

10-10-2023

## City of Willowick, Ohio Fire and EMS Department Feasibility Study

Bernard Becker

Cleveland State University, b.becker64@csuohio.edu

Follow this and additional works at: [https://engagedscholarship.csuohio.edu/urban\\_facpub](https://engagedscholarship.csuohio.edu/urban_facpub)



Part of the [Emergency and Disaster Management Commons](#)

[How does access to this work benefit you? Let us know!](#)

---

### Repository Citation

Becker, Bernard, "City of Willowick, Ohio Fire and EMS Department Feasibility Study" (2023). *All Maxine Goodman Levin School of Urban Affairs Publications*. 0 1 2 3 1817.

[https://engagedscholarship.csuohio.edu/urban\\_facpub/1817](https://engagedscholarship.csuohio.edu/urban_facpub/1817)

This Report is brought to you for free and open access by the Maxine Goodman Levin School of Urban Affairs at EngagedScholarship@CSU. It has been accepted for inclusion in All Maxine Goodman Levin School of Urban Affairs Publications by an authorized administrator of EngagedScholarship@CSU. For more information, please contact [library.es@csuohio.edu](mailto:library.es@csuohio.edu).



# City of Willowick, Ohio Fire and EMS Department Feasibility Study



Prepared by:  
**Dr. Bernard W. Becker III; DBA**  
Director, Center for Emergency Preparedness

**October 10, 2023**

**Center for Emergency Preparedness**  
1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115  
<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •  
Fax (216) 687-2225

## **Executive Summary.**

The City of Willowick, Ohio, (Mayor and City Council), commissioned Cleveland State University, Center for Emergency Preparedness to conduct this “Willowick Fire and EMS Department Feasibility” study. The summary of findings and recommendations highlights some of the major issues, which require discussion.

The main focus of this study is on efficient and sustainable staffing for the Willowick Fire and EMS Department; however, there are a number of factors which must be addressed to meet the National Fire Protection Association and Insurance Service Office “best practices,” ones which public safety entities strive to achieve. In addition, this study will provide staffing alternatives, identify financial and legal information and identify funding opportunities that may be available for hiring personnel.

A thorough background literature review of the Insurance Service Office “Fire Suppression Rating Schedule,” “Emergency Medical Services” and “Fire and Rescue Services” are provided to assist in the understanding Fire and EMS service activities, which are mentally challenging, physically demanding and labor intensive.

This study investigated the current Willowick Fire and EMS Department staffing status, solicited information from contiguous jurisdictional Fire and EMS Departments, and identified staffing models which the Willowick Mayor and City Council may select as the “best fit” for their jurisdiction.

Recognizing that expenditures must be matched by revenue and system improvement should be constructed in service delivery increments, building from the current service delivery level through four possible models, with the fourth model being optimal.

## **Disclaimer.**

The research information contained in this document is believed to be true, and is referenced in the American Psychological Association (APA) format. The information obtained by providers (financial documents, survey information) is believed to be true to the best of our knowledge.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## Scope of Work.

Investigate and develop a Fire and EMS Department Feasibility Study for the City of Willowick, Ohio.

Factors to be investigated and presented are, but not limited to:

- a) assess the current part-time staffing model and evaluate against alternative staffing models to determine the most effective and sustainable structure for the City.
- b) Four (4) staffing alternatives shall be assessed as a part of the study.
  - 1) Existing (all part-time),
  - 2) Hybrid (mix of full and part-time employees),
  - 3) All full-time, and
  - 4) A consolidation into a fire district and/or shared resources between communities.

Each alternative will be assessed for the following:

- a) Fiscal Analysis – review all revenue and expenditures
- b) Legal Analysis – review legal basis for establishing any of the three (3) alternative structures the City does not currently have in place.

Fire and EMS Operational Analysis:

- a) Level of Service and Response Time
- b) Requirements to meet standards and operational needs for each staffing model

Future considerations and Overall Costs of Services per model.

The study shall also include identifying specific funding opportunities that may be available for hiring any new personnel.

Final deliverables shall include a report detailing each alternative staffing model, methodology and summary of each individual analysis, and recommendations based on assessment of each alternative. The report will also include a section detailing available funding opportunities for hiring new personnel.

## Project Methodology.

The methodology used for this study will be grounded in the recommended best practices of the National Fire Protection Association (NFPA), the NFPA Fire Department Profile for small sized emergency service operations, the NFPA Fire Protection Handbook, and the International City/County Management Association (Managing Fire and Emergency Services).

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

<b>Table of Contents:</b>	<b>Page</b>
Executive Summary:	2
Scope of Work:	3
Project Methodology:	3
Background; City of Willowick, Ohio:	5
Willowick Fire and EMS Department Profile:	6
Community Fire and Emergency Medical Services:	7
Emergency Medical Services:	10
Fire and Rescue Services:	13
Fire and EMS Standards and Best Practices:	14
Fire Suppression Rating Schedule (FSRS) Overview:	14
National Fire Protection Association Standards:	16
Occupational Safety and Health:	18
Fire Department Staffing Operations:	19
Matching Resources to Risk:	20
Staffing Fire and Emergency Departments with an all part-time staff:	21
Fire and EMS Consolidation:	24
Legal Analysis:	27
Ohio Revised Code, Title 7, Municipal Corporations:	27
Ohio Revised Code, Authority for tax on income and withholding tax:	27
Ohio Revised Code, Composition and control of city fire department:	28
Ohio Revised Code, Public Safety:	29
Ohio Revised Code, Fire and Ambulance District Creation:	31
Ohio Revised Code, Joint Fire District Creation:	32
Fire and EMS Department comparison and contiguous to the City of Willowick:	34
City of Euclid, Ohio:	35
City of Eastlake, Ohio:	36
City of Wickliffe, Ohio:	37
City of Willoughby, Ohio:	38
Fiscal Analysis:	41
Willowick Fire and EMS Department Financial:	41
Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program:	41
Fire and EMS Department Feasibility Study Scope of Work Addressed:	44
Willowick Fire and EMS Department Findings and Recommendations:	46
Service Delivery Models:	47
Service Delivery Costs:	48
Ideal Service Delivery Organizational Chart:	49
Reference:	50

**Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## **Background; City of Willowick, Ohio.**

**Population in 2021:** 14,145 (100% urban, 0% rural).

**Population change since 2000:** -1.5%

**Males:** 6,830 (48.3%)

**Females:** 7,315 (51.7%)

**Median resident age:** 41.1 years

**Ohio median age:** 39.6 years

**Zip codes:** 44095

**Estimated median household income in 2021:** \$71,280 (it was \$44,107 in 2000)

Willowick: \$71,280

Ohio: \$62,262

**Estimated per capita income in 2021:** \$37,845 (it was \$22,053 in 2000)

**Estimated median house or condominium value in 2021:** \$137,010 (it was \$109,800 in 2000)

Willowick: \$137,010

Ohio: \$180,200

### **Mean prices in 2021:**

- All housing units: \$182,300
- Detached houses: \$180,126
- Townhouses or other attached units: \$236,999
- In 2-unit structures: \$374,315
- In 5-or-more-unit structures: \$261,456
- Mobile homes: \$10,358
- Median gross rent in 2021: \$1,011

**March 2022 cost of living index in Willowick:** 94.0

(less than average, U.S. average is 100)

**Incorporated:** 1952

**Elevation:** 622 feet

**Land area:** 2.52 square miles

**Population density:** 5,623 people per square mile (average).

## **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## **Willowick Fire and EMS Department Profile.**

According to the Willowick Fire and EMS website, Willoughby-on-the-Lake became the Village of Willowick in 1923 with a population of approximately 300 people. In 1934, the first police station was in a 3-story house at the intersection of Lakeshore Boulevard and Vine Street and part of the Village Hall. In 1948, a building was constructed at 31230 Vine Street which housed the City Hall, Police and Fire Departments. The Fire Department moved into its current location at the Municipal Safety Center at 30435 Lakeshore Boulevard in December of 1976. (Willowick Fire Department, 2023).

Today, the Willowick Fire and EMS Department has one station (facility), and is still located at 30435 Lakeshore Boulevard, Willowick Ohio 44095; 47 years of providing Fire and Emergency Medical Services to the citizens and visitors of Willowick.

Currently, the ISO rating (Fire Suppression Rating Schedule) for the Willowick Fire and EMS Department is a class 3, obtained in 2020.

In 2022, the Willowick Fire and EMS Department consisted of one (1) full-time Fire Chief, one (1) full-time fire department secretary, and sixty-four (64) part-time firefighters. The Willowick Fire and EMS Department is dispatched by the Willowick Police Department. The authorized staffing strength for the Willowick Fire and EMS Department is 73 Fire and EMS personnel.

The Willowick Fire and EMS Department has a staffing level of six (6) part-time personnel, 24 hours a day, 7 days a week, 365 days a year; however, not all of the positions are filled consistently.

The City of Willowick Fire Protection Water is maintained by the Lake County Water Division. Willowick Fire and EMS Department personnel do not regularly engage in testing the available fire protection water flow of these fire hydrants.

In 2022, the Willowick Fire and EMS Department apparatus consisted of one (1) 1500 gallon per minute (GPM) fire engine (2005), which carries 750 gallons of water. One 78' ladder carrying 350 gallons of water (2014). Three Emergency Medical Service transportation units, two capable of transportation, one back-up unit, ranging in ages of 2014, 2019 and 2020.

The Willowick Fire and EMS Department operates under an Ohio certified Collective Bargaining Agreement between the City of Willowick and the Willowick Firefighters Association – January 1, 2022 through December 31, 2024.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

In 2022, the Willowick Fire and EMS Department daily (on-duty) operations consisted of six (6) part-time firefighter / EMS personnel on shift. The Willowick Fire and EMS Department operates with a three (3) daily shift system:

- a) 06:00 am until 12:00 pm (noon),
- b) 12:00 pm (noon) until 6:00 pm, and;
- c) 6:00 pm until 06:00 am.

Part-time firefighter / EMS personnel utilize the “Aladtec” software system to “sign-up” for desired work shifts. Aladtec is a robust online employee scheduling and workforce management software system, primarily utilized by EMS, Fire and Rescue, Law Enforcement, Dispatch and Communication Centers.

In 2022, the Willowick Fire and EMS Department responded to **653 Fire calls** with an average response time of **4:56 minutes** and **1,838 EMS calls** with an average response time of **4:33 minutes**.

The Willowick Fire and EMS Department part-time firefighter hourly base pay is \$22.35 per hour, and the part-time supervisor (Lieutenant) hourly base pay is \$25.93 per hour. The Willowick Fire and EMS Department has no career firefighters or career supervisors, other than the Fire Chief.

## **Community Fire and Emergency Medical Services.**

Traditionally, the mission of the fire service is to save lives and protect property. When many people think of their fire department, they think of fire suppression first. However, in a number of fire departments, more than 80% of the emergencies are requests for emergency medical services. Therefore, delivering emergency medical services care fits directly into the mission of the fire department. (Lawrence, 2001).

In today's economic climate, with budgets being crunched at all levels of government, resources are being stretched for many reasons, including crime and drug problems, health and welfare needs, the environment and maintaining infrastructure. All of these concerns compete with fire protection for limited funds. In some communities, even private organizations that once were funded outside the tax base are now seeking public support.

In fire departments, demands for services are increasing at a steady rate, particularly for emergency medical services (which most fire departments provide today). They will continue to do so as our population continues to age. Meanwhile, taxpayers do not want to pay more, meaning something has to give.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225



Many fire departments are turning to a variety of joint ventures to provide the level of service their communities need while conserving scarce resources. They are applying a wide variety of approaches, ranging from the informal sharing of individual personnel or equipment to the formal consolidation of departments across jurisdictional lines. The continuum of such cooperation might include:

- Informal mixing and matching in which one jurisdiction borrows a technical specialist from another to help with a short-term project or problem.
- Combining to share such specialized services or equipment, through a contract, as hazardous materials response vehicles, special heavy-rescue vehicles or aerial ladder trucks, apparatus maintenance or information services.
- Creating a process for hiring one another's specialized staff on a consulting basis for special projects or short-term relief, for example, one city, without a fire inspector for three months, arranges with a neighboring community to share the time of its inspection staff during that period.
- When shared needs exceed the limits of a single functional area and extend to the entire range of fire protection operations, such tools as mutual aid agreements (on-request or automatic) often are instituted. Increasingly, adjoining fire agencies are moving further, committing to legal consolidation of their organizations to form a new one. Consolidation itself offers a full range of alternatives.
- In a functional consolidation, separate fire departments are retained, but one or more duties normally performed by one department are assigned to members of another department, or duties normally performed separately by all departments are assigned to a combined new organization under the control of all participating organizations; an example of this is a joint training center.
- In a partial consolidation, separate fire departments are retained, and a special agreement is formulated to handle specific challenges; an example is shared staffing of a fire station located where it can readily serve two or more jurisdictions.
- In an operational consolidation, sometimes called a merger, separate fire departments are combined in total into one unified department through a legal process.
- Other types of consolidation exist as well, including combinations of police and fire departments into public safety departments, or comprehensive mergers of entire governments.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

- Mutual aid agreements provide for reciprocal assistance for emergency management, fire, rescue, emergency medical, hazardous material and other disaster response services. Such an agreement might specify joint response to all alarms in a given geographic area or automatic response by the facility closest to the incident, regardless of jurisdiction.
- Whatever the approach taken to interjurisdictional cooperation, the best interest of the public must be the driving motivator.

