

THE UNIVERSITY of
TENNESSEE 

MUNICIPAL TECHNICAL
ADVISORY SERVICE

NOLENSVILLE, TENNESSEE

Fire Services Study



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Introduction and Scope of Work

Nolensville needs fire protection, and there are several ways to provide this fire protection: establish a municipal fire department that is either fully paid, a combination paid/volunteer department, or a fully volunteer department; contract for fire service; or do both. No matter which option the town chooses, firefighting costs money. ISO states that, “A community’s investment in fire mitigation is a proven and reliable predictor of future fire losses.” Nolensville has already made a significant investment in community fire mitigation through the adoption of the sprinkler ordinance. The sprinkler ordinance helps limit fire risk, which means the community may continue to contract for fire service from the Nolensville Volunteer Fire Department for a longer period until the town desires to increase the level of fire suppression response. Increasing the level of fire suppression response service would include starting a municipal fire department. This report can identify some trigger points for increasing the level of fire service, but there is no formula that says, “Now is the time.” The decision is unique to every community and includes factors such as desired response times, growth, increased life risk (schools, daycares, hotels, assisted care facilities, etc.), increased commercial risk, and the desire to maintain or improve the ISO rating.

The town’s other investment in fire mitigation is the annual payment to the Nolensville Volunteer Fire Department (NVFD). The NVFD uses these funds to operate the fire department and provide for capital improvements. This payment has increased significantly over the years, and there is a question as to whether the town is paying too much for fire protection, and whether the town needs to start a municipal fire department.

The Town of Nolensville asked MTAS to look at this issue and make a report to the Fire Committee. The study’s purpose is to answer two questions:

1. What options are available to the Town of Nolensville regarding the provision of fire protection, emergency medical response, and related emergency services for the town?
2. Can MTAS provide a recommendation for a fire protection plan for the Town of Nolensville at build-out?

A written request from the town authorized MTAS to conduct an official study.

Background – How We Got To Where We Are

The Town of Nolensville was originally incorporated in 1838, but the town did not have a fire department. In January 1953, fire destroyed five buildings and damaged three others before three fire departments brought the fires under control. In December 1968, a major fire destroyed three buildings and required firefighters and equipment from Franklin, Nashville, Smyrna, Lavergne, College Grove, and Brentwood to extinguish the fire. Both major fires were fought with water from Mill Creek, as the town did not have fire hydrants. The Jaycees, realizing that something needed to be done to protect the

community from another conflagration, founded The Nolensville Volunteer Fire Department in 1973 with twenty members. The first engine was a 1969 Ford F-700 chassis with a John Beam Hi-Pressure Fog Unit. The engine was housed in a private garage until fire department members built the first fire hall in 1974. The department added a 1948 Buffalo fire engine and a 1953 American LaFrance fire engine to the roster. The department purchased land at 7347 Nolensville Road to construct a fire hall, and the county offered to build the hall but could not build on private land, so the department donated the land to the county. In 1991, the county built a shell building to house the fire apparatus, essentially a large garage. The members of the fire department built walls, offices, storerooms, bathrooms, sleeping quarters, and a training classroom and transformed the garage into a true fire hall. The department has grown to thirty-two active members and added apparatus. In addition to fire protection, the department provides emergency medical (EMS) first responder service, rescue service, and hazardous materials (Hazmat) response. It is an understatement to say that the firefighters have a lot of sweat equity in the fire department.

The area of Nolensville was settled in 1797 and the Town of Nolensville was originally chartered in 1838, but there was not much growth and development. As the area grew, the community realized the need for a more modern government and the Town of Nolensville was re-chartered in 1996. It was natural that the fire service the NVFD was providing before the town re-chartered would continue, as the town did not have the financial resources to start a separate fire department.

The Nolensville Volunteer Fire Department is an established and respected fire department, is recognized by the state under TCA § 68-102-108, and is the only volunteer fire department in Williamson County to achieve an ISO rating of 5/9. In addition to serving Nolensville, the department serves a large portion of Williamson County. The fire department provides firefighting, emergency medical response (EMS) at the basic life support (BLS) level, hazardous materials response (Hazmat), and rescue services. According to Kevin Lauer of CTAS, of the 732 fire departments in the State of Tennessee, the majority of fire departments are not-for-profit volunteer departments similar to NVFD.

Nolensville incorporated under a Mayor-Aldermanic charter that is silent on the details of fire protection, simply requiring that the town have a “plan of services” that includes “fire protection,” which provides the town with flexibility in how it provides fire protection. However, case law establishes the power of a town to have a fire department or to provide fire services to its residents is one of the police powers inherent in a municipality without specific mention in its charter. Section 7-209 of Nolensville’s Code of Ordinances identifies the fire chief as the chief of the Nolensville Volunteer Fire Department. Through a written agreement with the NVFD, it is obvious that the town’s current plan of services recognizes the NVFD as the agency providing fire protection in the town and the NVFD fire chief as the person responsible for enforcing fire codes and ordinances. In most cities, this makes the fire department, even a volunteer fire department funded by the town, a department or division of the town, and the members of the fire department are considered town employees. MTAS recommends that a fire

department answer to the elected representatives or the city manager or city administrator, depending upon the local charter and ordinances, and that the fire department submit an annual budget request. The NVFD, however, is an independent 501(c)(3) organization receiving funding from Nolensville residents through their Williamson County property taxes, Town of Nolensville property taxes, the town's adequate facilities tax on new construction, and private donations.

The fact that the NVFD is not a department of the town has caused occasional strained relations between the leaders of the fire department and the town. Part of this may be the natural assumption that all fire departments are units of government and therefore subject to the level of transparency expected of government. The NVFD's request for funds has escalated over the past years at a rate that has alarmed town officials. The natural questions the town asks are such questions as, "are we getting a good deal on fire protection?" and "what is the money being used for?" To this end, town officials have requested to see the fire department's records and budgets and the fire department has been reluctant to provide that information, which contributes to the strained relations. Even though the relations are, at times, strained, no one has ever faulted the quality of the service or the dedication of the members of the fire department. Even as a 501(c)(3), however, the fire department may have to provide more information to the town, and this is discussed later in this report.

The Importance of the ISO Rating

This information is intended to assist the Fire Committee and the town in their understanding of the complexities of providing fire protection, to assist in the prioritization of community needs, and to assist in the decision-making process.

The Insurance Services Office, Inc., also known as ISO, is a for-profit corporation that works for insurance companies to evaluate the capability of a community to suppress fires. ISO rates a community on a scale of 1 through 10. An ISO rating of 1 is the best (only 0.13% of the fire departments in the county have a Class 1 rating). An ISO rating of 10 is equivalent to not having any fire protection. Nolensville has been rated a Class 5. ISO rates a community based upon three major categories: communication (10% of the rating), fire department (50% of the rating), and water supply (40% of the rating).

The Class 5 rating is very good (see Figures 1 and 2), as just seventeen percent of all fire departments in Tennessee have a Class 5 ISO rating, and just 128 fire departments out of over 732 have a better ISO rating. The Class 5 rating means the NVFD is doing the right things to provide good service, and because of this Nolensville residents pay competitive rates for property insurance. The Class 9 rating applies to areas within five road miles of the fire station but more than 1,000 feet from a fire hydrant. Areas further than five road miles from a fire station receive a Class 10 rating. All portions of the Town of Nolensville are within the Class 5 rating area.

