This is primarily to have sufficient personnel to respond an ambulance unit, but those personnel are also trained as firefighters and can respond to fire and rescue incidents as well. This step was taken several years ago due to problems the department was experiencing having enough volunteer personnel available during those daytime hours for a response. But after 5:00 pm, the department struggles at times to have sufficient volunteer personnel available to respond.

A sampling of response data from 2015 was analyzed in which a total of 338 EMS calls were reviewed. Specifically, the length of time to get a unit enroute to the call, or turnout time was reviewed. Turnout time is measured from the time personnel are “toned out” or notified for an emergency response to the time the first unit is enroute to the call. Turnout time is a measurement normally used for personnel who are “in-station”. However, in this case, it provides a glimpse if the department is able to muster enough personnel to respond to calls. For the FFD, the time to get a unit in-service is consistently better that what would be expected of a department located in a somewhat remote area. The department was able to get the first unit enroute to the call within five minutes of receiving the call in 83% of the responses. For 94% of the calls, the EMS unit was enroute to the call within eight minutes of receiving the call. Almost all of those calls within a five minute turnout were during the daytime staffed hours. However, there were 11 responses that were in excess of eight minutes to get a unit enroute to the call. The table in Figure 11 shows the turnout time for the EMS calls received in 2015.

<table>
<thead>
<tr>
<th>Turnout Time</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 minutes</td>
<td>280</td>
</tr>
<tr>
<td>6-8 minutes</td>
<td>38</td>
</tr>
<tr>
<td>9-10 minutes</td>
<td>9</td>
</tr>
<tr>
<td>11+ minutes</td>
<td>11</td>
</tr>
</tbody>
</table>

It should be noted that there have been times when not enough members has shown up for a call and the department was unable to respond. When this occurred, a neighboring mutual-aid
department was called to respond and handle the call. In 2013 this occurred 11 times, in 2014 there were 16 occurrences, and in 2015, there were 18 occurrences. It is also important to note that in the cases where the turnout time was in excess of eight minutes, the response provided was a limited response. In these situations, mutual aid was utilized in order to get sufficient number of personnel on the scene to successfully manage the call. It is also important to note that in cases the department was unable to muster a crew, those available did respond to the incident as a first responder and provide initial care until a staffed ambulance arrived.

**Fire Prevention & Public Education**

Fire prevention activities are organized within the fire prevention-inspection bureau. The department has seven personnel who are CFSI. The village has an active zoning department; however, the zoning department deals mostly with issues not related to the fire department. The village utilizes the Mid-East Ohio Building Department, which serves a five county area for building permits, inspections and other related building issues. This is a cooperative effort that seems to be working well.

Building inspection records are maintained in a paper file format. Since 2011, FFD has averaged approximately four inspections per year. Continuing education required for inspectors is provided in-house by the department.

The department conducts approximately 10 safety and education programs annually, reaching approximately 200-250 people. Some of programs and activities include:

- CPR
- Fire extinguisher training
- Home safety inspections
- School programs
- Business and fire brigade training

The department provides smoke detectors to qualified households including installation. Reflective address markers are also made available to residents. The department is also an active participant in the Frazesburg Annual Homecoming event. The department promotes its mission via the fire department website and Facebook page.

Initial fire investigations are conducted by on-duty personnel. If the fire appears of suspicious origins, the Ohio State Fire Marshal’s Investigative Bureau is called for assistance. The department works closely with Frazesburg Police Department and the Muskingum County Sheriff’s Office. The department does not have any certified investigators; however, members have received training at the Ohio Fire Academy. The department conducts approximately four investigations annually. In 2015, the department was able to successfully prosecute one adult
and one juvenile for arson of motor vehicles. In 2013, the department experienced one civilian fire fatality at a mobile home trailer fire. The department utilizes Firehouse reporting software.

**Hiring Process**

The hiring process at the FFD consists of a multi-step process. After a written application is submitted, a background check is completed on the applicant and then they are interviewed by the Fire Chief and a committee of three department officers. If accepted on the department, the candidate goes through a 20-hour orientation and must serve a one-year probationary period.

**Risk Assessment**

A cursory review was conducted of target hazards within the response area. In the village, the FFD faces the typical occupancies normally found in a community of this size. The village has a small downtown area which contains several buildings and various commercial occupancies. These properties individually would pose a moderate risk. However, with the age of the buildings and the features of what is classified as “ordinary construction and wood frame” methods, any fire gaining headway in one of these building would endanger adjacent structures.