To help illustrate these points, a number of texts have been referenced for creditability and validation. The Insurance Services Office (ISO) has established some general station location standards. These are based on road-travel distances.

The ISO Fire Suppression Rating Schedule states, "Number of Needed Engine Companies for Method of Operation": The standard response on initial alarm to fires in structures consists of a minimum of 2 (two) engine companies. "Deployment Analysis": The built-upon area of the fire protection area should have a first due engine company within 1.5 miles and a ladder-service company within 2.5 miles. (Insurance Services Office, 2012).

The National Fire Protection Association (NFPA) Handbook indicates that first-due apparatus should be located within two miles of residential areas; within one- and one-half miles of commercial areas; and within one mile of locations where the required fire flow exceeds 5,000 gallons per minute. Variations in these distances may be specified; the distances, of course, are surrogates for travel times. (NFPA, 2023).

Ultimately, it is the governing body's responsibility to either elect to accept or reject certain standards for a variation of reasons. The ISO and NFPA; however, are nationally recognized standards, and offer "best practices" for consideration.

The key components of fire suppression, emergency medical service delivery, technical rescue operations (vehicle wrecks, machinery accidents, trench collapse, etc.), and large-scale incident/disaster response are dependent on the number of trained responders immediately available, the time it takes for them to be summoned and respond to the scene, and the vehicles and equipment available to responders.

Legal requirements (most often related to responder safety) and the Insurance Services Office (ISO) evaluations of local fire protection for insurance premium purposes are important considerations.

Moreover, national and industry standards are typically drawn from the National Fire Protection Association, the American Medical Association, the American Heart Association, and the Federal Emergency Management Agency and provide guidance for developing a response system.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

The standards for emergency medical response to life-threatening situations, for example, call for basic life support measures to begin within four minutes, followed by advanced life support measures within eight minutes.

## **Emergency Medical Services.**

The benchmarks, or standards, by which emergency medical performance is measured include the commonly applied Eisenberg Model and the American Heart Association's Statement on Chain of Survival. **The commonly accepted benchmark for the delivery of Advanced Life Support (ALS) to the scene of a life-threatening incident requires the delivery of ALS within eight minutes and 59 seconds.** This response is measured from the receipt of a call to arrival at the scene of an incident.

At a time when some of the major concepts that shaped EMS and our handling of sudden cardiac arrest—specifically layperson CPR, public access defibrillation and defibrillation by first responders—were not yet on the collective radar screen, Dr. Mickey Eisenberg was one of the first physicians to begin making them reality.

When King County (WA) EMS started to explore the concept of early defibrillation in the mid to late 1970s, Eisenberg became one of the first physicians genuinely interested in realizing the concept of adding semiautomatic external defibrillators to fire departments' first-responding units. As early as 1984, he published articles demonstrating the effectiveness of the aforementioned interventions in the context of an established EMS system, and he was instrumental in establishing these programs in the Seattle/King County area.

Eisenberg brought Seattle's results to national attention by publishing several landmark studies, and these programs remain models for lay-CPR and early-defibrillation success across the world. (Larsen, M. P., Eisenberg, M. S., Cummins, R. O., and Hallstrom, A. P. 1993).

Survivability for a non-breathing person is a function of application of CPR, defibrillation, and advanced life support. Models exist to predict survivability. One commonly applied model is the Eisenberg model, which estimates the probability of survival based on a system's ability to deliver critical services in a timely manner.

The model predicts that one-third of all non-breathing and/or cardiac arrest patients may die immediately, and that the remaining individuals' probability of survival decreases by as much as 5.5 percent for each subsequent minute; however, the decrease can be slowed by the application of various procedures (CPR, defibrillation, ACLS).

The American Heart Association, in its Statement on Chain of Survival, describes a sequence of events which must occur rapidly to allow a person to survive a sudden cardiac arrest.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

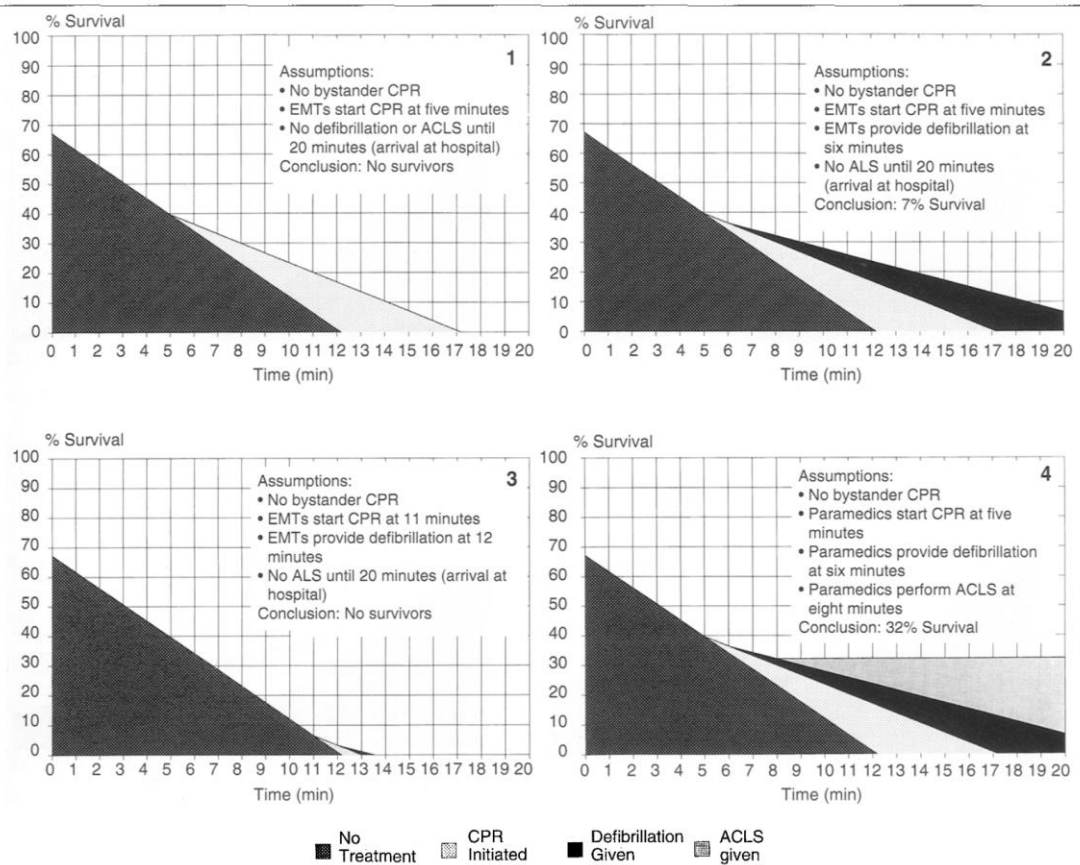
<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

The chain of survival includes recognition of early warning signs, activation of the emergency medical system, basic cardiopulmonary resuscitation, defibrillation, intubation and intravenous administration of medications. (Cummins, R. O., Ornato, J. P., Thies, W. H., and Pepe, P. E., 1991).

Early defibrillation is identified as a critical link in the chain of survival. A sudden cardiac arrest victim who is not defibrillated within eight to 10 minutes has a very limited chance of survival.

Survival from cardiac arrest for 1) EMT system with response time of four minutes; 2) EMT-D system with a response time of four minutes; 3) EMT-D system with a response time of ten minutes; 4) paramedic system with a response time of four minutes.



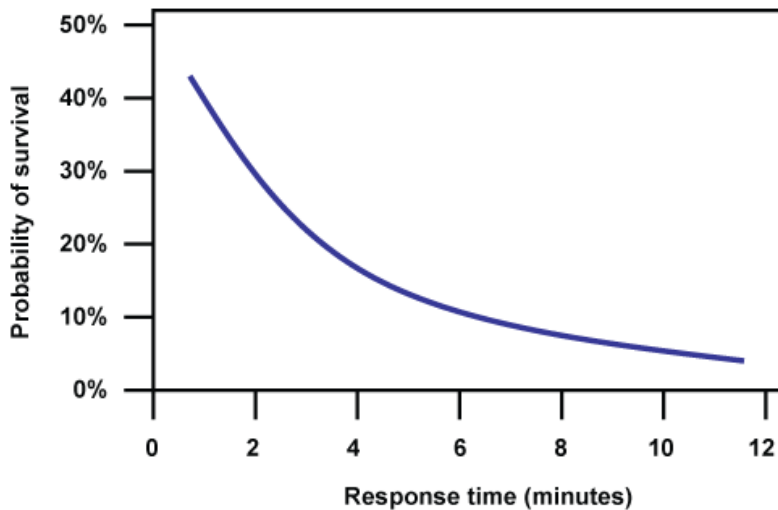
Emergency medical services (EMS) administrators seek methods to enhance system performance. One component scrutinized is the response time (RT) interval between call receipt and arrival on scene. In this observational study, emergency calls where RTs were less than 5 minutes were associated with improved survival when compared with calls where RTs exceeded 5 minutes. (Blackwell, T. H., and Kaufman, J. S., 2002).

### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

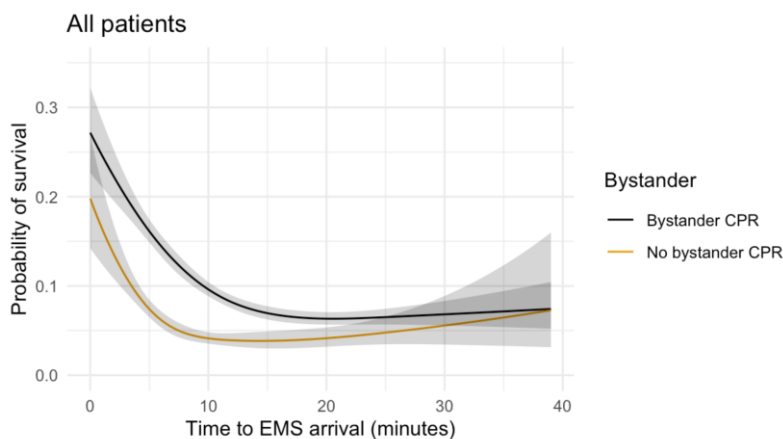
Fax (216) 687-2225



The term “Golden Hour,” is the term often used in trauma or emergency care to suggest that an injured or sick person must receive definitive treatment within the first 60 minutes from the time of injury or appearance of symptoms. It was believed that once this time has lapsed, the risk of death or long-term complications will significantly increase. (Annibale, D. J., and Bissinger, R. L., 2010).

The concept of “golden hour” is derived from the French military's World War 1 data. The doctors then believed that there is a golden hour between life and death. If an injury had caused potentially irreparable damage to the body, it needed to be taken care of within the 1-hour time frame, or the person would die in the next few days or weeks.

This illustration, from the Journal of the American Heart Association represents the non-linear association between EMS response time and survival, stratified by cause of cardiac arrest and whether CPR was initiated before EMS arrival. (Holmén, J., Herlitz, J., Ricksten, S. E., Strömsöe, A., Hagberg, E., Axelsson, C., and Rawshani, A., 2020).



### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## Fire and Rescue Services.

Fire smoke toxicity has been a recurring theme for fire safety professionals for over four decades. This is because all combustible construction and furnishing products can produce harmful smoke, most U.S. fire victims succumb to smoke inhalation, and the problem of how to address smoke toxicity in standards and codes has not yet been “solved.” (Gann, R. G., Averill, J. D., Butler, K. M., Jones, W. W., Mulholland, G. W., Neviasser, J. L., and Hall, J. R., 2001).

The danger from smoke is a function of the toxic potency of the smoke and the exposure a person experiences to the (changing) smoke concentration and thermal stress over the time they are in the vicinity of the fire. Some of the effects of smoke increase with continued exposure, others occur almost instantaneously.

Lethality is the most immediate effect smoke can have on occupants or on fire service personnel responding to the fire, and the U.S. has a standard for measuring the lethal toxic potency of smoke from burning products for use in hazard and risk analyses.

For planning purposes, **it is important to recognize that in typical residential fires, where most fire deaths happen, "flashover" occurs within eight to ten minutes.** Therefore, for emergency medical, fire, and rescue calls, trained, certified responders should reach the scene as close to four minutes as possible, with **the full assignment of responders arriving within eight minutes.**

“Flashover” refers to a phenomenon that occurs in a room or enclosed area where a fire has reached a critical stage, resulting in a sudden and rapid ignition of all combustible materials within the space. This can happen when the heat and gases produced by a fire reach a certain level and cause the entire room to become involved in the fire at once. During a flashover, the temperature inside the room can reach several hundred degrees Fahrenheit, making it extremely dangerous for firefighters to enter. To avoid flashover, firefighters use various tactics such as ventilation, cooling and isolating the fire to prevent its spread.

