

FIRE/EMERGENCY SERVICE CONSIDERATIONS CRAWFORD COUNTY

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Commonwealth of Pennsylvania | Tom Wolf, Governor PA Department of Community & Economic Development | Dennis M. Davin, Secretary | dced.pa.gov

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Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Introduction

This report is prepared for the use of the elected officials and officers of the County of Crawford, Pennsylvania, and others so designated by the County.

This project is funded through the Commonwealth of Pennsylvania, Department of Community and Economic Development, Center for Local Government Services. This project was initiated at the request of the County.

Allen W. Clark, Emergency Management Coordinator, served as the principal contact for the County. Eric Henry, Chairman of the Crawford County Board of Commissioners was the principal elected official involved with the project.

Technical information and data for this report has been provided by various sources. These sources are deemed to be reliable and are cited where appropriate. Additional information has been gathered from written documents, site visits, and interviews. Such information is taken at "face value" and is believed to be valid for the purpose presented. No part of this report constitutes an audit of financial statements or performance standards.

Prior to the start of this project, the County formed a Fire Service Task Force. The task force represents the interests of Crawford County's fire departments regarding issues of a countywide nature. The task force was formed in 2020 at the request of the County Commissioners.

The task force is structured to provide the County Commissioners with information and concerns regarding policies, procedures, and programs that impact the fire service. The task force has developed its own bylaws for the operation of the organization.

During this project, the task force provided valuable information to the consultant. Their dedication should be recognized as their work is referenced throughout this report.

The intent of this report is to provide information for municipal officials to assist in making informed decisions regarding public fire protection within and for the municipalities within the County.

As referenced in this report, the County of Crawford may also be referred to as Crawford County or simply as the County. The term municipality or municipalities refers to the unit of local government, such as a city, borough, or township.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

County Overview

Crawford County is one of 67 counties in Pennsylvania. Crawford is classified as a County of the Sixth-Class. It contains two Cities of the Third-Class, fourteen boroughs, and 35 townships of the Second-Class, totaling 51 individual municipalities.

Classifications of counties and local municipalities in Pennsylvania is primarily driven by population.

The U. S. Census Bureau reports the population of the County as 83,983. The area is 1,012 square miles with a population density of 87.7 per square mile.

The County is situated in northwestern Pennsylvania. Its western border is the State of Ohio. This is noteworthy and has certain considerations regarding interstate mutual aid between municipalities and emergency service providers.

The County is governed by a three-member Board of Commissioners who are elected at-large for a four-year term.

Throughout Pennsylvania, counties have limited authority to provide public fire protection and emergency medical services. Counties may provide discretionary funding in support of these services.

Public fire protection is currently provided by 27 fire departments operating from 30 fire stations.

Authority

The authority and responsibility to provide public fire protection throughout Pennsylvania is vested to local municipalities, not counties. This authority is referenced in several state statutes as it relates to each type of municipality.

The authority and responsibility to provide public fire protection is vested to the cities by the Commonwealth by virtue of the Third-Class City Code.

The Code was amended in 2008 by Act 31 of 2008 to further clarify responsibilities regarding fire protection.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Section 2403 Specific Powers...69. Emergency Services

69. Emergency Services.--(a) The city shall be responsible for ensuring that fire and emergency medical services are provided within the city by the means and to the extent determined by the city, including the appropriate financial and administrative assistance for these services.

(b) The city shall consult with fire and emergency medical services providers to discuss the emergency services needs of the city.

(c) The city shall require any emergency services organizations receiving city funds to provide to the city an annual itemized listing of all expenditures of these funds before the city may consider budgeting additional funding to the organization.]

The authority and responsibility to provide public fire protection is vested to the boroughs by the Commonwealth by virtue of the Borough Code.

The Code was amended in 2008 by Act 8 of 2008 to further clarify responsibilities regarding fire protection. The Borough Code was again amended by Act 37 of 2014 and is codified as Title 8, Pennsylvania Consolidated Statues, Section 1202(56):

(56) To ensure that fire and emergency medical services are provided within the borough by the means and to the extent determined by the borough, including the appropriate financial and administrative assistance for these services.

The borough shall consult with fire and emergency medical services providers to discuss the emergency services needs of the borough. The borough shall require any emergency services organization receiving borough funds to provide to the borough an annual itemized listing of all expenditures of these funds before the borough may consider budgeting additional funding to the organization.

The authority and responsibility to provide public fire protection is vested to the townships by the Commonwealth by virtue of the Second-Class Township Code. The Code, amended in 2008 by Act 7 of 2008, is now codified as Section 1553. This section states as follows:

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Emergency Services.-(a) The township shall be responsible for ensuring that fire and emergency medical services are provided within the township by the means and to the extend determined by the township, including the appropriate financial and administrative assistance for these services.

(b) The township shall consult with fire and emergency medical services providers to discuss the emergency services needs of the township.

(c) The township shall require any emergency services organizations receiving township funds to provide to the township an annual itemized listing of all expenditures of these funds before the township may consider budgeting additional funding to the organization.

The lack of authority to provide public fire protection is a challenge to Crawford and many other counties in Pennsylvania. While a county-based system is not currently possible, a county-wide system is a realistic possibility.

The effectiveness of such a system is directly proportional to the number of municipalities that would participate in such a system. This would require every participating municipality to enter in an intermunicipal agreement for this purpose. Additional information regarding intermunicipal agreements can be provided by the Department of Community and Economic Development (DCED) at <u>www.dced.pa.gov</u> and the Pennsylvania Municipal League, <u>www.pml.org</u>.

In addition to the intermunicipal agreement for the municipalities, all participating fire departments would enter into a shared services agreement.

As these agreements are not mergers or consolidations of the municipalities or fire departments, the agreements should be carefully written and reviewed so the expectation of all parties is clearly identified.

There are several critical factors required for the agreements. These include the following:

- A defined level of service to be provided and measurable parameters regarding service delivery (This is often referred to as the "acceptable level of risk".)
- Provisions for the participating fire departments to share resources, especially staffing and apparatus

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

• Defined financial responsibility for each municipality to the fire department(s) return for services provided

The County, by its Board of Commissioners, can be a great influence to encourage local elected officials to participate in such agreements. The County may also be able to provide resources to facilitate the agreements.

The role of local elected officials is critical to the fire protection of the community. For each municipality within the county, it is the local elected officials that are responsible for public fire protection to the extent they determine appropriate.

Recommendation: The County Commissioners should consider facilitating meetings with local elected officials to address public fire protection issues and encourage them to meet their legal obligations, including the appropriate funding for fire services.

Community Risk Reduction

A primary consideration in public fire protection is the adoption and implementation of a comprehensive Community Risk Reduction (CRR) plan. No such plan appears to exist in Crawford County.

Much like the County's Hazard Mitigation Plan approaches the management of natural and manmade disasters, a comprehensive Community Risk Reduction plan provides for the management of risks to the community thru the data-driven decision making process. This process includes interventions in prevention and mitigation.

The elements of community risk reduction include:

Education Engineering Enforcement Emergency Response Economic Incentives (sometimes referred to as economic impact)

The E's of Education, Enforcement, and Engineering are preventive in nature. They encompass interventions to be taken before an incident occurs.

Economic Incentives are offered to encourage people to make certain choices or influence behavior in a certain way.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Emergency Response is the part of the plan to effectively respond to incidents to mitigate (lessen the loss) injuries, save lives, and reduce the loss of property.

Education, engineering, and enforcement are typically viewed as prevention strategies. Appropriate resources for emergency response provide for mitigation.

The economic impact, also known as economic incentives, can provide an incentive for the proper intervention. If no action or inappropriate action is taken, the economic impact can have negative results. The reason to incorporate prevention is necessary to lessen the negative impact on the community.

A comprehensive community risk reduction program can be used to identify many situations having an impact on emergency service organizations throughout the county.

It is important that these decisions be data driven for objectivity. Data used for the plan needs to be credible.

The Center for Public Safety Excellence offers a publication for reference in the Community Risk Reduction process. This publication, *Outcomes-A Guide for Measuring Success,* is available as a free downloadable document from their website, <u>www.cpse.org</u>. Every elected official at the County and municipal should read this document and be familiar with this process and its benefits.

This document describes the importance of community risk reduction and a systematic approach to a community risk reduction plan.

Vision 20/20, a leading source for information for strategic fire and injury risk reduction, provides a great resource for this information. Their website is <u>www.strategicfire.org</u>.

Training in Community Risk Reduction is available through a variety of programs from the National Fire Academy. This training if offered free of charge. Additional information is also available from the Publications Office of the United States Fire Administration. This material is also free of charge. Internet access is available at <u>www.usfa.fema.gov</u>.

It is recognized that the diverse nature of the County, by its geography and population density, would require an approach based on the requirements of any given area. The urban nature of the cities provides challenges that are different than those encountered in the rural areas of the County.

Effective community risk reduction involves a variety of stakeholders, including elected and appointed officials, fire company members, and the general public.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Recommendation: The County Commissioners should consider facilitating a county-wide Community Risk Reduction plan.

The County currently has certain resources in place to assist with supporting such a plan. The departments of Public Safety, Geographic Information Services, and Planning are believed to maintain data that is credible for use in such a project.

There will probably be the need to add an additional staff position or contractor to facilitate the program. As the CRR program has the potential to have an impact throughout the County, it appears logical for this position to be somewhere in the County government organization.

The identification and development of stakeholders, especially the fire departments and emergency medical service providers, is critical to the success of the Community Risk Reduction plan.

Emergency Response

A prime concern identified by the Crawford County Task Force is emergency response. Emergency response is one of the five components of a comprehensive community risk reduction program. It is a critical component that is taken to save lives and protect property.

It is important to remember that today's fire departments do much more than respond to fires. They are typically "all hazards" response agencies. They respond to fires, vehicle crashes, medical emergencies, hazardous materials incidents, and a variety of other calls for public service.

One of the first steps to provide effective emergency response is to determine an acceptable level of risk. This involves formulating a standard of service. This is typically a measurement of the amount of time it takes to get the appropriate resources to the scene of an incident in time of emergency. There are several ways to measure this, including documents from the National Fire Protection Association, the Center for Public Safety Excellence, and the report prepared especially for Pennsylvania by the SR 60 Commission.

The Insurance Services Office (ISO) evaluates municipalities with their Public Protection Classification (PPC) system. They typically evaluate and classify over 40,000 fire protection service areas within the United States. This system is used by many as a benchmark in measuring public fire protection.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

The SR 60 Commission report has formulated a Standard of Service Matrix. In formulating this document, members of the Commission stated the importance of considering the vast differences in the communities of the Commonwealth.

The matrix identified six levels of service for public fire protection. The Commission was cautious in creating standards too stringent for small communities with limited personnel, but also to hold to an acceptable level of service for the residents of such communities. A copy of this matrix is provided for reference in the Appendix to this report. The entire SR 60 report is available at <u>www.pfesi.org</u>.

The task force has performed a comprehensive analysis of the Crawford County situation using the SWOT analysis method. This identifies strengths, weaknesses, opportunities, and threats. A complete copy of their analysis and action steps is included in the Appendix.

Highlighting from their findings, lack of personnel, declining volunteerism in all sectors, and an increasing demand for services are among the weaknesses described in their report. The report also addresses concern regarding standards of coverage, lack of municipal support, and training.

Elected officials at the County and municipal level are encouraged to read the SWOT analysis in its entirety, keeping in mind that this is formulated by the emergency responders from within the county and are among the best suited to address the issues within their own county.

Staffing levels are critically low, especially during daytime hours. To ensure adequate personnel are available, all fire departments within the county should consider sharing resources. A combined effort to staff key apparatus at selected locations should be implemented.

This concept would allow personnel from one fire department to staff the apparatus of another. Recognizing that not every existing fire station can be staffed, the task force has selected several stations within the County as locations that are critical for coverage. Their recommended time for coverage is 0800-1600. This time frame may be extended as necessary. Other communities have found their critical staffing times to be 0600-1800. Current data, reviewed on an annual basis, can help to further identify the peak staffing times and locations.

Recommendation: The County Commissioners should encourage all fire departments to participate in shared service agreements. The County may also be able to provide support to facilitate this process.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Recommendation: In addition to shared service agreements, the fire companies should look for opportunities for merger or consolidation.

Recognizing the decline of volunteers in the County and throughout the nation, consideration must be given to supplementing volunteers with paid personnel. As identified by the task force, this could begin with a paid on-call model using volunteers as per diem employees as an interim staffing measure.