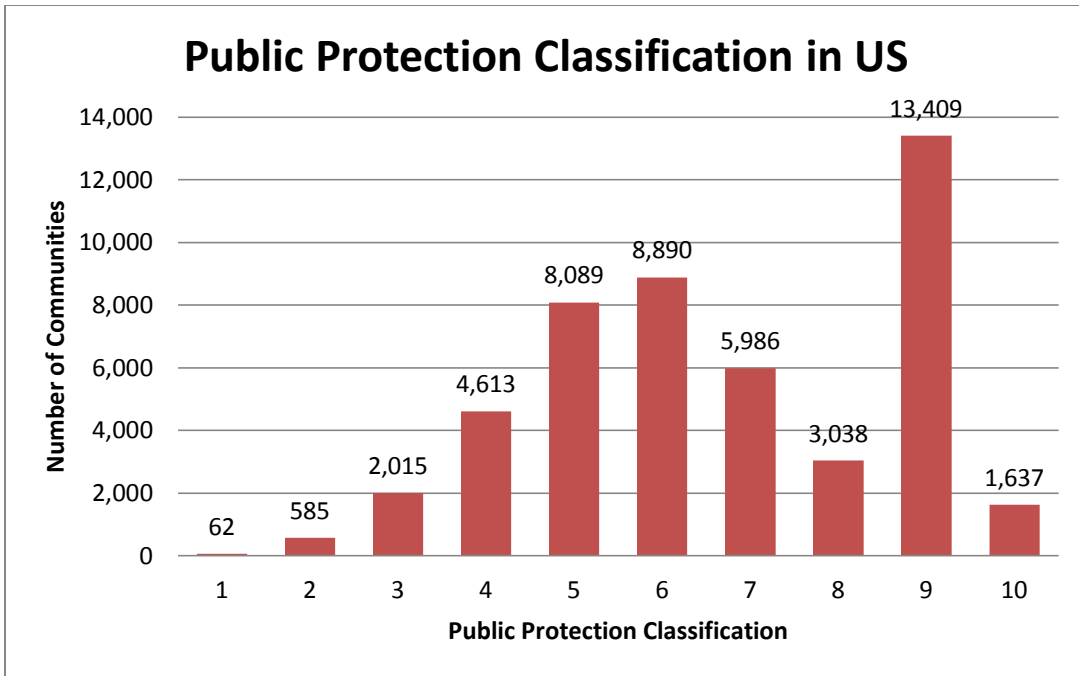


Figure 1 – Public Protection Classification (ISO Rating) in the US

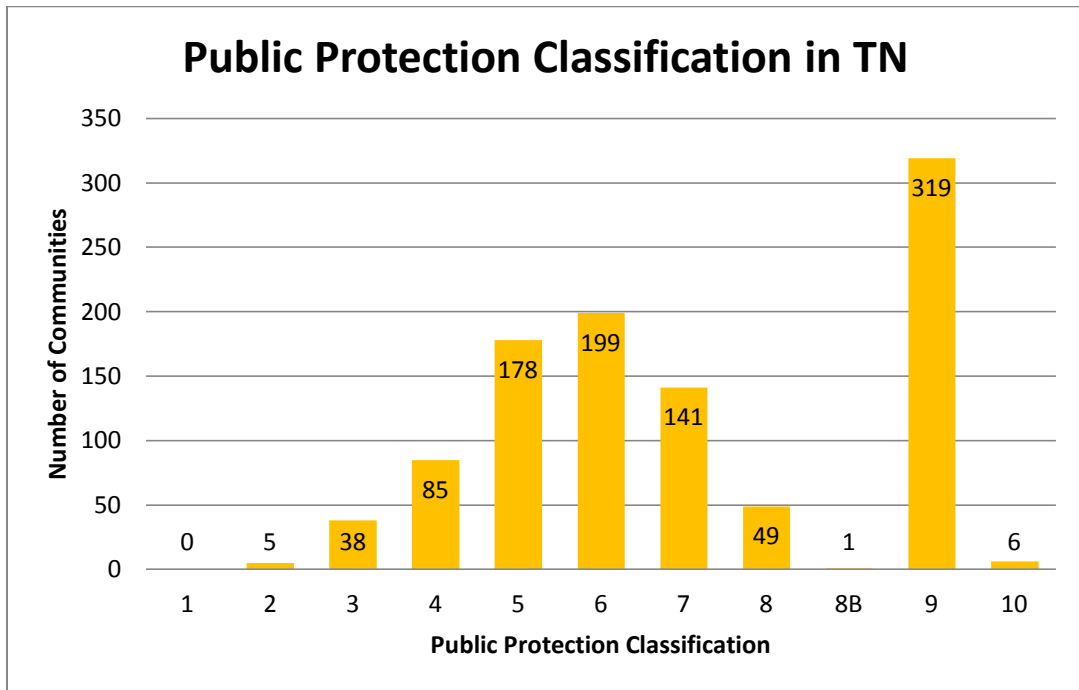


Figure 2 – Public Protection Classification (ISO Rating) in Tennessee

Is Town Entitled To See Any Fire Department Records?

Under the agreement, the NVFD must provide the town with a monthly report of the number and types of service calls made within the boundaries of the Town of Nolensville. The NVFD must provide the town a copy of its annual financial audit within 30 days after the receipt of audit by the Department. The NVFD should provide these reports regularly and without being asked.

As a recognized fire department in Tennessee, the NVFD is required by TCA § 68-102-108 to report to TFIRS. With the exception of any information that could violate the Health Insurance Portability and Accountability Act (HIPAA), and information that could jeopardize an active fire investigation, TFIRS records are public records, so the NVFD should provide copies of fire reports or other information found on TFIRS reports, if so requested.

As mentioned above, even though the NVFD is a non-for-profit 501(c)(3), the town is entitled to see the NVFD records. In a letter dated April 18, 2011 (see Appendix B), Sid Hemsley, an MTAS attorney, opined from a Tennessee Supreme Court case (Memphis Publishing Company v. Cherokee Children & Family Services, 87 S.W3d 67 (Tenn. 2002)) that the NVFD meets the definition of a governmental entity as a “functional equivalent of a governmental agency” and that its records are subject to the open records law. The following paragraph is quoted from Mr. Hemsley’s letter.

The records of the Nolensville Volunteer Fire Department, notwithstanding the fact that in theory it is a non-governmental, nonprofit organization that purports to be an "independent contractor" with respect to the City of Nolensville, are public records subject to inspection by any citizen of Tennessee. That result derives from a recent Tennessee Supreme Court case that adopted the "functional equivalent to a governmental agency" doctrine. Under that doctrine, the fire department is the "functional equivalent to a government agency"-a government fire department. The fire department's financial records are also open to the city under Tennessee Code Annotated, § 6-54-111, and under the contract between the city and the fire department in which the fire department agrees to provide fire services to the city.

MTAS recommends that the NVFD provide the information the Town of Nolensville requests. MTAS acknowledges, and the town should understand, that most volunteer fire departments have a keen sense of autonomy and ownership born from the intense personal involvement in organizing, building, and maintaining a department that serves the community, and may desire to maintain as much control over their department as possible. Likewise, the Town of Nolensville desires to provide excellent services for its residents in accordance with the good business and accounting practices expected of local government. These two interests are compatible once each side understands what the other side’s interests are. From our meetings with town and fire department personnel individually, and the fire committee jointly, it is obvious that both parties need

to strengthen their relationship through mutual education and understanding of the others business practices and build trust based on this understanding.

How Many Fire Stations Does Nolensville Need?

The answer to this question is based upon the size of the Town of Nolensville and not on the size of the service area of the NVFD. The map in Figure 3 shows the current town limits and the location of the NVFD fire hall. The blue line represents the town limits, and the red line illustrates the ISO defined 1½-mile service area.

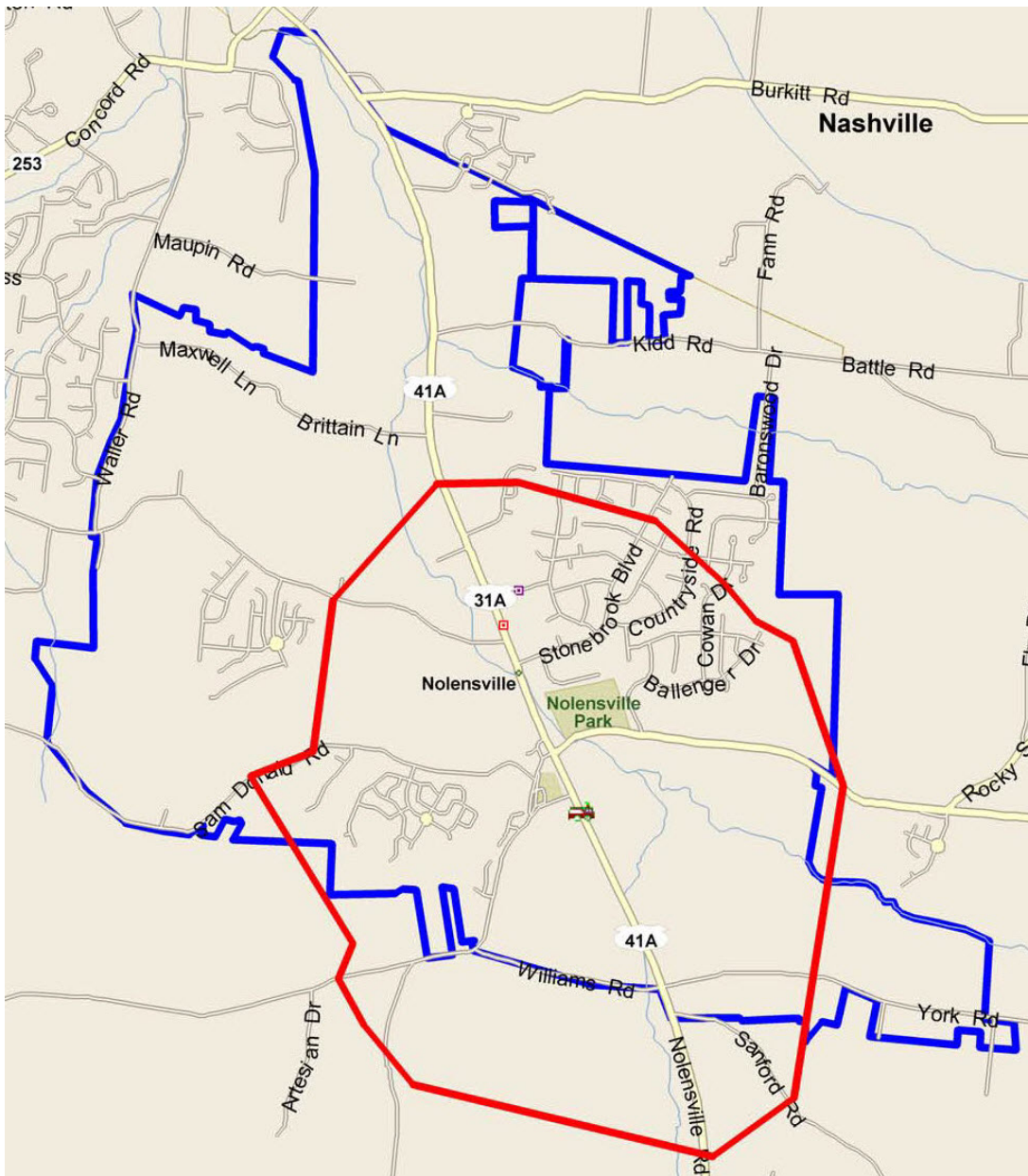


Figure 3 – Town Limits and 1½ Mile Service Area for NVFD Fire Hall

To answer the question of how many fire stations Nolensville needs now, one can look at several sources for guidance. The first is the Insurance Services Office (ISO) Fire Suppression Rating Schedule. Section 560 of the schedule covers distribution of companies and states: “The built-upon area of the city should have a first-due engine company within 1½-miles and a ladder-service company within 2½-miles.”

Using an “as the crow flies” radius of 1½-miles to draw a circle does not adequately represent the geographical area that a single fire station can cover. Studies have shown that a polygon better represents the ISO required response area, and that the average size of the polygon is 4.5 square miles. Two caveats: the polygon model assumes the even distribution of resources throughout the area, which is generally not the case, and the formula does not allow for geographical barriers, such as rivers and railroads, but the formula is useful as a reference. Based upon the 9.5 square miles within the town limits, a travel distance of 1½-miles, and assuming all engine companies are evenly distributed (which they are not) Nolensville needs 2.11 fire stations right now for adequate coverage.