Assuming it will take an average of four minutes for the above processes, including a caller to discover and notify the fire department of an emergency, for turnout of firefighters, for dispatch of the fire company, and for size up and set up at the scene, in most structure fires, the first-due company has very limited time to travel to the incident location and accomplish interruption of fire growth, perhaps no more than four minutes. (Moore-Merrell, L., 2019). **There are three basic components of fire department emergency response performance:**

- **Availability:** The degree to which the resources are ready and available to respond. (In-station staffing, Equipment and Apparatus Operationally Ready);

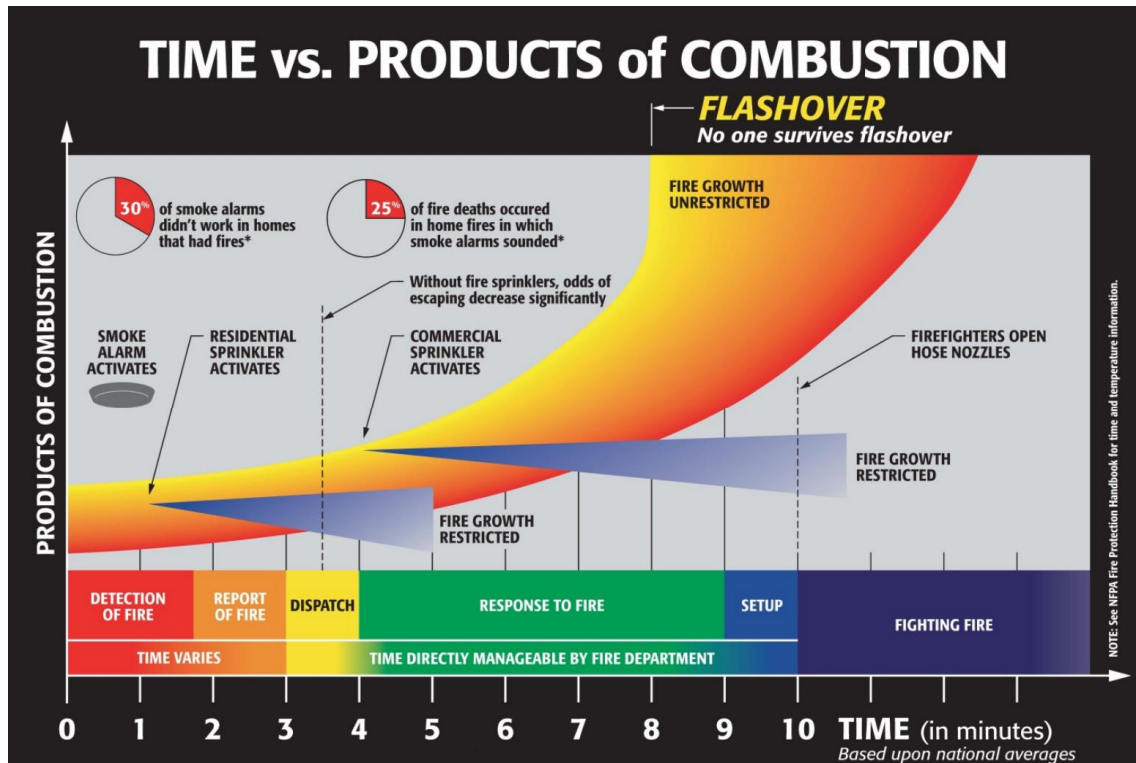
### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

- **Capability:** The abilities of deployed resources to manage an incident;
- **Operational Effectiveness:** A product of availability and capability. It is the outcome achieved by the deployed resources or the ability to match resources deployed to the risks to which they are responding.



## Fire and EMS Standards and Best Practices. Fire Suppression Rating Schedule (FSRS) Overview.

The Fire Suppression Rating Schedule (FSRS) is a manual containing the criteria we use in reviewing the fire prevention and fire suppression capabilities of individual communities or fire protection areas. The schedule measures the major elements of a community's fire protection system and develops a numerical grading called a Public Protection Classification (PPC®). (Insurance Services Office, 2012).

FSRS employs nationally accepted standards developed by such organizations as the National Fire Protection Association (NFPA), the American Water Works Association (AWWA), and the Association of Public-Safety Communications Officials (APCO) International. When those organizations update their standards, the evaluation changes as well. The PPC program always provides a useful benchmark that helps fire departments and other public officials measure the effectiveness of their efforts — and plan improvements.

### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## **How the FSRS works.**

The FSRS lists a large number of items (facilities and practices) that a community should have to fight fires effectively. The schedule is performance based and assigns credit points for each item. Using the credit points and various formulas, we calculate a total score on a scale of 0 to 105.5.

To receive certain PPC ratings, a community must meet minimum criteria. After a community meets those criteria, the PPC rating depends on the community's score on the point scale. For more information, see:

- Minimum Facilities and Practices to Get a PPC Rating
- Minimum Criteria for Class 9
- Minimum Criteria for Class 8B
- Minimum Criteria for Class 8 or Better
- Scores and PPC Ratings

The FSRS considers three main areas of a community's fire suppression system: emergency communications, fire department (including operational considerations), and water supply. In addition, it includes a Community Risk Reduction section that recognizes community efforts to reduce losses through fire prevention, public fire safety education, and fire investigation.

### **Emergency communications:**

A maximum of 10 points of a community's overall score is based on how well the fire department receives and dispatches fire alarms. The field representatives evaluate:

- the emergency reporting system
- the communications center, including the number of telecommunicators
- computer-aided dispatch (CAD) facilities
- the dispatch circuits and how the center notifies firefighters about the location of the emergency

### **Fire department:**

A maximum of 50 points of the overall score is based on the fire department. ISO reviews the distribution of fire companies throughout the area and check that the fire department tests its pumps regularly and inventories each engine and ladder company's equipment according to NFPA 1901. ISO also review the fire company records to determine factors such as:

## **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225



- type and extent of training provided to fire company personnel
- number of people who participate in training
- firefighter response to emergencies
- maintenance and testing of the fire department's equipment

### **Water supply:**

A maximum of 40 points of the overall score is based on the community's water supply. This part of the survey focuses on whether the community has sufficient water supply for fire suppression beyond daily maximum consumption. ISO surveys all components of the water supply system. ISO also review fire hydrant inspections and frequency of flow testing. Finally, ISO count the number of fire hydrants that are no more than 1,000 feet from the representative locations.

### **Community risk reduction:**

The Community Risk Reduction section of the FSRS offers a maximum of 5.5 points, resulting in 105.5 total points available in the FSRS. The inclusion of this section for "extra points" allows recognition for those communities that employ effective fire prevention practices, without unduly affecting those who have not yet adopted such measures.

The addition of Community Risk Reduction gives incentives to those communities who strive proactively to reduce fire severity through a structured program of fire prevention activities. The areas of community risk reduction evaluated in this section include:

- fire prevention
- fire safety education
- fire investigation

## **National Fire Protection Association Standards.**

There are two nationally recognized standards which to compare fire department operations. They are:

- NFPA 1710: "Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments", and;
- NFPA 1720: "Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Personnel Fire Departments".

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

**Since Willowick Fire and EMS Department operates as a career fire department, with in-station part-time personnel staffing, NFPA 1710 standard would apply.**

### **NFPA 1710:**

Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. The purpose of this standard is to specify the minimum criteria addressing the effectiveness and efficiency of the career public fire suppression operations, emergency medical service, and special operations delivery in protecting the citizens of the jurisdiction and the occupational safety and health of fire department employees. (NFPA 1710, 2020).

Fire departments accurately evaluate their response in these three areas:

- **Alarm Answering Time:** 15 seconds for 95% of calls; 40 seconds for 99% of calls;
- **Alarm Processing Time:** 64 seconds for 90% of calls; 106 seconds for 95% of calls;
- **Turnout Time:** 60 seconds for EMS responses; 80 seconds for fire responses;
- **First Engine Arrive on Scene Time:** 240 sec (4 minutes) for 90% of responses with a minimum staffing of 4 personnel;
  
- **Second Company Arrive on Scene Time:** 360 seconds (6 minutes) for 90% of responses with a minimum staffing of 4 personnel;
- **Initial Full Alarm – Low and Medium Hazard Assembly Time:** 480 seconds (8 minutes) on 90% of responses;
- **Initial Full Alarm – High Hazard/High-Rise Assembly Time:** 610 seconds (10 minutes 10 seconds) on 90% of responses.

NFPA 1710 recommends that each company be staffed with **four firefighters**, including a company officer, and that the company officer must remain as part of the company; they cannot stay outside the building as command.

Although NFPA 1710 provides essential benchmarks, fire departments often measure baseline performance in terms of total response time, which is the time it takes from the call to be received at the Public Safety Answering Point (PSAP) until the first unit arrives on the scene of the emergency incident.

Total response time should be measured and reported for all first-due units and the effective response force (ERF) assembly.

Total response time is composed of call-processing time, turnout time and travel time:

- **Call processing time:** the elapsed time from the call being received at the PSAP to the dispatching of the first unit;
- **Turnout time:** the elapsed time from when a unit is dispatched until that unit changes their status to “responding;”
- **Travel time:** the elapsed time from when a unit begins to respond until its arrival on the scene.

### **NFPA 1750 (Future):**

NFPA 1750 is in a custom cycle due to the Emergency Response and Responder Safety Document Consolidation Plan (consolidation plan) as approved by the NFPA Standards Council. As part of the consolidation plan, NFPA 1750 (combining Standards NFPA 1710, NFPA 1720, NFPA 1730, and NFPA 1201) is open for public input with a closing date of September 6, 2023.

## **Occupational Safety and Health.**

In firefighting, the policy of two-in, two-out refers to United States Occupational Safety and Health Administration (OSHA) policy 29 CFR 1910.134(g)(4)(i). The respiratory protection standard requires that workers engaged in fighting interior structural fires work in a buddy system; at least two workers must enter the building together, so that they can monitor each other's whereabouts as well as the work environment. (OSHA, 2019).

There must also be **at least two standby personnel outside the fire area prepared to rescue the inside firefighters should the need arise**. One of these outside firefighters must actively monitor the status of the inside fighters but the second outside firefighter may perform a variety of other duties, such as pump operations, incident commander or outside hose line operation.

It is also important to remember that the "two-in, two-out" OSHA Respiratory Protection Standard, which states that, except in extreme life-threatening situations to the occupants, four firefighters will be required at the fire scene before any two may enter.

The two-in, two-out rule establishes the minimal safety level that must be established before conducting interior firefighting. That **minimum safety level requires four trained and equipped firefighters** to be assembled on the fire-ground before entering an Immediate Danger to Life and Health (IDLH) atmosphere. Once the four firefighters are present, a **team of at least two firefighters** may enter the building equipped with self-contained breathing apparatus, commonly referred to as air packs.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

These air packs must be positive pressure units with a rated duration of at least 30 minutes and certified by the National Institute of Safety and Health. The two firefighters who enter the building must remain in direct contact with one another. To qualify as direct contact, the firefighters must stay within hearing or seeing distance of each other at all times. (Crouch, R., 2000).

Below are listed the four emerging standards, or benchmarks, which affect crew size desired for a fire call:

- OSHA requirements for a minimum of **four equipped personnel** to be present before entry in a structure fire incident;
- OSHA requirements for a **rapid entry team** to be present for safety reasons at working structure fires;
- OSHA and NFPA requirements for a **qualified incident commander** and a qualified safety officer to be present at working incidents;
- Industry standards to have a **minimum of 12 firefighters and an incident commander** present for a low-hazard structure fire, plus at least two pumpers and a ladder truck, or similar vehicle.

## **Fire Department Staffing Operations.**

Fire Company staffing is an important issue. Properly done it ensures sufficiency of hands to perform a variety of tasks required for success on the fire ground. Directly or indirectly staffing affects losses and outcomes and is likely an element in firefighter and civilian safety.

While the issue continues as part of a political consensus process, no recent attempts have been documented that suggest a process for local agencies to determine the appropriate company size based on their level of risk assessment and acceptability. (Lawrence, 2001).

Fire and rescue services are considered a staple among services provided by governments to local communities. Local governments are often charged with providing these services, especially across the United States and Canada. As with any professional service, there are standards set forth in order to ensure services are adequate and provide equity to the citizens that they serve.

Fire departments utilize various staffing models, but commonly, fire engines and ladder trucks have complements of three or four firefighter crews in career departments in the United States and Canada. **Industry standards suggests that a minimum of four firefighters should be staffed on each of these apparatus types.** However, as a standard, there is flexibility for local departments to staff according to need, whether based on fiscal need or service demand. (Shoffner, 2023).

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

As with any public agency there has always been a question of what adequate staffing should be in order to balance service provisions with available funds. The fire service across the world is tasked with delivering property and life-saving services that are conducted by dedicated individuals from all walks of life, all with the dedication and calling to serve others. Fire Departments of all shapes and sizes serve global citizens and protect them from a variety of hazards, most notably, protection from fire, and more recently life-saving emergency medical intervention services.

The National Fire Protection Association provides guidance to government managers and policy makers as to what their fire protection complement should be comprised of in terms of personnel numbers. This standard more specifically addresses the staffing on certain types of fire apparatus that most frequently respond to structure fire incidents.

Local governments receive significant portions of their revenue from taxes of various forms. These include but are not limited to, general sales taxes, specific excise taxes, fees and charges, and local property taxes. However, even with these various mechanisms, local government budgets often run very tight and operate with little leeway.

The fragility of local government revenues, and how various restraints on local government revenue across the United States can make it challenging for local entities to maintain budgets and provide services.

## **Matching Resources to Risk.**

Many fire departments across the nation are being challenged by budget crises, rising call volume, personnel and equipment shortages, security issues and the overall expectation to do more with less. Effectively managing these challenges requires a basic understanding of how changes in resources affect community outcomes. (Averill, 2011).

**Specifically, it is imperative that fire department leaders, as well as political decision makers, know how fire department resource deployment in their local community affects community outcomes in three important areas; firefighter injury and death, civilian injury and death, and property loss.** A cost-benefit analysis is the process of comparing the projected or estimated costs and benefits (or opportunities) associated with a project decision to determine whether it makes sense from a business perspective. (Stobierski, 2019).