The following locations were identified as potential significant risk properties:

- Frazeyburg United Methodist Church
- Frazeyburg Elementary
- DK Manufacturing
- Englefield Oil Company
- Nora Drive Apartments
- Mound Street Apartments
- Meadow View Church of Christ
- Enlink Storage Tank
- Chicken Production Plant; O’Dell Road
- Chicken Production Plant; County Road 3

**Insurance Services Office (ISO)**

As described previously, ISO is the leading supplier of statistical, underwriting, and actuarial information for the property/casualty insurance industry. ISO conducts field evaluations in an effort to rate communities and their relative ability to provide fire protection and mitigate fire risk. The village of Frazeyburg and surrounding townships currently have a PPC rating of Class 05/5X. The most recent evaluation was April, 2015.
How the PPC for each community affects business and homeowners can be somewhat complicated because each insurance underwriter is free to utilize the information as they deem appropriate. Most underwriters in Ohio utilize what’s called in the industry, the “suburban rule.” In this case, the split ratings identified for the village of Frazeysburg, Jackson Township and Pike Township are a 05/5X. The village and the areas of the townships receiving a 05 rating are properties within five road miles of a recognized fire station and within 1,000 feet of a fire hydrant or alternate water supply. For those businesses and residents in areas of the townships who are located more than 1,000 feet from a fire hydrant but not over five road miles from a recognized fire station are assigned a 5X rating. The reason that the rating is generally not more favorable is due to the lack of a dependable water supply. When the ISO field evaluation is conducted on communities, the overall water system, including pumping capacity, storage capacity, distribution system and system maintenance, carries a weight of 50% of the total evaluation. Some township areas do not have the benefit of a water system and as a result, a higher PPC.

Training

The department conducts internal in-service training once a month. These training sessions are approximately four to six hours in length. The department has one certified fire and EMS instructor and four EMS continuing education instructors. A review of the training records from the past two years indicated a comprehensive training program. Some of the in-service topics include: emergency vehicle operator course (EVOC), ladder operations, firefighter safety, extrication, hazardous materials operations and SCBA operations. Training topics specific to the rural nature of the response district included hose applications, tanker operations, water movement and train safety.

There was some inconsistency noted in the number of training hours completed by each individual member. This may be attributed to the part-time and volunteer nature of the work force. Overall, this system is well-designed and allows members to meet in-service training requirements established by the state of Ohio to maintain certifications for EMT and firefighter. If possible, the agency may want to consider establishing a minimum number of training hours that each member must complete at FFD. This would help assure members maintain familiarity with the department’s small equipment and emergency response protocols specific to the department. Training records are maintained in-house and exported to the Ohio Department of Public Safety website. Please see Appendix A for further certification requirements of the state of Ohio.
Fire Station Facility

The FFD operates out of one facility located at 26 W. Second Street, Frazeysburg. The station and land are owned by the Frazeysburg Fire Association. The station is a one-story facility and has approximately 7,200 square feet of space. The station has been added on to over the years with the last addition in 1979 of the meeting/training room. The administrative office area is wood-frame construction with a brick veneer exterior. The apparatus bay area is constructed of cinder block.

The facility has six back-in bays. All of the bays have 10’ x 10’ electrically operated overhead doors with emergency releases permitting manual operation in the event of a power failure. The size of the doors provides just enough room for the apparatus to fit inside the building. There is minimal spacing between apparatus and interior and exterior walls. The station is heated by a ceiling-mounted forced-air gas heater.
Overhead door clearance  Clearance at rear of apparatus bay

PPE for the individual firefighter, sometimes referred to as “turnout gear”, is stored in metal lockers located along the bay walls. The lockers provide a separated space for each firefighter, but the PPE is exposed to diesel emissions from apparatus. The facility does not have a diesel exhaust system. When apparatus is started, the vehicle exhaust can affect PPE, small equipment, and computer/electronic equipment in the station. Any personnel in the station would be exposed to fumes and vapors.

A few storage cabinets are located within the apparatus area; however, space is limited with additional pieces of equipment stored openly on the apparatus floor. EMS supplies are stored at this facility. The facility does not have a formal decontamination area.

The facility is wired for an emergency generator; however, the facility does not have a permanent emergency back-up electrical supply. The department can supply some power to the facility by using a portable generator. There are no smoke or carbon monoxide alarms installed in the apparatus bays.

As noted previously, an addition was added to the building in 1979 which houses a meeting/training area, kitchen, day room and bedroom. There is a unisex restroom located in this addition; however, there are no formal shower facilities located in this structure. This part of the facility is protected by smoke detectors which are not monitored. Emergency lighting is provided. The cooking area is not protected by a suppression system. Adjacent to the meeting/training room is the day room. In the day room is a television, two recliners and a couch. Attached to the day room is a bedroom which houses two single beds.

The building lacks adequate storage space and exposes equipment and personal protective clothing to the byproducts of diesel exhaust. The facility lacks sufficient dormitory and administrative office space. There is minimal ADA compliance and the HVAC system appears to be insufficient. Future expansion of this facility is questionable.
Apparatus and Equipment

The FFD operates two engines, one water tender/tanker, one grass fire unit and two ambulances. An overall general impression of the apparatus and equipment is that it is well-maintained and is of the appropriate size and design for the intended purpose. The corresponding maintenance records and equipment inventory were reviewed by the assessment team during the site visit and during later review. Below is a brief description of each piece of apparatus.