One can use the polygon model to determine the number of needed ladder trucks or service companies based upon ISO’s maximum travel distance of 2½-miles for a ladder or service company. The average size of a polygon for a ladder or service company is 12.3 square miles. Based upon a 9.5 square mile service area, a travel distance of 2½-miles, and assuming all ladder or service companies are evenly distributed (which they are not) Nolensville needs one ladder or service company right now.

The ISO standard for distribution is 1½-miles for an engine and 2½-miles for a truck company, but ISO will extend a community’s fire protection rating as far as five miles from a fire station provided there is adequate water available for fire protection. Based on the five-mile distance, Nolensville would need one fire station. There is a caveat for basing fire protection on this five-mile distance, and that is the risks associated with extended response times. Travel time, measured as the time from when the fire department resource starts to roll until it arrives on the scene, is just one component of response time (see Appendix A). At 1½-miles, the travel time for a fire engine is approximately 3:12 (time expressed as minutes: seconds). At five miles, the travel time is approximately 9:09. The response time, which includes ring time, call answering, call processing, turnout, and travel time, is much longer. Thus, a total response time of six or seven minutes for stations based on 1½-mile distribution increases to twelve or thirteen minutes (or longer if call processing and turnout times exceed NFPA recommendations) based on five-mile distribution. As stated earlier in this report, the level of fire protection provided in a community is a local decision, but MTAS does not recommend basing community fire protection on this maximum five-mile distance.

The second resource is the National Fire Protection Association (NFPA). NFPA addresses the number of fire stations needed in an indirect way based on minimum response times. NFPA Standard 1710 Section 5.2.4.1.1 allows a 240 second (4 minute) travel time for the first arriving engine company. Using an empirical model called the piece-wise linear travel time function, based upon studies done by the Rand

Institute estimating the average response speed of fire apparatus at 35 mph, one can determine that the distance a fire engine can travel in 4 minutes is approximately 1.97 miles. A polygon based on a 1.97 mile travel distance covers on average 7.3 square miles. Based upon a 9.5 square mile service area, a travel-time-calculated travel distance of 1.97 miles, and assuming all engine companies are evenly distributed (which they are not) Nolensville needs 1.3 fire stations right now. However, the town is not evenly distributed, and strip annexation has extended the corporate limits far beyond what the existing NVFD station can cover adequately.

The previous two examples are based upon time and distance to be covered. A third resource is the ISO Fire Suppression Rating Schedule's determination of needed engine companies based upon the community's basic (needed) fire flow. Section 510 of the schedule requires one engine company for a basic fire flow of 500 to 1,000 gpm, two engine companies for a basic fire flow of 1,250 to 2,500 gpm, and three engine companies for a basic fire flow of 3,000 to 3,500 gpm. Basic fire flow is calculated by determining the needed fire flow for all non-sprinklered properties in the community, and then the fifth highest is considered the basic fire flow for the community. For Nolensville, that is 2,500 gallons-per-minute. A strong commercial and residential sprinkler ordinance can limit significantly community risk, as ISO does not consider properties protected by automatic sprinkler systems when determining the basic fire flow, and sprinklered properties reduce the fire risk in the community. Nolensville has adopted model codes that require fire sprinklers in residences, which is visionary and commendable, and Nolensville should consider adopting a more restrictive sprinkler ordinance for commercial properties to reduce fire risk to the community. For example, an ordinance requiring a sprinkler system for all commercial properties that exceed 5,000 square feet would reduce community risk and limit fire growth.

Finally, city leaders must consider the phenomenon known as flashover. As a fire grows in size, it gives off temperatures that heat other objects in the vicinity of the fire. At some point in the time-temperature curve, all of the objects in the fire room reach their ignition temperature and ignite. The entire room bursts into flames, and the temperature rises to a point where no person can survive, including firefighters. This is called flashover. The NFPA Fire Protection Handbook states: "During flashover, however, the temperature rises very sharply to such a level that survival of persons still in the room at that stage becomes unlikely. Thus the time interval between the start of the fire and the occurrence of flashover is a major factor in the time that is available for safe evacuation of the fire area." The development of fire conditions to reach the point of flashover is a function of temperature rise over time. Therefore, a sufficient number of fire stations strategically located to provide quick response times can reduce the incidence of flashover, thus saving lives and property. As shown in the graph in Figure 4, flashover can occur within 9 to 11 minutes of the start of a fire. Locating fire stations to provide a total response time of six to seven minutes is advantageous, as firefighters need time after arrival to setup, lay fire hose, and gain access to the seat of the fire before they can actually begin to search for trapped occupants or extinguish the fire. This is where the five-mile distribution of fire stations proves to be inadequate.

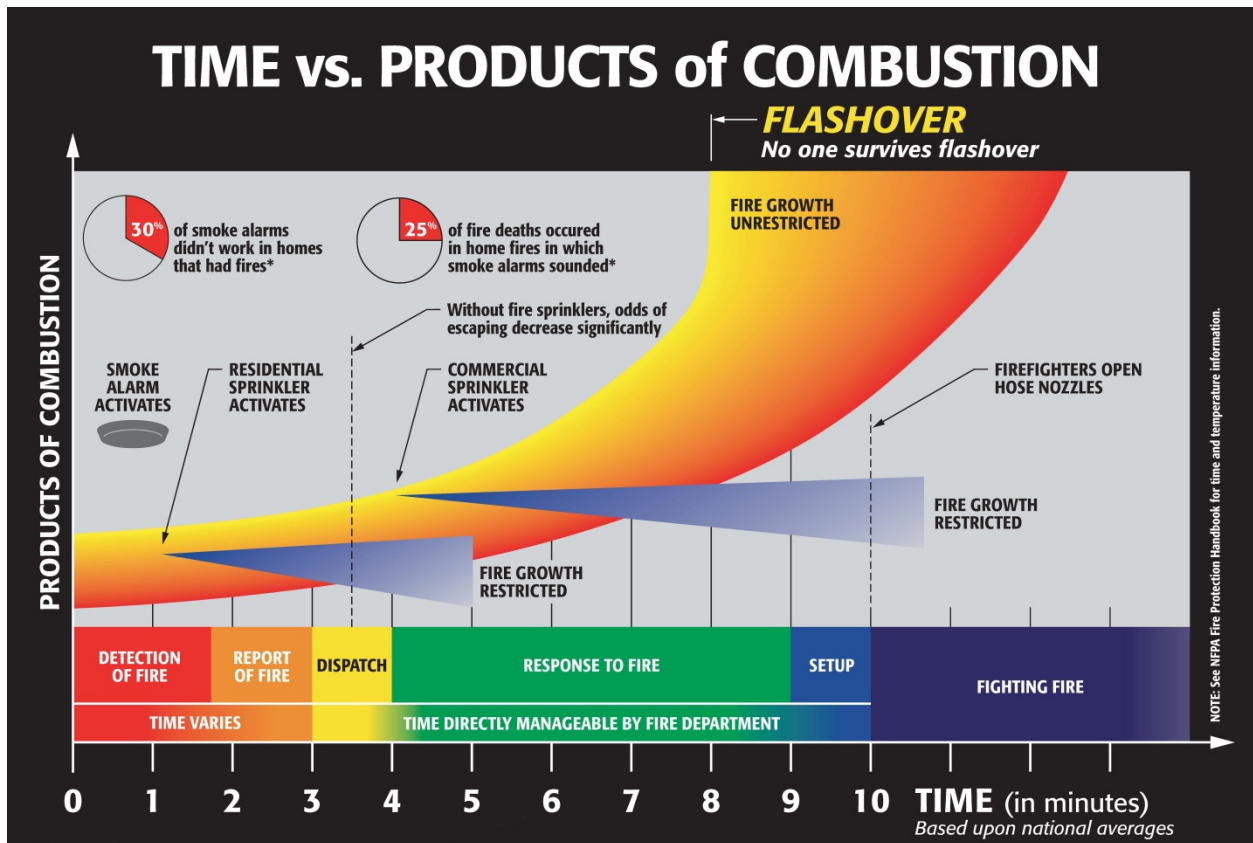


Figure 4 – Time versus Products of Combustion

How Many Ladder or Service Companies Does Nolensville Need?

A community needs a ladder company when it has at least five buildings that are three stories or more than thirty-five feet in height, or five or more buildings with a needed fire flow greater than 3,500 gpm, or a combination of five buildings meeting these criteria. Nolensville does not have enough buildings to require a ladder truck under ISO requirements. ISO states that if a ladder company is not needed, a service company is then required. A service company carries the same tools and equipment as a ladder company, but does not have the aerial ladder. As mentioned previously, based on ISO's requirements for distribution, according to the polygon model, Nolensville needs one service company. The NVFD maintains an apparatus that provides service as a service company.

Minimum Firefighter Response for a Low-Risk Structure Fire

Firefighting is a dangerous and labor-intensive operation, and the discussion on the number of firefighters needed to fight a fire continues, but there are guidelines one can use to make an informed decision on the number of firefighters needed to fight a structure fire. Back in 1966, NFPA Standard 197, A Training Standard on Initial Fire Attack, stated, "The desirable number of men normally required to respond with the

apparatus to give this level of performance with properly manned hose streams and equipment would be approximately fifteen plus the chief.” NFPA Standard 1410 replaced NFPA Standard 197 in 1979, but the idea of a minimum of fifteen firefighters plus an incident commander as a valid minimum number of personnel for the initial alarm has withstood the test of time. Since then, various agencies have conducted many studies over the years regarding the number of firefighters needed to extinguish a fire, and there is consensus among NFPA, ISO, and the International City Management Association (ICMA) that a low-risk structure fire requires between fourteen to nineteen firefighters for effective operations. A single-family dwelling is an example of a low-risk structure fire. For example, ISO gives full staffing credit for a response of nineteen personnel. NFPA recommends a minimum of fourteen as shown in Table 1.