Employment of any emergency services personnel must be given careful consideration. Employment by a municipal government is different than employment by a private entity, including a nonprofit corporation. There are advantages and disadvantages to each. Items for consideration include any applicable state and federal employment laws. An appropriate compensation schedule is also needed to attract and retain the appropriate employees.

In addition to supplementing the system with compensated personnel, steps should also be taken to reinforce the volunteer system. Volunteers provide a tremendous cost savings to the municipality.

The following websites can provide additional information regarding the recruitment and retention of volunteers: <u>www.becomeapafirefighter.com</u> and <u>www.firerecruiter.com</u>.

The task force should consider working with all fire departments to standardize position descriptions and job performance requirements. This includes operational positions and administrative positions. The Pennsylvania Association of Nonprofit Organizations (PANO) may have resources to help with this process. Their website is <u>www.pano.org</u>.

In assessing potential volunteers, organizations must remember that not everyone is suitable to become a member of their fire department. This applies to operational, administrative, and support personnel. Criteria should be developed for the selection of all new personnel.

Several resources are available for managing and operating a volunteer fire department. One of these is the National Volunteer Fire Council. Information can be found at their website, <u>www.nvfc.org</u>. In addition to the opportunities of fire fighting and emergency response, almost every fire department is in need of administrative volunteers and support personnel. These positions are critical to every organization.

The Pennsylvania Fire and Emergency Services Institute (PFESI) is also a valuable resource for volunteer recruitment and retention. They are hosting a series of workshops for training recruitment and retention coordinators. Additional information on these programs may be obtained at <u>www.pfesi.org</u>.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Recognizing the capabilities and limitations of the existing system, there is an option of transitioning to a more versatile type of apparatus as a primary response vehicle. This is identified by the National Fire Protection Association (NFPA) as an Initial Attack Fire Apparatus or simply an Initial Attack Apparatus. This is defined as an apparatus with a permanently mounted fire pump of at least 250 gallons per minute, a water tank and hose body whose primary purpose is to initiate fire suppression attack on structural, vehicular, or vegetation fires, and to support associated fire department operations.

Complete information can be found in NFPA Publication 1901-Standard for Automotive Fire Apparatus. Information regarding this publication can be found at <u>www.nfpa.org</u>.

Some advantages of Initial Attack Apparatus include its size, maneuverability, ease of operation, and the initial purchase price. These vehicles are typically built on a commercial chassis. In some cases, the initial purchase price is reported to be half of that of a custom-built pumper. Initial Attack Apparatus can often be configured for emergency medical response.

The purchase of this type of apparatus should be studied and consideration for use should be supported by data. These apparatus should be used as part of a comprehensive system. Its firefighting capabilities differ greatly from that of a full-size pumper. While an initial attack apparatus might handle many of the common fire department responses, achieving the correct balance of various types of apparatus throughout the County is necessary for effective emergency response.

In addition to personnel and apparatus, the dispatch of appropriate resources is a critical component of emergency response. The County's Department of Public Safety operates the Public Safety Answering Point (PSAP). The PSAP receives calls from the public and dispatches resources to reported incidents. The PSAP has its own set of standards to follow and are often influenced by state and national regulations, standards, and best practices. The PSAP should work closely with the fire task force to evaluate criteria as needed and consider the use of proximity dispatching.

Another consideration for effective fire response is a water supply. While a public water supply has been established in several parts of the County, much of the County relies on private sources of water and the ability of the fire department to deliver the water to the scene of a fire when needed.

The County's 1999 Comprehensive Plan provided for future water service. Some of this expansion had been done in the area of Oil Creek Township by the Titusville Water Authority.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

A reliable and sustainable water supply is critical to fire protection.

Recommendation: The County should continue to explore opportunities for expansion or establishment of existing public water systems and private water supplies for fire protection.

Financial Issues

Adequate funding for fire protection is a concern for both local municipalities and fire departments.

In some areas, the municipality funds the entire operating and capital budget for their fire department. In other areas, municipalities provide no funding. Communications between the municipality and the fire department is critical. Another important item is accountability for the use of funds and the transparency of transactions.

Other funding options include the following:

Assessment Based

Funds are distributed from the municipality to the fire department based on the assessed value of the property protected. Higher assessment values are typically an indicator of resources needed for fire protection. This may also reflect high-value target properties and life safety issues.

• Per-capita

Funds are distributed by the municipality to the fire department based on the population of the area being served. Generally speaking, the more people in an area, the greater the demand for service.

• Demand for Service

Funds are distributed by the municipality to the fire department based on the demand for service. Historical data is used for this determination.

Funding for public fire protection can be provided by enacting a fire tax. Every municipality within the county may enact a fire tax, except for cities of the third-class.

Additional municipal options include an allocation of monies from the municipal general fund and a local services tax.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

In addition to municipal funding, alternative funding may be available in the form of grants and fees for service.

While many local fire companies conduct fund raising activities, it is absurd to think that public fire protection can be adequately funded in the future in this manner.

It is important for every municipality to appropriately fund their local fire department in a manner that reflects their acceptable level of risk.

The U.S. Fire Administration has published a manual, FA-331, *Funding Alternatives for Emergency Medical and Fire Services.* This publication is available as a free download from their website, <u>www.usfa.fema.gov</u>.

Critical to funding, the local municipalities and their fire departments must establish open communications to determine public fire protection needs and to make data-driven decisions.

Future Opportunities

There is a unique opportunity within Crawford County to form a county-wide fire department. While current law does not permit the County to operate a fire department, a newly formed nonprofit organization could be the nucleus of public fire protection for the County.

This new organization could likely be formed by the existing Crawford County Fire Services Task Force being incorporated for such purpose. This would be a nonprofit corporation with a 501(c)3 designation by the Internal Revenue Service. This would require participation of the existing fire companies to form such an agency and the municipalities to endorse the concept.

While participation might not be achievable in all areas, the concept could also be done on a regional basis. Special consideration will need to be given to the municipalities where career or paid firefighters are currently employed.

This concept brings certain operational and administrative advantages, such as one central organization operating from multiple fire stations.

This concept has gained popularity in several parts of the state, especially in south central and southeastern Pennsylvania.

Numerous examples could be discussed in future meetings.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Recommendation: The County should consider exploring this option. While current laws do not allow the County to operate a fire department, the County is permitted to provide discretionary funding to organizations for the public good.

The County is also well suited with its resources to support the research necessary to make data-driven decisions in the exploration of this project.

The existing Crawford County Fire Services Task Force could be transitioned into the "Crawford County Emergency Services Alliance" for this purpose.

Fire/Emergency Service Considerations for Crawford County, Pennsylvania

Summary

Crawford County, as many counties in Pennsylvania, is experiencing challenges in maintaining appropriate public fire protection within their local municipalities.

These challenges include adequate staffing and funding. The number of volunteer firefighters is declining every year. Despite the best efforts to recruit and retain volunteers, there is a limited number of people within any area from which to recruit.

Operational changes need to be made to ensure that resources are available in time of emergency. This includes the sharing of personnel within the emergency service community. The fire departments within Crawford County now have an opportunity to initiate and develop this process.

Paid personnel, whether full-time, part-time, or any combination thereof, must be considered to supplement staffing. The future of the fire service for throughout the County will most likely be one which utilizes the dedication of the volunteers blended with paid personnel.

Funding emergency services must also be addressed. Local municipalities must recognize their legal obligation to determine the level of fire protection needed for their municipality and to fund it accordingly.

The concept of volunteer fire companies raising their own funds to support public fire protection is absurd. Local municipalities must take immediate action to address this desperate financial need.

	Municipal Operated Services	Municipal Supported Services	Municipal Contracted Services
Benefits	Ownership and responsibility for direct delivery of fire/rescue services Creates a municipal fire/rescue department (bureau) within the governmental organization Paid employee staffing increases reliability of services Volunteer staffing provides exceptional cost savings	Control of the services provided are shared by the municipality and the governing body of the nonprofit organization that directly provides the service Control can be accomplished through establishing policies for the delivery of services, standards for the services delivered, and the appropriation of funds to support the services provided Paid employees used within this system would be employees of the nonprofit organization, not the municipality, and subject to different laws and regulations	Municipality contracts for the service to be provided - no involvement with direct delivery of services Municipality selects a service provider for the service
Drawbacks	Probably the most expensive option - involving start-up costs for facilities, equipment, and personnel Considerable cost to support personnel Recurring costs for personnel Subject to labor/management regarding collective bargaining Facility and equipment maintenance	Options for funding this model include the appropriation of municipal funds, grant opportunities, and contributions from the public	Delivery of services accomplished through a request for proposals or by a competitive bidding process - subject to statute or regulation This option has the potential to be misunderstood and possibly strain existing relationships with existing provider agencies
Additional considerations	Volunteers and paid personnel could both be used within this system If the municipality becomes the direct provider of these services, it may become ineligible for certain funding opportunities that may only be afforded to nonprofit organizations that have IRS 501(c)3 designation	Careful consideration must be given to the issue of employee/employer relationship, and the municipality should consult with legal counsel to identify and clarify and issues regarding this matter Expectations and desired outcomes should be expressed in the form of a written agreement	Would allow for fire companies and other out-of-town agencies to submit proposal for these services

Service Delivery Options

Municipal Operated Service

This option provides the Municipality with the ownership and responsibility for the direct delivery of fire/rescue services. It creates a municipal fire/rescue department (or bureau) within the governmental organization. It gives the Municipality the greatest control over the services that are provided. It is also probably the most expensive option as it might involve start-up costs for facilities, equipment, personnel.

The Municipality also has recurring costs associated with these services. The greatest expense is the cost of personnel if the Municipality chooses to use paid employees for staffing. This would also subject the Municipality to the labor/management provisions of Acts 111 and/or Act 195, the State laws regarding collective bargaining for municipal employees in these categories. A paid employee staffing option increases the reliability of service in a defined manner. A paid employee option would most likely have an annual cost of millions of dollars. Additional recurring costs would involve facility and equipment maintenance. The use of volunteers within this scenario is also considered. Volunteer staffing is most likely dependent on the incentives provided in return for the service rendered. Volunteers and paid personnel could both be used within this system.

If the Municipality becomes the direct provider of these services, it may become ineligible for certain funding opportunities that may only be afforded to nonprofit organizations that have IRS 501(c)3 status.

Municipal Supported Service

The control of the service provided is shared by the Municipality and the governing body of the nonprofit organization that directly provides the service. This control can be accomplished through establishing policies for the delivery of service, standards for the service delivered, and the appropriation of funds to support the services provided.

Expectations and desired outcomes should be expressed in the form of a written agreement.

Options for funding this model include the appropriation of municipal funds, grant opportunities, and contributions from the public.

A key consideration is that if paid employees are used within the system, they are employees of the nonprofit organization, not the municipality, and are subject to different laws and regulations when compared to municipal employees. This may have certain financial advantages to the Municipality. Careful consideration must be given to the issue of employee/employer relationship, and the Municipality should consult with legal counsel to identify and clarify any issues regarding this matter.

Municipal Contracted Service

With this option, the Municipality simply contracts for the service to be provided. This option provides the Municipality with no involvement in the direct delivery of services.

The Municipality would simply select a service provider for fire/rescue services. This may be accomplished through a request for proposals or by a competitive bidding process.

Close and careful attention needs to be given to the specifications for the proposal and the contract that follows. The type and amount of service is specified by the contract.

While this option may provide the least expensive option for the Municipality, it may not be the best option. This option has the potential to be misunderstood and possibly strain existing relationships with existing provider agencies.

Funding Options

Typically, services of this type are funded through a system of general fund revenue and appropriations to a designated agency or by means of a line-item budget if the services are provided directly by the municipality.

Additional sources of funding may be available from the provisions of an Emergency and Municipal Services Tax and/or a fire tax.

Close and careful consideration needs to be given to taxing options. Municipalities throughout the state are challenged with the lack of funding options. The Municipal officials may want to consider meeting with elected officials at the state level to discuss and advocate for a wider range of local options for funding emergency services.

User fees, such as those generated from the permitting and inspection process of a Fire Code may provide additional sources of revenue.

As many emergency service organizations throughout the country are faced with funding challenges, the United States Fire Administration has produced a publication, *Funding Alternatives for Emergency Medical and Fire Services,* Publication FA-331. This publication is available as a free download from their website, <u>www.usfa.fema.gov.</u>

For a comprehensive understanding of funding alternatives, it is suggested that Municipal and organization officials review the options contained in the publication, especially *Chapter 4, Local Revenue and Funding Alternatives; and Chapter 7, Foundations and Corporate Grants.*

These options should be investigated to determine what is right for the Municipality.

