Elk Grove Village Fire Department

2022

Community Risk Assessment and Standards of Cover

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TITLE PAGE

Elk Grove Village Fire Department

Community Risk Assessment

and Standards of Cover

2022

The Village of Elk Grove Village, Illinois

Fire Chief Richard Mikel

Deputy Fire Chief Nathan Gac

Lieutenant David Hoppe

Fire Fighter Joe Albert

Fire Fighter Mike Foster

Management Analyst Catherine Miarnowski

Secretary Debbie Weber

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INTRODUCTION

The Elk Grove Village Fire Department 2022 Community Risk Assessment and Standards of Cover is the Department's fundamental step in the accreditation process. The document is written under the guidelines of the Center for Public Safety Excellence's Community Risk Assessment: Standards of Cover 6th edition and the 9th edition Fire and Emergency Services Self-Assessment Manual.

The document was developed by studying and evaluating the Department's current practices through the analysis of objectives and response data from January 1, 2017 through December 31, 2021.

The purpose of this document is to:

- Quantify the Elk Grove Village Fire Department's efforts towards continuous improvement.
- Identify community risk factors.
- Define the appropriate level of service for the community.
- Ensure safe and effective responses to calls for service
- Evaluate the Department's performance.

The goal of the Elk Grove Village Fire Department is to provide exceptional service to the community in a fiscally responsible manner. An annual review of the Standards of Cover will be conducted to facilitate the achievement of that goal.

Richard J. Mikel, EFO CFO
Fire Chief

Raymond R. Rummel, MPA
Village Manager

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EXECUTIVE SUMMARY

The Elk Grove Village Fire Department is a career fire department that serves Elk Grove Village, Illinois with emergency response services including: fire suppression, emergency medical services with patient transport, technical rescue, hazardous materials and water rescue.

The Elk Grove Village Fire Department also provides the following community risk reduction programs: public education, fire/life safety code enforcement and senior citizen services.

The Department employs 88 sworn members operating out of three strategically located fire stations. All fire suppression vehicles are staffed with three certified firefighters and equipped to provide advanced life support (ALS) interventions. All ambulances are also ALS equipped and staffed with two cross-trained, certified firefighter/paramedics.

The accreditation process challenges the Department to take an extensive look at its current practices. The development of the Standards of Cover presented the Elk Grove Village Fire Department with an exceptional opportunity to evaluate programs and services based upon nationally recognized standards and local best practices. Through self-assessment, the development of a strategic plan, and the completion of this Community Risk Assessment (CRA) and Standards of Cover (SOC) document, the process provides the Department a foundation for exceptional services through continuous evaluation and improvement.

Community Risk Assessment involves the analysis of risk for fire and non-fire emergencies. The Department has established four planning zones and classified key risks within each zone. Impacts to life, property, economic drivers and the environment are measured along with an incident's probability. In summary, low risk is defined as incidents having low probability and low consequences; moderate risk is defined as incidents having high probability with low consequences; high risk is defined as incidents having low probability and high consequences; maximum risk is defined as incidents having high probability and high consequences. The Department has established specific risk classifications and has conducted critical task analyses to determine appropriate response levels for: fire suppression, emergency medical services, technical rescue, hazardous materials and water rescue.

As part of this process, the Department has established performance benchmarks based upon historical baseline data. Benchmark objectives established response time goals that the Department will strive to meet or exceed. The goal is to achieve an approximate 10% quicker total response time across all incident types. The goal is realistic and attainable. Baseline measures reflect historical performance of total response time (TRT) which is measured in two ways: the first-arriving unit, and the effective response force (ERF). The ERF is the total number of personnel necessary to mitigate the incident. Total Response Time is comprised of call processing time, turnout time, and travel time. The Elk Grove Village Fire Department observes the 90th percentile for performance as opposed to the average (50^{th} percentile) response time. By doing so, the

department measures performance based on what it does a vast majority of the time, rather than half of the time. The baselines and benchmarks will be reviewed by the Benchmark Committee and assessed yearly as part of the Annual Program Appraisal. It is expected that the success of the first year will increase the motivation for continued improvement in the following years.

The analysis of risks presented in the community, and the historical performance of the Department, led to conclusions in areas in which the Department excels, as well as areas presenting opportunities for improvement. The Department does well in resiliency, fire dollar loss, fire casualties and EMS response performance. The Department has initiated yearly program appraisals to review, develop, and implement procedures to facilitate proactive changes and continual improvement.

The Fire Department and the Village of Elk Grove are committed to the process of strategic self-assessment, continuous quality improvement and exceptional service delivery as provided by the Center for Public Service Excellence's Agency Accreditation Program.

Elk Grove Village Fire Department

Mission Statement

To provide the highest quality fire protection, rescue, emergency medical services, and safety education.

Vision Statement

Honoring tradition, learning from the best, embracing change, we look forward, providing leadership and excellence.

Core Values

Compassion	Understanding the suffering of others and providing such aid as we are capable to relieve that suffering.
Courage	Functioning under stressful or dangerous conditions and taking reasonable risks to accomplish tasks worthy of such risks.
Education	Maintaining and increasing our knowledge, and readily using and sharing it to the benefit of others.
Integrity	Being honest and above reproach, upholding the trust and confidence of the community, and executing our duties while adhering to the highest ethical standards.
Professionalism	Practicing and adhering to the highest accepted standards and methods of work in our profession.
Teamwork	Working together in a supportive, harmonious group toward common goals, putting collective effort above individual prominence.

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Area Characteristics

Named for the native elk that roamed the northern Illinois forests and grasslands, Elk Grove Village was settled in 1834 by pioneer New England farmers. By 1848, German-immigrant farmers soon settled in the area, establishing a thriving community that would eventually become Elk Grove Village.

The rural community transformed into a center of commerce when Douglas Aircraft built a military transport manufacturing plant in nearby Orchard Place during World War II. Following the war, the industrial facility and land was sold for $1 to the City of Chicago as war surplus. The location would then become O'Hare International Airport. The expansion of O'Hare during the 1950s and 1960s closely parallels Elk Grove Village's growth as a successful community and leading Midwest industrial center.

Elk Grove Village's expansion is also attributed to an enterprising group of Dallas-based land developers that selected Elk Grove Village as its site for a planned community during the 1950s. Centex Corporation chose the Village because of its proximity to rail, the new air facilities, and major highways. A master plan for the controlled growth of the Village was initiated and construction of industrial buildings, homes, corporate offices, retail establishments and schools soon followed. Under the comprehensive plan, the Village was divided in half with residential development to the west and a business park on the east, bordering the airport.

Today, those 1,500 acres have increased to almost 7,000 through more than 150 annexations, and the small community of 116 original residents is now home to nearly 33,000 people who have come to appreciate the exceptional community of Elk Grove Village.

Within the 11.1 square miles of Elk Grove Village, there exist two distinct but still united communities: residential and business. Listed in a recently published book, "Fifty Fabulous Places to Raise Your Family" by Melissa Giovagnoli, Elk Grove was included for its excellent schools, parks and recreation, access to transportation, varied housing stock, vibrant economy, low crime rate, exceptional community service, and small-town atmosphere. Thanks to more than $36 million in revenue collected yearly from sales and commercial property taxes, Elk Grove Village is able to enjoy one of the lowest property tax rates in the Northwest suburbs.

In addition to Elk Grove's residential community, it also possesses a booming business community. Beginning with only 90 companies that opened for business in 1962, there

are now over 3,500 firms and service organizations within the Village. The 5.6 square mile Elk Grove Village Business Park has over 62 million square feet of real estate inventory and has produced over 100,000 jobs for Chicagoland and surrounding suburbs. Elk Grove Village is at the crossroads of the Transcontinental Rail Service, and with its easy access to an international airport, and the close proximity to six interstates and three state highways, it is regionally considered a premier location for business and industry. By sharing a border with O'Hare International Airport (Chicago), Elk Grove Village is able to have a versatile industrial and mercantile land mass. The Village is dedicated to assuring the highest level of service to the business community and residents.

Another noteworthy source of employment, located outside of the Business Park, is the 125-acre Northwest Point Office Park. Northwest Point features a 10-story building with 200,000 square feet of office space, a luxury hotel, beautifully landscaped setting, prominent corporate tenants, and other added amenities.