Initial full-alarm structure fire assignment per NFPA 1710, § 5.2.4.2.2		
Sub-section	Function	Minimum Number
(1)	Incident command	1
(2)	Water supply/pump operator	1
(3)	Two hand lines with 2 firefighters each	4
(4)	Hand line support, 1 for each hand line	2
(5)	Search and rescue	2
(6)	Ventilation	2
(7)	Aerial device operator (only if aerial used)	1
(8)	Rapid Intervention Team (RIT)	2
	Total	14 or 15*
	* If an aerial device is used	
Table 1 – NFPA Recommended Minimum Response for House Fire		

The response level described above is for a residential structure fire of a house of about 2,000 square feet with no basement or exposures. NFPA 1710 Section 5.2.4.2.3 says that higher risk occupancies (schools, hospitals, apartments, commercial properties, etc.) require more resources, which means more apparatus and personnel. Local leaders must decide on a level of fire protection for their community, balancing the cost of providing the service against the lives and property at risk. To make this decision, it is important for the leaders to understand minimum response recommendations. This report acknowledges that Nolensville does not have the financial resources to hire enough paid personnel to provide that level of response to a structure fire. The use of automatic aid and mutual aid can provide a sufficient number of trained firefighters but this method takes more time to assemble an effective firefighting team of fourteen to fifteen personnel.

Fire Department Staffing for a Town Operated Fire Department

If Nolensville wants to start a paid fire department, providing minimum adequate staffing is critical for firefighter safety and to provide interior fire attack capability. OSHA 1910.134(g)(4), commonly called the “2-in/2-out rule,” requires that a minimum of two

properly trained and equipped firefighters be outside of the IDLH (Immediately Dangerous to Life and Health) atmosphere, which is what the smoke filled interior of a structure fire is, before two firefighters can make entry into an IDLH atmosphere. This is a minimum requirement, as effective and safe (as possible) firefighting requires considerably more than four firefighters. To enable interior firefighting operations to begin as quickly as possible, Nolensville should have a minimum of four firefighters on-duty (paid) 24/7. A second option would be to have two firefighters on-duty (paid) 24/7 with volunteer response that was timely. A third option would be to have an all-volunteer fire department. No interior firefighting operations can take place until a minimum of four firefighters are on the fire scene. The paid-staffing fire department option provides an improved service level in response time over the current service level. The drawbacks of the combination paid/volunteer and all-volunteer options are the uncertainty of the level of volunteer response during daytime hours, and the fact that the Town of Nolensville would be competing with the NVFD for volunteer firefighters from the same pool of potential volunteers. Therefore, MTAS recommends that Nolensville consider the paid option with four firefighters on-duty 24/7.

Assembling an Effective Firefighting Force

As mentioned above, Nolensville does not have the financial resources to provide for enough paid firefighters to meet the minimum response level of fourteen firefighters recommended by NFPA. NFPA 1710 § 5.2.1.2 allows for automatic aid and mutual aid to bring additional firefighters from other departments to the scene to provide sufficient staffing to fight the fire. Therefore, the most cost effective way for Nolensville to establish a municipal fire department is to hire enough personnel to provide a minimum on-duty strength of four firefighters 24/7 and enter into an automatic aid agreement with the NVFD. By providing a minimum of four on-duty personnel, the town avoids placing firefighters in a situation where they may be forced to make entry into an IDLH atmosphere with an insufficient number of personnel on the scene to comply with OSHA requirements. By using automatic aid, the town will assemble an effective firefighting force to improve fire protection.

Providing Needed Pump Capacity

Automatic aid is essential for providing the needed pump capacity on the scene. As mentioned above, Nolensville's basic fire flow is 2,500 gpm. For full ISO credit, the town needs to have enough fire engines on the scene to provide a total pump capacity of at least 2,500 gpm. A single fire engine is not capable of providing sufficient pump capacity, so the town needs automatic aid to provide the minimum pump capacity needed.

Anticipated Costs for Starting a Fire Department

The town owns no fire department assets, which means the town must fund the startup and operating costs. To minimize the fiscal impact, the town could opt to build and equip the fire department in one fiscal year and open and staff the fire department in the following fiscal year. These costs are significant, as shown in Table 2.

Category	1st Year	2nd Year	3rd Year	4th Year	5th Year
Exempt Salaries	0	0	0	0	0
Non-Exempt Wages	429,000	439,725	450,718	461,986	473,536
Overtime Wages	17,160	17,589	18,029	18,479	18,941
Holiday Pay	19,305	19,788	20,282	20,789	21,309
Benefits	175,890	180,287	184,794	189,414	194,150
Training/Education	12,000	6,000	6,000	6,000	6,000
Dues and Subscriptions	300	300	300	300	300
Meetings and Travel	3,000	3,000	3,000	3,000	3,000
Electricity and Gas	14,000	14,280	14,566	14,857	15,154
Water and Sewer	700	714	728	743	758
Telephone Expense	1,400	1,400	1,400	1,400	1,400
Prof. Svcs. - Physicals	2,400	0	2,400	0	2,400
Prof. Svcs. - NVFD					
Equipment Maintenance	500	500	500	500	500
Building Maintenance	3,000	3,000	3,000	3,000	3,000
Radio Maintenance	500	500	500	500	500
Office Supplies	800	800	800	800	800
Medical Supplies	2,500	2,500	2,500	2,500	2,500
Chemical Supplies	1,500	750	750	750	750
Uniforms and Clothing	9,600	6,000	6,000	6,000	6,000
Turnouts/PPE	30,000	1,000	1,000	3,500	3,500
Petroleum Products	4,800	4,896	4,994	5,094	5,196
Small Tools	800	800	800	800	800
Vehicle Maintenance	8,000	8,160	8,323	8,490	8,659
Insurance	30,000	30,000	30,000	30,000	30,000
Other Expenses	500	500	500	500	500
Fire Station - Land	350,000	0	0	0	0
Fire Station - Design & Con	1,320,000	0	0	0	0
Fire Station - FF&E	125,000	0	0	0	0
Firefighting Equipment	100,000	0	0	0	0
Vehicles	400,000	0	0	0	0
TOTAL	2,942,655	742,489	761,885	779,402	799,653

Table 2 – Town of Nolensville Estimated Fire Department Budget

The estimated budget was built using average salaries competitive with the local market, and by examining the operating budgets of other fire departments. Appendix C contains the narrative explanations of the items funded by each line item. The first year estimate includes the entire cost of the fire station, fire engine, and required equipment for the engine. These costs could be less depending upon whether the town already owns suitable land, and the construction materials used for the fire station, but the budget is a good estimate to work with. The town can spread the capital costs over several years by using bonds, loans, or other long-term funding options.

The estimated costs for land and the fire engine (acknowledging that fire apparatus must be replaced at some point, so the town should provide an apparatus replacement fund, which is not included in the operating budget) total \$2,175,000 of the estimated \$2,942,655 first-year expense. This leaves an estimated operating amount of \$767,655 for the first year. The estimated average annual operating cost over the five-year projection period is \$770,217, which is an estimated per capita cost of \$131.41. This does not include the cost of professional services with the NVFD. Fire departments must comply with state and federal laws, for example fit testing for wearing respirators and air quality testing for the breathing air compressor. In addition, the fire department needs a way to refill air cylinders, and a breathing air compressor is over \$30,000. The NVFD is an established fire department with the resources to provide these services. MTAS believes that it would be less expensive for the town to contract for these services with the NVFD. Since it is not possible to know what the NVFD might charge for these services, the line item is blank as an unknown cost. If the town elected to provide these services, then the budget estimate could be revised to include the cost of a breathing air compressor and fit testing device.

One of the questions asked was whether the town is paying too much for fire protection. MTAS does not have cost comparison data for volunteer fire departments, so it is not possible to make an “apples-to-apples” cost comparison. MTAS does have data from the Tennessee Municipal Benchmarking Project (TMBP). This project surveys ten cities for many performance measures, including the cost for fire service per capita. The cities surveyed are larger than Nolensville and have paid fire departments, but the data is useful for comparing the per capita cost of a paid fire department. The smallest city in the TMBP, Athens, has a population of 13,458 and a per capita cost of \$119.50, so the estimated per capita cost for a town operated fire department of \$131.41 is higher. For FY13, the town’s payment to the NVFD is \$113,850, or \$19.43 per capita, which is less than the cost of providing a municipal fire department.

Options Available to the Town of Nolensville

One of the questions asked was what options are available to the Town of Nolensville regarding the provision of fire protection, emergency medical response, and related emergency services for the town, and there are several options available.

Option 1 – Provide Full Fire Service

Create a fully self-sufficient fire department funded and staffed by the Town of Nolensville. The viability of a combination paid/volunteer department, or fully volunteer department, is doubtful, so a paid department is the best option. This option gives the town the greatest control over the delivery of fire services. The town would need two fire stations, two engines, a service company, a rescue unit, and forty-two personnel, which is enough personnel to place fourteen firefighters on the scene of a structure fire. Capital, startup, and first year operating costs are estimated at \$6,991,410. The annual operating cost estimate is \$2,641,410, or \$450.68 per capita. The town cannot afford to fund a fully self-sufficient fire department, and MTAS does not recommend this option.

Option 2 – Provide Initial Response Fire Service

Create a fire department funded and staffed by the Town of Nolensville with one town owned fire station and sufficient personnel to maintain a minimum daily staffing level of four firefighters. This option gives the town more control over the delivery of fire services and recognizes that the town will use automatic aid and mutual aid to place an effective firefighting force and the required pump capacity on the scene of a structure fire. This option allows the town to transition from receiving all fire services from the NVFD to assuming responsibility for the initial response while maintaining a partnership with the NVFD. As the town grows, the town expands the fire department as needed with the long-term goal of assuming responsibility for all fire services. Capital, startup, and first year operating costs are estimated at \$2,942,655. The annual operating costs estimate is \$770,217, or \$131.41 per capita.

Option 3 – Contract for Fire Service

Continue to contract with the NVFD for fire services. In meeting with representatives from the town and the NVFD, everyone has acknowledged that the service provided by the NVFD is very good. The town enjoys fire insurance premiums based on the NVFD's Class 5 ISO rating, which is in the top third of all fire departments in Tennessee. The per capita cost (currently \$19.43) is significantly less than what the town would pay for fire services under options 1 and 2.