Generally speaking, cost-benefit analysis involves tallying up all costs of a project or decision and subtracting that amount from the total projected benefits of the project or decision. If the projected benefits outweigh the costs, you could argue that the decision is a good one to make. If, on the other hand, the costs outweigh the benefits, then a company may want to rethink the decision or project.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## Staffing Fire and Emergency Departments with an all part-time staff.

Just like many private and public organizations throughout the United States, the Willowick Fire and EMS Department utilizes an all-part-time staffing model. (Waltower, 2023).

Many employers use both part-time and full-time employees in accordance with their business's model. While there are pros and cons of each employment option, the final decision comes down to the organization's specific requirements. Technically, there are no federal laws or regulations that completely or exhaustively define full- or part-time employment.

There are; however, positives and negatives in operating with an all-part-time staff. The positives include:

- **Lower overhead costs:** It is less expensive to have part-time staff; full-time employees often require higher salaries and employee benefits;
- **Flexibility:** Hiring part-time workers allows for more nimble staffing for fluctuating scheduling needs;
- **Extra support:** Having part-time employees permits easier overflow or additional staffing when you need it (either week to week or seasonally);
- **Cross-training:** You can develop experienced backup team members (and cross-trained team members) to cover shifts and projects when needed;
- **Balanced employees:** In some cases, a part-time schedule allows your loyal team members to work other jobs, go to school or attend to family responsibilities. This is why a large portion of employees choose to work part time.

The negatives include:

- **Inconsistency:** Inconsistent scheduling sometimes makes it hard to retain employees, especially those who need steady hours. This is what the Willowick Fire and EMS Department is currently experiencing.
- **Potential inefficiency:** Part-time employees who work only occasionally may have higher error rates resulting from a lack of consistent repetition;
- **Outside employment challenges:** When you hire part-time workers, you may have to deal with co-employment issues. There is always the chance that your company is the "side gig" that an employee does not value as much as their other job. For example, when an employee has more than one job, they may have to decide which takes priority if they are double-booked for a shift.

### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

There is great reliance on non-career firefighters (e.g. on-call or part-time firefighters [PTFs]) for responses to accidents and emergencies, the recruitment and retention of these firefighters is a critical challenge in several communities. There has been a trend towards falling numbers of non-career firefighters, which is related to economic and demographic changes. However, there are also other factors that contribute to this challenge. Studies show that difficulties in balancing family life and work responsibilities can create stress that leads to resigning. An inability to recruit and retain non-career firefighters makes it difficult for fire and rescue services (FRSs) to meet their community protection responsibilities. (Lantz, 2022).

A literature review in the field describe factors contributing to motivation and challenges non-career firefighters experience. The majority of included studies in this review refer to personnel firefighters. However, even though there is a reasonable amount of research regarding personnel firefighters, few studies are covering the context of paid PTFs. There are several factors contributing to the recruitment and retention of non-career firefighters and a common denominator includes altruistic feelings.

Recognition, supervisor support and climate are also related to satisfaction and intention to remain. Recurrent reasons for resigning are often family related, such as family disapproval or lack of time to fulfil domestic demands.

While economics is the primary factor which to utilize part-time firefighters, there are a number of disadvantages in depending solely on utilizing part time firefighters as the sole community fire force. Studies have shown that employees under such a system of staffing are transient and may lack dedication and loyalty to a particular department. (Bromen, 2000).

The disadvantages of the part-time system manifest themselves in scheduling, reliability, competency, and training. A bidding war causes nearly constant migration of the part-time member pool, a phenomenon most often observed during summer months and especially on weekends. In addition, firefighter fatigue was a noted issue.

Moving from one 24-hour shift to a 12-or-24-hour subsequent shift raises concerns about fitness for continued emergency response. One firefighter was found with five department memberships in two counties. Departments employing such members, especially the larger employers, report high costs of maintaining equipment and training for these part-time members.

Scheduling difficulties, employee competency, and employee inconsistencies are negative implications an organization should expect. Some pay no premium or incentive pay for required EMS continuing education, but require continued certification for employment, deferring to their employee's other departments for funding such obligations.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

Employees within Fire and EMS Departments using the part-time staffing system report that there is a migration of employees from department to department based on hourly wages, increasing multiple department memberships on the part of their employees, seasonal shortages (summer time is harder to cover), day of the week shortages (weekends are harder to cover), migration to departments with newer facilities or better equipment, or partially funded health insurance plans, etc.

Many report increasing difficulties in obtaining and maintaining a roster of qualified employees to fill the number of part-time positions they need to fill on a daily basis. At the very least, members with multiple department part-time employment may not be available to your department in an emergency that is area-wide. The increasing technical nature of the firefighter's job, reflected in increased state requirements for certification for firefighting and especially EMS, has been included in the explanation for the decreased availability of personnel.

Today we see studies being conducted by departments using 40-60 part-time members to evaluate the benefit of reducing equipment and training costs and administrative overhead by replacing these with 6-9 full-time members. Although the part-time system appeared advantageous initially, turnover required high maintenance.

Studies have reported that an overwhelming number of administrators and mayors are positive about part-time, despite disadvantages in personnel scheduling, reliability, competency, and training. One consistent theme was noted throughout the literature; the majority of part-time employees want full-time employment in the firefighting profession.

Part-time employees, over time, have demonstrated decreasing loyalty, except where they anticipate career employment opportunities in the near future. Additionally, training is often duplicative but necessary because of operational and equipment differences between departments. Members report, and departments verify, problems with members remembering where they are and what procedures are in place on any given day. When this problem is realized it is frequently during emergency operations.

There appear to be hidden overhead costs associated with using part-time employees. The administrative time and effort required to ensure adequate staffing by part-time members is reported as high and increasing. Many departments are researching a threshold of when converting part-time employees to full-time employees makes economic and functional sense.

Incentive pay is given for additional specialized training such as driver, apparatus operators, and paramedic. Incentives were offered, an annual bonus dollar amount, and uniform and clothing allowances were instituted. An additional cost was the administrative overhead cost.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225



This maintenance was in the area of training, equipment, and expense of the hiring process. Included are concerns about increasing costs of part-time employees to a point of equivalency to full-time employee's hourly wages. Being examined are reduction in administrative overhead and headache, reduction of equipment and training costs, creation of an employee with department loyalty, and employees that are more likely to be able to be recalled in a disaster.

## **Fire and EMS Consolidation.**

The Fire and Emergency Services is a business. As such, it is important to understand when opportunities arise, and how to take advantages of the improved possibilities.

As outlined in many business journals and periodicals, we find that a small business owner, or in our case, each jurisdiction, typically needs a diverse set of skills to succeed, including deep market knowledge, effective management of business operations and hard work. (FEMA, 2023). Some of these methods include:

### **Reduce Costs:**

The consolidation of business activities reduces operational redundancies and eliminates superfluous staff and administrative functions. As a result, operating and capital costs decline, which helps improve the bottom line.

### **Increase Revenue:**

Alternative funding mechanisms such as EMS billing, motor vehicle accident billing, hazardous materials response, and training opportunities for area businesses are all focused in relieving direct tax costs from businesses and home owners, and placing the need for additional revenue directly on the user of the service.

### **Increase Economies of Scale:**

A business consolidation leads to the elimination of duplicate assets, which equals financial savings. By reducing the number of facilities in a business, it can save money and operate more efficiently. This consolidation can also improve communication between business functions, such as production and marketing, and achieve savings by decreasing head count and consolidating systems and processes.

When discussing organizational issues, the topics of consolidations, mergers or regionalization to arise when discussing challenges facing fire departments, such as staffing shortages, financial needs and deployment problems. These are complex issues that vary greatly by state and jurisdiction. State law will govern much of what can and cannot be done, and how it can or cannot be done. A comprehensive legal assessment is essential. State and local politics will also enter into the discussion and should not be underestimated.

## **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

When the idea of consolidation, merger or regionalization comes up, it often impacts department morale. Leadership must be prepared to manage the feelings of members. Members may feel that these efforts are being brought against them personally or based on some animosity toward them or the department by outsiders.

It is very important that everyone involved must be honest and realistic about why these changes may happen, and clearly communicate to members the benefits to the department and their community as well as the positive new regionalized impacts. It is critical to keep members as well-informed as the law allows, and to involve them in the discussions and decisions as much as possible.

Otherwise, the department may end up with 2 workforces coming together in an atmosphere of hostility that can drive existing personnel out and make it exceedingly difficult to recruit replacements.

Lawsuits, public outcry and poor service are also typical outcomes from forced, unhappy mergers and can damage the department's public image. Additionally, when faced with the issue of consolidation, merger or regionalization, it is best to address it and make decisions as soon as possible. Letting the issue drag on will destroy morale, create anxiety and further hurt recruitment efforts because it is difficult to attract personnel to an organization that is perceived as having no future.

Also, local station department mergers or regionalization can end up creating combination departments. If career and personnel work and affiliation issues are not properly planned, this situation can become a cause for poor working relationships between career and personnel firefighters. Strong, effective leadership is needed to set clear expectations regarding the working relationship, training, command structure, organizational roles and civility among members.

Department leadership must quickly deal with all disputes in a manner that is not perceived as favoring one group or the other. Otherwise, leadership runs the risk of losing control of how people behave and could end up with grievances, dwindling ranks of personnel, lawsuits and poor service to the community.

When facing regionalization, it is important to note that regionalizing a group of departments over a large geographic area may not result in improved response times. This outcome can be due to the overall geographic distances between responding units. For instance, merging 5 departments and putting a staffed station at the center of the geographic area will be great for those that live in the middle of the area, but as you move farther out from the regional fire station, response times get longer and longer.

Creating a system with reasonable response times for all can be difficult. And, politically, the communities and residents at the edges are likely to object to paying for a service that is no longer local and is far away.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

First responders may balk at longer commutes to the station and longer response times, and morale may decline as the department image suffers in the eyes of the community. These types of regionalization work best when the focus is on administrative regionalization, along with other areas such as maintenance, training and purchasing, but leave the local stations intact.

However, each jurisdiction has a governing body made of elected officials and appointed officials. Before any consideration of consolidation of resources, each jurisdiction must identify their idea of an acceptable level of risk.

There are three components which each jurisdiction must consider. They include **a) the adequate level of protection, b) reasonable cost to the community, and c) acceptable risk.**

#### **Adequate level of Fire and EMS Protection:**

The question of “adequacy” is addressed not only in day-to-day needs but also in major contingencies that can be anticipated for future needs. A definition of “optimal” protection is needed - in contrast to “minimal” protection, which fails to meet contingencies and future needs, and “maximal” protection, which is usually more expensive than a community can afford.

Comprehensive planning must include contingencies drawn from an analysis of community hazards. This process of hazard identification and analysis is crucial to fire department planning.

#### **Reasonable community costs:**

Fire, both as threat and reality, has its costs, including deaths, injuries, property losses, hospital bills, and lost tax revenues, plus the costs of maintaining fire departments, paying fire insurance premiums, and providing built-in fire protection. Each community must decide on an appropriate level of investment in fire and emergency medical protection.

Some costs that are beyond the public’s willingness to bear may be transferred to the private sector (as when buildings over a certain size or height or with a certain occupancy are required to have automatic extinguishing systems).

#### **Acceptable risk:**

A certain level of fire loss must be accepted as tolerable simply because of limited resources of a community. Conditions that endanger the safety of citizens and fire fighters beyond the acceptable risk must be identified as targets for mitigation. Consideration of these matters helps to determine what functions and emphasis should be assigned to the fire department, other municipal departments, and the private sector both now and in the future. It helps to define new policies, laws, or regulations that may be needed.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

Because the fire department cannot prevent all fire losses, formal obligations to have built-in fire protection fall on owners of certain kinds of buildings. For the same reason, private citizens have an obligation to exercise prudence with regard to fire in their daily lives. But prudence also requires education in fire safety, and the obligation to provide that education appropriately falls in the public sector, chiefly the fire department.

The public sector (again, chiefly the fire and building code enforcement departments) also has an obligation to see that requirements for built-in protection in the private sector are being met. A fire department, then, has more than one responsibility - and the aforementioned responsibilities are not exhaustive.

## **Legal Analysis.**

### **Ohio Revised Code, Title 7, Municipal Corporations.**

Section 701.05 Authority of municipal corporations' states:

Municipal corporations operating under a charter which provides for or authorizes a method of procedure in the passage and publication of legislation, the making of improvements, and the **levying of assessments** differing from the method prescribed by general law, may pass and publish such legislation, make such improvements, and levy such assessments under the general law or in accordance with the procedure provided for or authorized by its charter. Assessments so levied by charter municipal corporations shall, as to their amount, be subject to the limitations, whether based on percentages of value of land to be assessed, proportion of cost and expense of the improvement, or other basis, as fixed by general law; provided that notwithstanding section 727.05 of the Revised Code, the entire cost may be assessed of sprinkling, sweeping, cleaning, removing snow from and treating the surface of municipal streets, alleys, and public ways.

### **Ohio Revised Code, Section 718.04 Authority for tax on income and withholding tax.**

Section 718.04 Authority for tax on income and withholding tax states:

(A) Notwithstanding division (A) of section 715.013 of the Revised Code, a municipal corporation may levy a tax on income and a withholding tax if such taxes are levied in accordance with the provisions and limitations specified in this chapter. On or after January 1, 2016, the ordinance or resolution levying such taxes, as adopted or amended by the legislative authority of the municipal corporation, shall include all of the following:

(1) A statement that the tax is an annual tax levied on the income of every person residing in or earning or receiving income in the municipal corporation and that the tax shall be measured by municipal taxable income;

#### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

- (2) A statement that the municipal corporation is levying the tax in accordance with the limitations specified in this chapter and that the resolution or ordinance thereby incorporates the provisions of this chapter;
- (3) The rate of the tax;
- (4) Whether, and the extent to which, a credit, as described in division (D) of this section, will be allowed against the tax;
- (5) The purpose or purposes of the tax;
- (6) Any other provision necessary for the administration of the tax, provided that the provision does not conflict with any provision of this chapter.