Although the expansion of Elk Grove Village today is limited by the boundaries of its neighbors, it continues to redevelop and thrive as the "Exceptional Community." In 2021 a new state of the art ComEd station was built to accommodate the growing technological and data centers located on the North East side of the industrial park totaling over 64,435 sq ft. of advancement. Currently, Elk Grove Village, is in the process of construction a first of its kind "Technology Park," designed specifically for data collection and information gathering. The Technology Park covering approximately 85 acres, will consist of 7 buildings with over 1.2 million square feet, and will focus on future innovation and state of the art technology (https://www.elkgrovetechnologypark.com/). Microsoft will be building 3 of the 7 new buildings and a one business hotel (37,985 sq. ft.) has been proposed to support the growing industry. The motto of the Elk Grove Village Industrial Park is "Makers Wanted".

Since 1956, Elk Grove Village has experienced substantial change and economic prosperity growing from 116 residents to over 33,000. The community's planned, controlled development serves as the foundation for Elk Grove Village's strong demographic base and high standard of living among private and commercial/industrial residents alike. The exceptional community boasts:

- A diverse population encompassing all ages, occupations, incomes & ethnicity.
- Highly educated residents with above-average test scores and advanced levels of education.
- One of the lowest property tax rates in the metropolitan Chicago.
- Special community events throughout the year.

Awards and Recognition

Following are some recent *Honors, Awards, and Recognitions* which highlight our continued dedication to excellence:

- Center for Public Safety Excellence Accredited Agency 2020
- Firehouse Magazine 2019 Station Design Award
- 2019 Governor's Hometown Award and Governor's Cup Finalist for the Elk Grove Village Cares Program, a community-based strategy to tackle opioid addiction, help those in need, and make our community safer, stronger, and healthier.
- Named 3rd Safest City to Live in Illinois in 2019 by backgroundchecks.org
- Designated a "Storm Ready" Community by the National Weather Service (NWS) in 2019
- Illinois Fire Chief of the Year 2018, Fire Chief Richard Mikel.
- In 2020, International Government Finance Officers Association awarded Elk Grove its 38th consecutive Certificate of Achievement for Financial Reporting for transparency and accuracy of governmental financial reporting.
- Advanced Meritorious "CALEA" Certified Police Department: Since 1993, the Elk Grove Police Department has been continuously certified as a model of excellence and is now advanced meritorious accredited by CALEA.
- Lowest Taxes: Elk Grove Village continues to have the lowest combined property tax rate among comparable Cook County suburbs.
- Best Hometown: Elk Grove Village again recognized as "Best Hometown" by 2016 Daily Herald Readers' Choice poll.
- Best American City for Global Trade as ranked by Global Trade Magazine.
- 2016 Outstanding Civil Engineering Achievement Award for the Busse Woods Dam modification storm water mitigation project.
- Award for Business Excellence (AABE) presented to Elk Grove Village by the Daily Herald Business Ledger.
- Recipient of the 2016 Gold Award of Excellence in recognition of the high quality and creative design of the Makers Wanted Campaign.
- Davey Marketing Award for Outstanding Creative Work among the best small agencies worldwide.
- Top Rated Fire/Paramedic Department: With an Insurance Service Office rating of Class 2, the Elk Grove Fire Department ranks in the upper 2% of fire departments nationwide.
- Recipient of Small Business Advocate Award as determined by the United States Conference of Mayors.
- Elk Grove's Business Resource Guide named: Top 10 Resource for Start-Up Businesses as determined by Startup Savant.
- Elk Grove Village has been rated as a Tree City, USA for more than 30 years with a "Growth" distinction due to a strong urban forest system.
- Gold Communicator Award for business website: egvbizhub.com.
- Elk Grove Television named Best of Midwest by the Alliance for Community Media.

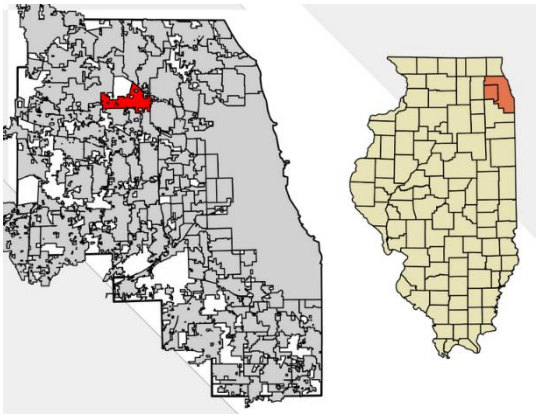
- Global Trade Magazine ranked Elk Grove Village as one of the best U.S. Cites for Global Trade in 2014.
- The Village's "Makers Wanted" marketing campaign won the Daily Herald's Business Ledger Award for Business Excellence in 2015.
- The U.S. Conference of Mayors awarded Elk Grove Village the 2016 Small Business Advocate Award.

...as well as our continued history of National and Regional Excellence:

- 1st Environmentally Friendly Village Hall (LEED Gold Certified) in the State of Illinois.
- Top 100 Places to Relocate in the United States as named by Relocate-America.com
- Chicago Magazine rated Elk Grove Village as the "Best Hometown".
- Named as *1 of the 50 Fabulous Places to Raise a Family* in the United States in a book by the same name.
- Nine Governor's Hometown Awards for volunteer excellence in the community.
- Global Trade Magazine ranked Elk Grove Village as one of the best U.S. Cites for Global Trade in 2014.

Local Government

Elk Grove Village is a home-rule community as defined by The Illinois Constitution. The Village operates under the council-manager form of government. This form of government combines the leadership and policy-making skills of elected officials with the professional administrative training of the Village Manager. Under this form of government, the elected representatives establish policies steering the Village's purpose, values, mission, and goals.