MTAS recommends option 3, contract service, with the following recommendations.

1. The town should form a standing fire committee to review the monthly response and service summary reports, maintain a good working relationship between the town and the NVFD, and educate town leaders on the cost and science of providing fire protection.
2. The NVFD should provide to the town the information the town believes is necessary to understand the cost of providing fire services. Town leaders spend taxpayer funds responsibly, and they desire to be fully informed when making decisions. Information provided by the NVFD will illustrate the cost and complexity of providing good fire protection.

3. The NVFD should prepare an annual contract service proposal and submit the proposal to the fire committee before the end of February of each year for review, to give the town adequate time to include the cost of fire services in the town's budget development process. The fire committee should review the proposal, discuss and resolve any issues with the NVFD, and then make a recommendation to the town on whether to accept or reject the proposal.
4. Revise the contract to eliminate any provisions where the town purchases fire apparatus or pays for improvements for the NVFD. The town should contract for fire services through a request for proposal process, identifying the service levels desired, the same as the town would do for other contract services.
5. The town should develop a strategic plan for fire services with the intent of establishing a municipal fire department at some future date. The plan should identify potential locations for fire stations, estimated costs, and a funding method. The plan should outline the level of service desired and how that service will be provided.

Transitioning to a Paid Fire Department

The second question asked MTAS to provide a recommendation for a fire protection plan for the Town of Nolensville at build-out. The answer is that the town needs to develop a strategic plan for fire services. It is highly probable that at some point in the future the town will establish a municipal fire department. Exactly when that needs to occur is unknown and difficult to predict. The easiest answer is to say transition when the community's expectations are not being met, and the strategic plan defines those expectations. There are some trigger points the town can use to help make this decision based upon the community's fire protection goals identified in a strategic plan.

The plan should state the desired service level for the community. This service level can be identified in several ways, such as a desired ISO rating, desired response time, or desired number of firefighters on the scene of a structure fire. The plan should identify the services the town will provide. While fire response is assumed, does the town want to provide emergency medical response, and if so, at what level: first responder, basic EMT, or advanced life support? Does the town wish to provide vehicle extrication, hazardous materials response, and/or technical rescue services such as confined space, high angle, or trench rescue? The plan should identify potential locations for fire stations along with estimated costs for land, buildings, and furniture, fixtures, and equipment (FF&E). The plan should identify the cost for fire apparatus and equipment, and a funding method. The plan should identify desired performance measures, outline the level of service desired, and state how that service will be provided.

Nolensville should plan for at least three fire stations. The map in Figure 5 shows Nolensville's urban growth boundary. The blue line represents the urban growth boundary, and the red line illustrates the ISO defined 1½-mile service area of the NVFD fire station. Depending upon where the fire stations are located, it appears that the

town could achieve basic coverage with two stations, but three stations would provide the best response time and provide sufficient companies for commercial response. The exact size in square miles of the urban growth boundary was not available, but this report is using an estimate of twenty-five square miles. Based on the NFPA recommended maximum travel time of 240 seconds (about 1.97 miles), an area of twenty-five square miles requires 3.42 fire stations.

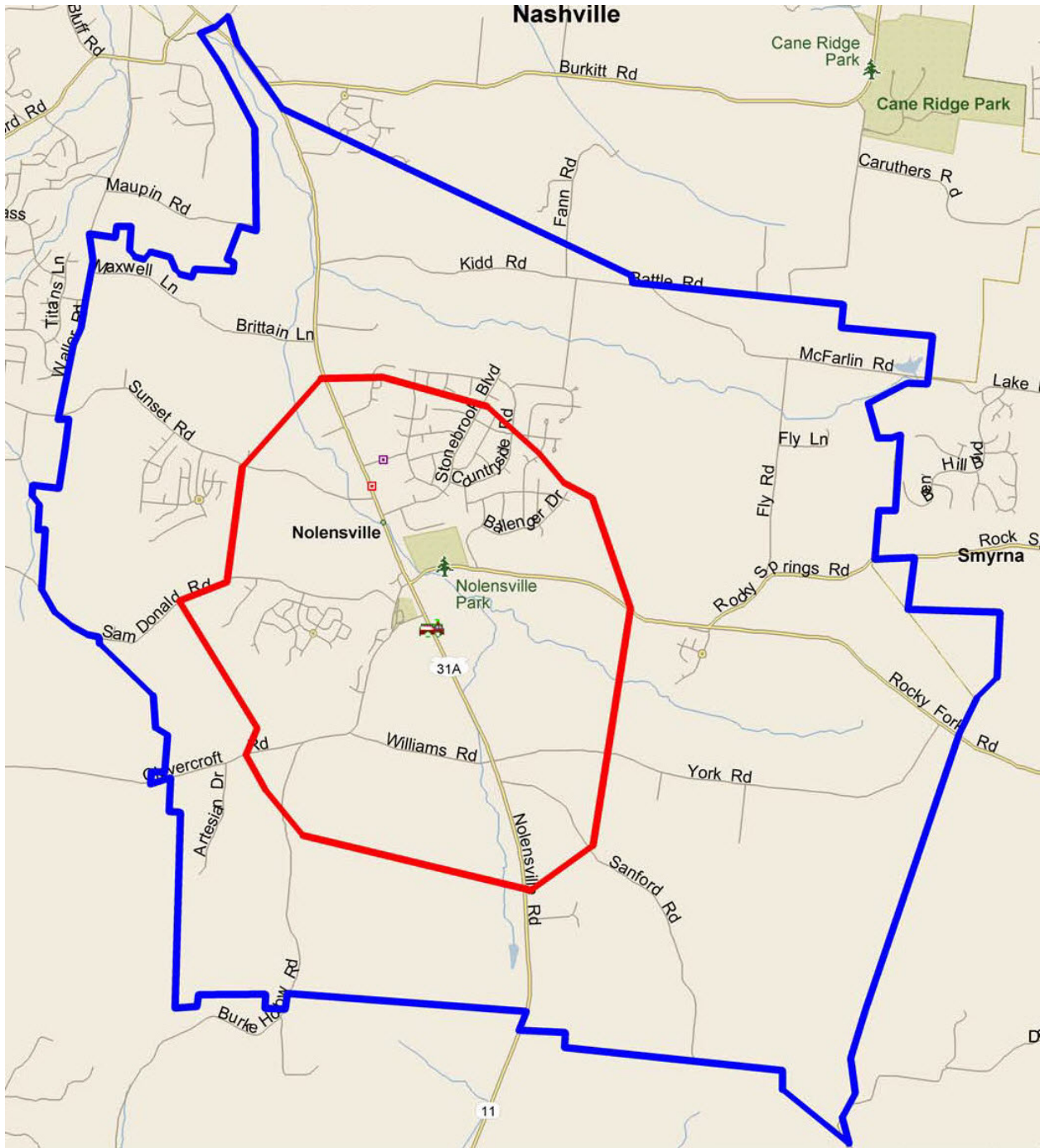


Figure 5 – Urban Growth Boundary and 1½ Mile Service Area for NVFD Fire Hall

Community Growth – The need for emergency services is constant, but the demand for emergency services grows. More residents, more visitors, more homes, and more businesses increase the demand for emergency services. The Williamson County Land Use plan noted that Nolensville is a town “showing increased potential for high growth.” Currently, the demand for fire services is low, as shown in Table 3, which means there is time for Nolensville to plan and budget for increasing and improving fire services as the community grows.

In looking at Table 3, the call volume (demand) increased by 37.12%. Fires increased by 14.29%, and the number of other emergencies decreased by 11.84%. The largest increase in service demand was for emergency medical calls, which increased by 68.94%. This indicates that Nolensville needs to include a plan for providing EMS response in its strategic plan.

Type Incident	2010		2011	
	Number	Percent	Number	Percent
Structure Fire	6	2.62%	6	1.91%
Vehicle Fire	2	0.87%	2	0.64%
Other Fire	13	5.68%	16	5.10%
Medical Calls	114	49.78%	193	61.46%
Vehicle Accidents	18	7.86%	30	9.55%
Other Rescues	13	5.68%	15	4.78%
Hazmat	4	1.75%	2	0.64%
Investigations	11	4.80%	10	3.18%
Alarms	36	15.72%	29	9.24%
Other	12	5.24%	11	3.50%
TOTAL	229	100.00%	314	100.00%

Table 3 – Calls for Service in Nolensville

Community Expectations – Growth will mean that people will move *to* Nolensville *from* other places. Nashville is the largest city nearby, and people who move from Nashville or other areas where they have been receiving urban level emergency services may expect the same level of emergency services in Nolensville. The larger the community, the higher the level of service people expect.

Missed Calls – The current demand for services is within the capabilities of the NVFD, but there will come a time when the NVFD, simply because of the nature of any volunteer fire department, will not be able to respond to a call in a timely manner. The town should monitor indicators such as response time, the number of firefighters responding, the number of fire apparatus responding, and the number of minutes it takes to assemble an effective firefighting force (at least fourteen firefighters, the required pump capacity on the scene, the ability to generate adequate fire flow) to help determine if the desired community services levels are there.

Extended Response Times – The regular failure of response apparatus to turnout (respond from) of the fire station in a timely manner endangers the community. Seconds saved are minutes earned, and response time is a critical factor for positive outcomes on fires and for decreased morbidity and mortality on medical emergencies. The town should monitor the turnout time of the initial response unit and the time to arrival of the complete first alarm assignment as performance indicators, as well as an increased reliance on mutual aid to meet desired response levels.

Reduced Firefighter Response – The NVFD is a volunteer department, which means the firefighters work full-time jobs and have other commitments that take them out of the community or delay their responses in the community. Active lifestyles may reduce the number of hours a firefighter can devote to the fire department, or prevent others from serving. Recruitment, retention, and turnover are continuing issues for every volunteer fire department. Apparatus responding with fewer than the required number of firefighters needed compromises the safety of citizens and the firefighters. The town should monitor the membership level of the NVFD and the number of firefighters responding on calls as indicators.