*Unit 402* is a 2010 Pierce rescue-pumper with a 1,500 GPM pump and carries 750 gallons of water. This unit also has compressed air foam capabilities with a 20 gallon Class A foam cell. This unit carries all the necessary loose equipment as required by NFPA 1901. This vehicle is in excellent condition and has 4,200 miles.

*Unit 403* is a 2007 is a grass fire unit on a Ford F-350 Super-Duty chassis. This unit has a 200 GPM pump and carries 250 gallons of water. It is also equipped with a 10 gallon Class A foam tank. The unit is equipped with dual booster reels, ground sweep nozzles and a winch. The vehicle carries all the necessary loose equipment as required by NFPA 1901. This vehicle is in excellent condition and has 6,300 miles.

*Unit 404* is a 2000 Pierce pumper with a 1,250 GPM pump and carries 1,000 gallons of water. This unit also is equipped with a 10-gallon in-line Class A foam system. The vehicle carries all the necessary loose equipment as required by NFPA 1901. The vehicle is in good condition and has 14,980 miles. It was noted the vehicle has an unknown electrical issue which causes the vehicle to unexpectedly shutdown.

*Unit 405* is a 2001 Pierce water tender (tanker) on an International chassis. This unit is equipped with 500 PGM pump and carries 1,800 gallon of water. The vehicle is equipped with a rear-mounted 10-inch gravity feed water chute and 2,500 gallon porta-tank. The vehicle carries all the necessary loose equipment as required by NFPA 1901. The vehicle is in good condition and has 11,700 miles.

*Unit 418* is a 2015 Road Rescue Type II ambulance on a Ford F-450 chassis. This unit is configured and equipped to deliver ALS care and transport service, including a Zoll 12-lead heart monitor/defibrillator. Additionally, this vehicle is equipped with 4-wheel drive and a winch. The unit has 8,000 miles and is in excellent condition.

*Unit 420* is a 2005 McCoy-Miller Type III, modular ambulance on a Ford E-450. This unit is configured and equipped to deliver ALS care and transport service, including a Zoll 12-lead heart monitor/defibrillator. The unit appears to be in good condition and has 66,000 miles.
The department’s apparatus and equipment maintenance programs are delivered through a number of strategies. Weekly inspection and minor maintenance are performed by department personnel. Preventive maintenance on the pumper is provided by Southwest Area Transit and ambulance preventive maintenance by Burgess Ambulance Sales.

Pump testing is performed annually by Finley Fire Equipment. Pump test records were reviewed and found to be current and in order. The ISO, NFPA, and pump manufacturers’ recommendations require annual pump testing of all in-service fire department pumper. The OAC also requires annual testing in accordance with NFPA recommendations.

Aerial and ground ladder testing is conducted by Mistras Group Inc., to assure safe operations in accordance with current NFPA standards and manufacturers specifications. The OAC also requires annual ladder testing in accordance with NFPA recommendations. Records are maintained by the Fire Chief.

The department has five Scott 4.5 and 13 Scott 75-4500 SCBA. All of the SCBA appear to be in good condition. The units are inspected weekly by department personnel. SCBA repair and annual flow testing is performed by Warren Fire Equipment, Warren, OH. There are a total of 40 SCBA cylinders, one for each unit plus spares. Hydrostatic testing of air cylinders is conducted by Finley Fire Equipment.

Each member is issued their own personal facepiece and is fit-tested annually by department personnel with the use of county-owned testing equipment. The OAC also requires that all personnel who may operate in a toxic vapor or oxygen deficient environment be approved annually by a physician to wear a respirator or SCBA. This respirator certification approval is currently not being obtained.

The department has its own breathing air compressor to refill SCBA cylinders. The compressor is a Breathing Air Systems compressor which is over 20-years old. It appears to be well-maintained; however, the unit has limited filling capacity for the current SCBAs. Annual air sampling is conducted in accordance with NFPA 1989.

Hose testing is conducted annually by department personnel in accordance with NFPA 1962. ISO also requires the proper testing and maintenance of fire hose and documentation retained for their analyses when conducting a public protection classification survey. Hose test records were current and well-maintained. The fire hose inventory varies in age but all appeared to be in good condition.
Personal Protective Equipment (PPE)

The department provides each member with a set of PPE; full-time members receive a second set of PPE. The department currently utilizes Globe G-Extreme coat and pants. The PPE ensemble includes a face/neck hood, gloves and boots. The average age of the gear is five to seven years old and is in excellent condition. The department attempts to replace structural PPE on a 10-year service cycle, which is in compliance with NFPA 1971: *Standard on Protective Ensemble for Structural Firefighting and Proximity Firefighting*. The department has a formalized inspection program to identify any potential maintenance issues with the gear. The department carries a limited supply of replacement PPE. The replacement and inspection program allows for compliance with OAC 4123:1-21-02 (E, F, G). In addition to the structural PPE, the department also issues each member a set of wildland PPE, which consists of coat, pants, gloves and helmet. The department has an extractor for cleaning the gear.