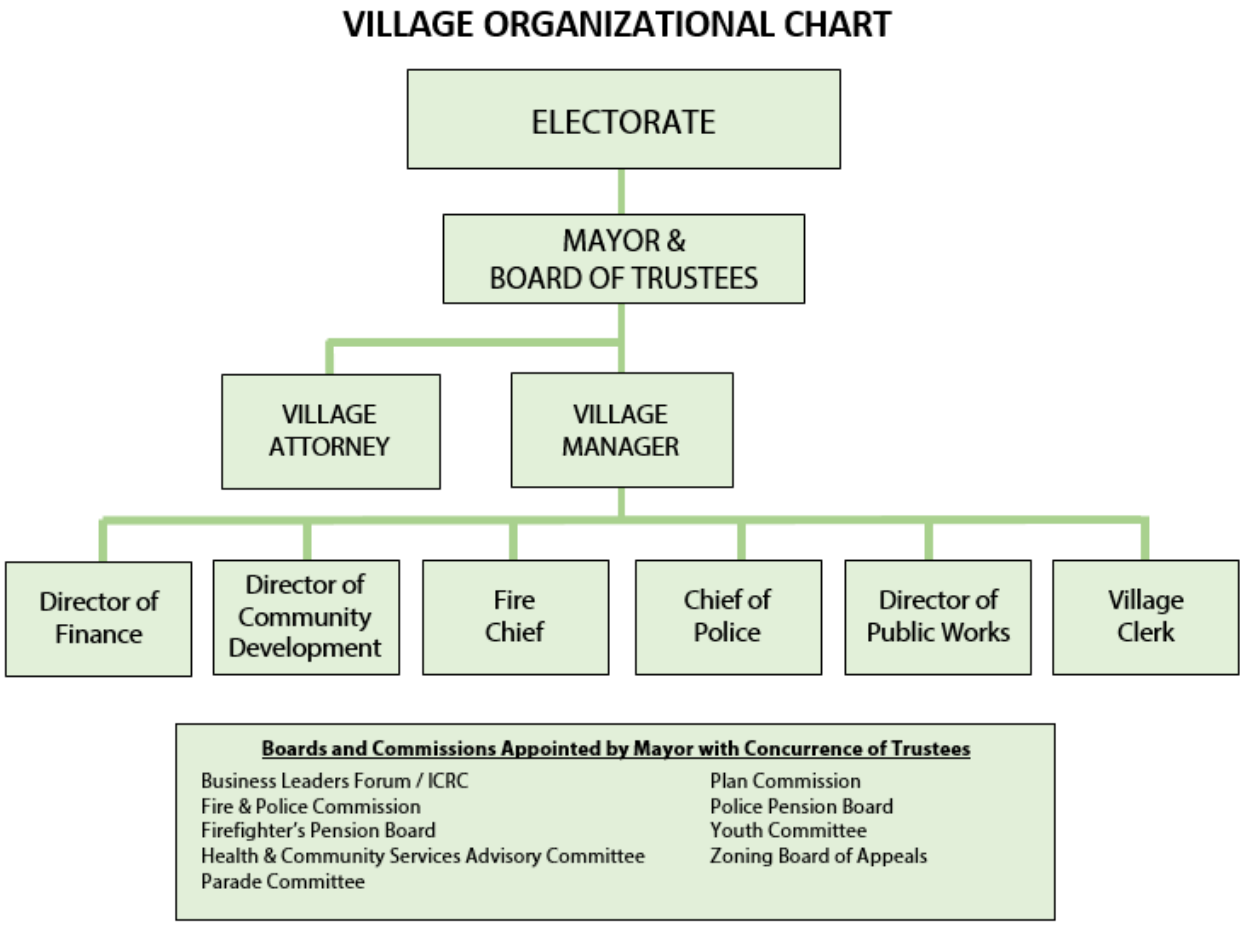


Village Map / County Map

Village Board members are elected at large on a non-partisan basis, and serve as the community's decision-makers. The Village Board is comprised of six Village Trustees that act as the legislative body, and one Mayor. The experience provided by the Board allows them to manage effectively the concerns of residents and business owners. These stakeholders direct and oversee all functions within the borders of Elk Grove Village, and the public services the Village provides.

The Village Manager performs the daily functions and operations required by the council. He or she acts as the Chief Administrative Officer and is appointed by the Mayor and the Board of Trustees. The Village Manager is responsible for preparation and presentation of the budget and has full authority over all Village departments.

Village org. chart



Finances

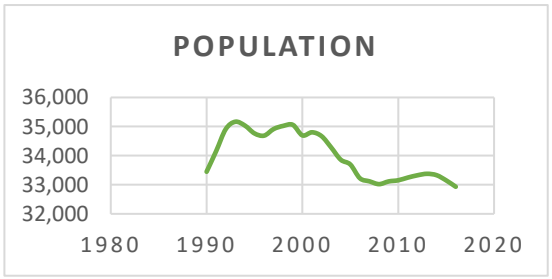
The Village of Elk Grove annually adopts a budget to guide the financial operations of the Village. The Village operates on a May 1 – April 30 fiscal year. In April 2021, the Mayor and Village Board approved the Fiscal Year 2022 Budget. The General Fund budget, which contains most of the Village's traditional services such as Fire, Police and Public Works, was approved at $63,434,485. The General Fund budget represents a 1.59% decrease from FY2021.

The Village of Elk Grove is dedicated to providing residents and businesses with exceptional government financial management. The Finance Department's commitment to financial excellence has been recognized nationally by the Government Finance Officers Association (GFOA), which has presented the department with the Certificate for Excellence in Financial Reporting for its Comprehensive Annual Financial Report (CAFR) for 37 consecutive years. Additionally, Standard & Poor's Investor Services demonstrate the strength of Elk Grove's financial standing through the Village's municipal bond rating of AA+. This favorable bond rating within the community is indicative of financial strength, conservative budget practices and economic stability.

Community Risk Assessment

Demographic Characteristics (2A.7)

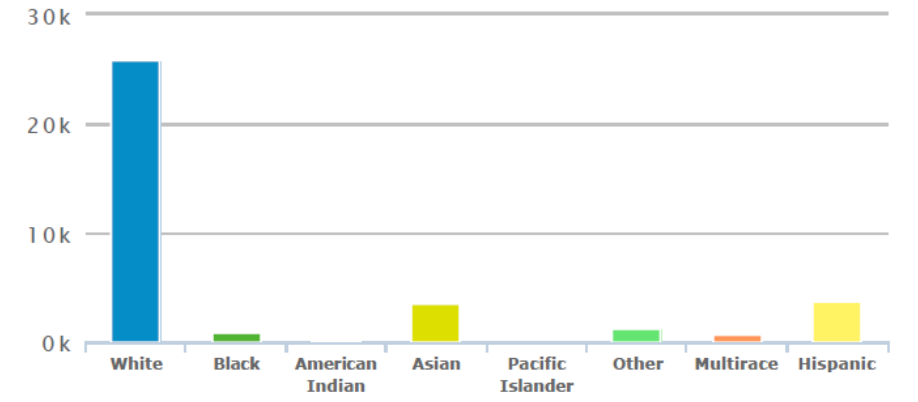
Population: U.S. Census Bureau



The population of the Village of Elk Grove has ranged between 32,257 and 35,114 over the past three decades. The residential population primarily consists of 82% white with the second highest percentage of the population being Hispanic (12%) and Asian (10%) decedent. Nineteen percent of Elk Grove Village's population is over the age of 65 (US Census Bureau - 2020). This represents a 6% higher than that of the national average for the elderly. The median family income is $81,895 and 36% of adults have obtained education of a Bachelor's degree or higher.

Race/Ethnicity: U.S. Census Bureau

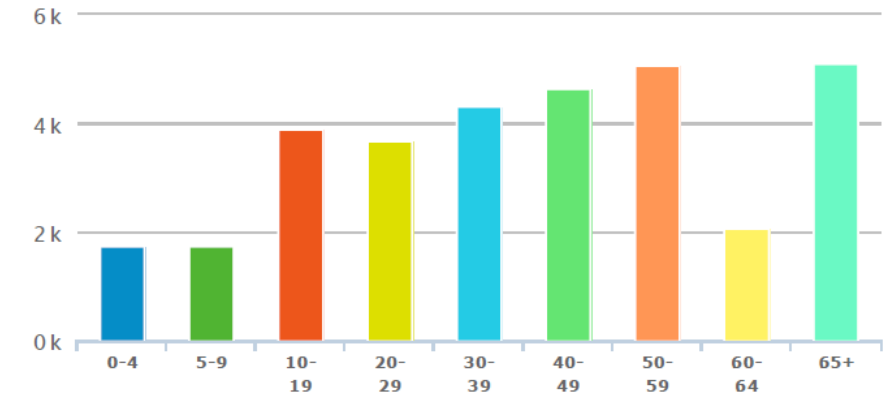
Race and Ethnicity Distribution (2015)



Race and Hispanic Origin	Elk Grove Village village, Illinois
White alone, percent	82.5%
PEOPLE	
Race and Hispanic Origin	
White alone, percent	82.5%
Black or African American alone, percent (a)	1.6%
American Indian and Alaska Native alone, percent (a)	0.0%
Asian alone, percent (a)	9.6%
Native Hawaiian and Other Pacific Islander alone, percent (a)	0.1%
Two or More Races, percent	3.0%
Hispanic or Latino, percent (b)	12.3%
White alone, not Hispanic or Latino, percent	74.6%

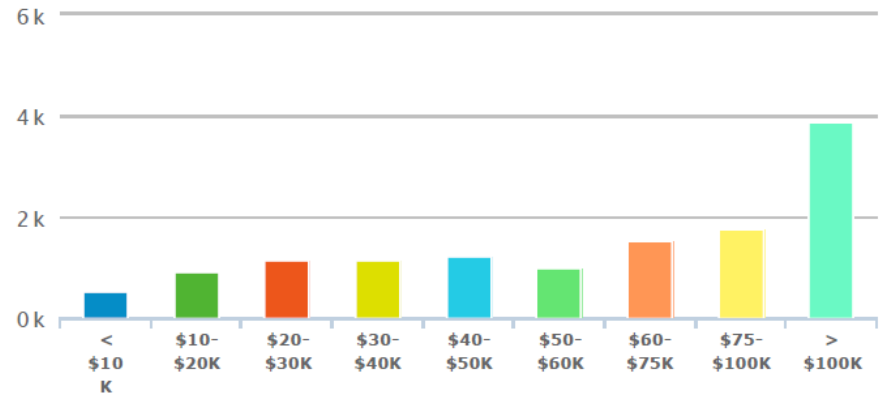
Age: U.S. Census Bureau

Age Distribution (2015)