Desire for Non-Emergency Services – The NVFD provides fire and emergency medical response services, but there may come a time when the community desires the provision of non-emergency services. Examples include public education programs, fire prevention programs, fire code inspections of commercial properties, and fire and arson investigation.

Value of Services Received – The NVFD provides very good fire and emergency service for the town at a reasonable cost. As with any business, the cost of supplies, utilities, insurance, and other items increases, which means the business (the NVFD) must charge more for its services. As long as the cost of the contract service is less than what it would cost the town to provide the service, the return on investment is positive as long as the quality of service and the ISO rating meets the community's expectations. At some point, the cost of contract service will approach what it would cost the town to provide the service, or the quality of the service may decrease. At that point, the town should evaluate the return on the investment in contract service.

Recommendations

1. The Town of Nolensville enjoys a Class 5 ISO rating through the Nolensville Volunteer Fire Department. The Class 5 rating places the town in the top 30% of communities in Tennessee in terms of fire protection. Because of the Class 5 rating, residents and business owners enjoy lower insurance rates where the Class 5 rating applies. The service provided by the NVFD is very good. The cost for the town to start a fire department is considerably higher than the cost for contract service. MTAS recommends that the town continue to contract with the Nolensville Volunteer Fire Department for fire services while developing a strategic plan to establish a municipal fire department at some future date.
2. Adopt a response time standard for the community. Nolensville is a perpetual organization that will outlast current leaders, and this study looks towards build out, which is 20-plus years in the future. Once adopted, the response time standard will serve as a planning guide for future leaders. This study recommends a response time standard of 6:35 (six minutes, 35 seconds) for 90% of all responses, which is based upon recommendations found in NFPA Standard 1710, Standard for the Organization and Deployment of Fire Suppression Operations. The 6:35 breaks down as follows: ring time – 15 seconds, call processing time – 60 seconds, firefighter turnout time – 80 seconds, travel time – 240 seconds. Using this standard, planners would look for fire station locations to maintain a 4 minute travel time to as much of the area to be protected as possible.
3. Adopt a sprinkler ordinance for all new commercial construction. When determining the basic fire flow for a community, ISO does not consider properties protected by a code compliant automatic sprinkler system. In a sprinklered building, the amount of time between the occurrence of a fire and reopening for business can be as little as a few hours or days versus months, years or even never rebuilding for a non-sprinklered building.
4. Maintain the residential sprinkler ordinance. Tennessee's fire mortality rate for civilians has been among the highest in the nation. During 2002-2010, the period for the Tennessee Fire Mortality Study, the national fire mortality rate declined, but the rate in Tennessee increased. Residential structure fires account for about three-fourths of all civilian fire deaths in the state. Residential sprinklers save money and lives and are a good investment in a home, and Nolensville is commended for being pro-active in community safety.
5. Develop a strategic plan for fire services. The plan should state the desired service level for the community, identify potential locations for fire stations along with estimated costs for land, buildings, and furniture, fixtures, and equipment (FF&E), identify the cost for fire apparatus and equipment, and a funding method, and identify desired performance measures, outline the level of service desired, and state how that service will be provided.
6. Work to have Nolensville's development requirements extended into the urban growth boundary. Nolensville's ordinances do no good if the land in the urban growth boundary is developed to a lesser standard, and Nolensville inherits the increased risk upon annexation.

Appendix A – Estimated Travel Times and Total Response Time in Minutes

Distance To Travel in Miles	Estimated Travel Time	Ring Time	Call Processing Time	Fire Dept. Turnout Time	Total Response Time
0.25	1.08	0.25	1.00	1.33	3.66
0.38	1.30	0.25	1.00	1.33	3.88
0.50	1.50	0.25	1.00	1.33	4.08
0.75	1.93	0.25	1.00	1.33	4.51
1.00	2.35	0.25	1.00	1.33	4.93
1.25	2.78	0.25	1.00	1.33	5.36
1.50	3.20	0.25	1.00	1.33	5.78
1.75	3.63	0.25	1.00	1.33	6.21
2.00	4.05	0.25	1.00	1.33	6.63
2.25	4.48	0.25	1.00	1.33	7.06
2.50	4.90	0.25	1.00	1.33	7.48
2.75	5.33	0.25	1.00	1.33	7.91
3.00	5.75	0.25	1.00	1.33	8.33
3.25	6.18	0.25	1.00	1.33	8.76
3.50	6.60	0.25	1.00	1.33	9.18
3.75	7.03	0.25	1.00	1.33	9.61
4.00	7.45	0.25	1.00	1.33	10.03
4.25	7.88	0.25	1.00	1.33	10.46
4.50	8.30	0.25	1.00	1.33	10.88
4.75	8.73	0.25	1.00	1.33	11.31
5.00	9.15	0.25	1.00	1.33	11.73
5.25	9.58	0.25	1.00	1.33	12.16
5.50	10.00	0.25	1.00	1.33	12.58
5.75	10.43	0.25	1.00	1.33	13.01
6.00	10.85	0.25	1.00	1.33	13.43
6.25	11.28	0.25	1.00	1.33	13.86
6.50	11.70	0.25	1.00	1.33	14.28
6.75	12.13	0.25	1.00	1.33	14.71
7.00	12.55	0.25	1.00	1.33	15.13

Notes:

- Travel time was calculated using the Rand formula of $T = 1.7(D)$ to estimate travel time, where T is time and D is the distance to be covered expressed in miles.
- The 15-second ring time, 60-second call processing time, and 80-second turnout time are based on recommendations found in NFPA Standard 1710.
- Minutes expressed as decimal minutes: to compute seconds, multiply the decimal number by 60. For example, 3.66 decimal minutes equals 3:40 (3 minutes, forty seconds).

Appendix B – Letter from MTAS Attorney Sid Hemsley on Open Records Law

April 18, 2011

Mayor Jimmy Alexander
City of Nolensville
705 Stonebrook Blvd.
Nolensville, Tennessee 37135

Dear Mayor Alexander:

Questions and Answers

You have three questions arising from the fire study done for the City of Nolensville by Mr. Gary West, the former MTAS Fire Consultant:

1. Does the city have legal authority to provide financial support for the operation of the Nolensville Volunteer Fire Department, presumably including contracting for fire service from that department?
2. Is the city obligated to provide any level of fire services to the city and the residents of the city?
3. Are the records of the Nolensville Volunteer Fire Department subject to Tennessee's Open Records Law?

The answer to Question 1 is yes. The basis of that authority is the general law mayor-aldermanic charter under which the city is established. In addition, it probably has the inherent authority to provide fire service to its residents, including by contract. To that end, the city has a contract with the Nolensville Volunteer Fire Department to provide the city fire service. It also makes a "charitable contribution to the fire department under the authority of Tennessee Code Annotated, § 6-54-111.

The answer to Question 2 is that the fire department is contractually liable to provide fire service inside the city. In addition, the fire department is covered by the Tennessee Governmental Tort Liability Act, under which it is exempt from liability for its discretionary functions, but is liable for the negligence of its employees in performing its non-discretionary duties, including some aspects of how it responds to and fights fires.

The answer to Question 3 is yes. The records of the Nolensville Volunteer Fire Department, notwithstanding the fact that in theory it is a non-governmental, nonprofit organization that purports to be an "independent contractor" with respect to the City of Nolensville, are public records subject to inspection by any citizen of Tennessee. That result derives from a recent Tennessee Supreme Court case that adopted the "functional equivalent to a governmental agency" doctrine. Under that doctrine, the fire department is the "functional equivalent to a government agency"—a government fire

department. The fire department's financial records are also open to the city under Tennessee Code Annotated, § 6-54-111, and under the contract between the city and the fire department in which the fire department agrees to provide fire services to the city.

Analysis of Questions and Answers

Analysis of Question 1

The City of Nolensville is chartered under the general law mayor-aldermanic charter, codified at Tennessee Code Annotated, § 6-1-101 et seq. Nothing in that charter expressly mentions any authority for a city established under that charter to have a fire department or provide fire services. But the power of a city to have a fire department or to provide fire services to its residents is undoubtedly one of the police powers inherent in a municipality without specific mention in its charter. [Penn-Dixie Cement Corporation v. City of Kingsport, 225 S.W.2d 270 (Tenn. 1949).]

Penn-Dixie Cement Corporation is a reflection of Dillon's Rule, which still lives on in Tennessee. Under Dillon's Rule:

It is a general and undisputed proposition of law that a municipal corporation possess and can exercise the following powers and no others: First, those granted in express words; second, those necessarily or fairly implied in or incident to the powers expressly granted; and third, those essential to the accomplishment of the declared objects and purposes of the corporation—not simply convenient, but indispensable. Any fair, reasonable, substantial doubt concerning the existence of power is resolved by the courts against the corporation and the power is denied. [Merriman v. Moody's Executor, 25 Iowa 163, 170 (1868)]. [Emphasis is mine.]

Section 6-2-201(13) of the general law mayor-aldermanic charter provides that among the powers of municipalities established under that charter is the power to:

Make contracts with any person, firm, association or corporation for public utilities and public services to be furnished the municipality and those in the municipality. The power to make contracts embraces the power to make exclusive contracts. When an exclusive contract is entered into, it shall be exclusive against any other person, firm, or corporation. These contracts may be entered into for a period of twenty-five (25) years or less, but no longer....

Even if it were not true that the provision of fire service by a municipality is inherent in municipal corporations, under its charter power to make contracts with persons, firms and corporations, the City of Nolensville would still have the power to make such contracts for the provision of fire service. If there were any doubt that Section 6-20-201(13) could be read that way, it was declared in Southern Contractors v. Loudon County Board of Education, 58 S.W.3d 706 (Tenn. 2001) that while Dillon's Rule is still the law in Tennessee, it is only a rule of statutory construction, and that where the

General Assembly has granted local governments “comprehensive governmental powers...without either enumerating the powers or expressly limiting the scope of that authority,” that general provision “will be liberally construed.” [At 713] The court cited three examples of the General Assembly’s grant of such comprehensive general powers. One of those was § 6-2-201(32) of the general law mayor-aldermanic charter in which provides that:

Every municipality incorporated under this charter may [h]ave and exercise all powers that now or hereafter it would be competent for this charter specifically to enumerate, as fully and completely as though these powers were specifically enumerated.