Consultant Information

John S. Senft served as the consultant for this project. In this role, he served as subject matter expert and overall project facilitator.

Mr. Senft has over forty years of combined experience in public safety. He has served as a volunteer firefighter and officer and has over thirty-six years of experience as a career firefighter, progressing through the ranks from recruit to Chief of Department.

He holds a Certificate in Fire Protection from Harrisburg Area Community College, a B.A. in Organizational Management and a M.S. in Nonprofit Management from Eastern University in St. David's, Pennsylvania.

He is a graduate of the Executive Fire Officer program of the National Fire Academy and is a court recognized expert in the fields of fire suppression, fire investigation, and fire prevention.

Chief Senft is an instructor for several colleges and an Adjunct Faculty member of the National Fire Academy. He has also served as a subject matter expert for curriculum and program development.

In addition to teaching, he provides consulting services to emergency service organizations, government and public agencies, and nonprofit organizations throughout the United States.

Appendix and Supplemental Information





Data used for this map creation and maintenance is approximate and should not be used for specific decision making. Crawford County assumes no responsibility or liability to the accuracy or completion of these maps.









Truck Company Buffers

Ailes

 1 miles

 1 mile

 2 miles

 3 miles

 4 miles

This map is subject to change at any time after date of issuance. Data used for map creation is approximate and should not be for site specific decision making.Cawford Courty assumes no responsibility or lability to the accuracy or completion of this ma



Hydrant Locations Crawford County, PA Maintained by: Crawford County GIS Printed: April 2021 Cawford County Government Orandon Park Meadolle PA 16335 Manager: Fill Banana Commissioners: Eric Henry | Francis F Welderspahn Jr | John Christopher Soff

This map is subject to change at any time after date of issuance. Data used for map creation is approximate and should not be for site specific decision making.Cawford County assumes no responsibility or liability to the accuracy or completion of this mi

HYDRANTS

Type

DRY HYDRANTHYDRANT





Standard of Service Matrix from the SR 60 Commission Report

Standard of Service Matrix

It is important for us to consider the vast differences in the communities of the Commonwealth. Therefore, we must be cautious in creating standards too stringent for small communities with limited personnel, but also hold to acceptable levels of service for the residents of such communities.

SERVICE	DESCRIPTION
LEVEL*	
Defensive	a. Personnel required – 3
Service Level	b. Equipment – 1 NFPA criteria engine (pumper)
F	c. Exterior Defensive Firefighting capabilities only
•	d. Expectations - Protect surrounding exposures, loss of involved property - NO TIME LIMITS
Offensive	a. Personnel required – 5
Service Level	b. Equipment – 1 NFPA criteria engine (pumper)
Е	c. Interior Firefighting capabilities only of room or contents and small buildings under 750 square feet, NFPA PPE/SCBA.
	 Expectations – Ability to extinguish a fire and save life and property. Respond within 9 minutes, plus travel time.
Offensive	a. Personnel required – 5
Service Level	b. Equipment – 1 NFPA criteria engine (pumper)
	c. Interior Firefighting capabilities only of room or contents and small buildings under 750 square
D	feet. Also, vehicle extrication capabilities with little or no power equipment. NFPA PPE/SCBA.
	d. Expectations – Ability to extinguish a fire and save life and property. The ability to extricate a
	person from a motor vehicle efficiently. Respond within 9 minutes, plus travel time.
Offensive	a. Personnel required – 6
Service Level	b. Equipment – 1 NFPA criteria engine (pumper)
C	c. Interior Firefighting capabilities of room or contents and small buildings under 1000 square feet.
C	Vehicle rescue capabilities with power or no power equipment and provide Operations level Hazardous Materials Response. NFPA PPE/SCBA.
	d. Expectations – Ability to extinguish a fire and save life and property. The ability to perform and
	extricate a person from a motor vehicle efficiently. The ability to identify and provide
	operations level hazardous materials response. Arrive on scene within 14 minutes, 80% of the time.
Offensive	a. Personnel required – 10
	b. Equipment – 2 NFPA criteria engine (pumper)
Service Level	c. Interior Firefighting capabilities of room or contents and small buildings under 5000 square feet.
В	Vehicle rescue capabilities with power or no power equipment and provide Operations level Hazardous Materials Response. NFPA PPE/SCBA.
	d. Expectations - Ability to extinguish a fire and save life and property. The ability to
	perform and extricate a person from a motor vehicle efficiently. The ability to
	identify and provide operations level hazardous materials response. Arrive on scene within
	10 minutes of dispatch, 80% of the time.
Offensive	a. Personnel required – 15
Service Level	b. Equipment – 2 NFPA criteria engine (pumper), and one truck company (aerial or support truck)
	c. Interior Firefighting capabilities of room or contents and small buildings under 10,000 square
A	feet. Vehicle rescue capabilities with power or no power equipment and provide Operations level Hazardous Materials Response. NFPA PPE/SCBA for each person.
	d. Expectations – Ability to extinguish a fire and save life and property. The ability to perform and extricate a person from a motor vehicle efficiently. The ability to identify and provide operations level hazardous materials response. Arrive on scene within 9 minutes of dispatch, 90 % of the time.

* An ultimate (most basic) goal is to have a turnout time (time from dispatch to time first vehicle leaves the door) is 9 minutes 90% of the time, plus travel time to the incident. (Levels E and F)

* Communities may have more than one service level

NOTE: SPECIAL RISKS REQUIRE ADDED SERVICES AS DETERMINED LOCALLY

Fire Department Listing and Area Served

Bloomfield Township VFD	22978 Shreve Ridge Road	Union City	PA	16438
Blooming Valley VFD	15244 Mill Street	Saegertown	PA	16433
Cambridge Springs VFD	302 Venango Avenue	Cambridge Springs	PA	16403
Centerville VFD	39567 Centerville Road	Centerville	PA	16404
Cochranton VFD	P.O. Box 655	Cochranton	PA	16314
Conneaut Lake VFD	11877 Conneaut Lake Road	Conneaut Lake	PA	16316
East Mead VFD	23876 State Highway 27	Meadville	PA	16335
Fallowfield Fire & Rescue	9328 Atlantic Road	Atlantic	PA	16111
Fellows Club (Conneautville) VFD	P.O. Box 355	Conneautville	PA	16406
Greenwood Volunteer Fire & Rescue	15444 State Highway 285	Conneaut Lake	PA	16316
	15417 State Highway 198	Meadville	PA	16335
Hydetown VFD	12666 Main Street	Hydetown	PA	16328
Linesville FD	P.O. Box 55	Linesville	PA	16424
Meadville Fire Department	850 Park Avenue	Meadville	PA	16335
North Shenango VFD	2887 State Highway 285	Espyville	PA	16424
Randolph VFD	P.O. Box 25	Guys Mills	PA	16327
Saegertown VFD	P.O. Box 164	Saegertown	PA	16433
Spartansburg VFD	P.O. Box 233	Spartansburg	PA	16434
Springboro VFD	176 North Main Street	Springboro	PA	16435
Summit Township VFD	P.O. Box 51	Harmonsburg	PA	16422
Titusville Fire Department	315 North Franklin Street	Titusville	PA	16354
Townville VFD	P.O. Box 6	Townville	PA	16360
Venango VFD	P.O. Box 157	Venango	PA	16440
Vernon Central Hose Company	16589 McMath Avenue	Meadville	PA	16335
Vernon Township VFD	18208 Cussewago Road	Meadville	PA	16335
West Mead #1 VFC	P.O. Box 573	Meadville	PA	16335
West Mead #2 VFD	20607 Ryan Road	Meadville	ΡA	16335
Crawford County SCUBA Team	20487 Ryan Road	Meadville	PA	16335
Crawford - Venango Fire School	430 Thirteenth Street	Franklin	PA	16323

Fire department coverage in square miles as covered within Crawford County, Pennsylvania

FIRE DEPARTMENT	PARTMENT FE	DEPARTM	E COUNTY NAM	E State	SqMi
BLOOMFIELD	20001	1	CRAWFORD	PENNSYLVANIA (PA)	44
BLOOMING VALLEY	20002	2	CRAWFORD	PENNSYLVANIA (PA)	32
CAMBRIDGE SPRINGS	20003	3	CRAWFORD	PENNSYLVANIA (PA)	54
CENTERVILLE	20006	6	CRAWFORD	PENNSYLVANIA (PA)	50
CHAPMANVILLE	61001	35	CRAWFORD	PENNSYLVANIA (PA)	12
COCHRANTON	20004	4	CRAWFORD	PENNSYLVANIA (PA)	69
CONNEAUT LAKE	20005	7	CRAWFORD	PENNSYLVANIA (PA)	11
CONNEAUT LAKE	20007	7	CRAWFORD	PENNSYLVANIA (PA)	14
CONNEAUTVILLE	20008	8	CRAWFORD	PENNSYLVANIA (PA)	54
EAST MEAD	20009	9	CRAWFORD	PENNSYLVANIA (PA)	23
EDINBORO	25380	38	CRAWFORD	PENNSYLVANIA (PA)	18
FALLOWFIELD	20045	45	CRAWFORD	PENNSYLVANIA (PA)	40
GREENWOOD	20040	40	CRAWFORD	PENNSYLVANIA (PA)	37
HAYFIELD	20012	12	CRAWFORD	PENNSYLVANIA (PA)	44
HYDETOWN	20014	14	CRAWFORD	PENNSYLVANIA (PA)	33
JAMESTOWN	43890	89	CRAWFORD	PENNSYLVANIA (PA)	39
LINESVILLE	20015	15	CRAWFORD	PENNSYLVANIA (PA)	44
MEADVILLE CENTRAL	20016	16	CRAWFORD	PENNSYLVANIA (PA)	4
MILL VILLAGE	25120	37	CRAWFORD	PENNSYLVANIA (PA)	14
NORTH SHENANGO	20017	17	CRAWFORD	PENNSYLVANIA (PA)	26
PLEASANTVILLE	61016	36	CRAWFORD	PENNSYLVANIA (PA)	10
RANDOLPH	20018	18	CRAWFORD	PENNSYLVANIA (PA)	45
SAEGERTOWN	20019	19	CRAWFORD	PENNSYLVANIA (PA)	27
SPARTANSBURG	20022	22	CRAWFORD	PENNSYLVANIA (PA)	61
SPRINGBORO	20021	21	CRAWFORD	PENNSYLVANIA (PA)	64
SUMMIT	20020	20	CRAWFORD	PENNSYLVANIA (PA)	26
TITUSVILLE	20026	26	CRAWFORD	PENNSYLVANIA (PA)	3
TOWNVILLE	20024	24	CRAWFORD	PENNSYLVANIA (PA)	48
VENANGO	20025	25	CRAWFORD	PENNSYLVANIA (PA)	23
VERNON CENTRAL	20023	23	CRAWFORD	PENNSYLVANIA (PA)	39
VERNON TWP	20027	27	CRAWFORD	PENNSYLVANIA (PA)	6
WEST MEAD 1	20028	28	CRAWFORD	PENNSYLVANIA (PA)	11
WEST MEAD 2	20029	29	CRAWFORD	PENNSYLVANIA (PA)	13

Sample Fire Protection Agreements
JOINT FIRE PROTECTION AGREEMENT

CORN THIS AGREEMENT, entered this 15 day of June, 2006, by and among: BROWNSTOWN BOROUGH. WESTMONT BOROUGH, (all of the foregoing hereinafter collectively referred to as "Municipal Parties"), and WEST HILLS REGIONAL FIRE DEPARTMENT, INC (hereinafter called the "Fire Department").

WITNESSETH AS FOLLOWS:

WHEREAS, The Municipal Parties hereto are responsible for the health, safety, and welfare of their residents; and

WHEREAS, the provisions of the Borough Code authorizes the parties hereto to enter into contracts and make appropriations in order to provide fire protection to their residents; and

WHEREAS, the parties hereto desire to set forth below the terms and conditions of their joint agreement by which such services will be provided within their respective territories or portions thereof, including specifically provisions for appropriations therefore.