Communications

The FFD is dispatched by the Muskingum County Sheriff’s Office, which is located in Zanesville. The communications center is housed in a secure facility that is equipped with a back-up generator. There is a CAD system in place but it is underutilized for fire dispatching or operations. The dispatchers do have the ability to dispatch multiple departments to the same event. This is currently being done when Frazeysburg is dispatched to fire incidents.

The department is equipped with mobile radios and portable radios for all apparatus. The department operates on a VHF radio system and members are alerted to alarms via the VHF system pagers and cell phones. The department is equipped with Motorola HT1250 portables which are approximately eight years old. The apparatus are equipped with Motorola mobile radios that are the same age and in good condition.
Creation of Fire/EMS District

The creation of a joint fire district has gained in popularity across Ohio in the last decade. Under Ohio law, specifically sections 505.37, 505.371 and 505.375 of the Ohio Revised Code, township trustees and municipal corporations may elect to create joint districts to deliver fire and ambulance services. There are several options available, including the creation of a joint ambulance district, joint fire district, or the creation of a joint fire & EMS district.

The benefits of forming a joint district include creating an equal tax base among all residents within the district area, participating response areas having equal representation in management oversight, and in some cases, cost savings with economy of scale and reduction in duplication.

The fire agencies in Dresden and Frazeysburg are experiencing staffing issues similar to situations faced by other agencies around the state. Many smaller communities have minimal local employment opportunities. For example, some people commute up to an hour each way for work. This takes the potential volunteer out of the community and unavailable to respond. Family obligations and some of the increased training requirements all affect each organization’s ability to recruit and retain volunteer personnel. Overall, the time demands on the volunteer service are greater than ever, especially for providing emergency medical services.

As stated earlier, FFD employs full-time and part-time personnel to staff the station during the daytime hours. This helps assure that at least one crew is available to respond to calls. This has proven to be beneficial in improving the reliability of response and decreasing response times. The DFD continues to experience difficulty assembling a crew together during the daytime hours. As a result, the number of mutual-aid responses by FFD to Dresden has increased. Note: Since the inception of this study, DFD has implemented part-time staffing in-station during daytime hours to improve response reliability and decrease response times.

Conversely, DFD has volunteers available during the nighttime hours, whereas FFD at times experiences difficulty in assembling a crew to respond in a timely manner. Thus, mutual-aid responses by Dresden to Frazeysburg have increased during the nighttime hours. With these problems continuing to affect operations, the Fire Chiefs of Dresden and Frazeysburg are hopeful that a fire district concept can provide the structure to maintain operational stability.

In an effort to determine if this concept is feasible, a joint fire and EMS district will be created on paper to allow department members and elected officials to examine organizational structure, general operations, and the estimated cost of providing service delivery with this type of organization. This can then be used to assist in making the final determination if a joint fire/EMS district is a viable option.
Organizational Structure
To create a joint fire/EMS district, the service area must first be defined. For this study, the proposed joint fire/EMS district service area includes the villages of Dresden and Frazeysburg, and the townships of Cass, Jackson, Jefferson and most of Madison. For organizational and legal purposes, it will be easier to examine the district concept using those entities within Muskingum County. Forming a joint district will require significant involvement of the Muskingum County Prosecutor. Dealing with one county prosecutor will make the process much less cumbersome. Additional areas can be added to the district at a later time if desired, or the district can provide services to areas such as Pike and Washington Townships in Coshocton County via contractual agreement. The name of this proposed joint fire/EMS district will be Northwest Muskingum Joint Fire/EMS District. This was used for consistency and illustrative purpose only. Any name selected by the entities involved can be used. A map of the joint fire/EMS district is found in Figure 12. The district boundary is outlined by a dark blue line. The red dashed lines outline Pike and Washington Townships, both located in Coshocton County. They will continue to be served by the district via contractual agreement and can join the district at a later time or they can join the district in its start-up.

Figure 12
The staffing needs of the joint fire/EMS district are important, as this will establish the staffing model desired and funds necessary to support the staffing model. One of the key questions surrounding the staffing of positions is how much time is expected of them and should they be volunteer, part-time, or full-time. Frazeysburg currently has personnel in station every day from 7:00 am to 5:00 pm. This is accomplished with a combination of full-time and part-time personnel. Volunteer personnel supplement the in-station personnel on structure fires and provide the response after 5:00 pm. Dresden just implemented in-station staffing on June 1 with two part-time personnel daily from 6:00 am to 6:00 pm.