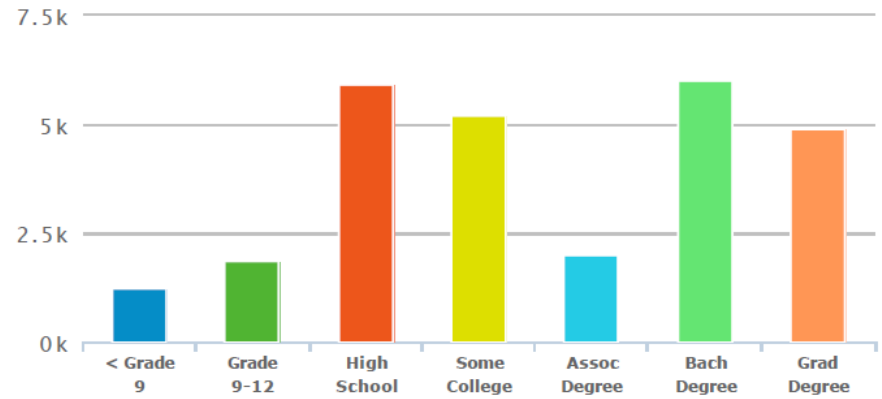
Income: U.S. Census Bureau

Household Income Distribution (2015)



Education: U.S. Census Bureau

Education Attainment (2015)



	TOTAL	%
Population Age 25+	27,227	
< Grade 9	1,231	4.52
Grade 9-12	1,888	6.93
High School	5,943	21.83
Some College	5,222	19.18
Assoc Degree	2,001	7.35
Bach Degree	6,047	22.21
Grad Degree	4,895	17.98

Climate and Geography

Being located within the Midwest, Elk Grove Village has warm summers and cold winters.

Weather

	Average Low	Average High	Record Low	Record High	Average Precipitation	Average Snow
January	14°	30°	-27° (1985)	67° (1950)	1.75"	11.3"
February	19°	35°	-21° (1899)	75° (1976)	1.63"	8.3"
March	29°	46°	-12° (1873)	88° (1986)	2.65"	6"
April	38°	58°	7° (1982)	91° (1980)	3.68"	1.6"
May	47°	70°	27° (1983)	98° (1934)	3.38"	0"
June	57°	79°	35° (1945)	104° (1988)	3.63"	0"
July	63°	84°	45° (1983)	105° (1934)	3.51"	0"
August	62°	81°	42° (1986)	102° (1918)	4.62"	0"
September	54°	74°	29° (1995)	101° (1953)	3.27"	0"
October	42°	62°	14° (1887)	94° (1963)	2.71"	0.3"
November	32°	47°	-2° (1950)	81° (1950)	3.01"	1.8"
December	20°	34°	-25° (1983)	71° (1982)	2.43"	8.7"

Source: National Weather Service for Zip Code 60007

While ever changing, the weather in Elk Grove Village is predictable, and the exposure to catastrophic events is limited. The largest weather threats are the flooding of Salt Creek (a Des Plaines River tributary), snowstorms, extreme heat/humidity, and the potential for tornadoes.

The Elk Grove Village Fire Department is responsible for fire and medical emergency services for the 457 acres of Busse Woods Forest Preserve which consists of a large lake, dozens of ponds, and 1.6 miles of Salt Creek. All ponds and lakes are considered year-round cold-water emergency responses. The land of Elk Grove Village is very flat, ranging between 675 and 750 feet above sea level.

Legal Authority and Jurisdictional Boundaries (2A.1)

The Elk Grove Village Fire Department receives its legal authority to exist from the Illinois State Statues and by ordinance of the Village Board. The Village of Elk Grove Village was incorporated July 17, 1956 in accordance with Illinois Revised Statues, Chapter 24, Article 1, Section 5 (now Article VII of the State Constitution). On February 8, 1960 the Village followed Illinois Revised Statute, Chapter 24, Section 11-6-1 (now 65 ILCS 5/Article 11, Division 6) allowing for the municipality to provide fire protection to its citizens by issuing Ordinance Number 125. The jurisdictional boundaries are outlined in the Village Municipal Code: Title 5 Fire Protection and Prevention Chapters 1-7.

Other Service Responsibility Areas (2A.2)

Elk Grove Village Fire Department has automatic aid agreements with several bordering jurisdictions including:

- Schaumburg Fire Department
- Arlington Heights Fire Department
- Des Plaines Fire Department
- Mount Prospect Fire Department
- Bensenville Fire Protection District
- Itasca Fire Protection District

In addition to these automatic aid agreements, the Elk Grove Village Fire Department is a member of The Illinois Mutual Aid Box Alarm System (MABAS).

The Mutual Aid Box Alarm System is a formal agreement of statewide mutual aid. This system allows for assistance to a jurisdiction whose resources are overwhelmed by either day-to-day emergency responses or disasters. Day-to-day extra alarms are handled systematically providing a quick response of emergency resources to a member community during an ongoing emergency. Governor declared disasters provide a MABAS sustained system of response on top of daily mutual aid activations.

Today MABAS includes approximately 1,175 of the state's 1,246 fire departments organized within 69 divisions. MABAS includes approximately 38,000 of Illinois' 40,000 firefighters. MABAS also offers specialized operations teams for hazardous materials (40 teams), underwater rescue/recovery (15 teams), technical rescue (39 teams) and a state sponsored urban search and rescue team.

Every MABAS participant agency has signed the same contract with their 1,100 plus counterparts. MABAS agencies agree to: standards of operation, incident command, minimal equipment staffing, fireground safety and on-scene terminology. MABAS partners are able to work together seamlessly on any emergency scene to provide the resources needed to mitigate an incident when the effected agency's assets are overwhelmed. Extra alarm incidents are commanded by the authority having jurisdiction. Dispatch is handled through the community's MABAS division dispatch center. Over 800 MABAS locally controlled extra alarm incidents occur annually throughout Illinois.

Existing Illinois statute regarding a Declaration of Disaster allows the Governor to mobilize state assets under the direction of the Illinois Emergency Management Agency (IEMA). Through a memorandum of understanding between IEMA and MABAS, fire, EMS and special operations resources can be activated as a State of Illinois asset to provide sustained incident operations. Fire, EMS and special operations resources can be mobilized as state assets and afforded liability, reimbursements and worker's compensation coverages.

Elk Grove Village Fire Department Captain Don Kuhn founded the first MABAS agreement, Illinois Division One, in 1968. The Elk Grove Village Fire Department is still a member of MABAS Division One along with 12 other fire departments in the Northwest suburbs of Chicago. Division One covers 543,179 people and responds to over 67,000 calls per year.

Division One members meet bi-monthly to assure continuity of responses, training and policies. Mutually agreed on policies are published to the organization's website for dissemination to the individual departments. Division 1 predetermined response resources are outlined by each member agency and reflected on "Box Cards" used by the emergency dispatch center.

Under the Illinois Mutual Aid Box Alarm System, the Elk Grove Village Fire Department can give and receive mutual aid from any member agency within the State.

Example Box Card

DEPARTMENT NAME: ELK GROVE VILLAGE	BOX ALARM TYPE: STRUCTURE FIRE	EFFECTIVE DATE: JANUARY 2022	MABAS DIVISION: 1
BOX ALARM #: 8	LOCATION OR AREA: District 8 (Beats 0803, 0805)	AUTHORIZED SIGNATURE:	

LOCAL DISPATCH AREA:

ALARM LEVEL	ENGINES	TENDERS	TRUCKS	SQUADS	EMS	CHIEFS	SPECIAL EQUIPMENT	CHANGE OF QUARTERS (STA #)
Code 3	Elk Grove Village Elk Grove Village Mt. Prospect		Elk Grove Village Elk Grove Village		Elk Grove Village Elk Grove Village	Battalion 2		
Code 4	Arlington Heights		Des Plaines		Elk Grove Village	200,201,202,203		Schaumburg Eng & Addison Amb - Sta 7 Hoffman Estates Eng & Rosemont Amb - Sta 8

+ EGVFD 4th Ambulance if staffed/on duty

MABAS BOX ALARM:

ALARM LEVEL	ENGINES	TENDERS	TRUCKS	SQUADS	EMS	CHIEFS	SPECIAL EQUIPMENT	CHANGE OF QUARTERS (STA #)
BOX	Hoffman Estates Schaumburg Rolling Meadows		Itasca Prospect Heights	Palatine	(+Elk Grove Village) Addison Rosemont	Schaumburg Mt. Prospect	Salvation Army Canteen Elk Grove Village Comvan MABAS DIV 1 Air Truck	Wood Dale Eng & Hanover Park Amb - Sta 7 Streamwood Eng - Sta 8
2ND	Streamwood Wood Dale		Wheeling		Hanover Park	Palatine		Palatine Rural Eng & Lake Zurich Amb - Sta 7 Buffalo Grove Eng to Sta 8
3RD	Palatine Rural Buffalo Grove		Arlington Heights	Park Ridge	Lake Zurich	Des Plaines		Roselle Eng & Long Grove Amb - Sta 7 Schiller Park Eng - Sta 8
4TH	Roselle Schiller Park		Bensenville		Long Grove	Rolling Meadows	MABAS DIV 5, AIR 5	Bartlett Amb - Sta 7 Franklin Park Eng - Sta 8
5TH	Franklin Park		Rosemont		Bartlett	Hoffman Estates		Addison Eng & Barrington Countryside Amb - Sta 7 Elmhurst Eng - Sta 8
INTERDIVISIONAL REQUEST		1ST CHOICE 3		2ND CHOICE 20		3RD CHOICE 12		

INFORMATION: *+ EGVFD 4th Ambulance if staffed/on duty*

Station 7: 101 Biesterfield Rd 847-734-8007 Station 8: 700 Fargo Ave 847-734-8008 Station 10: 676 Meacham Rd 847-734-8010

Community Hazard Risk Assessment (2B.1)

The accreditation process brought about the first Community Risk Assessment for the Elk Grove Village Fire Department which identifies, assesses and classifies all hazards within the response area with consideration given to area development, population demographics, critical infrastructure and historical fire department response demands. The continued assessment will serve as policy for the continued strategy to reduce and mitigate the community's risk and demand for emergency services.

The fire department identifies potential hazards in each of the four planning zones. These hazards include fires, medical emergencies, hazardous materials releases, water rescues, technical rescues, and others.

Risk Classification

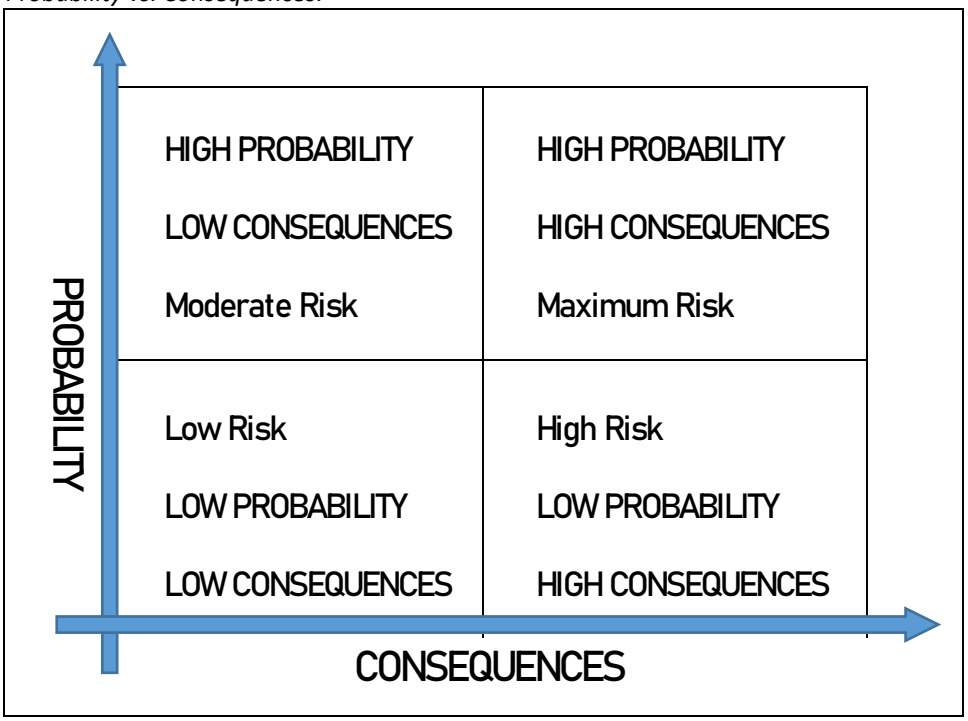
Assessment of risk hazards considers the incident type, probability, consequence and impact of an event:

- Probability, (the likelihood of an event), is based on historical data as well as population demographics and area/building characteristics.
- Consequences, (the results of a loss), include the personal and financial effect an event has on those directly involved in the incident as well as the community as a whole.
- Impact of the event refers to the use of Elk Grove Village Fire Department resources and the ability to continue services to our jurisdiction during an incident.

Categorization of these risks considers the probability of an event occurring, ranging from low to maximum, as well as scaling the consequence or impact, also ranging from low to maximum. The Elk Grove Village Fire Department classifies risk into four categories:

- Maximum Risk = high probability, high consequence
- High Risk = low probability, high consequence
- Moderate Risk = high probability, low consequence
- Low Risk = low probability, low consequence

Probability vs. Consequences.



Risk Classification of Structures

Half of Elk Grove Village's land mass, 5.6 square miles, is occupied by an industrial/commercial business park containing over 3,500 commercial buildings. This area development has led the fire department to assess occupancies using a quantitative scale for fire-based risk that considers:

- Building square foot area
- Needed fire flow
- Presence of fire protection or monitoring systems (2B.5)
- Occupancy usage
- Presence/type/quantity of hazardous materials.

Each variable is scaled with a number from 2-10 (2 being low risk). Only even numbers were used to keep from compressing the ranges and zero was not used because of the potential to use a risk modeling software in the future that involves multiplication.

Variable explanations:

Building square foot area - This data is from internal pre-plan information as well as community development permitting applications. The following scale was created by the

Fire Marshall with consideration of historic responses, the volume of industrial buildings in Elk Grove Village and NFPA 101(Egress):

0-10,000 = 2
10,001-50,000 = 4
50,001-100,000 = 6
100,001-250,000 = 8
250,001+ = 10

Needed Fire Flow (NFF) - This information is from the Insurance Safety Organization (ISO) that maintains these records on each structure that has insurance. For any addresses not included in the ISO database, we calculated the NFF using the Iowa method.

0-1,499 gpm = 2
1,500-3,999 gpm = 4
4,000-7,999 gpm = 6
8,000-9,999 gpm = 8
10,000+ gpm = 10

Presence of fire protection or monitoring (2B.5) - This data is from Elk Grove Village building and fire inspections records reflecting if an address has either a full fire protection sprinkler system, partial sprinkler, or fire alarm systems. Reference NFPA 13, NFPA 72 and Village of Elk Grove Ordinance No. 3479.

Full Sprinkler = 2
Partial Sprinkler = 4
Alarm Only = 4
No Alarm = 6

Per ordinance, all non-residential buildings with partial or full sprinkler must also be monitored. All new construction must be sprinklered (including residential).

Occupancy Usage—Categories of occupancy usage are consistent with those used by the National Fire Incident Reporting System and NFPA 901. Each classification is assigned a rating based on potential risk:

100 Assembly = 6
200 Education = 6
300 Health Care, Detention, Correction = 6
400 Residential = 4
500 Mercantile, Business = 4
600 Industrial, Utility, Defense, Agriculture, Mining = 10
700 Manufacturing, Processing = 8
800 Storage = 4
900 Outside, Special Property = 2

Presence of Hazardous Materials—Data set obtained from the Illinois Emergency Management Agency (IEMA) using their mandated self-reporting system. Businesses using any amount of chemical listed on the "extremely hazardous chemical" list must report yearly to the state the name and total number of pounds of chemical on hand.

Using this list, a Hazardous Materials Technician and the Fire Department Safety Officer identify and quantify the risk associated with the number, type and amount of chemical storage at each occupancy on an individual case basis.