## **Ohio Revised Code, Composition and control of city fire department.**

Section 737.08 Composition and control of city fire department states:

(A) The fire department of each city shall be composed of a chief of the fire department and other officers, firefighters, and employees provided for by ordinance. Neither this section nor any other section of the Revised Code requires, or shall be construed to require, that the fire chief be a resident of the city.

(B) No person shall be appointed as a permanent full-time paid member, whose duties include firefighting, of the fire department of any city, unless either of the following applies:

(1) The person has received a certificate issued under former section 3303.07 of the Revised Code or section 4765.55 of the Revised Code evidencing satisfactory completion of a firefighter training program.

(2) The person began serving as a permanent full-time paid firefighter with the fire department of a village or other city prior to July 2, 1970, and receives a fire training certificate issued under section 4765.55 of the Revised Code.

(C) No person who is appointed as a volunteer firefighter of a city fire department shall remain in that position, unless either of the following applies:

(1) Within one year of the appointment, the person has received a certificate issued under former section 3303.07 of the Revised Code or section 4765.55 of the Revised Code evidencing satisfactory completion of a firefighter training program.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

(2) The person began serving as a permanent full-time paid firefighter with the fire department of a village or other city prior to July 2, 1970, or as a volunteer firefighter with the fire department of a township, fire district, village, or other city prior to July 2, 1979, and receives a fire training certificate issued under section 4765.55 of the Revised Code.

## **Ohio Revised Code, Public Safety.**

Section 737.09 Chief of fire department states:

The chief of the fire department shall have exclusive control of the stationing and transferring of all firemen and other officers and employees in the department, under such general rules and regulations as the director of public safety prescribes.

Section 737.11 General duties of police and fire departments states:

The police force of a municipal corporation shall preserve the peace, protect persons and property, and obey and enforce all ordinances of the legislative authority of the municipal corporation, all criminal laws of the state and the United States, all court orders issued and consent agreements approved pursuant to sections 2919.26 and 3113.31 of the Revised Code, all protection orders issued pursuant to section 2903.213 or 2903.214 of the Revised Code, and protection orders issued by courts of another state, as defined in section 2919.27 of the Revised Code. The fire department shall protect the lives and property of the people in case of fire. Both the police and fire departments shall perform any other duties that are provided by ordinance. The police and fire departments in every city shall be maintained under the civil service system.

A chief or officer of a police force of a municipal corporation may participate, as the director of an organized crime task force established under section 177.02 of the Revised Code or as a member of the investigatory staff of such a task force, in an investigation of organized criminal activity in any county or counties in this state under sections 177.01 to 177.03 of the Revised Code.

Section 737.21 Municipal fire regulations, department, companies, and rescue units' states:

The legislative authority of a municipal corporation may establish all necessary regulations to guard against the occurrence of fires, protect the property and lives of its citizens against damage and accidents resulting therefrom, and for such purpose may establish and maintain a fire department, provide for the establishment and organization of fire engine and hose companies and rescue units, establish the hours of labor of the members of its fire department who shall not be required to be on duty continuously more than six days in every seven, and provide such bylaws and regulations for the government of such companies and their members as is necessary and proper.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

Section 737.22 Appointment of fire chief or fire prevention officer and firefighters' states:

(A) Each village establishing a fire department shall have a fire chief as the department's head, appointed by the mayor with the advice and consent of the legislative authority of the village, who shall continue in office until removed from office as provided by sections 733.35 to 733.39 of the Revised Code. Neither this section nor any other section of the Revised Code requires, or shall be construed to require, that the fire chief be a resident of the village.

In each village not having a fire department, the mayor shall, with the advice and consent of the legislative authority of the village, appoint a fire prevention officer who shall exercise all of the duties of a fire chief except those involving the maintenance and operation of fire apparatus.

The legislative authority of the village may fix the compensation it considers best. The appointee shall continue in office until removed from office as provided by sections 733.35 to 733.39 of the Revised Code. Section 737.23 of the Revised Code shall extend to the officer.

(B) The legislative authority of the village may provide for the appointment of permanent full-time paid firefighters as it considers best and fix their compensation, or for the services of volunteer firefighters, who shall be appointed by the mayor with the advice and consent of the legislative authority, and shall continue in office until removed from office.

(1) No person shall be appointed as a permanent full-time paid firefighter of a village fire department, unless either of the following applies:

(a) The person has received a certificate issued under former section 3303.07 of the Revised Code or section 4765.55 of the Revised Code evidencing satisfactory completion of a firefighter training program.

(b) The person began serving as a permanent full-time paid firefighter with the fire department of a city or other village prior to July 2, 1970, and receives a fire training certificate issued under section 4765.55 of the Revised Code.

(2) No person who is appointed as a volunteer firefighter of a village fire department shall remain in that position, unless either of the following applies:

(a) Within one year of the appointment, the person has received a certificate issued under former section 3303.07 or section 4765.55 of the Revised Code evidencing satisfactory completion of a firefighter training program.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

(b) The person has served as a permanent full-time paid firefighter with the fire department of a city or other village prior to July 2, 1970, or as a volunteer firefighter with the fire department of a city, township, fire district, or other village prior to July 2, 1979, and receives a certificate issued under division (C)(3) of section 4765.55 of the Revised Code.

(3) No person shall receive an appointment under this section unless the person has, not more than sixty days prior to receiving the appointment, passed a physical examination, given by a licensed physician, a physician assistant, a clinical nurse specialist, a certified nurse practitioner, or a certified nurse-midwife, showing that the person meets the physical requirements necessary to perform the duties of the

position to which the person is to be appointed as established by the legislative authority of the village. The appointing authority shall, prior to making an appointment, file with the Ohio police and fire pension fund or the local volunteer fire fighters' dependents fund board a copy of the report or findings of that licensed physician, physician assistant, clinical nurse specialist, certified nurse practitioner, or certified nurse-midwife. The professional fee for the physical examination shall be paid for by the legislative authority of the village.

Section 737.23 Schooling of officers and firemen of fire department states:

The legislative authority of a municipal corporation may send any of the officers and firemen of its fire department to schools of instruction designed to promote the efficiency of firemen, and, if authorized in advance, may pay their necessary expenses from the funds used for the maintenance and operation of such department.

Section 737.25 Buildings for department states:

The legislative authority of a municipal corporation may provide or erect necessary and suitable buildings containing rooms for fire engines, and other equipment, and provide for the meetings of the fire and hose companies.

## **Ohio Revised Code, Fire and Ambulance District Creation.**

Section 505.375 Fire and ambulance district creation states:

(A)(1)(a) The boards of township trustees of one or more townships and the legislative authorities of one or more municipal corporations, or the legislative authorities of two or more municipal corporations, or the boards of township trustees of two or more townships, may negotiate an agreement to form a fire and ambulance district for the delivery of both fire and ambulance services.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225



The agreement shall be ratified by the adoption of a joint resolution by a majority of the members of each board of township trustees involved and a majority of the members of the legislative authority of each municipal corporation involved. The joint resolution shall specify a date on which the fire and ambulance district shall come into being.

(b) If a joint fire district created under section 505.371 of the Revised Code or a joint ambulance district created under section 505.71 of the Revised Code is dissolved to facilitate the creation of a fire and ambulance district under division (A)(1)(a) of this section, the townships and municipal corporations forming the fire and ambulance district may transfer to the fire and ambulance district any of the funds on hand, moneys and taxes in the process of collection, credits, and real and personal property apportioned to them under division (D) of section 505.371 of the Revised Code or section 505.71 of the Revised Code, as applicable, for use by the fire and ambulance district in accordance with this section.

## **Ohio Revised Code, Joint Fire District Creation.**

Section 505.371, Joint fire district creation states:

(A) The boards of township trustees of one or more townships and the legislative authorities of one or more municipal corporations, or the legislative authorities of two or more municipal corporations, or the boards of township trustees of two or more townships, may, by adoption of a joint resolution by a majority of the members of each board of township trustees and by a majority of the members of the legislative authority of each municipal corporation, create a joint fire district comprising all or any portions of the municipal corporations and all or any portions of the townships as are mutually agreed upon. A joint fire district so created shall be given a name different from the name of any participating township or municipal corporation.

(B) The governing body of the joint fire district shall be a board of fire district trustees, which shall include one representative from each board of township trustees and one representative from the legislative authority of each municipal corporation in the district. The board of fire district trustees may exercise the same powers as are granted to a board of township trustees in sections 505.37 to 505.45 of the Revised Code, including, but not limited to, the power to levy a tax upon all taxable property in the fire district as provided in section 505.39 of the Revised Code.

The board of fire district trustees may be compensated at a rate not to exceed thirty dollars per meeting, not to exceed fifteen meetings per year, and may be reimbursed for all necessary expenses incurred. The board shall employ a clerk of the board of fire district trustees.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

(C)(1) The board of fire district trustees may establish reasonable charges for the use of ambulance or emergency medical services. The board may establish different charges for residents and nonresidents of the district, and may waive, at its discretion, all or part of the charge for any resident of the district.

The charge for nonresidents shall be an amount not less than the authorized Medicare reimbursement rate, except that if, prior to February 4, 1998, the board had different charges for residents and nonresidents and the charge for nonresidents was less than the authorized Medicare reimbursement rate, the board may charge nonresidents less than the authorized Medicare reimbursement rate.

(2) In the resolution creating the joint fire district, the political subdivisions that create the district may provide that any of those political subdivisions may agree to pay any charges for the use of ambulance or emergency medical services that the board of fire district trustees establishes under division (C)(1) of this section and that are incurred by the residents of the particular political subdivision.

Unless the board elects pursuant to that division to waive all or part of the charges for the use of ambulance or emergency medical services that any resident of the district incurs, the residents of a particular political subdivision that has not so agreed to pay the charges for the use of ambulance or emergency medical services incurred by its residents shall pay those charges.

(3) Charges collected under division (C) of this section shall be kept in a separate fund designated as the ambulance and emergency medical services fund and shall be appropriated and administered by the board. The fund shall be used for the payment of the costs of the management, maintenance, and operation of ambulance and emergency medical services in the district.

(4) As used in division (C) of this section, "authorized Medicare reimbursement rate" has the same meaning as in section 505.84 of the Revised Code.

(C) Any municipal corporation or township, or parts of them, may join an existing joint fire district by the adoption of a resolution requesting such membership and upon approval of the board of fire district trustees. Any municipal corporation or township may withdraw from a joint fire district created under this section, by the adoption of a resolution ordering withdrawal. On or after the first day of January of the year following the adoption of the resolution of withdrawal, the municipal corporation or township withdrawing ceases to be a part of such district, and the power of the district to levy a tax upon taxable property in the withdrawing township or municipal corporation terminates, except that the district shall continue to levy and collect taxes for the payment of indebtedness within the territory of the district as it was comprised at the time the indebtedness was incurred.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

Upon the withdrawal of any township or municipal corporation from a joint fire district created under this section, the county auditor shall ascertain, apportion, and order a division of the funds on hand, including funds in the ambulance and emergency medical services fund, moneys and taxes in the process of collection, except for taxes levied for the payment of indebtedness, credits, and real and personal property, either in money or in kind, on the basis of the valuation of the respective tax duplicates of the withdrawing municipal corporation or township and the remaining territory of the joint fire district.

When the number of townships and municipal corporations comprising a joint fire, district is reduced to one, the joint fire district ceases to exist by operation of law, and the funds, credits, and property remaining after apportionments to withdrawing municipal corporations or townships shall be assumed by the one remaining township or municipal corporation.

When a joint fire district ceases to exist and an indebtedness remains unpaid, the board of county commissioners shall continue to levy and collect taxes for the payment of that indebtedness within the territory of the joint fire district as it was comprised at the time the indebtedness was incurred.

(E) Neither this section nor any other section of the Revised Code requires, or shall be construed to require, that the fire chief of a joint fire district be a resident of the fire district.

## **Fire and EMS Department comparison and contiguous to the City of Willowick:**

The following are jurisdictions contiguous to the City of Willowick, relating to the Fire and EMS Departments operations and staffing costs. They include:

- City of Euclid Fire Department
- City of Eastlake Fire Department
- City of Wickliffe Fire Department
- City of Willoughby Fire Department

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## City of Euclid, Ohio.

To the west of the City of Willowick is the City of Euclid, Ohio. Euclid Ohio, (in Cuyahoga County), was established in 1951, encompasses 10.7 square miles, has a population of 48,928, and a population density of 4,569 persons per square mile.

Currently, the ISO rating (Fire Suppression Rating Schedule) for the City of Euclid is a class 2, obtained in 2014.

The current authorized strength for the Euclid Fire and EMS department is **85 full-time personnel and no part-time personnel**. The Euclid Fire and EMS department staffing operates a 24-hour on-duty / 48-hour off-duty cycle. (Full-time 8:30a - 8:30a).

The Euclid Fire and EMS department operation includes three (3) equipped Fire and EMS stations, two (2) front-line fire engines, two (2) reserve fire engine, one (1) front-line ladder company, with no spare ladder company, three (3) front-line EMS (Paramedic) units, with one (1) spare EMS unit.