Under that provision of Nolensville’s City Charter, then, § 6-2-201(13) is liberally construed and would certainly allow the city to contract with the Nolensville Volunteer Fire Department for fire service, as a “public service.”

In addition, in *Gray v. City of East Ridge*, 641 S.W.2d 204 (Tenn. 1982), under Section 2 of the city’s charter, “[s]aid city shall have power by ordinance of its governing authority within said City, ... to provide for the organization, and regulation of a police and a fire department.” [At 206] That charter provision, declared the Court, was enough to allow the city to grant a franchise to the East Ridge Fire Department, which was a subscription fire service, and that such fire service satisfied the requirement in Section 2 of the city’s charter. In that case, the owner of an apartment complex, a unit of which was destroyed by fire, was denied the right to recover his damages because he had failed to subscribe for fire services from the East Ridge Fire Department.

Section 6-2-201(13) of the general law mayor-aldermanic charter, which we have already considered above, also authorizes the city to grant “exclusive contracts” for city services which authority undoubtedly contemplates the granting of exclusive franchises for fire services.

I have not been asked to pass upon the validity of the contract between the city and the fire department for latter to provide to the former fire services, nor the validity of the “charitable contribution” the city makes to the fire department under Resolution 06-09. I assume that both are valid agreements. In fact, I have no reason to argue otherwise. However, I will briefly outline those agreements below because they are pertinent to the analysis of all three questions.

The City of Nolensville has a contract, last executed July 23, 1993, for the Nolensville Volunteer Fire Department, to provide fire service “to all areas and locations within the municipal boundary of Nolensville, Tennessee.” Under that contract, the Nolensville Volunteer Fire Department purports to be “organized pursuant to the authority of T.C.A. 7-38-101 et seq., which permits individuals to form private Departments for firefighting purposes.” That contract provides for the payment by the City of Nolensville of \$32,000 a year to the Nolensville Fire Department. However, it is my understanding that the city appropriates approximately \$90,000 a year to that fire department, which includes, but is not limited to, payments toward the cost of an addition to the fire department’s

building inside the city. The city's payments for the addition to the fire department's building are being made under Resolution 06-09 adopted on what appears to be September 7, 2006, in which the city agreed to finance 50% of the cost of the construction of an addition to the Nolensville Fire Department, which is expected to cost \$441,000.

The statutory authority for Resolution 06-09 is Tennessee Code Annotated, § 6-54-111, which authorizes municipalities to make contributions to "nonprofit charitable organizations," and to nonprofit civic organizations. The Nolensville Volunteer Fire Department was chartered in 1977 by the Tennessee Secretary of State as a "Non-Profit Corporation." [Tennessee Secretary of State's website.], even though it was originally established under Tennessee Code Annotated, § 7-38-101. Under Tennessee Code Annotated, § 7-38-101:

Any number of persons, residents within a municipality, may form themselves into a company for the purpose of extinguishing fires, by having their names and objective recorded in the register's office of the county.

That statute is the product of an 1831 act that has changed little since then. As far as I can determine, there are no cases interpreting that statute. It is clear that fire companies organized under that statute are "private fire companies," [although the word "private" never appeared in the heading of that statute until recent times]. They have the right to "make rules and regulations for their government, to impose fines for nonattendance or other delinquencies," [Tennessee Code Annotated, § 7-38-102], and to "procure fire engines, buckets, hooks and ladders ... and may hold property, real and personal, for its purposes..." [Tennessee Code Annotated, § 7-38-104]. It is not clear whether that statute contemplated that fire companies could be profit and nonprofit companies. Whatever the case there, given the history of fire service in America, most of them were probably volunteer companies, although some of them may have provided service on a subscription basis. In any event, because the Nolensville Volunteer Fire Department was incorporated as a nonprofit public benefit corporation in 1977, presumably it meets the definition of "charitable organization" contained in Tennessee Code Annotated, § 6-54-111.

Analysis of Question 2

The contract between the City of Nolensville and the Nolensville Volunteer Fire Department obligates the latter "to provide firefighting services to all areas and locations within the municipal boundaries of Nolensville, Tennessee," which under the contract includes a wide variety of firefighting and fire safety services. [Paragraph 3] The city has also agreed in that contract "not to compete by establishing or by funding a municipal fire department so long as the Department is fulfilling its responsibility under this agreement." [Paragraph 7]

The city has a contractual expectation that the fire department will provide the city fire services during the term of the contract, and the failure of the fire department to perform

that service would be actionable on the part of the city. Of course, the fire department has a contractual expectation that the city will live up to its obligations under the contract.

But the fire department is also liable under the Tennessee Governmental Tort Liability Act (TGTLA) to perform fire services commensurate with that Act. The contract provides that “The express intent of both these parties is that the Department will be an independent contractor.” But Tennessee Code Annotated, § 29-20-102(3) defines “Governmental entity” as:

any political subdivision of the state of Tennessee, including, but not limited to, any municipality, metropolitan government, county, utility district, school district, nonprofit volunteer fire department receiving funds appropriated by a county legislative body or a legislative body of a municipality.

The same statute, subsection (2) defines “Employee” as:

Means and includes any official (whether elected or appointed), officer, employee or servant ... or any officer, employee or servant thereof, of a governmental entity, ... and, further including regular members or voluntary or auxiliary firefighting, police or emergency assistance organizations.

Tennessee Code Annotated, § 29-20-107(a) provides that “Any person who is not an elected or appointed official or a member of a board agency or commission shall not be considered an employee of a governmental entity for purposes of this chapter unless the court specifically finds that all of the following elements exist:”.... [There follows a list of requirements that a member of a volunteer fire department could not meet]. Subsection (c) of the same statute provides that, “No governmental entity may extend the immunity granted by its chapter to independent contractors, or other persons or entities by contract, agreement or other means....” But Subsection (d) of that statute declares that “A regular member of a voluntary or auxiliary firefighting, police, or emergency assistance organization of a governmental entity shall be considered to be an employee of that governmental entity for purposes of this chapter without regard to the elements set forth in subsection (a).”

As we saw above, the definition of “governmental entity” in Tennessee Code Annotated, § 29-20-102(3)(A) includes a “nonprofit volunteer fire department receiving funds appropriated by a...legislative body of a municipality....” Those definitions contained in the TGTLA do not distinguish between volunteer fire departments that are municipal agencies and volunteer fire departments that are so-called “independent contractors.”

Under that Act, fire departments are not liable for discretionary duties. In *Harper v. City of Milan*, 825 S.W.2d 92 (Tenn. Ct. App. 1992), the City of Milan had a rural fire service contract with the Harpers to respond to structural fires within 3-1/2 miles from the city limits, under certain requirements, which the Harpers met. The city responded to a fire at the Harper’s home with a pick-up truck equipped with a 250 gallon tank. The Harpers

argued that action was inadequate both under the TGTLA and under their contract with the city.

As to the TGTLA claim, the Court held that

Determining the amount and type of equipment to deploy in response to a particular call is one such discretionary decision....The Harpers do not raise an issue of fact regarding the proficiency or skill of the firemen. Any injury to the Harpers that may have resulted from the alleged negligence of the City of Milan in responding to the Harper's fire arose out of the exercise or performance of a discretionary function.... [At 95]

But not all decisions of a fire department are discretionary, declared the Court. It pointed to the earlier case of *Gordon v. City of Henderson*, 766 S.W.2d 784 (Tenn. 1989), in which four persons died in a fire. The plaintiff alleged the city was negligent for (1) the city's "firemen being absent from their regular duty station, had to be located by the Henderson Police Department"; (2) the "response time of the firemen was at least fifteen minutes when the proper response time considering the location of the fire and the fire house should be less than five minutes"; (3) "some of the firemen responding to the fire 'had the smell of liquor on their breath and were unable to respond as trained and professional firemen'"; and (4) "the firemen incorrectly placed their equipment in operation." [At 94] The Court declared that, "we find it difficult to characterize the apparent intoxication of firemen as a 'discretionary function,' nor, without an explanation by defendants, the absence of firemen from their duty station and the resultant undue delay in response time." [At 95]

That case led the *Harper v. City of Milan* Court to declare that, "The courts have held that it is not a question of the exercise of discretion when it is a matter involving the proficiency of the department." [At 95] But "The Harpers do not allege any delay in the response by the City of Milan nor that the firemen did not act in a skillful manner....The Harpers do not allege any lack of proficiency on the part of the City of Milan," said the court. [At 95]

As to their contractual claim, the Court, pointing to the contract between the City of Milan and the Harpers, held that "the Harpers have clearly stated a cause of action for a breach of contract." [at 96] But the Court also dismissed that claim, reasoning that:

There is no dispute that the City of Milan did respond to the call regarding the Harpers' fire. The contract makes no promise or guarantee as to the adequacy of the response made by the City of Milan. The only promise made by the City of Milan to the Harpers is that the City could respond to their call and there is no evidence in the record that there was any breach of that promise. [At 96]

Under those cases, the Nolensville Volunteer Fire Department has both a contractual obligation to respond to fires within the City of Nolensville, and under the TGTLA is liable for negligence in performing its non-discretionary duties, one of which is to respond to fires in a manner that does not reflect a negligent response.