Combining the two departments together would result in four personnel on-duty roughly 12 hours daily. It is assumed that this staffing model would continue. In addition, given this staffing model would involve a number of part-time and full-time employees, two facilities, and a large service area, the Fire Chief’s position should be considered for part-time status or the position should be paid a stipend that is reflective of the position’s responsibilities. In addition, the district will need to establish work-hour guidelines that are consistent with Ohio law, the Fair Labor Standard Act (FLSA) and Affordable Care Act (ACA) guidelines.

The department’s management team will be responsible for establishing operating procedures and developing the command/supervisory structure. A suggested organizational structure of the proposed joint fire/EMS district is depicted in Figure 13. The members of the fire district board will be required and have the authority to appoint the Fire Chief of the joint fire/EMS district. Ultimately, it will be the district board’s decision, with input from the Fire Chief and other members of the management team on how to structure the command staff.
Cost of Operation/Funding
Developing a projected budget can be a useful tool to make an informed decision regarding the creation of joint fire/EMS district. By nature, the projected expenses are determined on the high side while projected revenues will be estimated conservatively. The current operating budgets of the both departments provide a solid foundation from which to determine projected operating expenses for the fire district.

Assets
One of the first steps in making a fire/EMS district functional is to configure apparatus and equipment. The FFD is a private, non-profit organization that holds title to all of the department’s apparatus and fire station facility, including the land. The DFD is a village-operated department. The village holds title to all of the apparatus and equipment as well as the fire station facility and land. Normally, all apparatus, equipment and supplies currently owned and used by the two departments would be titled over to the joint fire/EMS district, including any apparatus loan or lease obligations. However, additional work by the entities in this area will be necessary.

The FFD has two loan obligations, one for an ambulance and one for a fire truck. The anticipated pay-off date for the ambulance is 2020 and the fire truck is 2021. Frazeysburg would need to verify with the institution that has loaned the funds for the truck purchases that the title and loan transfer can be completed.
Dresden has several loan obligations, including a fire truck, ambulance, and the fire station. The fire station bond was financed through the United States Department of Agriculture (USDA). The debt service is paid from the village’s fire and income tax funds. The fire truck was purchased as a result of a voter-approved tax levy. The loan payments are made from the funds generated from this tax. Direction and advice from the county prosecutor and auditor will be necessary to determine the appropriate course of action for the fire truck obligation. The funds received from the tax levy may not be able to be used for a truck not owned by the village. If this turns out to be the case, then the village may need to retain ownership until the loan is satisfied, which is scheduled in 2020. The use of the truck by the new fire district may need to be established by a lease agreement. The USDA will need to be contacted to see if loan obligations on the facility can be transferred to the new district. The anticipated pay-off for the station is 2018. The department also has an outstanding loan on an ambulance. This is a $12,493 annual debt service payment. At the end of 2016, the outstanding balance will be less than $3,000. Since this loan will be satisfied in 2017, it was not included in the projected budget of the joint fire/EMS district.

In general, the fire station facilities could be handled in one of two ways. The buildings and land can be transferred to the fire district, or the fire district could lease the facilities from the current owners. The advantage of the transferring the buildings and land is in common insurance coverage. In addition, transferring Frazeysburg’s building assets to the district would eliminate the property tax liability. After discussing this situation with the Fire Chiefs of both agencies, the budget was prepared with the Frazeysburg station and land assets being transferred to the new district and the Dresden station remaining the property of the village. A nominal lease payment for use of the Dresden facility was added to the projected operating budget.

Frazeysburg and Dresden both have firemen’s associations that are organized to support the efforts of the fire department. For example, these associations hold fund-raising events in the community. The funds are then used in a variety of ways to assist the volunteer departments, including purchasing equipment and other support functions. For the Dresden Fireman’s Association, all funds of the fireman’s association remain the property of the fireman’s association, and can be retained or disposed as they deem appropriate. In Frazeysburg’s case, the funds raised by the association to support department operations would need to be allocated into a special account and separated from association general operating funds. Those funds allocated to the special account would remain the property of the fireman’s association, and can be retained or disposed as they deem appropriate.

Projected Budget and Revenue
After receiving input from both Fire Chiefs, the assessment team developed two budget scenarios for illustrative purposes. One is the fire/EMS district concept with two personnel in-station staffing 24 hours each day at both fire stations, along with a third person 10 hours each day.
Monday through Friday. This staffing scenario will be referred to as **Scenario A**. The second budget scenario is 24-hour staffing at both stations with two part-time personnel. It will be referred to as **Scenario B**.

**Scenario A** includes the two existing full-time personnel from the Frazesburg Fire Department and uses them as first line supervisors such as a lieutenant. The full-time personnel would work 10 hours each day, one at each station. As an example, they would work 7:00 am to 5:00 pm Monday through Friday. In addition, each station would have two part-time personnel in-station 24 hours a day, seven days-a-week. As an example, these positions would work 7:00 am to 7:00 pm and 7:00 pm to 7:00 am. All personnel in-station would be available to respond to calls and would be able to check apparatus and equipment, assuring response readiness. They also can perform other light maintenance and other related duties. The primary purpose of the in-station staffing is to have personnel available to provide a timely response to emergency incidents. The district would rely on volunteer response to assist on major incidents.