NOW THEREFORE, for valuable consideration and intending to be legally bound hereby, the parties hereto agree as follows:

<u>1. Fire Protection Service:</u> Fire Department agrees that it shall provide fire protection services in the form of primary emergency response through Cambria County 911 to fires and other emergencies to which fire personnel are dispatched occurring within the portions of the territories of the Municipal Parties as shown and depicted on Exhibit A appended hereto.

2. Scope of Obligation: The Municipal Parties acknowledge and agree that the ability of Fire Department to respond on a primary basis is limited by personnel and equipment and by the prospect that the Fire Department may at any given time be in response to other fire or emergency calls. In the event that the Fire Department is unable to provide primary response, standby emergency response shall be provided in accordance with mutual aid agreements and protocols established through the Cambria County Department of Emergency Services. It is expressly understood and agreed that this Agreement is not intended to confer any rights upon third parties who are not parties hereto, including specifically without limitation, any right or cause of action allegedly arising from the manner by which fire protection within the territories of the Municipal Parties. Each party hereto retains all privileges and immunities available to such party under laws of the Commonwealth of Pennsylvania in connection with the rendition of the emergency services contemplated hereby.

3. West Hills Regional Fire Commission: The parties hereby establish the "West Hills Regional Fire Commission", to which each of the Municipal Parties may appoint two representatives. One of the representatives is to be an elected official and the other is to be a resident of the municipality, who is not an elected official. The Fire Department shall be represented by the Fire Chief, President, and the Director of Emergency Services. Each representative of the West Hills Fire Commission (hereinafter called the "Commission") shall serve as a liaison between the other parties and the entity which he or she represents. The officers of the commission shall be Chairperson, Vice Chair Person, and Secretary, and their duties shall be as prescribed by Roberts Rules of Order, revised. A majority of the members of the Commission shall constitute a quorum and the action of a majority of the members present at a meeting at which a quorum is present shall be the action of the Commission. The Commission shall have the following duties and responsibilities.

A. To meet regularly for the purpose of reviewing the fire protection and all matters pertaining thereto. Except as expressly stated herein, the Commission may make recommendations, but shall not have the authority to financially obligate any party hereto. Each representative of the Commission shall report to his or her appointive entity and shall offer recommendations of the Commission and secure input for the continued provision of the services contemplated by this Agreement.

B. To negotiate and approve the provision of fire protection to additional territories through primary response or mutual aid agreements. Each party specifically agrees that no such agreement for the provision of fire protection shall be made without the unanimous approval of the Commission and the approval of the Municipal Parties.

C. To serve as a liaison between state and local officials in matters pertaining to fire protection.

D. To identify and review grant applications for the purpose of providing fire protection.

4. Term of Agreement: This Agreement shall become effective January 1, 2006, and shall continue in effect until December 31, 2011, and shall renew automatically for successive five year terms.

5. Withdrawal: A Municipal Party desiring to withdraw from this Agreement shall give written notice of such intention to all other parties no later than three hundred



sixty five (365) days before the end of the term then in effect. In such event, the withdrawing Municipal Party shall cease to be party to the Agreement and agrees to the removal of such Municipal Party from the primary response areas of the Fire Department, effective upon withdrawal.

In the event that the Fire Department shall desire to withdraw from this Agreement, such party shall give written notice to the intention to withdraw to all other parties no later than three hundred sixty five (365) days before the end of the term then in effect. In such event, this Agreement shall terminate at the end of the current term as to the service provided by the withdrawing party.

With respect to the termination, cessation or discontinuance of their respective services hereunder, the Fire Department shall comply with all applicable statutes, laws, and ordinances and regulations and shall provide all requisite notices pertaining to the discontinuance of such terminated service, including without limitation, the notice provisions of Act 1985-45, known as the "Emergency Medical Services Act".

<u>6. Operating Budget and Contribution of Municipal Parties:</u> The Cost Allocation due from participating municipalities will be based on the budgeted operating costs of the Fire Department for that year as approved by the Commission and each Participating Municipality. The participating municipalities shall be responsible for the percentage of the operating costs as determined in Exhibit B Cost Allocation Formula appended hereto. The Parties agree that such payments shall be made to the Fire Department on a monthly or quarterly basis of the current fiscal year during which such Municipal Party shall have levied the requisite millage for fire protection. In the event of a deficiency in any year, each Municipal Party shall bear the cost of the making up such



deficiency on the same percentage basis as each is required to contribute to the budget under Exhibit B Cost Allocation Formula. In the event of a surplus in the budget, the surplus funds shall be retained by the Fire Department and shall be expended in any manner as the Commission resolves from year to year with the approval by all participating Municipal Parties.

7. Payment of Workers' Compensation: The workers' compensation coverage will be provided by Westmont Borough. Each Municipal Party shall pay to Westmont Borough that Municipal Party's proportionate share of the workers' compensation premium costs for volunteer fire personnel computed in accordance with the population figures attached hereto as Exhibit C for service areas of the Fire Department, it being understood and agreed that all municipalities, whether or not parties hereto, which are nevertheless included within the respective primary response areas of the Fire Department, shall be required to agree to contribute on such a pro-rata basis as a condition precedent to inclusion within such primary response area. Each Municipal Party shall be obligated to pay such proportionate share of premium costs as shall become payable during a period that such Municipal Party shall be a party hereto, without regard to whether the duration of the workers' compensation policy extends beyond the current term of the Agreement. The proportionate share of each Municipal Party shall be determined by dividing that population of the Municipal Party receiving fire protection as set forth on Exhibit C, divided by the entire population within the respective primary response areas of the Fire Department, using population figures required for computation of workers' compensation premiums for volunteer fire protection services. Population figures will be obtained through the U.S. Census Bureau web site. Payment shall be due



thirty (30) days following invoice therefore, provided nevertheless that such invoice shall not be submitted more than forty-five (45) days prior to the due date for payment of such premiums to the insurance carrier.

8. Payment of Auto Insurance Premiums: Auto insurance coverage will be provided by the Westmont Borough Insurance Carrier. Westmont Borough will then invoice the participating Municipal Party for the share of the auto insurance premium for the apparatus housed in their municipality. In the event that no apparatus is housed in the Municipal Party's municipality, Westmont Borough will invoice the participating Municipal Party for the percentage of the cost based on the road mileage of the municipality as a percentage of the road mileage of the total coverage area as set forth on Exhibit D. Each Municipal Party shall be obligated to pay such proportionate share of premium costs as shall become payable during a period that such Municipal Party shall be a party hereto, without regard to whether the duration of the auto insurance policy extends beyond the current term of the Agreement. Payment shall be due thirty (30) days following invoice therefore, provided nevertheless that such invoice shall not be submitted more than forty-five (45) days prior to the due date for payment of such premiums to the insurance carrier.

9. Foreign Fire Insurance Tax Funds: The funds from the Foreign Fire Insurance Tax, which are distributed to the member Municipal Parties by the Commonwealth of Pennsylvania, shall be forwarded by the Municipal Parties hereto, and by any subsequently joining municipalities, to the Fire Department for the purposes authorized under law governing the operation of the Volunteer Fire Fighters Relief Association.



10. Failure to Make Timely Payment: In the event that a Municipal Party shall fail to make payment to the Fire Department of the required amount by January 31st, or in the event that a Municipal Party shall fail to make payment of its pro-rata share of workers' compensation or auto insurance premiums by the due date thereof, a minimum late charge of five (5%) percent of the sum then due and unpaid shall be imposed. An additional late charge of one (1%) percent of the amount due shall be added for any sums remaining due and unpaid to the Fire Department or to Westmont Borough hereunder for each additional month following the due sate thereof.

In addition, the default in payment by a Municipal Party of its proportionate share of workers' compensation premiums, auto insurance premiums, or contribution to the Fire Department may be referred by the Commission representatives to the respective governing bodies of the other Municipal Parties, and, upon resolution of a majority of the other Municipal Parties hereto, such nonpaying Municipal Party shall be terminated as a party to this Agreement upon such advance written notice, not to exceed one hundred fifty (150) days, as shall be necessary to enable compliance by the Fire Department with all applicable laws and regulations pertaining to the termination of such service. Upon such termination, the defaulting Municipal Party shall no longer be within the primary service area of the Fire Department and shall receive no further fire protection pursuant hereto.

11. Real and Personal Property: All contracts or purchases in excess of \$10,000.00 shall not be made except with and from the lowest responsible bidder after three bids for that equipment are received, which shall be read and approved at a public meeting of the Commission. In awarding bids the Commission shall have the right to take into



consideration availability, cost, and quality of service, and this requirement shall not apply in cases where particular types, models or pieces of equipment, apparatus, appliances, vehicles or parts thereof required which are patented and manufactured or copyrighted or those contracts involving professional or personal services. Where contracts call for the performing of work or furnishing of materials, appropriate performance and payment bonds shall be required. In the event of termination of this agreement all common equipment, materials and supplies held by the Commission shall be appraised by appraisers appointed by the parties to this agreement for the purpose of determining the value of the equipment, materials and supplies. The equipment, materials and supplies shall then be distributed in the same proportion as the contributions of the member municipalities as set forth in the Cost Allocation Formula. In the event that an equitable distribution is not possible, or upon agreement of the member municipalities, all or any portion of the equipment, materials, and supplies may be sold and the proceeds distributed under the aforesaid Cost Allocation Formula.



<u>12. Binding Nature:</u> This Agreement shall be binding upon the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective authorized representatives on the day and year first above written.

WESTMONT BOROUGH:

BX Susan B. Delmas

Council President

WEST HILLS REGIONAL FIRE DEPT.

BY: Philip) A. Christofes) President

BROWNSTOWN BOROUGH:

Council President

WEST HILLS REGIONAL FIRE DEPT.



Example of an

Initial Attack Fire Apparatus

For illustration purposes only. Endorsement of any specific product or manufacturer is not implied.







Rugged • Reliable • Affordable





VM8 MINI- RESCUE PUMPER

Standard Equipment

Large hosebed with enclosed ladder and hard suction storage



24" wide module affords easy operation and accessibility. Low double-stack crosslays



Large rescue compartments

BODY:

- All-aluminum 5052-H32
- FEA structural certification
- Formed skeletal super-structure
- Flex mounting system
- SCBA bottle holders in
- wheelskirts (3)
- Full width rear step platform
- Stainless steel fenderettes
- Removable wheelliners
- Recess rubrails for reflective stripping and warning lights
- 15-year warranty
- 12-year paint warranty

PUMP MODULE:

- Aluminum module with stainless steel panels
- Double-stack crosslays
- Hale DSD 1250 gpm pump
- 300 gallon poly water tank
- 6" suction intake L&R
- 2.5" auxiliary intake
- 2.0" tank fill
- Discharges:
- 2.5" LH (1)
- 3.0" RH (2)
- 2.5" hosebed pre-connect
- 1/5" swivel crosslays (2)
- Electronic governor
- LED water gauge
- Hosebed and crosslay covers

CHASSIS:

- 4x4 with shift-on-the-fly
- 6.7L Turbo-diesel
- Exhaust brake
- 10-speed transmission w/PTO
- Dual alternators 357-amp
- Power windows and lock
- Remote controlled mirrors

- Step bars beneath cab doors
- Chrome bumper
- Tire pressure monitors



- Rescue compartmentation: (Interior Dimensions – W x H x D)
 - L1/R1: 30.25 x 60 x 21.5
 - L2/R2: 46.5 x 36 x 21.5
 - L3.R3: 38 x 60 x 21.5
 - B1: 50 x 32 x 26.5
 - Roll-up Doors satin
 - Sweep-out compartments
 - · Full height stainless steel corner protectors
 - Extruded hosebed with universal adjustable divider
 - Rear tow eyes (2)
 - Rear Chevron Stripping

ELECTRICAL:

- V-MUX multiplexed
- Center console in cab
- 40-amp battery conditioner
- 20-amp Auto-eject shore
- USB power ports (2)
- Electronic siren with speaker
- LED compartment lights strip type at forward door opening
- Whelen 4-stack LED taillight assy - C6 series
- Backup camera
- Whelen C9SL scene/work lights upper rear
- Whelen C9 upper rear and side body warning lights
- Whelen ION warning lights recessed in rubrails (4)
- Whelen ION grille (2)
- Whelen ION intersectors
- Whelen Justice LED light bar

NOTE: List is not exhaustive



Rear B-1 compartment ideal for hydraulic rescue tools or booster reel

High-back front seats Seating for 4 personnel



VM8 MINI-RESCUE PUMPER

ROUP

AVAILABLE OPTIONS

Chassis:

- XLT Trim Level
- Aluminum wheels (std on XLT)
- Trailer hitch with 7-pin connector and brake controller
- 4x2 in lieu of std. 4x4

Pump System:

- □ 3" Deck Gun electric valve
- □ SmartFoam[™]system with integral 20 gallon foam cell
- Metric gauges (ULC compliant)
- Booster reel in B-1 with 200-ft hose
- Right side intake 2.5"
- Pump module running boards soft suction hose trays

Body:

- Painted roll-up doors
- Door locks
- Adjustable shelves, trays, toolboard
- Wheel chocks
- Hard suction storage
- D Pike pole storage in ladder compartment (2)
- Adjustable hosebed dividers (in addition to standard)
- Custom striping and lettering

Electrical:

- Telescoping flood lights left and right front body
- Upper side body scene lights Whelen C9SL (4)
- □ Upper side body flood lights FireTech Guardian (4)
- Rear flood lights FireTech Guardian in lieu of standard (2)
- Brow flood light Whelen Pioneer (requires upgrading lightbar)
- □ Whelen F4N2VLED Lightbar 55"
- Upper side body C9 warning light upgrade (4) each side
- Additional ION grille warning lights (for total of 4)

For further information contact:

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Sample Job Announcement for Paid Firefighters



TOWNSHIP OF UPPER PROVIDENCE DEPARTMENT OF FIRE AND EMERGENCY SERVICES 1286 BLACK ROCK ROAD PHOENIXVILLE, PA 19460 www.uprov-montco.org PHONE: 610-933-9179

JOB ANNOUNCEMENT

Upper Providence Township (Montgomery County, PA) has consistently taken a proactive stance in prioritizing the public safety of its residents, businesses, and visitors. To continue to meet the increasing public safety demands of our community, the Township has engaged in the construction of a new central fire and emergency services facility and will be transitioning to 24-hour staffing that includes career firefighters working alongside volunteer crews to elevate our service level and assure a consistent and timely response to emergencies. The anticipated occupancy of the new station and transition to 24-hour coverage is April of 2022.

The Upper Providence Township Department of Fire and Emergency Services (DFES) is a combination fire department consisting of full-time career firefighters and volunteer firefighters from Black Rock Volunteer Fire Company (Station 68). Under the direction of the Township Fire Chief, two DFES divisions (Operations and Training & Community Risk Reduction) are each overseen by an Assistant Fire Chief, one of which who also serves a dual role as the Township Fire Marshal. A full-time Director of Emergency Management is responsible for all emergency management activities for Upper Providence and Trappe Borough. The DFES is augmented by volunteer response from the Black Rock station as well as other area fire departments. In addition to fire suppression, we are a licensed QRS provider and deliver a wide range of technical rescue services to our community, including swift water rescue.

The DFES seeks qualified applicants for the position of entry level firefighter. Interested applicants who meet the requirements and qualifications should forward their resume, a copy of their high school diploma or GED, and copies of required certifications by close of business January 21, 2022, to:

Humanresources@uprov-montco.org

Positions available: Five (5)*

*A 12-month probationary period will apply. Successful completion of a Candidate Physical Ability Test (CPAT) when test site is available is a condition of this probation.

Shift Schedule: Firefighters will be assigned to a shift working 24 hours on, 48 hours off after completing a department orientation and training program.





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TOWNSHIP OF UPPER PROVIDENCE JOB POSTING

ENTRY LEVEL FIREFIGHTER

SUPERVISOR:	Chief of Fire & Emergency	FLSA STATUS:	Non-Exempt
	Services		
SUPERVISION:		CLASSIFICATION:	FT
BARGAINING UNIT:	N/A	DATE:	06/2021

POSITION SUMMARY

Under general supervision of the Chief of Fire & Emergency Services, this employee responds to emergency calls to provide fire suppression, rescue, and emergency assistance to the public. This position also conducts fire prevention inspections, prepares pre-plans, incident reporting oversight and performs general maintenance on fire apparatus, equipment and facilities as assigned.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Responds to alarms of fire and other emergencies with the appropriate fire apparatus, lays and connects hoses, raises, and climbs ground ladders, performs rescues, extinguishes fires, controls leaks and spills of hazardous substances and other related duties as may be required by the Chief.
- Operates complex firefighting and rescue equipment included but not limited to the following: Selfcontained breathing apparatus, cascade systems, hydraulic rescue equipment and gasoline-powered saws.
- As part of a team, performs on-site inspections of public or private buildings for the purpose of determining compliance with the Fire Code of Upper Providence Township and/ or for the purpose of pre fire planning.
- Performs basic life support activities as an EMT, i.e., CPR, patient stabilization, first aid. Assists Advanced Life Support Units as needed.
- Inspects tests and maintains fire apparatus and equipment and performs general station cleaning duties.
- Prepares and maintains reports and records of activities, incidents, inspections, and other required information. Utilizes computer software such as Microsoft Office and records management systems.
- Participates in fire department training programs to learn or enhance skills in firefighting methods, equipment, or services.
- Participates and teaches fire safety education at public relation and educational events and activities.

REQUIRED KNOWLEDGE TO PERFORM WORK

Principles and practices of fire suppression, prevention, and education; use and maintenance of firefighting equipment and apparatus; department regulations, geography of the township, basic life support techniques and Automatic External Defibrillation (AED) equipment; hazardous material recognition and control; Department Standard Operating Guidelines.

ABILITY TO

- Learn the principles and procedures of modern fire-fighting prevention, suppression and investigation and apply techniques; react quickly and calmly (in emergencies).
- Establish and maintain effective working relationship with the public, other employees, and volunteer response personnel.
- Function and maintain composure in life-or-death decisions during emergency and/ or adverse conditions.
- Operate both as a member of a team and independently at incidents of uncertain duration.
- Analyze situations quickly and objectively and to recognize actual and potentially dangerous situations, and to determine the proper course of action.
- Organize and prioritize workload effectively.
- Use manual, power, and specialized firefighting tools in the performance of duties.
- Learn and operate complex equipment. Learn and operate large and complex vehicles.
- Read and write the English language in a fluent, comprehensible, and concise manner. Communicate clearly and concisely in both written and oral form. Must be able to compose and submit reports in a clear, concise, and complete manner. Reports must be thorough and easily understood by both fire professionals and the public.
- Learn and use basic computer skills.

WORKING CONDITIONS AND HAZARDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Work inside and outside, exposure to all extremes of the environment. Experience frequent transition from hot to cold and from humid to dry atmospheres. Work in wet, icy, or muddy areas. Work in or be exposed to areas containing toxic and non-toxic fumes, dusts, and gases. Perform a variety of tasks on slippery and/or hazardous surfaces such as rooftops or from ladders. Work in areas where sustaining traumatic or thermal injuries is possible. Exposed to all hazards of firefighting, hazardous material, and medical responses.

May be required to perform duties while faced with traumatic and emotionally challenging situations in course of duties.

Employee is subject to 24 hour "call back" at the discretion of the Chief.

SPECIAL REQUIREMENTS

Must be at least 21 years of age at time of appointment.

PHYSICAL REQUIREMENTS

Position normally requires full use of sight, hearing, speech, arms, hands, legs, and feet; lifting objects in excess of 100 pounds with frequent lifting and/or carrying of objects weighing 50 pounds or more.

Must be able to work at heights in excess of twenty (20) feet.

EDUCATION/TRAINING & QUALIFICATIONS

This position must maintain the following at minimum throughout employment as well additional education/training/certification/licensure required by the Chief.

- A) High school diploma, and
- B) Certification through the PA State Fire Academy-or-IFSAC-or-Pro-board in all of the following areas: Firefighter I (NFPA 1001)
 Technician level Vehicle and Machinery Rescue (NFPA 1006) or PA DOH Vehicle Rescue Hazardous Materials Operations (NFPA 472)
 NIMS 100, 200, 700, 800
- C) Pennsylvania Department of Health Emergency Medical Technician Basic (EMT-B)
- D) Valid PA State Driver's License, Class C
- E) Water Rescue Emergency Response (WRER) or obtain within one year of employment

Preferred Qualifications:

- A) Certificates of attainment shall be required for the successful completion of an approved Fire Service Emergency Vehicle Driver Training course
- B) NIMS 300 and 400
- C) Firefighter II (NFPA 1001)
- D) Fire Inspector I (NFPA 1031 or ICC)
- E) Pumps I & II
- F) Fire Instructor I (NFPA 1041)
- G) Fire Officer I (NFPA 1021)
- H) Valid PA State Driver's License, Class B CDL with no restrictions
- I) Driver/Operator-Pumper (NFPA 1002)
- J) PA Fish and Boat Commission (PBFC) Boat Operator

Interested applicants who meet the requirements and qualifications should forward resume by January 21, 2022, to: Humanresources@uprov-montco.org

Proud to be an Equal Opportunity Employer Who Values Diversity, Equity & Inclusion

Journal Articles Regarding Staffing and Apparatus https://apnews.com/d46c0e68f18b737d34e9892a60ed289c

Pennsylvania fire departments facing volunteerism emergency

The state of volunteer firefighting is in a crisis

By JUSTIN STRAWSER, The (Sunbury) Daily Item Dec 25, 2021

SUNBURY, Pa. (AP) — The state of volunteer firefighting is in a crisis.

That is the assessment of Acting Pennsylvania State Fire Commissioner Thomas Cook and multiple fire officials in the state, nation and Valley.

The current model of volunteer firefighting in Pennsylvania is based on the long-standing tradition going back to the 1700s when Ben Franklin founded the first volunteer department in Philadelphia. That model has continued virtually unchanged since that time, said Cook.

"With the evolution of society, the volunteer fire service is facing several crises," Cook said. "The financial crisis: the process of selling hoagies no longer generates enough money to buy a vehicle that now costs between \$500,000 and \$1 million. The second crisis — it is no longer looming. I think we're actively engaged — is the staff issues across the board. Volunteerism is down."

The issues are complex. Cook and other fire leaders said they range from aversion to change to societal transformations of the family unit where both spouses are now working to increasing extracurricular activities for children. It means fewer people are coming out to fight fires, which leads to second and third alarms being called not due to the severity of the incident but to the lack of manpower.

The National Volunteer Fire Council reported in 2018 that volunteers comprise 67 percent of firefighters in the United States. Of the total estimated 1,115,000 firefighters across the country, 745,000 are volunteers.

The number of volunteer firefighters in the U.S. reached a nearly 40-year low in 2017 with 682,600 but rose again in 2018 with 745,000. At the same time, call volume has tripled in the last 30 years, due in large part to the increase in emergency medical calls, according to the National Volunteer Fire Council.

In Pennsylvania, the number of firefighters is estimated to be between 36,000 and 38,000. The state does not require fire departments to report the number of volunteers. The number of volunteer firefighters is an estimated 30,000. In 1975, that number was 360,000, according to The National Volunteer Fire Council and the state Department of Community and Economic Development.

"We used to turn out 100 men for a fire, but now it might be down below 10 for a rural fire," said Cook. "Those are the main issues. How do we get money and how do we get people."

"It's an oversimplification of the problem to say that we waited too long," said Cook. "Society in 2021 is nowhere near comparable to 1760s Philadelphia. It's a different culture, it's a different society, but we're still using the core business model for firefighting. The problem has been hiding in the background as long as I've been involved (for 40 years). It's really come to the forefront in the last 10 to 15 years."

Under the Fire Commissioner Act, the Pennsylvania State Fire Commissioner is the official charged with meeting the "diverse training, operational, and informational needs of the commonwealth's fire and emergency service community."

The Office offers assistance, including the development and operation of Pennsylvania's emergency service training program, the Volunteer Loan Assistance Program (VLAP) that provides low-interest loans to volunteer fire and emergency services organizations, and the state's fire safety education program. In addition, the commissioner is responsible for the development of a comprehensive fire incident reporting system.

Central to the commissioner's duties is the cultivation of a close working relationship with Pennsylvania's 2,400 fire departments and their personnel. The commissioner and his staff function as support and resource personnel for these agencies in dealing with issues such as volunteer recruitment and retention, firefighter safety, intervention programs dealing with juvenile fire-setters, and community safety education.

Cook said the goal is to help fire companies find access to existing funding sources, educate them on what funding sources are available, how to look for grants and low-interest loans.

Time to 'roll up our sleeves'

Jerry Ozog, the executive director of the Pennsylvania Fire and Emergency Services Institute, said there's been a steady decline over 20 years with a more acute drop in the past five to eight years. Pennsylvania demographics have played a part in the crisis as well.