The Euclid Fire and EMS department has a minimum staffing of sixteen (16) personnel and a maximum staffing of nineteen (19) personnel, 24 hours a day, 7 days a week, 365 days a year.

The Euclid Fire and EMS department is dispatched by the Chagrin Valley Dispatch system and participates in automatic and mutual aid into the City of Willowick.

In 2022, the Euclid Fire and EMS department responded to **2,522 Fire calls** with an average response time of **6:06 minutes** and **10,109 EMS** calls with an average response time of **6:06 minutes**.

The Euclid Fire and EMS department career firefighter hourly base pay is \$28.04 per hour, and the career supervisor (Lieutenant) hourly base pay is \$34.55 per hour.

The Euclid Fire and EMS department would consider Fire and EMS Department consolidation; however, in-depth discussion would need to take place.

*Information obtained from Fire Chief Christopher Haddock, August 7, 2023.*

### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## City of Eastlake, Ohio.

To the east of the City of Willowick is the City of Eastlake, Ohio. Eastlake Ohio, (in Lake County), was established in 1953, encompasses 6.4 square miles, has a population of 17,499, and a population density of 2,736 persons per square mile.

Currently, the ISO rating (Fire Suppression Rating Schedule) for the City of Eastlake is a class 3, obtained in 2019.

The current authorized strength for the Eastlake Fire and EMS department is **29 full-time personnel and no part-time personnel**. The Eastlake Fire and EMS department staffing operates a 24-hour on-duty / 48-hour off-duty cycle. (Full-time 7:30a - 7:30a).

The Eastlake Fire and EMS department operation includes one (1) equipped Fire and EMS station, two (2) front-line fire engines, one (1) reserve fire engine, no (0) front-line ladder company, with no spare ladder company, two (2) front-line EMS (Paramedic) units, with one (1) spare EMS unit.

The Eastlake Fire and EMS department has a minimum staffing of nine (9) personnel and a maximum staffing of nine (9) personnel, 24 hours a day, 7 days a week, 365 days a year.

The Eastlake Fire and EMS department is dispatched by the Eastlake Police Department, and participates in automatic and mutual aid into the City of Willowick.

In 2022, the Eastlake Fire and EMS department responded to **882 Fire calls** with an average response time of **4:21 minutes** and **2,293 EMS calls** with an average response time of **4:21 minutes**.

The Eastlake Fire and EMS department career firefighter hourly base pay is \$30.35 per hour, and the career supervisor (Lieutenant) hourly base pay is \$33.39 per hour.

The Eastlake Fire and EMS department would not consider Fire and EMS Department consolidation at this time.

Information obtained from Chief Ted Whittington / Mayor Dennis Morley, August 7, 2023.

### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## City of Wickliffe, Ohio.

To the south of the City of Willowick is the City of Wickliffe, Ohio. Wickliffe Ohio, (in Lake County), was established in 1951, encompasses 4.65 square miles, has a population of 12,464, and a population density of 2,718 persons per square mile.

Currently, the ISO rating (Fire Suppression Rating Schedule) for the City of Wickliffe is a class 3, obtained in 2015.

The current authorized strength for the Wickliffe Fire and EMS department is **23 full-time personnel and 14 part-time personnel**. The Wickliffe Fire and EMS department staffing operates a 24-hour on-duty / 48-hour off-duty cycle. (Full-time: 8a - 8a; Part-time 7a - 7p / 7p - 7a).

The Wickliffe Fire and EMS department operation includes one (1) equipped Fire and EMS station, one (1) front-line fire engine, one (1) reserve fire engine, one (1) front-line ladder company, with no spare ladder company, two (2) front-line EMS (Paramedic) units, with one (1) spare EMS unit.

The Wickliffe Fire and EMS department has a minimum staffing of four (4) full-time personnel and two (2) part-time personnel and a maximum staffing of seven (7) full-time personnel and two (2) part-time personnel, 24 hours a day, 7 days a week, 365 days a year.

The Wickliffe Fire and EMS department is dispatched by the Wickliffe Police Department, and participates in automatic and mutual aid into the City of Willowick.

In 2022, the Wickliffe Fire and EMS department responded to **628 Fire calls** with an average response time of **4:08 minutes** and **2,342 EMS calls** with an average response time of **3:56 minutes**.

The Wickliffe Fire and EMS department career firefighter hourly base pay is \$27.54 per hour, and the career supervisor (Lieutenant) hourly base pay is \$37.95 per hour. The Wickliffe Fire and EMS department part-time firefighter hourly base pay is \$19.11 per hour, and has no part-time supervisor positions.

The Wickliffe Fire and EMS department would not consider Fire and EMS Department consolidation at this time.

Information obtained from Fire Chief James Powers, August 10, 2023.

### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## City of Willoughby, Ohio.

To the south east of the City of Willowick is the City of Willoughby, Ohio. Willoughby Ohio, (in Lake County), was established in 1951, encompasses 10.2 square miles, has a population of 23,898, and a population density of 2,351 persons per square mile.

Currently, the ISO rating (Fire Suppression Rating Schedule) for the City of Willoughby is a class 2, obtained in 2021.

The current authorized strength for the Willoughby Fire and EMS department is 75, **39 full-time personnel and 36 part-time personnel**. The Willoughby Fire and EMS department staffing operates a 24-hour on-duty / 48-hour off-duty cycle. (Full-time: 8a - 8a; Part-time 8a - 8p / 8p - 8a).

The Willoughby Fire and EMS department operation includes two (2) equipped Fire and EMS station, two (2) front-line fire engine, two (2) reserve fire engine, one (1) front-line ladder company, with no spare ladder company, two (2) front-line EMS (Paramedic) units, with three (3) spare EMS unit.

The Willoughby Fire and EMS department has a minimum staffing of eight (8) full-time personnel and three (3) part-time personnel and a maximum staffing of twelve (12) full-time personnel and three (3) part-time personnel, 24 hours a day, 7 days a week, 365 days a year.

The Willoughby Fire and EMS department is dispatched by the Willoughby Police Department, and participates in automatic and mutual aid into the City of Willowick.

In 2022, the Willoughby Fire and EMS department responded to **1,120 Fire calls** with an average response time of **5:13 minutes** and **3,990 EMS calls** with an average response time of **4:03 minutes**.

The Willoughby Fire and EMS department career firefighter hourly base pay is \$38.41 per hour, and the career supervisor (Lieutenant) hourly base pay is \$42.67 per hour. The Willoughby Fire and EMS department part-time firefighter hourly base pay is \$25.67 per hour, and has no part-time supervisor positions.

The Willoughby Fire and EMS department would not consider Fire and EMS Department consolidation at this time.

Information obtained from Fire Chief Todd Unger, August 2, 2023.

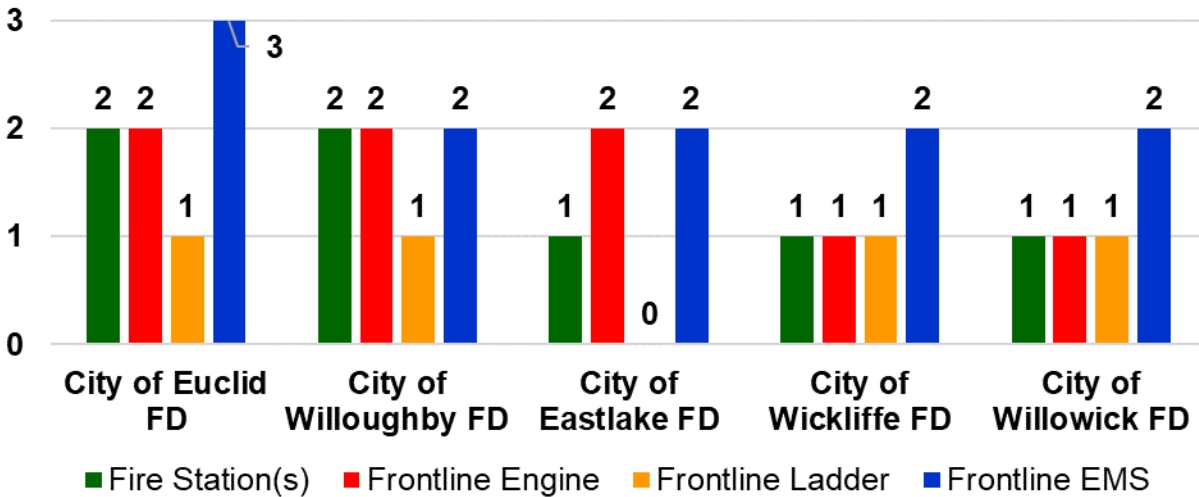
### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

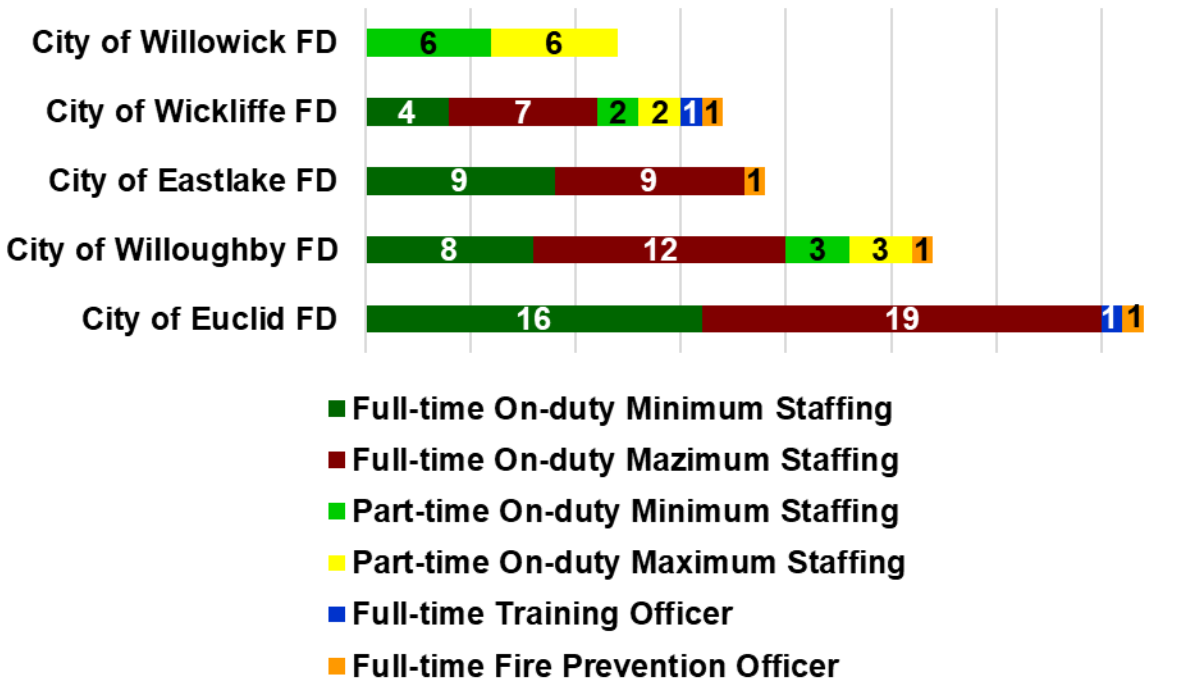
<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

### Fire & EMS Stations & Frontline Apparatus



### Fire Department Staffing



### Center for Emergency Preparedness

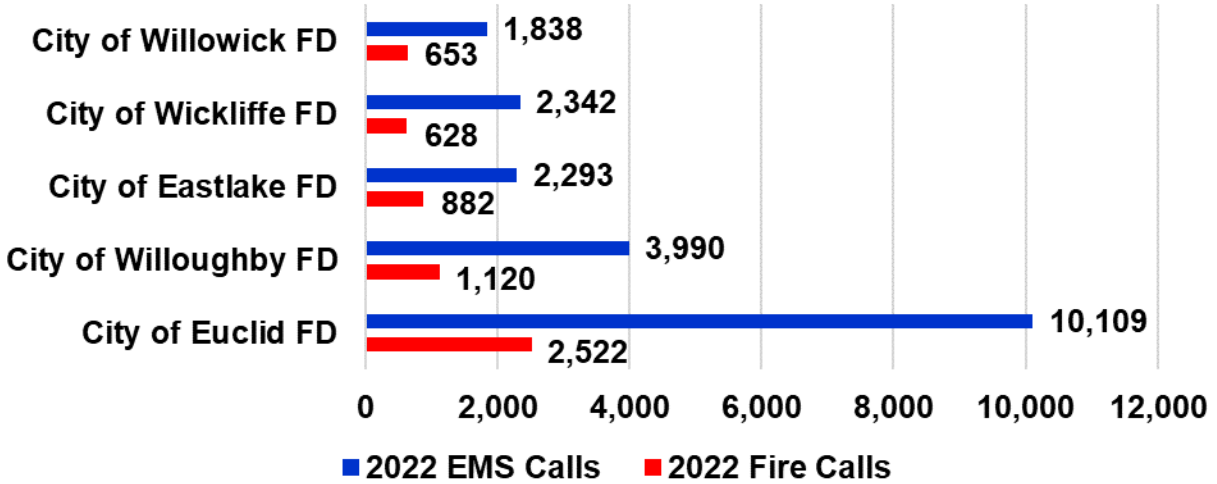
1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