The projected operating expense budget in **Scenario A** for the fire/EMS district is provided in Figure 14. The current budgets of both departments were used as a basis for its development. Also included was the recent expansion of part-time personnel in the station implemented by Dresden. Expenses were added for the fiscal officer and dedicated funds for capital outlay. These are the estimated expenses to maintain the current level of service and defray equipment acquisition costs. Salaries were estimated for management level positions: Fire Chief $5,000, Asst. Chiefs $1,500, and captains $500. Other assumptions used in developing estimated operating expense included:

- Staffing both stations 24 hours each day with part-time personnel
- $12 per hour pay rate for part-time personnel
- Current salary for the two full-time personnel
- 18 part-time personnel needed for coverage and meet state and federal work-hour limitations
- Existing workers’ compensation premiums
## Scenario A Estimated Budget

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<thead>
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<th>Personnel</th>
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<td>EMS Equipment</td>
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<td>Training, professional development</td>
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<td><strong>Subtotal District Fiscal Office</strong></td>
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| Total Budget           | $1,072,255 |

*Figure 14*
The revenue calculator and estimate of expense analysis (Figure 15) indicates that a 6.5 mill levy along with EMS billing would provide sufficient funds to operate the district. A 6.0 mill levy would also provide sufficient funds, but the margin would be much tighter. Along with the capital funds identified in the projected budget, reserve funds accumulated would assist the district with long-term apparatus replacement and facility renovation. Based on the projected expenses, a three-year operating budget was developed to show how the budget may be expected to increase and the overall effect on finances. Personnel costs are computed with a 1% annual increase and supplies and materials are computed assuming 3% increases. This budget is displayed in Figure 16.
Using the information from the estimated three-year operating budget, a worksheet was developed that shows examples regarding net operating expenses and the accumulation of reserves. Accumulation of reserves is vital for future equipment replacement for fire trucks, ambulances, and other capital equipment such as self-contained breathing apparatus.

<table>
<thead>
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<th>Operating Budget</th>
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<th>2019</th>
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*Accumulated reserves does not include investment income

Figure 17 shows reserves of $167,114 after three years with a 6.0 mill levy. This is a fairly tight margin. Any significant emergency expenditure could create a financial hardship for the district. Future capital replacements will also require a disciplined planning effort to have sufficient funds available. Replacement costs for apparatus alone can quickly eat up reserves. While there are numerous types, styles and options to choose from, a new ambulance will cost approximately $200,000 and a fire pumper approximately $300,000. The new fire/EMS district’s fleet will consist of four ambulances, five engines, one heavy rescue, one ladder-tower, and three grass/brush trucks. It is estimated in the first five years of operation, the district will need to replace two of the existing ambulances and initiate planning to replace the tower-ladder. A 15-20 year replacement plan would need to be developed by the new management team to assist
long-term financial planning for the district. The newly formed fire/EMS district board would have to determine, based on input from the voters, what level of margin would provide the best environment for long-term success and financial stability. A 6.5 mill operating levy would have a projected carryover after three years of $223,583. This is a larger margin, but would still limit the district’s options with regards to capital replacement. For example, an option is to operate the district on a closer margin and take all capital replacement requests to the voters for bond approval to replace specific pieces of equipment.

The projected operating expense budget in Scenario B for the fire/EMS district is provided in Figure 18. This budget calculates the cost of having two personnel on duty at each station around-the-clock, as well as identifying the resources to defray equipment acquisition costs. Salaries were estimated for management level positions: Fire Chief $5,000, Asst. Chiefs $1,500, and captains $500. Other assumptions used in developing estimated operating expense included:

- Four full-time personnel working 10 hours a day Monday thru Friday
- Staffing the remaining 14 hours Monday thru Friday with part-time personnel
- Staffing four positions around-the-clock on weekends with part-time personnel
- $12 per hour pay rate for part-time personnel
- 24 part-time personnel needed for coverage and meet state and federal work-hour limitations
- Existing workers’ compensation premiums
### Scenario B Estimated Budget

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*Figure 18*
The revenue calculator and estimate of expense analysis (Figure 19) indicates that a 6.0 mill levy along with EMS billing would provide sufficient funds to operate the district. Along with the capital funds identified in the projected budget, reserve funds accumulated would assist the district with long-term apparatus replacement and facility renovation. Based on the projected expenses, a three-year operating budget was developed to show how the budget may be expected to increase and the overall effect on finances. Personnel costs are computed with a 1% annual increase and supplies and materials are computed assuming 3% increases. This budget is displayed in Figure 20.
Using the information from the estimated three-year operating budget, a worksheet was developed that shows examples regarding net operating expenses and the accumulation of reserves. Accumulation of reserves is vital for future equipment replacement for fire trucks, ambulances, and other capital equipment such as self-contained breathing apparatus.