"We do a great job in Pennsylvania describing the problem," he said. "We need to roll up our sleeves and start fixing the problem. It won't come from state government. It will come at the local level redesiging the way we volunteer."

He added, "As Pennsylvanians get older and populations decline, volunteer firefighters have to become more creative," he said. "Recruitment has to be constant to keep the levels of membership stable. For volunteer organizations to be successful, they have to focus on people. They have to have a commitment to a county-wide recruitment campaign followed up with local training. That's the key to success."

Ozog said there are proven models of recruitment campaigns if you have dedicated leaders and people involved. In the Harrisburg area, Ozog said he was part of a committee that received a \$2.2 million grant to conduct a regional recruitment campaign for 20 municipalities with 22 fire departments. It involved training, a marketing campaign and incentives for volunteers meeting their training goals.

"Incentives are common in areas that have the budget to support it, but that doesn't work for all," he said. "It's a challenge in a rural area. If there are a lot of traditional members who do it for 40 years, and then a new generation wants incentives, there might be internal conflict as well. You really have to have leaders who can reimagine fire departments for the future." Furthermore, said Ozog, retention is key.

"When members stick around, they are collaborative and stick together. When there's cliques, chaos or conflict, who wants to volunteer for that?" he said.

The National Volunteer Fire Council (NVFC), a nonprofit membership association representing the interests of the volunteer fire, EMS and rescue services, provides online training to its members for grant funding, recruitment and retention, safety and equipment, and a number of other topics.

Steve Hirsch, chair of the National Volunteer Fire Council, based in Kansas, said small communities can't wait an hour when their house is on fire or they're hanging upside down in a car. He said call volume has increased and society has changed.

Recruitment can be a nonstop process, he said.

"There are departments around the nation that don't have trouble, but there are those that really struggle," he said.

On the Council's <u>makemeafirefighter.org</u>, Hirsh said departments can create their own web portal and citizens can look up their local fire departments to see if there is a need for volunteers.

"Once you make people aware of the need, I think people will step up and volunteer," said Hirsh. "We have to make sure people know we have a need. I refuse to believe that volunteering is a thing of the past. Communities like mine and across the nation, they just don't have the call volumes to justify more."

Consolidation

Consolidation and regionalization are "definitely in the toolbox" when looking for potential solutions, said Cook.

"If that geographic area is densely populated, and there's a high number of call volumes, you can't approach it from that perspective," he said. Ozog said regionalization and consolidation have been successful in Pennsylvania but organizations must want to do it.

"When they don't, it is not successful," he said. "It will work if the organizations want it to work. You have to have proactive leadership to challenge the old school traditions and thinking, and have a vision for the future."

Challenging the model

The National Volunteer Fire Council reported that the time donated by volunteer firefighters saves localities across the country an estimated \$46.9 billion per year. The cost of switching to a paid or career firefighting model is not necessarily feasible, fire leaders said.

Ozog said there will be challenges when going against the current model.

"I don't want to say as a blanket statement that the volunteer model is not sustainable," he said. "The grit and community spirit will allow it to be sustainable, but the key is excellent leadership and excellent relationship with municipal government."

In certain communities, including the William Cameron Engine Company in Lewisburg, the transition to a paid fire department has worked, he said.

Hirsh said the dollar figure for a paid service may be preventative.

"You're talking huge dollars," he said. "In some communities, it can't be justified. There are communities in the nation that have issues, but the volunteer model will not change for the majority of the country."

In Northumberland

Northumberland Borough Fire Chief Brian Ginck said volunteerism is the number one concern. The companies have 40 active firefighters, but that number dwindles at any given point depending on the day or time.

"I believe that in the very near future that the local departments will have to regionalize in order to survive, because of the lack of manpower," said Ginck. "A borough like Northumberland, we could never afford the taxes it would take to put in a paid department. The only way to do that is regionalize." Polling manpower and resources could cover a broader area, he said.

"It wouldn't be as good for our residents, but that could end up being the reality," said Ginck.

In Sunbury

In Sunbury, in the midst of consolidation talks, East End Hose Company and Friendship Hose Fire Company have already been working together out of the East End's station since 2014. That was the year Friendship lost its building to a fire.

"They have a rescue, we have an engine," said East End Captain John Ferrari. "If it's an accident, everybody piles on the rescue and the rescue goes. If it's a fire, everybody piles on the engine and the engine goes. The call dictates how we operate. It's nice because we really have two companies working out of here. Manpower-wise, we're very fortunate compared to other places in the Valley."

Ferrari said the public isn't aware of the struggles that fire companies are having. Members of the public are sometimes not even aware that the local companies are volunteers, he said.

"You either help the volunteers and save your tax dollars or at the end of the day if we can't survive, there will be paid companies in here," he said. "I don't know what the answer is."

In Shamokin

Northumberland County Director of Public Safety and Emergency Management Stephen Jeffery, who also works as the Shamokin Fire Bureau Chief, said consolidation and regionalization are the ways that fire companies are headed.

"It's a dying breed," he said. "It's a reality that people don't want to see. The fire services are dwindling. It's nice to have generations come in behind you that will support what you are working for, but there's not a lot of that out there. There's a lot of people who want to volunteer, but they don't want to do this (firefighting) to volunteer." Jeffery said the senior firefighters still have the mindset that they never called for mutual aid 20 years ago and they did it on their own, but that isn't the case now. Mutual aid is common and needed because manpower isn't what it used to be, he said.

There are 75 people between six companies that respond to calls, but about half are considered active. There are three to four people per apparatus, said Jeffery.

Jeffery predicts the next 10 years will be the turning point for fire service.

"If something doesn't drastically support the fire service, the alternative is regionalizing and you'll probably pay somebody to do it, and you'll see the downsizing of firehouses," said Jeffery. "South of here, Berks County, Adams County, York County, they've regionalized. They have a tax base to support it."

Many of the Valley municipalities, including Shamokin as an Act 47 financially distressed city, the tax base may not be there to support such measures, he said.

Jeffery said Friendship has a construction plan in the works to construct a new bay building across the street in an empty lot.

"We're planning for the future, just we don't know what the future holds," he said.

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FIREHOUSE

VOLUNTEER FIREFIGHTER

Volunteer View: Volunteer Staffing Can't Put Quantity Before Quality

Aaron Dupree urges volunteer departments not to lose sight of the goal of having all of their members trained and able to complete all of the tasks that are needed for successful fireground operations amid efforts to increase staffing numbers.

Aaron Dupree

Recruitment and retention have become buzzwords as of late in the volunteer fire communities, with everyone scratching their head as to how to increase staffing numbers. As we continue to see a decline in the number of volunteer firefighters throughout the United States (down 100,000-plus since 2015), departments have had to work with fewer members and even lowered physical and training standards for those members. Grant money for recruitment, toll-free phone numbers for information to join and gift cards for retention are three of the ideas among many that are being employed to attempt to increase membership. Amid all of these efforts, I find myself asking the question, are we losing focus on more important areas because we are concentrating on numbers, namely quality?

Do the numbers add up?

When speaking with peers in the volunteer community, the regular metric that typically is discussed is total number of members. We rarely discuss individual firefighter statistics, staff numbers per incident, certification levels, or training above and beyond initial certification.

If you ask the general question, is it better to have 10 firefighters on scene of a structure fire or 20, the most common response that you will receive obviously is 20. However, we can't paint the issue with such a broad stroke. It's a fact that more is better—when the more are competent and able. However, when we lower the standards for department membership and/or hire members who aren't cognitively or physically able to do the task(s) that's required, it's obvious that quality should be more important than quantity.

In the quest to put more bodies in seats, volunteer departments across the country are losing sight of quality. By operating in this way, we are affecting emergency operations negatively, possibly more severely than having fewer firefighters on scene.

Minimums are subjective

It's obvious that there is a minimum number of firefighters that's needed on scene to accomplish operational goals, but to come up with that minimum number, we must recognize that the number is different for every department, and we must know the abilities of the firefighters who are assigned to accomplish the tasks at hand.

As we look at a common task, such as throwing a ladder, I hear regularly in my area that we always should have two people when throwing a 24-foot extension ladder because of safety concerns. Is it great to utilize two firefighters if we have the staffing? Absolutely. Should it be completely acceptable to use one? Yes, because it isn't unsafe, assuming that the firefighter is trained properly and physically able.

So, this brings up a good point: Is it about having large numbers, or should we just make sure that we adhere to a higher standard for hiring and for developing and implementing training requirements?

Meeting the minimums

Currently, Ohio has a certification level that doesn't meet *NFPA 1001: Standard for Fire Fighter Professional Qualifications*. The state's certification is specifically for volunteer firefighters, and it's based on some NFPA 1001 standards, but it doesn't meet them in their entirety. (Certification only takes 36 hours to complete.)

To explain, let me begin by saying that many departments utilize this certification as a starting point but require their members to proceed on to Firefighter I—and even, in some cases, Firefighter II—to maintain membership. That said, many departments are comfortable with 36 hours being the only certification that their members achieve. The belief that this is all that their members need is based on three thoughts. First, "It's the way that it always has been" is a common premise that's offered up for just about any question that's asked. Second, the state of Ohio doesn't mandate anything higher. Third, departments are afraid that requiring new hires—or even longtime members—to dedicate any more of their own time to go to class will turn away potential members. As much as I understand the concerns of the third response, we must hold ourselves to a higher level and not always be comfortable with meeting the minimums.

Once when I was teaching in a "36 hour" course, I had a student voice concerns that the ladder practical, which consisted of a single person removing a ladder from the apparatus, moving the ladder to a structure and placing it according to instructions, was a ridiculous skill test and that it wasn't safe. He believed that it always should utilize two firefighters. He went on to say that skills such as this only harm a department's capability to gain members, because the skills are too difficult to pass. After explaining why it was beneficial to be able to complete this skill alone, I asked him a question: If people can't put up a ladder on their own, do you feel like you can rely on them to back you up, particularly if something goes wrong?

Hard truths

Sometimes, we must ask ourselves the difficult questions. We must recognize and accept that not everyone is cut out to be a firefighter and, although our membership numbers might be low, numbers don't mean much if members aren't properly trained, competent and able to do the required tasks. Focusing on making sure that the members who we have and hire are properly trained and prepared is more important than total numbers on paper.

Setting standards purposely low so that everyone can pass doesn't do anyone any favors, including those individuals who wouldn't pass if the bar were set higher. We are setting up our departments and their members for failure if we fail to recognize the need for standards enforcement.

Answers

What's the answer? Increasing membership and having staffing numbers that meet national standards obviously is the end goal for every department, and we never should stray from that. That said, we can't lose sight of the goal of having all members trained and able to complete all of the tasks that are needed for successful fireground operations.

As volunteer departments, we must remember that just because our departments aren't staffed with "professional" firefighters doesn't mean that our departments shouldn't operate with the utmost professionalism. It shouldn't mean that they don't strive to adhere to professional standards. We must set higher standards for required certifications, and we must provide better in-house trainings that are real-world and relevant and are developed utilizing national standards.

We must do a better job with our hiring processes, making sure that the candidates are able to meet the physical and cognitive requirements of the position.

We must utilize automatic and mutual-aid agreements to help with staffing shortfalls, and we can't permit calling for mutual aid to be a blow to our ego but, rather, that it's what's best for not only department operations but for the public's welfare.

We must be sure that we fill the seats with able, well-trained firefighters and not just warm bodies.

Source URL: https://www.firehouse.com/volunteer-firefighter/article/21247018/volunteer-view-volunteer-staffing-cant-put-quantity-before-quality

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AP

Combined fire department unique, reasons for its creation aren't

Eric Scicchitano - The Daily Item, Sunbury, Pa. (TNS) Dec 22, 2021



Dec. 22—Declining enrollment in the volunteer ranks spurred William Cameron Engine Company in Lewisburg to shift toward an operational model supported by career staff and volunteers.

The change to a combination fire department was put in motion some 25 years ago. Since then, no other department in the Valley has followed suit.

William Cameron's operation is unique, at least locally, but the circumstances hardly are.

Fire departments nationwide struggle to recruit and retain volunteers. That's the same in the Valley. Enrollment dropped in Pennsylvania from an estimated 300,000 volunteer firefighters in 1976 to roughly 38,000 in 2021. The decline extends to paid staff like EMS workers, a population that dropped across the state to an estimated 17,000 from a high of 30,000.