Examples (not all inclusive):

Occupancy not listed on IEMA Extremely Hazardous Chemical list = 2
2,000 lbs. of Lead batteries as part of a backup power supply = 4
25,000 total pounds of 4-5 different chemicals = 6
50,000 total pounds of multiple different chemicals = 8
100,000+ total pounds of either a single or multiple chemicals = 10

Each occupancy was assigned a classification of low, moderate, high or maximum risk based on this methodology.

Overall risk rating:

10-19 = Low risk
20-29 = Moderate risk
30-39 = High risk
40+ = Maximum risk

Example of Structure Risk Spreadsheet

Occ ID	Occupancy Name	Address	Planning Zone	Detection Present	Sprinkler Present	Sprinkler Type	Protection Rating	Property Use Rating	Property Use Description	NFF	NFF Rating	Sq. Ft.	Sq. Ft Rating	Haz Mat	Overall Rating
517	DUPONT FABROS-CH1 FACILITY	2200 Busse Rd	9	1	1	2	2	10	635 Computer Ctr	136,080	10	453,600	10	6	38
1096	ARROW PLASTICS	701 E Devon Av	9	1	1	1	2	8	700 Manufacturing	58,700	10	209,620	8	4	32
3279	ADMIRAL BYRD SCHOOL	265 Wellington Av	7	1	2	1	4	6	213 Elementary Scho	3,600	4	30,000	4	2	20
185	BETTY'S BISTRO	1183 Biesterfield Rd	10	N	N	N	6	6	144 Casino, Gambling	1,250	2	1,045	2	2	18
1505	WALGREEN'S	930 Elk Grove Town Ctr	7	1	1	1	2	4	580 General Retail	3,000	4	13,668	4	2	16

In the first quarter of the 2021 calendar year, the Department and Dispatch Center will transition to a new computer aided dispatch (CAD) system. This new CAD will allow the risk classification of structures to be used in determining the appropriate number of resources dispatched. Currently, the CAD cannot differentiate responses based on structure/occupancy risk resulting in the same resources being dispatched to the Walgreens (listed in the example chart above), as the Dupont Facility.

Risk Classification of Events

The classification of risk requires a fire department to develop a definition of risk for different types of known or potential events. The Elk Grove Village Fire Department links its methodology for event risk classification to its procedure for asset distribution identified in SOG 210: Standard Response Codes. Department command staff evaluates and revises these definitions and correlations on a periodic, as needed basis.

Low Risk Events - Situations with a low potential for loss of life, loss of property, and/or limited financial impact to the community. Service requests for incidents of a limited nature constitute a relatively minor emergency and can be handled with a single resource.

Examples:

- Wires down, electrical transformers.
- Fire trouble alarms
- Reset fire alarms
- Lock outs (residential)
- Lock out of vehicle (occupied)
- Broken or leaking water pipes
- Outside odor investigations
- Brush, grass, or prairie fires
- Carbon Monoxide Detector Activation with no reported illness
- Fire in small structures isolated from other buildings (shed or playground equipment)
- Car fire, not on an expressway
- Single patient ambulance responses

Moderate Risk Events - Incident types that constitute emergency situations with limited risk for growth, spread, or loss. Fire Department responses to moderate risk hazards without clarifying information consist of a limited multi-company response of 5-12 personnel (i.e., 1 Engine and 1 Ambulance or 2 Engines, 1 Quint, 1 Ambulance and 1 Shift Commander).

Examples:

- Expressway/Tollway response
- Cardiac arrest ambulance response
- Motor vehicle collisions with report of personal injury
- Accident with Entrapment
- Truck Fire
- Activated Fire Alarm (2C.3)

High Risk Events—Any situation with increased potential for growth, spread or loss to property, life or the environment. High hazard risks require a multi-company response of 12 to 19 personnel (i.e., 3 Engine Companies, 2 Truck/Quint Companies, 2 Ambulances, and 1 Shift Commander).

Examples:

- Unconfirmed report of a structure fire
- Smell of electrical burning
- Inside natural gas leak
- Lightning strike to a structure
- Haz Mat Level 1

- Dumpster or vehicle fire within 5 feet of a building
- Drowning in a small body of water or initial water rescue responses
- Accidents with injuries on the expressway
- Initial alarm for technical rescue with suspected victim

Maximum Risk Events—Situations with the potential to overwhelm the resources of the Elk Grove Village Fire Department, or inflict substantial loss of property, or life or cause major environmental impact. It also includes incident types which by their nature or unique circumstance require a substantial response of personnel, specialized equipment, and/or unique capabilities. Maximum hazard risks require responses of 24 or more personnel (i.e., 4 engine companies, 3 truck companies, 3 ambulances companies, 1 shift commander and 2 chief officers) or MABAS Box Alarm.

Examples:

- Structure fires confirmed by on scene Fire or Police Department personnel
- Special alarm responses requiring the capabilities of a special team or specific rescue abilities
  - Haz Mat team level 2
  - Technical Rescue Team
  - Water Rescue level 2
- Multiple incidents exceeding on-duty capabilities
- EMS events with multiple patients exceeding the capacity of Elk Grove Village Fire Department
- Incidents requiring additional staffing or MABAS alarms

Planning Zones (2A.3)

The Elk Grove Village Fire Department has established four planning zones. The purpose of these planning zones is to provide a more detailed analysis of community characteristics, risks and incident data. The planning zones align with the dispatch districts of 7, 8, 9 and 10. These four districts/planning zones (Table 10) divide the jurisdiction into roughly equal geographical territory and consider call volume, population (urban, 2A.4) and travel time. Occupancy types were also taken into account in establishing the zones. Districts 7 and 10 have predominantly residential risks, while Districts 8 and 9 cover commercial and industrial buildings.

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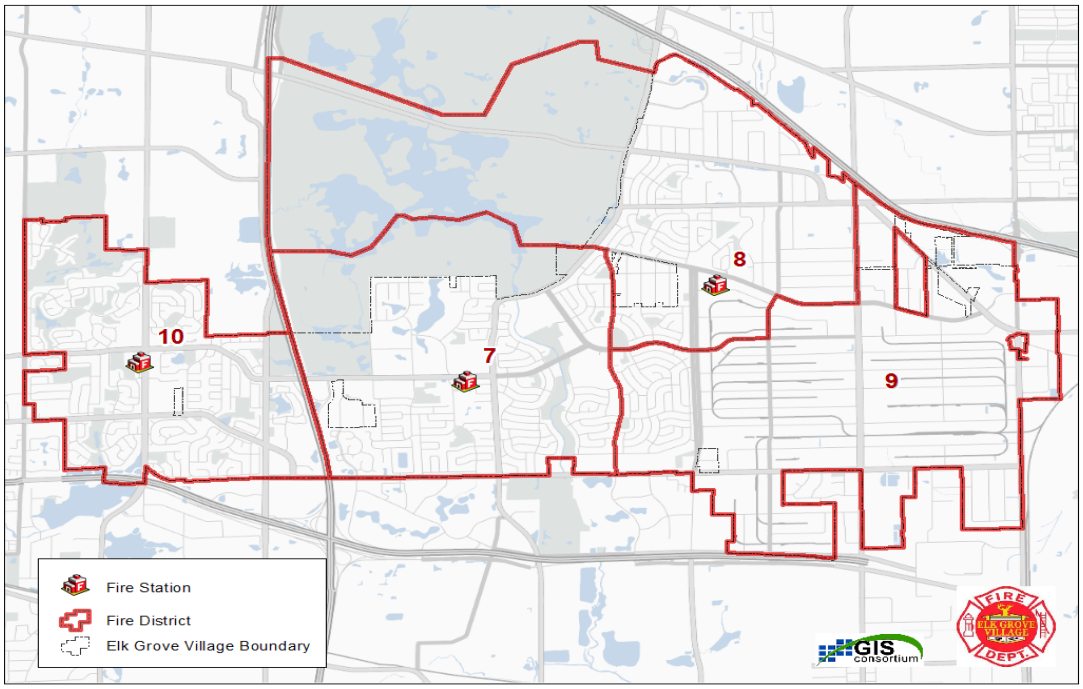
Planning Zone Map – All Stations



Individual Planning Zone Characteristics (2A.6)

To assess risk within each planning zone, the Elk Grove Village Fire Department considered infrastructure, geographic and demographic information as well as building type, business activities, occupancy and historical call data.