Analysis of Question 3

It appears that this question is settled by the Tennessee Supreme Court's application of the Open Records Law in the case of *Memphis Publishing Company v. Cherokee Children & Family Services*, 87 S.W.3d 67 (Tenn. 2002). In that case, the Court considered the history of the privatization of governmental functions through independent contractors and non-profit government benefit agencies and other non-governmental entities, and adopted a "functional equivalent of a governmental agency" test for determining whether the records of such agencies and contractors was subject to Tennessee's Open Records Law. In holding that the records of the Cherokee Children & Family Services, a non-profit public benefit corporation, were open records the Court declared that:

Our review of authority from other jurisdictions persuades us that the functional equivalency approach described above provides a superior means for applying public records laws to private entities which perform "contracted out" governmental services. As the facts of these cases demonstrate, private entities that perform public services on behalf of a government often do so as independent contractors. Nevertheless, the public's fundamental right to scrutinize the performance of public services and the expenditure of public funds should not be subverted by government or by private entity merely because public duties have been delegated to an independent contractor. When a private entity's relationship with the government is so extensive that the entity serves as the functional equivalent of a governmental agency, the accountability created by public oversight should be preserved. [At 79]

In applying the "functional equivalency" test against the character and functions of the Cherokee Children & Family Services, the Court reasoned that:

- Child care services for indigent families, and supervising child care placement under TDHS guidelines, were "undeniably public in nature."
- "Cherokee's involvement in providing these services was extensive, with all of its employees performing services under contracts with TDHS."
- Under its charter, Cherokee's business activities were dedicated exclusively to the services of TDHS contracts. For that reason, "all of its records relate to state business."
- Over ninety-nine percent of Cherokee's operations came from state funds.
- ["A] significant level of governmental control" over Cherokee was exercised by TDHS. [79-80]

The Court also declared that:

While it is true that (1) Cherokee was privately incorporated rather than created by the legislature; (2) the contracts disavowed any agency relationship between Cherokee and

the State; and (3) the parties asserted that the State incurred no tort liability for Cherokee's activities, these considerations are outweighed by the other factors listed above. Accordingly, we conclude that Cherokee served as the functional equivalent of a governmental agency, and so we hold that the records in Cherokee's possession are subject to the public access pursuant to the terms of the Tennessee Public Records Act.... [At 80]

While the fit of the Nolensville Volunteer Fire Department with Cherokee is not exact, it is not required to be exact under the "functional equivalent" test; the fit is far more than close enough. A large part of the fire department's operations, if not all of them, are "public in nature." Undoubtedly, all or most of the personnel in the fire department, be they volunteer or paid personnel, are dedicated to performing fire services under contracts with the City of Nolensville, and with the county. While I do not know how much funding the fire department receives from the county, it receives at least \$90,000 a year from the city, including payments towards the charitable contribution the city made to the fire department under Tennessee Code Annotated, § 6-54-111. It is also my understanding that the fire department has received various grants from public agencies and entities for its firefighting functions. The fire department also falls under the definition of a "governmental entity," and its volunteer firefighters under the definition of "governmental employees," under the TGTLA, and both receive extensive immunities thereunder. A significant amount of government control is exercised over the fire department's firefighting functions, including the requirement of state recognition under Tennessee Code Annotated, § 68-102-108(c), and Chapter 0780-2-20 issued by the Tennessee Department of Commerce and Insurance, Division of Fire Prevention. Control is also exercised by the City of Nolensville under its contract with the fire department (and perhaps similarly, by the county).

But the Nolensville Fire Department also has broad governmental powers under the contract between the city and the fire department. Under Paragraph 6 of the contract, "Any ordinance adopted by the Town for fire protection or fire prevention will be adhered to by the Department. The Department will also be authorized to enforce all such ordinances or Town regulations." [Emphasis is mine.] It is difficult to find stronger evidence of the "functional equivalency" of a governmental agency than that close link between the city and the fire department that allows the fire department to enforce the city's ordinances.

Neither the fire department's status as a non-profit organization, nor the fact that the city and the fire department characterize the fire department as an "independent contractor" in their contract for fire service to the city, lift the fire department over the "functional equivalent" test. It seems abundantly clear that under all the facts and circumstances the Nolensville Volunteer Fire Department is the "functional equivalent" to a government.

In addition, Paragraph 4 of the 2003 contract between the City of Nolensville and the Nolensville Volunteer Fire Department provides that:

The Nolensville Volunteer Fire department will provide to the Town a copy of their proposed budget on an annual basis in time to allow the Town to consider this information in constructing the Town's budget. The Nolensville Volunteer Fire department will provide the Town with a quarterly revenues and expense statement and an annual revenues and expense statement at the end of the Nolensville Volunteer Fire department's fiscal year...

That is an "open records" contractual agreement on the part of the Nolensville Volunteer Fire Department toward the City of Nolensville. The above language in paragraph 4 is not restricted to the revenues and expenses related only to the City of Nolensville, but the fire department's total budget.

But even if that were not so, the City of Nolensville's Resolution 06-09, in which it gives to the Nolensville Volunteer Fire Department 50% of \$441,000 under Tennessee Code Annotated, § 6-54-111 brings it entirely under that statute, including subsection (c), which provides that:

Any nonprofit organization that desires financial assistance from a municipality shall file with the city clerk a copy of an annual report of its business affairs and transactions, which includes, but is not limited to, a copy of an annual audit, a description of the programs that serve the municipality and the proposed use of the municipal assistance. Such report will be open for public inspection during regular business hours of the city clerk's office.

That provision appears to include a general annual report and audit, not ones related only to the nonprofit organization's business affairs with the city.

However, the most important entrance to the fire department's records is not through the provisions in the contract between the city and the fire department nor the disclosure requirements in Tennessee Code Annotated, § 6-54-111, but Tennessee's Open Records Law, found at Tennessee Code Annotated, § 10-7-501 et seq. which generally opens to public inspection most records of all local governments, during their business hours, which, under the "functional equivalent" test includes the Nolensville Volunteer Fire Department.

Sincerely,

Sidney D. Hemsley
Senior Law Consultant

Appendix C – Budget Category Explanations

Exempt Salaries: Salaries for exempt employees. No exempt salary is shown, as the recommendation is that the police chief serve as the initial fire chief through a reclassification to the position of public safety director.

Non-Exempt Wages: Wages for non-exempt (hourly) employees. The budget projection includes an annual wage increase of 2.5%. The wages projected are based on the following pay rates, which are suggested to remain competitive based on a salary survey for area fire departments: firefighter, \$33,000; driver, \$36,000; fire lieutenant, \$41,000.

Overtime Wages: Wages for non-exempt employees working extra duty hours. The amount estimated is 4% of the total for non-exempt wages. Overtime use covers FLSA overtime for a 56-hour workweek, backfill for personnel off on sick leave, vacation, training, or other absence, and callback of off-duty personnel for large fires, other incidents, or other reasons, such as increased staffing from projected severe weather emergencies.

Holiday Pay: Wages for non-exempt employees working on scheduled holidays. Since firefighters must work 24/7, this pay compensates firefighters for working on holidays. Estimated at 4.5% of the total amount of non-exempt wages.

Benefits: The cost of providing benefits including group health insurance, retirement, OPEB (other post-employment benefits), and Worker's Compensation. Estimated at 41% of the total of exempt salaries and non-exempt wages.

Training/Education: Funds for training fire personnel. Estimated at \$1,000 per firefighter for the initial year to provide for rookie school and to purchase training manuals for the fire department library. Training costs include maintaining emergency medical care licenses. Training costs are estimated at \$500 per firefighter for future years.

Dues and Subscriptions: Funds for the fire chief to be a member of the Tennessee Fire Chiefs Association and for subscriptions to fire service publications including Fire Chief, Firehouse, and Fire Engineering.

Meetings and Travel: Funds for the fire chief to attend the meetings of the Tennessee Fire Chiefs Association and for firefighters to attend classes at the Tennessee Fire and Codes Academy.

Electricity and Gas: Funds for the gas and electricity used at the fire station.

Water and Sewer: Funds for the water and sewer used at the fire station.

Telephone Expense: Funds for business rate local and long distance telephone service.

Prof. Svcs. – Physicals: Funds for physical examinations for all firefighters, estimated at \$200 per physical. Physicals should be repeated at least every other year.

Prof. Svcs. – NVFD: Funds for contracting for services with the NVFD for the refilling of SCBA air cylinders and the annual fit testing of firefighters. Contracting for this service is considerably less expensive than purchasing a breathing air compressor and the equipment to do the annual fit testing required by OSHA. This item is blank because while this report recognizes the need for these services the cost of these services should be negotiated at the local level.

Equipment Maintenance: Funds for the repair and maintenance of small hand tools, nozzles, hose, and other firefighting equipment.

Building Maintenance: Funds for the repair and maintenance of the fire station, which includes consumables and cleaning supplies, and grounds maintenance, including the mowing of the grass.

Radio Maintenance: Funds for the repair and maintenance of mobile radios, portable radios, and pagers for firefighters, and purchase of rechargeable batteries.

Office Supplies: Funds for office type supplies including pens, paper, maps, photocopying, postage, etc.

Medical Supplies: Funds for emergency medical supplies, such as bandages, splints, and oxygen, used in providing emergency medical care on first responder calls.

Chemical Supplies: Funds for firefighting chemicals such as AFFF firefighting foam and the refilling of dry chemical and carbon dioxide fire extinguishers.

Uniforms and Clothing: Funds for uniforms for firefighters. Estimated at \$800 for the first year so fire personnel can purchase a winter coat, and at \$500 annually for the replacement of worn uniform items.

Turnouts/PPE: Funds for the purchase of turnouts (protective firefighting clothing). Each set of turnouts costs approximately \$2,500. Turnouts have a life of about six years, so the town should establish a turnout replacement program. The cost of outfitting 12 firefighters is included in the first year. \$1,000 is included in years two and three to replace items that are prone to wearing out. The cost to replace one set of turnouts and funds for wear and tear are included in years four and five to begin the turnout gear replacement program.

Petroleum Products: Funds for the purchase of diesel fuel and oil for fire apparatus.

Small Tools: Funds for the replacement of small tools and equipment that cannot be repaired due to damage or loss.

Vehicle Maintenance: Funds for the maintenance and repair of fire department apparatus and vehicles.

Insurance: Funds for insurance premiums for coverage of the fire station and fire department vehicles.

Other Expenses: Funds for miscellaneous and “petty cash” expenses not otherwise anticipated that occur during the budget year not covered in another line item.

Fire Tools and Equipment: Funds for the purchase of the tools, hose, nozzles, SCBA, and other items required to equip a new fire engine.

Vehicles: Funds for the purchase of a fire engine.

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