<table>
<thead>
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<th>Operating Budget</th>
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<th>2018</th>
<th>2019</th>
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*Accumulated reserves does not include investment income

The accumulation of reserves shown in Figure 21 provides important data. A 5.5 mill levy would provide sufficient operating funds initially, but the margin is not sustainable due to inflation. As shown in the chart, the district would quickly be in an operating deficit with this budget scenario at a 5.5 mill taxation rate. A 6.0 mill operating levy would result in accumulated
reserves of $212,677 at the end of three years. A 6.5 mill operating levy would result in accumulated reserves of $273,766 at the end of three years. As explained in Scenario A, these millage rates may appear to be excessive, but replacement costs for apparatus alone can quickly eat up reserves. It is estimated in the first five years of operation, the district will need to replace two of the existing ambulances and initiate planning to replace the tower-ladder. A 15-20 year replacement plan would need to be developed by the new management team to assist long-term financial planning for the district. The newly formed fire/EMS district board would have to determine, based on input from the voters, what level of margin would provide the best environment for long-term success and financial stability.

Impact on ISO
With the creation of the new fire/EMS district response area, there should be no impact on the current Public Protection Classification of any of the entities.

Process to Proceed
To move forward with the formation of a joint fire/EMS district, the steps necessary are guided by the Ohio Revised Code. The key player in the creation of the district is the Muskingum County Prosecutor. He or she must be involved with the formation and preliminary functions of the district board. The action steps necessary are as follows:

- The township board of trustees of Cass, Jackson, Jefferson and Madison Townships, and the village councils of Dresden and Frazeysburg would need to adopt resolutions to form the district. The county prosecutor should be consulted about this process.

- Each township and village would be required to select one representative (a township trustee or village council person) to the district board. Working with the county prosecutor, the townships and villages need to develop a process to appoint an at-large member. This would result in a district board of seven members, subject to recommendations of the county prosecutor.

- The district board would need to schedule meetings, chose a chair and other positions as needed. Once functioning, the district board can operate similarly as a township. The district board can then vote to approve placing an operating levy on the ballot for the voters to consider.

- The district board would need to select a fire chief and fiscal officer.

- The district board would need to determine the start-up date for the new district and plan accordingly.
The district board determines the millage needed to operate the district and takes the necessary steps to have the issue placed on the ballot.

Voters support new operating levy.

The district management team prepares for operations to begin.

With legal assistance, assets and loan obligations from Dresden and Frazesburg Fire Departments would need to be transferred to the new fire/EMS district.

All existing personnel would need to be appointed members of the new district.

Existing contracts would terminate on the designated date and new contracts executed with the district.

The new district begins operational response on designated date.

Final Analysis

The purpose of this study was to determine if the creation of a joint fire/EMS district for the Frazesburg and Dresden Fire Departments was a viable option for consideration. In this study, the existing service delivery was reviewed as well as the existing service demands. Next, a new fire/EMS district was developed on paper, including a projected operational budget and revenue collection. These items together provide the basis for officials to make their informed decisions.

After careful analysis and review, the assessment team has determined that it is feasible for the departments, townships, and villages to form a joint fire/EMS district. There are several advantages to consider in forming a fire district. The joint fire/EMS district will result in an equitable tax base of all residents within the district response area. There will be an economy of scale that will reduce some of the operating expenditures, such as equipment and supplies. There will be an improved level of immunity for Frazesburg, since they are currently a private fire company, and overall improved operations efficiencies in staffing, training and future apparatus purchases.

In reviewing the projected expenses versus revenue, a 6.0 or 6.5 mill operating levy approved by the voters would provide sufficient funds for day-to-day operations along with build-up of reserves. A smaller millage is possible, but the margin for expenses versus revenue is much smaller and is not sustainable. This millage rate would support two personnel in-station staffing at both stations for 24 hours each day, which will significantly improve response times and reliability.
All of the entities involved have fire levies that have varied millage rates and various dates in which the levies terminate. All of the entities would require a higher taxation rate than they are now paying based on the staffing scenarios developed. Both communities are experiencing staffing issues as it relates to the consistent availability of volunteer personnel. There is also a limited part-time pool of trained fire and EMS personnel. Attempting to staff both stations around-the-clock with part-time personnel would be very difficult. With work-hour restrictions previously identified, filling four positions around-the-clock will require approximately 36 part-time personnel. Part-time firefighter labor pools around the state are limited. Falls Township, Newton Falls and New Concord also utilize part-time firefighters, so there is some level of competition for a limited part-time pool of employees.