The maps of each planning zone identify (2A.9 and 2B.6):

- High Risk Occupancies (or the highest risk classification in that zone)
- Government Infrastructure
- Healthcare Facilities
- Utility Infrastructure

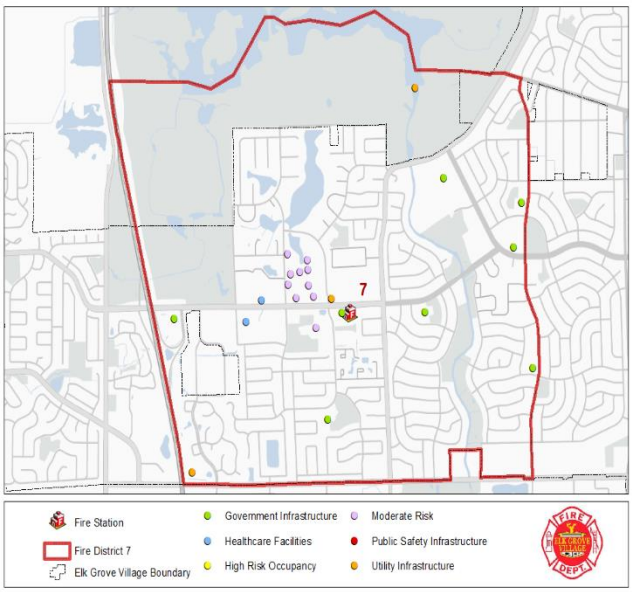
Detailed lists of the identified facilities are found in the appendix.

Also listed under each planning zone is a summary of the station, equipment, specific call volume and station availability for that zone.

- Station information highlights features of the building
- The equipment list outlines the capabilities and staffing of the vehicles
- Station incident type breaks down the number and category types of historical incidents
- Station availability is the percentage of calls in that zone handled by the vehicle with first due responsibilities for the planning zone

District 7 Planning Zone

Planning Zone 7 Map



Station 7

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Fire Station 7 is located at 101 Biesterfield Road and attached to the Municipal Complex. The station recently received a major remodel in 2020 that provided an updated training classroom with virtual classroom abilities, fitness facility, updated bunk rooms, and male and female locker rooms.

Station 7 equipment list:

- Ambulance 7—an ALS transport vehicle staffed with 2 paramedics
- Quint 7—an ALS equipped 107' aerial with a 2,000 gpm pump and 500 gallon tank staffed with 3 personnel
- Squad 7—an ALS mini-pumper with a 1,500 gpm pump staffed with 2-3 personnel (3 on Monday-Thursday between 0800 and 1600, other times it may have 2 members or cross-staffed with Quint 7). The Squad is dispatched primarily as an EMS support vehicle.
- Battalion 2—Shift Commander
- Ambulance 9-an ALS transport vehicle (not staffed)

District 7 is centrally located in the Village of Elk Grove. Fire incidents in this planning zone are likely to be in the low to moderate risk category (commercial stores, single family and alarm monitored multi-family housing). EMS calls, while numerous, are generally low or moderate risk in this zone. The special risk of Amita Health's Alexian Brothers Hospital is located in this district (2B.4).

Station Incident Type 7 (2B.2)

Incident Type (PZ 7)	2017	2018	2019	2020	2021	Total	1 Year Projection	3 Year Projection
Fire (Low Risk)	14	13	16	18	14	75	13	12
Fire (Moderate Risk)	0	0	0	2	2	4	2	3
Fire (High Risk)	22	19	7	4	10	62	8	3
EMS	1,664	1,842	1,847	1,662	1,779	8,794	1,808	1,866
Haz Mat (Low Risk)	6	3	14	10	6	39	5	4
Haz Mat (Mod. Risk)	20	24	18	15	17	94	16	13
Haz Mat (High Risk)	2	1	5	4	2	14	2	1
TRT (Low Risk)	5	7	14	9	9	44	9	10
TRT (Moderate Risk)	1	4	3	3	3	14	4	5
TRT (High Risk)	2	0	0	2	0	4	0	0
Water Rescue	0	0	0	1	0	1	0	0
Non Emergent Other	95	131	124	63	101	514	100	97
Emergent Other	296	265	246	210	217	1,264	211	199
Total	**2,127**	**2,309**	**2,294**	**2,003**	**2,160**	**10,806**	**2,177**	**2,212**

Planning Zone 7 - Station Availability

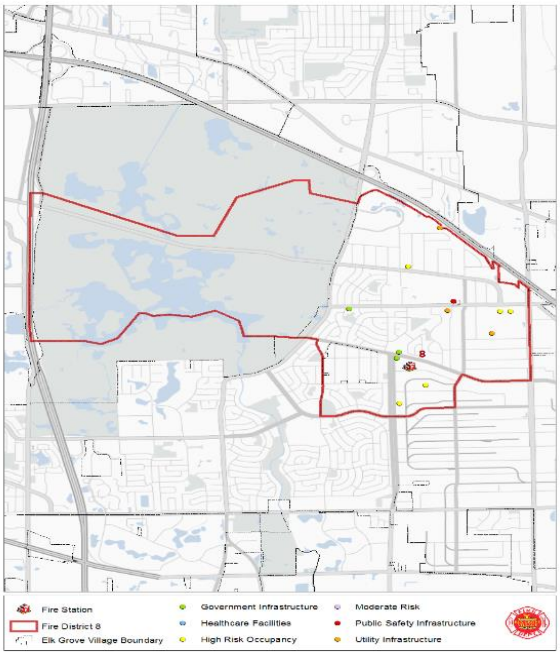
Year	Station Responses	Planning Zone Station 7 Calls	Station Availability
2017	2,052	2,127	96.50%
2018	2,195	2,309	95.10%
2019	2,222	2,294	96.86%
2020	1,928	2,003	96.26%
2021	2,066	2,1160	95.65%
Total	**10,463**	**10,893**	**96.05%**

Planning Zone 7 - Ambulance Availability

Year	Ambulance 7 Responses	Planning Zone Station 7 EMS Calls	Ambulance 7 Availability
2016	1,348	1,634	82.50%
2017	1,329	1,664	79..87%
2018	1,503	1,842	81.60%
2019	1,608	1,847	87.06%
2020	1,402	1,662	84.36%
Total	**7,190**	**8,649**	**83.78%**

District 8 Planning Zone

Planning Zone 8 Map



Fire Station 8

Click on the icon for digital viewing

Fire Station 8 located at 700 Fargo Avenue includes an 11,000 square foot training tower, a classroom/community meeting room, a fire fighter fitness facility and a post-incident decontamination area separated from the living quarters.

Station 8 equipment list:

- Ambulance 8-an ALS transport vehicle staffed with 2 paramedics
- Engine 8-an ALS, 1,500 gpm pumper staffed with 3 personnel
- Quint 8-an ALS equipped 100' aerial platform with a 2,000 gpm pump and 300 gallon tank staffed with 3 personnel
- Dive rescue vehicles/boats (not staffed)
- Hazardous materials response assets (not staffed)
- Reserve Ambulance 8 used as COVID transport for much of 2020 (not staffed)
- Mobile Ventilation Unit 1 (not staffed)
- Reserve Engine 8 (training vehicle)

District 8 covers the northeastern portion of the Village of Elk Grove. Typical fire incidents in this planning zone are in industrial buildings (moderate to high risk), single family and multi-family housing (low to moderate risk). Planning Zone 8 also presents our greatest opportunity for maximum risk water rescues because of the inclusion of the forest preserve lake. Hazardous material risks in this zone tend to be in the high and maximum risk category due to the industrial nature of the district (2B.4). A portion of both the petroleum and natural gas pipelines run through this district. A map of the pipelines can be found in the appendix.