James Delaney, president of the Pennsylvania Career Fire Chiefs Association, testified to those present-day figures before state lawmakers in April.

"Make no mistake," Delaney told the Senate Veterans Affairs & Emergency Preparedness Committee, "in many areas across the commonwealth, our emergency services are in 'crisis mode."

Delaney predicted conditions will only worsen.

Regionalization, consolidation and combination career-volunteer departments are all seen as potential solutions, each with its own complexities.

How does William Cameron make it work and what could be learned from that department's experience?

Fire Chief James Blount isn't the type to talk about why other departments haven't chosen to follow suit. For those considering the shift, however, Blount emphasized that volunteers and career staff must be treated as equals by administrators and by one another. And, as importantly, all involved must buy into the concept.

"One thing people hate is change. When you've had something a certain way for years, you have to make sure you get that buy-in," Blount said.

'We're all one'

Blount was hired in 2015 as the department's first full-time paid fire chief, but the switch to a combination department began about 1995 when part-time EMS personnel were first hired. Full-timers followed around 1998 and career firefighters were brought on beginning about 2005, according to department members and published reports.

The department's 25 career staffers are cross-trained to work out of an ambulance or fire apparatus. The starting hourly wage and annual salary are \$17.53 and \$39,726.71. They work with about 20 active volunteers in operational and administrative roles, including Bucknell University students, Blount said.

"We don't look at it as career and volunteer personnel. We're all one working for the greater good. I think that's where a lot of the hangup gets at a lot of the time," Assistant Chief Ronald "JR" Young said.

"We don't segment our career and volunteer staff. A firefighter is a firefighter. Our volunteers play just as an important role as the career staff," Blount said.

William Cameron's primary coverage area is Lewisburg and East Buffalo Township along with about half of Kelly Township, about one-third of Buffalo Township and, across the Susquehanna River, about half of West Chillisquaque Township in Northumberland County.

The department's budget in 2021 is \$2,061,128. It pursues grant funds for equipment purchases and receives municipal contributions, but the bulk of its revenue comes from emergency medical services. Calls for EMS approach a rate of nearly 4-to-1 compared to fire service.

William Cameron already surpassed fire and EMS incident totals from 2020. As of Dec. 6, the department responded to 3,365 EMS calls (3,060 in 2020) and 885 fire-related calls (755) which include working fires, false alarms, traffic accidents and more.

The average response time this year, from the time of the call to arrival on the scene, is 6 minutes, 55 seconds, Blount said.

EMS in crisis, too

Mike Kobbe is the chief of the New Castle Fire Department in Lawrence County. It's been a career station since the early 20th Century, he said, and there is no volunteer component. But, its neighboring departments are largely volunteer.

Kobbe worked as a professional firefighter at New Castle since 1998. Prior to that, he was a volunteer himself with Shenango Township Volunteer Fire Department.

There have been bridges burned over the years between the professionals and volunteers. He said ego got in the way, and when he was younger he said he had his own misconceptions about the career firefighters. Now, he said he works to rebuild the damaged relationships.

"We facilitate that by training with each other," Kobbe said of career and volunteer firefighters working together to ensure seamless work at mutual aid calls.

New Castle employs 20 full-time workers, eight part-time and Kobbe, the chief. The average salary in 2021 for all full-timers including the chief was roughly \$58,000 — the starting salary is \$32,659 — while the hourly rate for part-timers was \$13.77, according to budget data.

The department is funded entirely by taxpayers and doesn't bill for fire and EMS services, Kobbe said. Most of the staff is EMS certified. When on a medical call, they stabilize patients and render aid, assisting area ambulance services who handle transports. Sometimes, the wait for an ambulance can reach 30 to 40 minutes.
Kobbe said EMS is facing the same manpower issues as volunteer fire departments. There are fewer people entering the emergency medical profession. According to Kobbe, required training to become a paramedic is nearly equivalent to an associate's degree and the cost is about 2/3 what it takes to go to nursing school. Many are opting for that route, in part, for better pay, he said.

"It's in a state of crisis right now. We're partially our own worst enemy," Kobbe said.

As for firefighting, he said it's become a complex business. It's more than putting out fires, Kobbe said. Now, they serve in emergency management roles and respond to hazardous materials incidents and technical rescues. It takes a lot of training and a lot of risks.

Kobbe said volunteers and career firefighters must recognize the job is the same.

"We all take the same risks, make the same commitments," Kobbe said. "I hope the general public recognizes how much responsibility is put on these folks whether they're career or volunteer. They expect perfection every time we respond and that comes at a cost."

Consider regionalizing

Changing demographics in Pennsylvania's shrinking population can be attributed, in part, for declining volunteerism for firefighting, said Jerry Ozog, executive director of the Pennsylvania Fire & Emergency Services Institute.

"In rural areas, you walk into a lot of firehouses and you see a lot of gray hair," Ozog said.

Combination fire departments inherently guarantee a response for every emergency dispatch. While there are exceptions, Ozog said he doesn't believe a paid model for firefighting is viable for rural communities. He said it's too expensive.

Ozog — who in a past consultancy role led the development of a strategic plan for William Cameron Engine Company in 2012 — broadly advocates for another option.

"Regionalization would absolutely be the way to go," Ozog said.

Members of regional departments pooling resources and merging demographics, i.e. population, can collaborate on bigger grant awards, he said. They might find it more feasible to offer stipends to volunteers or, potentially, a tuition reimbursement program for trade schools and colleges.

4/6

"I personally believe if the leadership in the organizations want the fire service to survive, they have to recognize the issue and have the courage to do something different," Ozog said.

William Cameron, for which Ozog had recommended a full-time paid chief among other suggestions, is the lone member of a fledgling regional operation: Central Susquehanna Fire and Emergency Services (CSFES).

The board consists of appointees of its three full-time members: Lewisburg, East Buffalo and Kelly townships. It provides fiscal oversight. The fire company maintains independence when it comes to emergency service operations.

The organization is built to be an umbrella outfit, allowing neighboring departments to join and operate as part of a single unit.

Matt Schumacher, a former CSFES board member and outgoing East Buffalo Township supervisor, was among the officials who worked to create the entity. A desire to maintain absolute control factors heavily in volunteer departments remaining independent as manpower resources dry out, he said. He said he understands the viewpoint but believes it's only a matter of time before CSFES adds member departments.

"That's why we named it the way we did," Schumacher said of creating a regional fire entity. He pointed out that a combination career-volunteer model would be used. "The volunteer numbers are falling so fast and the citizens deserve service."

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TRENDING VIDEO



Special Report

What's next for the fire service? Fire service leaders offer 2022 projections

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Robert Avsec

Is an initial-attack apparatus or QRV right for your department?

Use data to determine the appropriate apparatus for your department - and how staffing and tactics will change

Apr 13, 2021

Editor's Note:

This article originally appeared in the FireRescue1 Apparatus eNewsletter. Sign up to receive the Apparatus eNewsletter here.

It's no secret that over the past 50 years or more, fire apparatus in the United States have continued to get larger and heavier. As fire departments have added services (e.g., EMS, hazmat, technical rescue), new equipment must be added to the apparatus to support those services.

In "Considering the 'new normal' for fire apparatus," we discussed the role that initial-attack apparatus and quick response vehicles (QRV) can play in meeting a multitude of challenges. In that article, I addressed the financial aspects of "big pumper vs. smaller pumper" as well as fire suppression options (e.g., CAFS, UHP) that provide these capabilities in a smaller package.

But most fire departments are also facing other challenges that must be considered when specifying new pumping fire apparatus. Those challenges include:

¥,



While many fire departments have either started to downsize the fire apparatus in their fleet, opting for multipurpose apparatus, many proponents of a new approach still encounter resistance when trying to get leadership to consider anything other than a Type I pumper. (Photo/FireTruckMall.com)

- America's crumbling infrastructure: Many secondary roads, highways, interstates and bridges are succumbing to years of lack of maintenance or replacement due to underfunding by states and the federal government.
- Decreased staffing: This is a problem particularly for volunteer-staffed departments, but also a growing concern for career fire departments.
- Experience: Many new firefighters do not have prior experience driving big trucks.
- Cancer exposures: Fire departments must focus on reducing firefighters' risk of developing cancer from their exposure to the chemicals, chemical compounds, and carcinogens during interior structural firefighting.
- Environmental concerns: In many parts of the country, there is growing concern for available water supplies that are being affected by droughts and overdevelopment. There's also a growing concern in communities about the run-off from fires where large quantities of water were necessary to extinguish the fire, particularly given the number of petrochemical-based materials that are used in today's building construction and furnishings.

While many fire departments have started to downsize the fire apparatus in their fleet, opting for multipurpose apparatus, many proponents of a new approach still encounter resistance when trying to get leadership to consider anything other than a Type I pumper.

One FireRescue1 member shared: "I recently resigned from our Apparatus Committee after about 19 years [because] one of my great frustrations is that our department still wants to buy full-sized fire apparatus at the prices you mentioned when we use them to respond well over 80% of time to EMS

and non-emergent calls. Full-sized apparatus also cost us a lot in long-term maintenance costs to operate. I have been an apparatus operator for about 18 years, I have driven to countless EMS and non-emergent calls in my career but can count the larger multi-line fires I pumped on one hand. The other small fires I pumped are also few and far between. I think the facts are clear: Fire department budgets would be benefit from matching the vehicle to what we are doing with them vs, what we 'romanticize' we are doing with them."

So, why are many fire departments continuing to specify and purchase fire apparatus that's not designed from the tires up to match the calls more closely for service it will respond to?

EVALUATING INITIAL-ATTACK APPARATUS AND QRVS

Before, it would be useful to first determine what problem you're seeking to solve. Purchasing any type of fire apparatus is a process for which several critical factors should be considered.

Step 1: How is your current fire suppression response package working out?

Use your department's computer-aided dispatch (CAD) system, along with your fire incident reporting system (e.g., NFIRS), to evaluate the number and types of emergency calls to which your department has responded. It's best to review 3-5 years of data, depending upon your department's level of activity. Some of the critical data points to evaluate:

- How many responses were fire incidents that required fire suppression operations?
- For those responses, what types of fire suppression operations were required (e.g., structure fires, vehicle fires, brush/vegetation fires)?

This analysis should help you determine your fire department's needed response package to best manage those types of fires.

Step 2: How does your current staffing or volunteer response align with your fire responses?

How many firefighting personnel responded to each call for service that requires fire suppression? It's a serious question because, after all, how many career fire departments can put this many firefighters on the scene of such a working structure fire?

XUP KES ?

Functional positions required for a kitchen fire in a 1,400-square-foot ranch-style single-family dwelling with no occupants in the structure

PERSONNEL TYPE	NUMBER
Incident Commander	1
Firefighters for 1¾-inch attack hoseline	2
Driver/operator for pumping apparatus	1
Firefighters for vent-enter-isolate-search (VEIS) operations	2
Firefighters for rapid-intervention crew	2
Firefighters for secondary 1¾-inch attack hoseline	2
TOTAL	10

Figure 1. NFPA 1710: Standard for Organization and Deployment of Fire Suppression.

Just as importantly, how many fire departments can consistently respond within the response times outlined in NFPA 1710: Standard for Organization and Deployment of Fire Suppression Operations by Career Fire Departments?

DEMAND Zone	DEMOGRAPHICS	MIN. STAFF TO RESPOND	RESPONSE TIME (MIN.)	OBJECTIVE Met %
Urban zone	Greater than 1,000 people/sqmi.	15	ð burninnnafin í leiði brinninning mannafinnin	90%
Suburban zone	500-1,000 people/sqmi	10	10	80%
Rural area	Fewer than 500 people/sqmi.	6	neranden en der Standen ander Standen von Steinen Standen von Standen von Standen von Standen von Standen von S 14	international and a second second 80%
Remote area	Travel distancer greater than or equal to 8 mi.	the construction of the second s	Dependent on travel distance	<u>Entertarian (una casada manas)</u> 90%
	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90%

Table 1. NFPA 1710: Standard for Organization and Deployment of Fire Suppression, Appendix C.

The question is more germane to volunteer-staffed fire departments. Table 1 shows the response requirements for those fire departments contained in NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.