The opportunity to start a new fire/EMS organization affords a chance to build a long-term funding structure that would provide the citizens and elected officials stability. It is the collective opinion of the assessment team that sufficient tax dollars should be sought to establish the district and set it on the right footing – do it right and do it up front so that long-range financial and operational planning can be performed. However, in the end, the decision on the amount of taxation that would be supported by the voters would be a discussion and deliberation for the elected officials of the participating entities.

Some of the important issues that will need to be addressed by the new fire/EMS district board include planning for apparatus acquisition. Looking at the existing fleet of both departments together, there are two medic units that are over 10 years old, an engine that is 23 years old, a tanker that is 19 years old and a tower-ladder that is 33 years old. The ambulance units will need to be replaced in the next five to seven years. In addition, funds will be needed to renovate existing station space for sleeping quarters if the district expands to 24-hour staffing. These will be significant capital expenditures. Having sufficient accumulation of reserve funds would allow capital equipment replacement and also allow planning for debt service on facilities. Without sufficient reserve funds, capital equipment replacement and new equipment acquisition can become problematic. Many entities and organizations across the state have become reliant on grant funding, but these processes are normally highly competitive, and the awarding of grant funds or the continuing funding of the grant program at the federal level can never be assured.

Our experience has shown that the accumulation of reserve funds for long-term capital replacement is essential to the success of the fire/EMS district. In addition, using EMS billing funds to sustain daily operations could put the district in a sustainability issue down the road. It is unknown how future changes by Medicare or commercial insurance providers may affect EMS billing practices and reimbursement levels. It is recommended that funds generated by taxation provide sufficient levels to sustain operations and use EMS billing money to fund capital equipment and apparatus replacement for EMS operations, etc. If this is not feasible, an attempt
to earmark a percentage of EMS funds for capital replacement should be considered. As stated previously, the joint fire/EMS district can be operational at a lower millage rate; however, scheduled capital replacement items may become more difficult to complete. This situation would most likely result in bond levies brought to the voters for approval for apparatus purchases.

The district board will need to place an operating levy on the ballot. For illustrative purposes, the fire/EMS district board places a levy on the ballot for 6 mills in the November 2017 election. If approved, the property tax is scheduled to begin collection of tax January 1, 2018. However, residents are already paying on various levies in the townships and villages. In these types of situations, it must be clearly communicated to the residents that the existing levies will not be collected once the new district levy is approved. Communicating the advantages of creating the district and how the funding will change is essential for success.

Finally, it must be emphasized that the creation of a joint fire/EMS district will require considerable time and effort. As the projected budget and revenue analysis shows, the formation of a new district will not result in any initial cost savings, based on the amount of funds currently being expended. However, the new district will provide the residents and members of the fire department expanded in-station staffing and long-term stability. There may also be future opportunities for contracted services or expansion of the district, which should further stabilize the finances of the district.

The key issue for all those involved is determining the level of service desired by the public. An attempt to determine this service expectation should be initiated before placing tax levies on the ballot.
Appendix A

In the state of Ohio, the Ohio Division of EMS is responsible for provider licensure and certifications, and oversight and enforcement of all of the laws governing EMS. These laws are listed in section 4765 of the Ohio Revised Code (ORC) [http://codes.ohio.gov/orc/4765](http://codes.ohio.gov/orc/4765). Each level of certification is based on the National EMS Scope of Practice, which has been incorporated into the ORC. This outlines exactly what procedures can be performed by each certification level. A basic EMT requires a minimum of 150 ours of initial training and at least 40 hours of continuing education every three years. An advanced EMT requires an additional 200 hours of training above that of an EMT-Basic and at least 60 hours of continuing education every three years. Advanced EMTs are able to perform many advanced life support (ALS) procedures and administer certain medications to patients. To advance to the paramedic level, a person must possess EMT certification and is required to attend nearly 900 additional hours of clinical and didactic training, which allows them to perform even more life-saving procedures and administer additional medications. Examples of these procedures would be performing cardio-version, heart pacing, heart defibrillation (shocks to the heart) and advanced invasive procedures such as chest decompression and needle cricothyroidotomy. The paramedic must obtain 86 hours of continuing education every three years, which includes maintaining advanced cardiac life support certification offered through the American Heart Association.

In firefighting, training and certification has three distinct levels. Volunteer firefighting is the basic level and is limited by law to 36 hours of initial training. It is the minimum level required to perform the duties of a volunteer firefighter. This level of training is also the minimum required by law to serve as a part-time firefighter unless additional training is required by the local fire agency.

The next level of firefighter training is Firefighter I (FF I). This level requires an additional 104 hours of training beyond the volunteer course level. This level of training also requires the demonstration of competency in several required areas such as proper use of a self-contained breathing apparatus (SCBA). The highest level of training is Firefighter II (FF II). This includes 240-260 hours of training in a variety of subject matter and the ability to demonstrate competency in several required areas. Full-time firefighters in Ohio are required by law to achieve certification at this level to work in their position.

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References