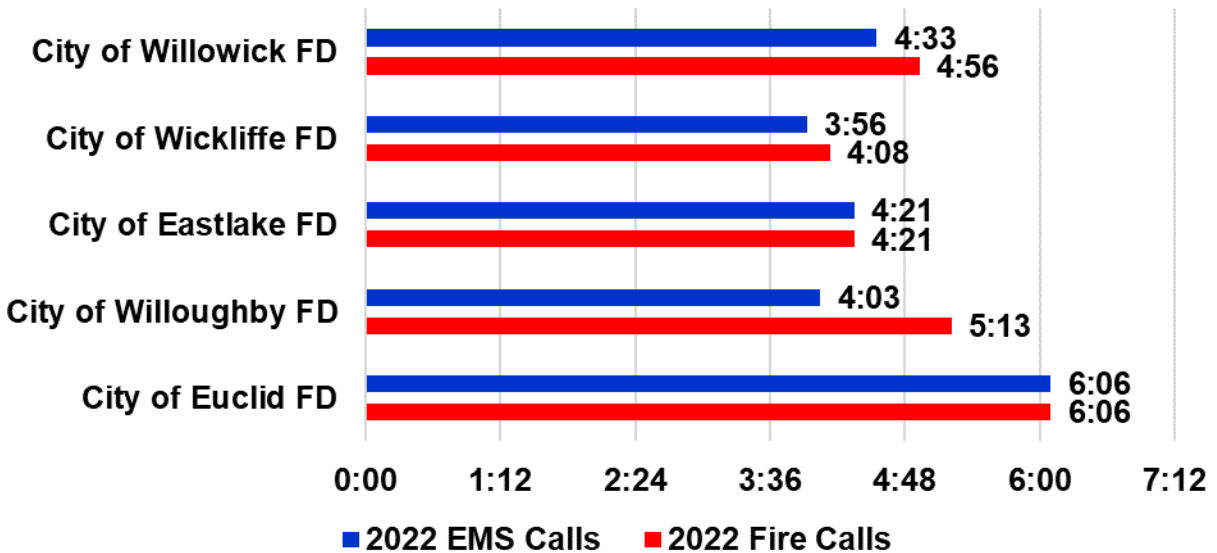
Fax (216) 687-2225



### 2022 Fire / EMS Response



### 2022 Fire / EMS Average Response Times



### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## **Fiscal Analysis.**

### **Willowick Fire and EMS Department Financial.**

Without adequate funding, no emergency services organization can survive or provide the level of service the community expects and deserves. Adequate funding can come from a variety of sources; including property taxes, special purpose levies, fundraising, donations, or fees for service. Regardless of the source of revenue, it is imperative that departments have sufficient funding to carry out their primary mission.

In 2022, the total Willowick Fire and EMS Department expenditure budget was \$2,629,127.50.

In 2022, the Willowick Fire and EMS Department Fire Chief salary was \$99,717.00. The Willowick Fire and EMS Department Administrative Assistant salary was \$51,244.00. The Willowick Fire and EMS Department part-time firefighters and officers was \$1,788,326.50. These figures do not include fringe benefits pension contributions, social security, medicare or clothing allowances.

The Willowick Police Department and the Willowick Fire and EMS Department share a capital improvement levy (since 1995), which today generates .859 mils. The Willowick Fire and EMS Department has a continuing fire levy (since 1978), which today generates 2.5 mils.

### **Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program:**

#### **The purpose of the SAFER Grant:**

“The Staffing for Adequate Fire and Emergency Response Grants (SAFER) was created to provide funding directly to fire departments and personnel firefighter interest organizations to help them increase or maintain the number of trained, "front line" firefighters available in their communities.” The grant program holds the goal “to enhance the local fire departments” abilities to comply with staffing, response and operational standards” that are established through the NFPA. (FEMA, 2023).

#### **History of SAFER Grant:**

Since 2005, the SAFER Program has awarded approximately \$5.2 billion in grant funding to provide critically needed resources to hire new, additional firefighters (or to change the status of part-time or paid-on-call firefighters to full-time firefighters), to rehire laid off firefighters, or to retain firefighters facing layoff, as well as recruitment and retention of personnel firefighters

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## History of SAFER Awards in Ohio:

Ohio Fire Departments have received 127 SAFER Grants between 2015 and 2023. The average grant reward is \$1,123,287.00. There were 11 Recruitment and Retention grants, 4 for Recruitment with the rest being Hiring grants.

## Award Categories:

There are two SAFER award categories:

- Hiring of Firefighters (Hiring) Activity
- Recruitment and Retention (R and R) Activity

## Eligibility Information:

**Hiring Activity:** Fire departments operating in any of the 50 states, as well as fire departments in the District of Columbia, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or any federally recognized Indian tribe or tribal organization. A fire department is an agency or organization having a formally recognized arrangement with a state, local, tribal, or territorial authority (city, county, parish, fire district, township, town, or other governing body) to provide fire suppression to a population within a geographically fixed primary first due response area.

The Hiring Activity offers grants to support applications to hire new, additional firefighters (***or to change the status of part-time or paid-on-call firefighters to full-time firefighters***), rehire laid off firefighters, or to retain firefighters facing layoff.

National, regional, state, local, tribal, and nonprofit interest organizations representing the interests of personnel firefighters are not eligible to receive a SAFER Program award under the Hiring Activity.

**R and R Activity:** Fire departments operating in any of the 50 states, as well as fire departments in the District of Columbia, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or any federally recognized Indian tribe or tribal organization.

A fire department is an agency or organization having a formally recognized arrangement with a state, local, tribal, or territorial authority (city, county, parish, fire district, township, town, or other governing body) to provide fire suppression to a population within a geographically fixed primary first due response area.

National, regional, state, local, tribal and nonprofit interest organizations representing the interests of firefighters are eligible to receive a SAFER Program award under the R and R Activity.

## Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

The R and R Activity offers grants to support applications to assist fire departments with the recruitment and retention of firefighters who are involved with or trained in the operations of firefighting and emergency response. Career fire departments are not eligible to apply for funding under the R and R Activity.

### **Steps to Apply:**

To apply for an award under this program, all applicants must:

- Apply for, update, or verify their Unique Entity Identifier (UEI) number and Employer Identification Number (EIN) from the Internal Revenue Service;
- In the application, provide a UEI number;
- Have an account with login.gov;
- Register for, update, or verify their SAM account and ensure the account is active before submitting the application;
- Register in FEMA GO, add the organization to the system, and establish the Authorized Organizational Representative (AOR). The organization's electronic business point of contact (eBiz POC) from the SAM registration may need to be involved in this step. See the FEMA GO Startup Guide for step-by-step instructions.
- Submit the complete application in FEMA GO; and
  
- Continue to maintain an active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by a federal awarding agency. As part of this, applicants must also provide information on an applicant's immediate and highest-level owner and subsidiaries, as well as on all predecessors that have been awarded federal contracts or federal financial assistance within the last three years, if applicable.

Applicants are advised that FEMA may not make a federal award until the applicant has complied with all applicable SAM requirements. Therefore, an applicant's SAM registration must be active not only at the time of application, but also during the application review period and when FEMA is ready to make a federal award.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## **Fire and EMS Department Feasibility Study Scope of Work Addressed:**

**Assess the current part-time staffing model and evaluate against alternative staffing models to determine the most effective and sustainable structure for the City.**

The current part-time staffing model presents consistent staffing challenges, which cannot be resolved under the current configuration. As identified in the “Staffing Fire and Emergency Departments with an all part-time staff” section of this study, the disadvantages of the part-time system manifest themselves in scheduling, reliability, competency, and training. A bidding war causes nearly constant migration of the part-time member pool, a phenomenon most often observed during summer months and especially on weekends.

**The four (4) staffing alternatives shall be assessed as a part of the study.**

- **Existing (all part-time),**
- **Hybrid (mix of full and part-time employees),**
- **All full time, and**
- **A consolidation into a fire district and/or shared resources between communities.**

An all part-time fire department staffing model (existing) was illustrated in the “Staffing Fire and Emergency Departments with an all-part-time staff” section of this study.

A hybrid (or combination Fire and EMS Department) model is plausible and recommended until funds are available for an all full-time Fire and EMS Department. However, combination Fire and EMS Departments, especially ones who place a full-time supervisory presence, have fewer staffing challenges, less turn-over in employment, and cultivates a positive culture to a mission driven organization.

An all full-time fire department is the ultimate service delivery model, providing the revenue match the expenses.

The consolidation into a fire district and/or shared resources is a practical and approachable idea; however, none of the current contiguous Fire and EMS Departments are willing to venture into a consolidated or shared resource department; however, the City of Euclid Fire Department would discuss the possibility of their Fire and EMS Department to provide Emergency Services to the City of Willowick for a fee. Additional one-on-one discussions would need to be employed.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## **City of Willowick Fire and EMS Department Fiscal analysis**

A review of the Willowick Fire and EMS Department financials for 2022 (information provided by Cheryl Benedict, City of Willowick Director of Finance), illustrated on page 41 are the actual and revised Fire Department budgets.

## **City of Willowick Fire and EMS Department Legal Analysis**

The Ohio Revised Code allows for the creating of an Ohio city taxing authority, a Fire and Ambulance District creation, and a Joint Fire District creation. The options and code language are illustrated; however, none of the contiguous jurisdictions are willing to venture into a consolidated or shared resource department at this time.

### **Fire and EMS Operational Analysis:**

#### **a) Level of Service and Response Times:**

Illustrated on page 40 are the 2022 Fire and EMS call volume as well as the corresponding response times.

#### **b) Requirements to meet standards and operational needs for each staffing model**

Illustrated on page 47 are the operational needs which meet national best practice standards for each staffing model.

### **Future considerations and Overall Costs of Services per model.**

Illustrated on page 48 are the costs for service per model.

### **The study shall also include identifying specific funding opportunities that may be available for hiring any new personnel.**

Based on the illustrated information, consider increasing (or renewing at today's valuation rate) both the Police and Fire Capital Improvement levy (assessment) and Fire Levy. In addition, seek SAFER funding, illustrated on page 41 for future Fire Department staffing opportunities.

## **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## **Willowick Fire and EMS Department Findings and Recommendations:**

Based on this research and recommended best practices, Cleveland State University, Center for Emergency Preparedness recommends the following:

- Maintain a combination (Hybrid) Fire and EMS Department until revenue is available to establish an all full-time Fire and EMS Department.
- Reallocate existing Fire and EMS Department funds to initiate the moderate service delivery model.
- Hire and provide consistent full-time supervision for all shifts and positions.
- Hire full-time Firefighter / Paramedics.
- Establish minimum and maximum staffing levels based on a solid full-time in-station nucleus supplemented by part-time personnel.
- Create the position of full-time Assistant Fire Chief who can serve as second in command, Training Officer, and Information Technology Officer.
- Create the position of full-time Captain who can serve as the Fire Prevention / Fire and Life Safety Officer, Fire Investigator, and Public Information Officer (PIO).
- Based on the illustrated information, consider increasing (or renewing at today's valuation rate) the Police and Fire Capital Improvement levy.
- Seek SAFER grant funding for full-time staffing.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

# Service Delivery Models.

## City of Willowick Fire EMS Department

Component	Ohio & National Standard	Current Service Delivery	Moderate Service Delivery	Improved Service Delivery	Ideal Service Delivery	Ultimate Service Delivery
Fire & EMS Station	NFPA & ISO	1	1	1	1	1
Response Time	NFPA 1710 Fire & EMS: 4 min / 8 min	4 min / 8 min	4 min / 8 min	4 min / 8 min	4 min / 6 min	4 min / 6 min
<b>In-Station 1st Responders</b>	NFPA 1710	4 to 6 Parttime	<b>6</b>	<b>9</b>	<b>12</b>	<b>12</b>
On Duty Fulltime / Parttime Personnel	NFPA / ORC	4 to 6 Parttime	(2) Full-time (24/48) (3) Part-time (24/48)	(4) Full-time (24/48) (4) Part-time (24/48)	(6) Full-time (24/48) (4) Part-time (24/48)	10 Full-time (24/48)
On-Duty Fulltime Supervision	NFPA / ORC		(1) Station Captain	(1) Station Captain	(1) Battalion Chief (1) Station Captain	(1) Battalion Chief (1) Station Captain
Fire Chief	NFPA / ORC	1	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)
Assistant Chief Training Officer	NFPA / ORC		(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)
Captain Fire Prevention & Life Safety	NFPA / ORC	(3) Part-time	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)
Administrative Assistant	Willowick	1	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)	(1) Full-time (40 Hrs.)
Dispatch	APCO & NFPA Standards	Willowick PD	Willowick PD	Willowick PD	Willowick PD or Lake County Dispatch	Willowick PD or Lake County Dispatch
Apparatus	NFPA & ISO	(1) Engine (1) Ladder (3) EMS	(1) Command Vehicle (1) Engine (1) Reserve Engine (1) Ladder (2) EMS (1) Reserve EMS	(1) Command Vehicle (1) Engine (1) Reserve Engine (1) Ladder (2) EMS (1) Reserve EMS	(1) Command Vehicle (1) Engine (1) Reserve Engine (1) Ladder (1) Rescue (2) EMS (1) Reserve EMS	(1) Command Vehicle (1) Engine (1) Reserve Engine (1) Ladder (1) Rescue (2) EMS (1) Reserve EMS

### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225



# Service Delivery Costs.

## City of Willowick Fire EMS Department

Shift:	Per Position Cost:	On Duty Personnel:	Personnel Total:	Personnel Base:	Benefits: Full-time @ 70% Part-time at 10%:	Personnel Costs:	Additional Operational Costs	Total Personnel Costs:
<b>Current Service Delivery: (2022)</b>								
40 Hrs. Fire Chief	\$ 99,717.00	1	1	\$ 99,717.00	\$ 69,801.90	\$ 169,518.90		
40 Hrs. Administrative Assistant	\$ 51,244.00	1	1	\$ 51,244.00	\$ 35,870.80	\$ 87,114.80		
24 Hrs. Part-time Capt. L.T. FF, P-PF		1	Varies	\$ 1,788,326.50	\$ 178,832.65	\$ 1,967,159.15	\$ 405,334.65	\$ 2,629,127.50
<b>Moderate Service Delivery:</b>								
40 Hrs. Fire Chief	\$ 100,000.00	1	1	\$ 100,000.00	\$ 70,000.00	\$ 170,000.00		
40 Hrs. Administrative Assistant	\$ 52,000.00	1	1	\$ 52,000.00	\$ 36,400.00	\$ 88,400.00		
40 Hrs. Assistant Fire Chief / Training	\$ 90,000.00	1	1	\$ 90,000.00	\$ 63,000.00	\$ 153,000.00		
40 Hrs. Fire Prevention Captain	\$ 80,000.00	1	1	\$ 80,000.00	\$ 56,000.00	\$ 136,000.00		
24/48 Battalion Chief	\$ 80,000.00	1	3	\$ 240,000.00	\$ -	\$ 408,000.00		
24/48 Shift Captain	\$ 70,000.00	2	6	\$ 420,000.00	\$ 294,000.00	\$ 714,000.00		
24/48 Full-time Firefighters	\$ 212,306.00	3	3	\$ 636,918.00	\$ 63,691.80	\$ 700,609.80	\$ 750,000.00	\$ 3,120,009.80
24/48 Part-time Firefighters								
<b>Improved Service Delivery:</b>								
40 Hrs. Fire Chief	\$ 100,000.00	1	1	\$ 100,000.00	\$ 70,000.00	\$ 170,000.00		
40 Hrs. Administrative Assistant	\$ 52,000.00	1	1	\$ 52,000.00	\$ 36,400.00	\$ 88,400.00		
40 Hrs. Assistant Fire Chief / Training	\$ 90,000.00	1	1	\$ 90,000.00	\$ 63,000.00	\$ 153,000.00		
40 Hrs. Fire Prevention Captain	\$ 80,000.00	1	1	\$ 80,000.00	\$ 56,000.00	\$ 136,000.00		
24/48 Battalion Chief	\$ 80,000.00	1	3	\$ 240,000.00	\$ -	\$ 408,000.00		
24/48 Shift Captain	\$ 70,000.00	4	12	\$ 840,000.00	\$ 588,000.00	\$ 1,428,000.00		
24/48 Full-time Firefighters	\$ 212,306.00	4	4	\$ 849,224.00	\$ 84,922.40	\$ 934,146.40	\$ 750,000.00	\$ 4,067,546.40
24/48 Part-time Firefighters								
<b>Ideal Service Delivery:</b>								
40 Hrs. Fire Chief	\$ 100,000.00	1	1	\$ 100,000.00	\$ 70,000.00	\$ 170,000.00		
40 Hrs. Administrative Assistant	\$ 52,000.00	1	1	\$ 52,000.00	\$ 36,400.00	\$ 88,400.00		
40 Hrs. Assistant Fire Chief / Training	\$ 90,000.00	1	1	\$ 90,000.00	\$ 63,000.00	\$ 153,000.00		
40 Hrs. Fire Prevention Captain	\$ 80,000.00	1	1	\$ 80,000.00	\$ 56,000.00	\$ 136,000.00		
24/48 Battalion Chief	\$ 85,000.00	1	3	\$ 255,000.00	\$ 178,500.00	\$ 433,500.00		
24/48 Shift Captain	\$ 80,000.00	1	3	\$ 240,000.00	\$ 168,000.00	\$ 408,000.00		
24/48 Full-time Firefighters	\$ 70,000.00	6	18	\$ 1,260,000.00	\$ 882,000.00	\$ 2,142,000.00		
24/48 Part-time Firefighters	\$ 212,306.00	4	4	\$ 849,224.00	\$ 84,922.40	\$ 934,146.40	\$ 750,000.00	\$ 5,215,046.40
<b>Ultimate Service Delivery:</b>								
40 Hrs. Fire Chief	\$ 100,000.00	1	1	\$ 100,000.00	\$ 70,000.00	\$ 170,000.00		
40 Hrs. Administrative Assistant	\$ 52,000.00	1	1	\$ 52,000.00	\$ 36,400.00	\$ 88,400.00		
40 Hrs. Assistant Fire Chief / Training	\$ 90,000.00	1	1	\$ 90,000.00	\$ 63,000.00	\$ 153,000.00		
40 Hrs. Fire Prevention Captain	\$ 80,000.00	1	1	\$ 80,000.00	\$ 56,000.00	\$ 136,000.00		
24/48 Battalion Chief	\$ 85,000.00	1	3	\$ 255,000.00	\$ 178,500.00	\$ 433,500.00		
24/48 Shift Captain	\$ 80,000.00	1	3	\$ 240,000.00	\$ 168,000.00	\$ 408,000.00		
24/48 Full-time Firefighters	\$ 80,000.00	10	30	\$ 2,100,000.00	\$ 1,470,000.00	\$ 3,570,000.00	\$ 750,000.00	\$ 5,708,900.00
24/48 Part-time Firefighters								

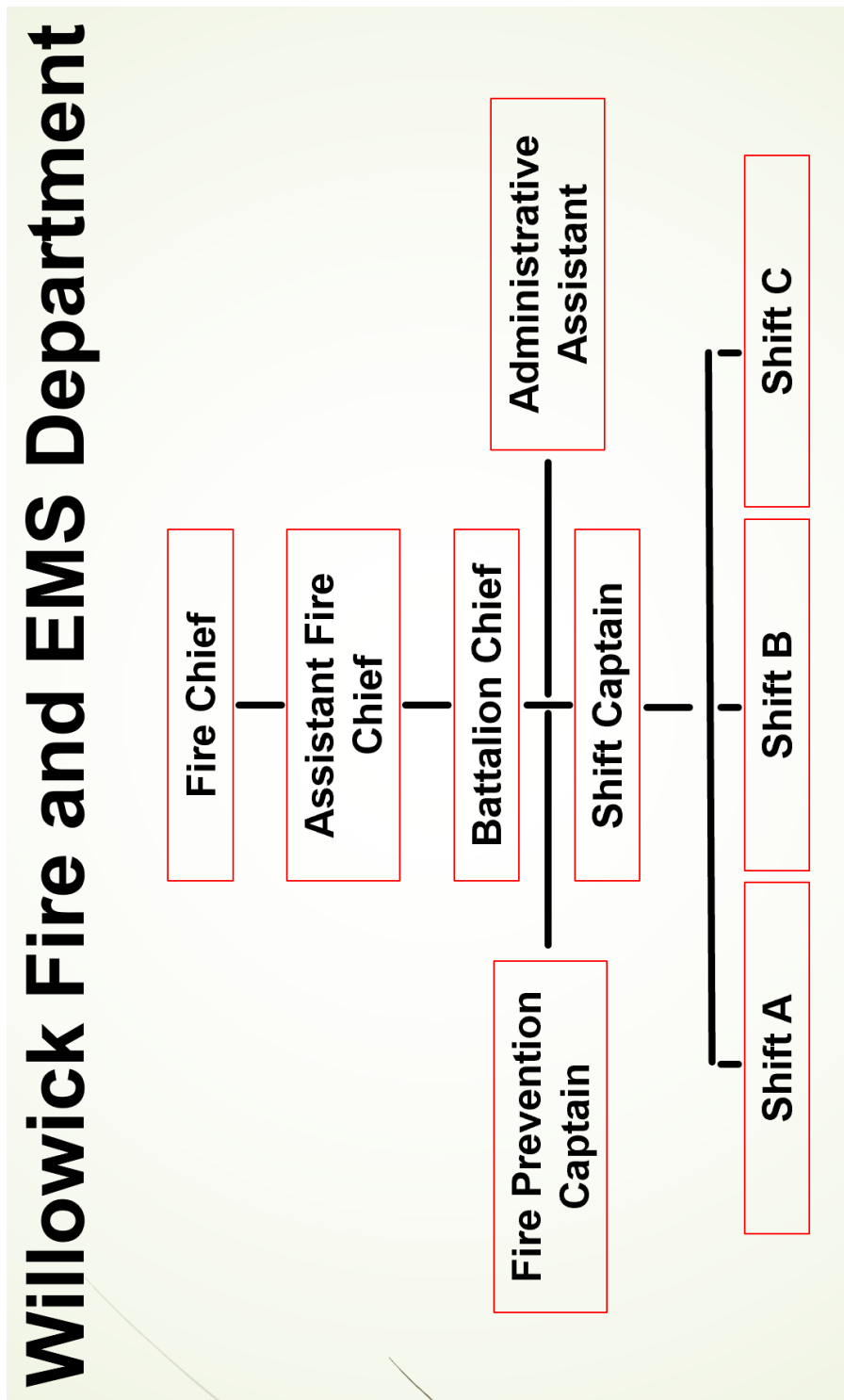
### Center for Emergency Preparedness

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

Ideal Service Delivery Organizational Chart:



**Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

## Reference.

- Annibale, D. J., and Bissinger, R. L. (2010). The golden hour. *Advances in neonatal care*, 10(5), 221-223.
- Averill, J. D., Moore-Merrell, L., Notarianni, K., Santos, R., and Wissoker, D. (2011). *National Fire Service Data Summit*.
- Blackwell, T. H., and Kaufman, J. S. (2002). Response time effectiveness: comparison of response time and survival in an urban emergency medical services system. *Academic Emergency Medicine*, 9(4), 288-295.
- Bromen, N. P. (2000). *Understanding part-time staffing issues in the fire service*. National Fire Academy.
- Crouch, R. (2000). *Two-in, Two-out and the OSHA Respiratory Protection Standard*. Municipal Technical Advisory Service, the University of Tennessee.
- Cummins, R. O., Ornato, J. P., Thies, W. H., and Pepe, P. E. (1991). Improving survival from sudden cardiac arrest: the "chain of survival" concept. A statement for health professionals from the Advanced Cardiac Life Support Subcommittee and the Emergency Cardiac Care Committee, American Heart Association. *Circulation*, 83(5), 1832-1847.
- FEMA, (2023). *Retention and Recruitment for Emergency Services*. <https://www.usfa.fema.gov/blog/retention-and-recruitment-manual>
- FEMA, (2023). *Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program*. <https://www.fema.gov/grants/preparedness/firefighters/safer>
- Gann, R. G., Averill, J. D., Butler, K. M., Jones, W. W., Mulholland, G. W., Neviasser, J. L., and Hall, J. R. (2001). International study of the sublethal effects of fire smoke on survivability and health (SEFS): Phase I final report. *National Institute of Standards and Technology*.
- Holmén, J., Herlitz, J., Ricksten, S. E., Strömsöe, A., Hagberg, E., Axelsson, C., and Rawshani, A. (2020). Shortening ambulance response time increases survival in out-of-hospital cardiac arrest. *Journal of the American Heart Association*, 9(21), e017048.
- Insurance Services Office, Inc. (2012). *Fire suppression rating schedule*. Insurance Services Office.

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225

- Lantz, E., Nilsson, B., Elmqvist, C., Fridlund, B., and Svensson, A. (2022). Serving the community while balancing multiple responsibilities—experiences of working as a paid part-time firefighter. *International Journal of Emergency Services*.
- Larsen, M. P., Eisenberg, M. S., Cummins, R. O., and Hallstrom, A. P. (1993). Predicting survival from out-of-hospital cardiac arrest: a graphic model. *Annals of emergency medicine*, 22(11), 1652-1658.
- Lawrence, C. (2001). Fire company staffing requirements: an analytic approach. *Fire technology*, 37(3), 199-218.
- Moore-Merrell, L. (2019). Understanding and measuring fire department response times.
- NFPA 1710 (2020). Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.
- NFPA (2023). Fire Protection Handbook. <https://www.nfpa.org>.
- Occupational Safety and Health Administration (2019). <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134>
- Ohio Revised Code (2016). Section 505.375 Fire and Ambulance District Creation. <https://codes.ohio.gov/ohio-revised-code/section-505.375>
- Ohio Revised Code (2019). Section 505.371 Joint Fire District Creation. <https://codes.ohio.gov/ohio-revised-code/section-505.371>
- Shoffner, J. D. (2023). Firefighter Staffing Model Implications on Fire Casualties and Fire Loss: Life Safety and Socio-Economic Impacts of the Fire Service.
- Stobierski, T. (2019). How to Do a Cost-Benefit Analysis and Why it is Important. Harvard Business School Online Business Insights Blog. <https://online.hbs.edu/blog/post/cost-benefitanalysis>.
- S. Waltower. (2023). Business Daily News, Hiring Full-Time vs. Part-Time Employees
- Willowick, Ohio (2023). <https://www.city-data.com/city/Willowick-Ohio.html>
- Willowick Fire Department (2023). <https://www.cityofwillowick.com/fire-department>

### **Center for Emergency Preparedness**

1717 Euclid Avenue, UR 134, Cleveland, Ohio 44115

<https://levin.csuohio.edu/cep/center-for-emergency-preparedness> • Director (216) 875-9860 •

Fax (216) 687-2225