DEMAND ZONE	DEMOGRAPHICS	MIN. STAFF TO RESPOND	RESPONSE TIME (MIN.)	OBJECTIVE Met %
Urban zone	Greater than 1,000 people/sq.·mi.	15	9 9	90%
	500-1,000 people/sqmi	namen or a substance of a substance of the substance of t	10	80%
Rural area	Fewer than 500 people/sqmi.	eranteka tereka erangen	nerentensi savatutu i juura pariju i kirki k 14	80%
Remote area	Travel distancer greater than or equal to 8 mi.	forestatutur fast tradition in a la de de consegle dem d'Arma Mesteur e e i séconseger 4	Dependent on travel distance	бонологичники контонологисти и и и и и и и и и и и и и и и и и и
Special risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90% 90%

Table 2. Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.

In today's world, where many volunteer-staffed departments are struggling to retain incumbent members and attract new members, how many of these departments can consistently put six firefighters – firefighters trained and equipped for interior structural firefighting – on a fire scene in a rural area within the 14-minute timeframe 80% of the time?

And those response goals are based on an assumption that all 4-6 firefighters who arrive on the scene are certified, trained and equipped to conduct interior structural firefighting operations. And if they are, can those firefighters accomplish with your existing pumping fire apparatus?

Step 3: Evaluate your current fleet and SOGs

Once you have a better idea of your community's fire history and the efficacy of your current approach for delivering fire suppression services, make a list of every current vehicle in your fleet and review your standard operating guidelines (SOGs) for each. This analysis can be useful in answering the question: Should we purchase an initial fire attack apparatus, QRV or a conventional Type I engine, or should we adjust the way we operate with our current fleet?

For example, if your data indicate that 95% of all responses to actual fires were safely, effectively and efficiently handled with one piece of fire attack apparatus and fewer than 5 personnel, an initial-attack apparatus or QRV might be a better apparatus purchase than a full-size pumper.

Step 4: Imagine new SOPs with an initial-attack apparatus or QRV

Once you've got a good picture of your current operating status, imagine what your new standard operating procedures (SOPs) would be like if your department had an initial-attack apparatus or QRV. A key point to consider is that most such apparatus only have room for 2-3 firefighters, so some of your current tactics will probably need adjustment.

Fire department leaders should develop an SOG making transitional fire attack from the exterior of a structure fire as the expectation for an initial-attack apparatus or QRV. Kevin Maschue is the planning and research deputy chief for the Mesa (Arizona) Fire and Medical Department. In his March 2020 article, "Combining transitional attack and early ventilation to reduce toxic exposures," Chief Maschue Chief provided a comprehensive look at how his fire department has radically changed how they approach structural firefighting.

Chief Maschue and several of his peers, inspired by the research conducted by the UL Firefighter Safety Research Institute, the National Institute of Standards and Technology (NIST), and the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), approached their departmental leader with their idea for reducing firefighter exposures to the chemicals, chemical compounds, and carcinogens present in structural firefighting without losing fire suppression capabilities.

Those leaders empowered Chief Maschue and his colleagues to form a committee to develop policy and procedures to address those two key issues. Using the information and ideas presented by UL FSRI, NIST and ATF, the committee settled on one UL FSRI presentation entitled, Tactical Considerations Web Series: Ep. 15 – Transitional Attack with Fire Showing Near Entry Point.

About that presentation, Chief Maschue wrote that the UL FSRI defined this process as an initial exterior attack upon arrival, prior to making entry, that's designed to cool the structure's interior temperature and "reset the clocks" – those clocks being "time to flashover" and "victim survivability."

According to Maschue: "We have without question reduced the circumstances leading to near-miss situations and LODDs. In 4 years, I haven't heard of an experienced rollover or flashover condition, and I've reviewed many of our departments' working fires as part of a quality assurance program. We've also saved a tremendous amount of property in that I can't remember the last time we went defensive on a house fire, and there's no doubt these methods have provided us the opportunity for more successful and viable victim rescue when the situation has presented itself."

APPARATUS AND TACTICS: YIN AND YANG

In Ancient Chinese philosophy, yin and yang is a concept of dualism, describing how seemingly opposite or contrary forces may be complementary, interconnected, and interdependent in the natural world, and how they may give rise to each other as they interrelate to one another.

And shouldn't we view our fire apparatus and our structural firefighting tactics in that context as well? If we did, I believe that now is the time for many fire departments to become more adept at first determining what they want to accomplish in their service delivery, especially regarding fire suppression, and then specify the type of pumping fire apparatus that best fits that need.

About the author

Battalion Chief Robert Avsec (ret.) served with the Chesterfield (Virginia) Fire & EMS Department for 26 years. He was an instructor for fire, EMS and hazardous materials courses at the local, state and federal levels, which included more than 10 years with the National Fire Academy. Chief Avsec earned his bachelor's degree from the University of Cincinnati and his master's degree in executive fire service leadership from Grand Canyon University. He is a 2001 graduate of the National Fire Academy's EFO Program. Beyond his writing for FireRescue1.com and FireChief.com, Avsec authors the blog Talking "Shop" 4 Fire & EMS. Connect with Avsec on LinkedIn or via email.



Special Report

What's next for the fire service? Fire service leaders offer 2022 projections

Fire Products > Fire Apparatus



Robert Avsec Product News

7 apparatus trends to watch in 2022

Fire apparatus evolve to include more safety, storage and communication features

Dec 13, 2021

The fire apparatus in use today have certainly come a long way since 1905 when the Knox Automobile Company of Springfield, Massachusetts, began selling a vehicle that has since been designated as the world's first "modern" fire engine. Today's fire apparatus is an engineering marvel that's safer, more effective and more efficient than early-20th-century firefighters could have ever imagined.

Just a few years ago, I wrote the article "8 game-changing apparatus trends from 2017," looking at new technology that would enable fire departments to get more operational capability out of fewer fire apparatus while keeping up with the expanded scope of the job and decreased staffing. That evolution is ongoing, with technology innovations happening faster than ever.

Because many fire departments are operating apparatus that are 20 or 30 years old, now is an ideal time to get up to speed on the next wave of developments in fire apparatus manufacturing. Let's look at some of these new trends in fire apparatus development and manufacturing.



Today's fire apparatus is an engineering marvel that's safer, more effective and more efficient than early-20th-century firefighters could have ever imagined. (Photo/Wikimedia Commons)

TREND 1: ENHANCED ELECTRONIC CONTROLS

Many of the innovations present in automobiles and light trucks are now being used by fire apparatus manufacturers to produce units that are easier to operate, more efficient, and easier to maintain and repair. Features like touchscreens and computerized equipment (e.g., digital pump panel controls and master stream controls) are streamlining apparatus operation, and a new generation of firefighters is embracing this approach.

Apparatus manufacturers, and fire departments creating specifications for new apparatus, welcome these developments for several reasons:

 Electronics save space on apparatus when compared to previous mechanical controls, allowing designers to create more useable space for personnel, hose and equipment.

- Multiplex electronics make troubleshooting electrical problems easier by minimizing the use of bulky wire bundles.
- Wireless communication allows firefighters to operate some apparatus control panels using wireless devices, such as tablets or smartphones.
- Small, durable wireless cameras can be mounted anywhere on fire apparatus to give the driver/operator a 360-degree view around their apparatus, which improves safety and situational awareness.
- On-board telematics control units (TCU) continually monitor the engine, transmission, brake systems, fluid levels, system voltage, operating hours and vehicle location, while also providing customized vehicle readiness reports to fire departments by email.

Finally, some manufacturers are offering smart truck technology that continuously and remotely monitors the health or condition of apparatus. This technology can decrease apparatus downtime because by detecting an emerging problem with apparatus performance, which means the problem can be fixed earlier and lessen downtime.

TREND 2: FEATURES TO MINIMIZE POTENTIAL DRIVER ERRORS

Fire apparatus manufacturers have embraced the use of technologies available in automobiles to help drivers avoid operating mistakes. Some of the more popular technologies being used are:

- Automatic emergency braking: Vehicle-mounted sensors, such as radar, cameras or lasers, detect an impending crash, warn the driver and apply brakes if the driver doesn't respond fast enough.
- Electronic stability control (ESC): Designed to help the driver/operator in maintaining control on slippery roads and avoid a rollover crash.
- Collision avoidance systems: Aid the driver/operator with blind spot detection, rear cross-traffic alerts and forward-collision warnings.
- Vision enhancement systems: The use of a forward-looking infrared camera to provide the driver/operator with better visibility when navigating an apparatus in low-visibility environments.

TREND 3: VEHICLE-TO-VEHICLE COMMUNICATIONS

Vehicle-to-vehicle (V2V) communication makes it possible for vehicles to broadcast and receive omnidirectional messages to create a 360-degree awareness of other nearby vehicles. Using a protocol like Wi-Fi, vehicles equipped with V2V can use those messages to identify potential crash threats as they develop. For example, V2V communication could alert the fire apparatus driver/operator that a vehicle is approaching an intersection without slowing down.

Several fire departments across the United States are testing V2V communication for use in their fleets. This technology has the potential to vastly improve firefighter safety, particularly when

responding to calls. The devices can be installed by the apparatus manufacturer or later by fire departments. As an emerging technology, it's unclear how soon these systems may become the norm on fire apparatus, but the continuing development of FirstNet, the first nationwide network dedicated to public safety, should give this technology a boost.

[Opinion: A plea to first responders: Join FirstNet to expand your communications options]

TREND 4: PROTECTING FIREFIGHTERS FROM CONTAMINANTS

Fire departments' adoption of the clean cab concept for fire apparatus to protect their firefighters from cancer-causing contaminants has prompted fire departments and manufacturers to create compartment space outside the crew compartment so that contaminated gear and equipment can be isolated from personnel when they're returning to quarters.

Apparatus manufacturers are maximizing storage compartments as part of overall apparatus design. Relocating equipment outside the cab is also helpful in case of an apparatus accident because there are no unsecured items in the cab to become moving projectiles that can injure firefighters.

Crew compartments are being designed using non-porous materials to minimize contamination and enable firefighters to clean those surfaces more safely, effectively and efficiently. Crew seats can be treated with antimicrobial finishes, and removable seat covers are available.

[Read next: Getting your apparatus clean cab- or 'cleaner cab'-ready]

TREND 5: SMALLER APPARATUS FOR SPECIALIZED DUTIES

Many fire departments are learning that more nimble fire apparatus using a smaller chassis can provide several advantages, including the capability to handle smaller incidents while reducing the wear-and-tear on larger, more expensive fire pumper and aerial apparatus. Smaller vehicles may be:

• Easier to maneuver so they can be driven into tight spaces for better access to a fire in its incipient stage.

• Easier to drive, a factor particularly useful in volunteer-staffed and combination departments where firefighters may not be accustomed to driving large trucks and where training costs to operate larger apparatus may be cost-prohibitive.

• More economical to operate, plus there's an advantage of less wear-and-tear on a department's fullsized apparatus, which can extend its service life.

• Operationally flexible because smaller-chassis vehicles can be adapted as paramedic/EMS vehicles, as a quick response vehicle with a water tank and CAFS, or as a tactical rescue vehicle. Smaller apparatus requires fewer firefighters to operate, a real plus for volunteer-staffed departments or combination departments.

Read Next: Is an initial-attack apparatus or QRV right for your department?

TREND 6: THE IMPACT OF STICKER SHOCK ON SHRINKING BUDGETS

In an earlier article, "Considering the 'new normal' for fire apparatus," we looked at how will fire departments need to adapt for continued service delivery as fire department budgets are stretched these days. In many fire departments, existing fleets of fire apparatus are aging and replacements are expensive. Consider that pumpers can cost \$500,000 or more with aerial apparatus running upwards of \$850,000.

TREND 7: STANDARDS DRIVE THE NEXT WAVE OF APPARATUS DEVELOPMENTS

NFPA 1901: Standard for Automotive Fire Apparatus is a 200-plus-page document that details a variety of consensus standards about fire equipment and apparatus. "Consensus" means the standards were developed by a committee of experts that includes stakeholders representing a balance of interests. The voluntary standard defines the requirements for new automotive fire apparatus and trailers designed for use under emergency conditions to transport personnel and equipment, and to support the suppression of fires and mitigation of other hazardous situations.

Historically, changes to NFPA 1901 have centered on making the apparatus safer. The standard provides guidance for the development and evolution in the fire apparatus field and reflects changing expectations for performance and compliance of fire equipment. For example, revisions to the 2016 version of NFPA 1901 included a requirement for a vehicle data recorder to capture data that can be used to promote safe driving and riding practices. Also added in 2016 were requirements for operation and performance of diesel particulate filters, and requirements for minimum length of seat belts.

About the author

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