Planning Zone 8 - Station Incident Type (2B.2)

Incident Type (PZ 8)	2017	2018	2019	2020	2021	TOTAL	1 Year Projection	3 Year Projection
Fire (Low Risk)	8	11	6	11	11	47	11	11
Fire (Moderate Risk)	1	0	2	0	6	9	7	9
Fire (High Risk)	13	13	8	5	8	47	7	4
EMS	834	799	743	649	769	3,794	770	771
Haz Mat (Low Risk)	3	4	0	1	1	9	0	0
Haz Mat (Moderate Risk)	5	12	6	2	9	34	9	10
Haz Mat (High Risk)	6	6	3	1	7	23	7	8
TRT (Low Risk)	2	2	5	0	2	11	2	1
TRT (Moderate Risk)	1	3	6	4	3	17	2	1
TRT (High Risk)	1	0	0	0	0	1	0	0
Water Rescue	5	0	3	3	2	13	2	3
Non Emergent Other	70	67	88	59	71	366	69	64
Emergent Other	337	211	187	171	258	1,164	244	217
Total	**1,286**	**1,128**	**1,057**	**906**	**1,147**	**5,524**	**1,131**	**1,098**

Planning Zone 8 - Availability

Year	Station Responses	Planning Zone Station 8 Calls	Station Availability
2017	1,188	1286	92.40%
2018	1,009	1128	89.50%
2019	1,022	1057	96.69%
2020	885	906	97.68%
2021	1,131	1,147	98.61%
Total	**5,235**	**5,524**	**94.77%**

Planning Zone 8 - Ambulance Availability

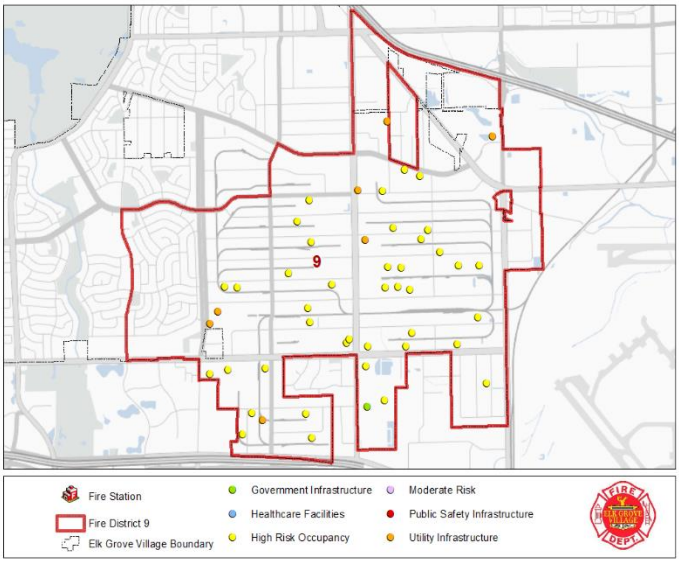
Year	Ambulance 8 Responses	Planning Zone Station 8 EMS Calls	Ambulance 8 Availability
2017	662	834	79.38%
2018	649	799	81.23%
2019	642	743	86.41%
2020	573	649	88.29%
2021	667	769	86.74%
Total	**2,526**	**3,025**	**83.50%**

District 9 Planning Zone

District 9 covers the southeastern portion of the Village of Elk Grove and a majority of our 6 square mile business park. This planning zone is home to most of Elk Grove Village's high risk fire buildings. These same occupancy types increase the likelihood of hazardous materials incidents falling in the high to maximum risk category (2B.4). The special hazard of Kinder Morgan Petroleum Tank Farm as well as petroleum and natural gas pipelines are also located in this district. A map of the pipelines can be found in the appendix.

EMS calls in this district are covered by Ambulance 8 in the northern portion and Ambulance 7 in the southern portion.

Table 17. Planning Zone 9 Map



Planning Zone 9 – Station Incident Types (2B.2)

Incident Type (PZ 9)	2017	2018	2019	2020	2021	Total	1 Year Projection	3 Year Projection
Fire (Low Risk)	10	6	13	9	19	57	20	23
Fire (Moderate Risk)	2	1	3	3	4	13	4	3
Fire (High Risk)	24	26	9	12	12	83	9	7
EMS	574	607	558	529	604	2,872	613	631
Haz Mat (Low Risk)	3	2	6	4	6	21	6	7
Haz Mat (Moderate Risk)	8	11	7	8	7	41	5	2
Haz Mat (High Risk)	12	9	11	9	6	47	6	5
TRT (Low Risk)	1	3	1	3	4	12	3	2
TRT (Moderate Risk)	5	6	11	3	2	27	1	0
TRT (High Risk)	0	0	0	0	0	0	0	0
Water Rescue	0	0	0	1	0	1	0	0
Non Emergent Other	74	100	114	94	87	469	89	92
Emergent Other	414	405	360	295	320	1,794	295	246
Total	**1,127**	**1,176**	**1,093**	**970**	**1,071**	**5,437**	**1,048**	**1,003**

Planning Zone 9 Station Availability

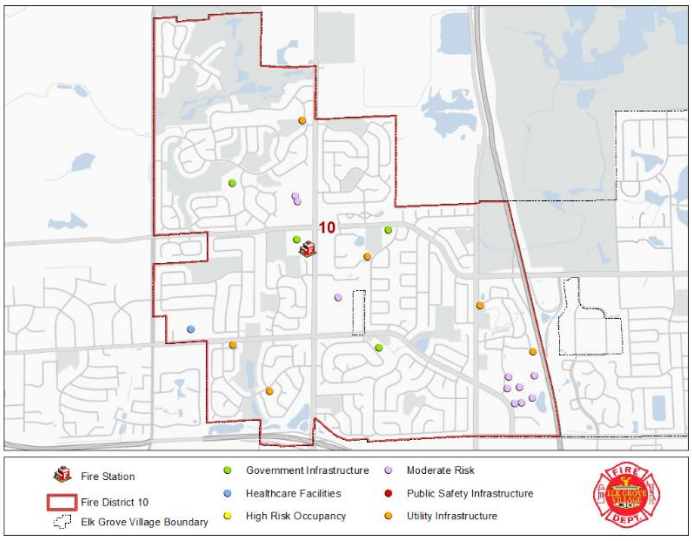
Year	Station Responses	Planning Zone Station 9 Calls	Station Availability
2017	930	1,127	82.50%
2018	915	1,176	77.80%
2019	1,041	1,093	95.24%
2020	944	970	97.32%
2021	1,048	1,071	97.85%
Total	**4,878**	**5,437**	**89.72%**

Planning Zone 9 - Ambulance Utilization

Year	Ambulance 7 Responses	Ambulance 8 Responses	Ambulance 9 Responses	Ambulance 10 Responses	Planning Zone Station 9 EMS
2017	158	342	52	32	574
2018	192	362	55	39	607
2019	75	361	131	21	558
2020	51	444	27	8	529
2021	69	488	54	22	186
Total	**353**	**1,635**	**319**	**122**	**2,454**

District 10 Planning Zone

Planning Zone 10 Map



Fire Station 10

Click on the icon for digital viewing

Fire Station 10 is located at 676 Meacham. Constructed in 2019 to replace the former Station 10 at the same location, this station is a four bay 15,281 square foot building. Station 10 has a classroom/community meeting room, a fire fighter fitness facility, and a post-incident decontamination area separated from the living quarters.

District 10 covers the western portion of the Village of Elk Grove. The typical fire risks in this planning zone are single family and alarm monitored multi-family residences. EMS and hazardous material events are likely to be low or moderate risk (2B.4).

Station 10 equipment list:

- Engine 10 - An ALS Engine with a 1,500 gpm pump and 750 gallon tank staffed with 3 personnel
- Ambulance 10 - An ALS transport vehicle staffed with two paramedics
- Reserve Engine 10 (not staffed)
- Reserve Ambulance 10 (not staffed)
- Mobile Communications and Command vehicle (not staffed)
- Technical Rescue Response Trailer (not staffed)

Planning Zone 10 – Station Incident Types (2B.2)

Incident Type (PZ 10)	2017	2018	2019	2020	2021	Total	1 Year Projection	3 Year Projection
Fire (Low Risk)	14	4	9	6	13	46	15	18
Fire (Moderate Risk)	1	1	0	0	0	2	0	0
Fire (High Risk)	15	14	14	11	13	67	13	12
EMS	928	980	941	896	1,005	4,750	1,022	1,055
Haz Mat (Low Risk)	9	8	8	9	5	39	5	4
Haz Mat (Moderate Risk)	10	3	14	12	11	50	13	16
Haz Mat (High Risk)	2	2	1	2	1	8	0	0
TRT (Low Risk)	5	8	12	18	14	57	16	21
TRT (Moderate Risk)	2	1	1	0	2	6	2	3
TRT (High Risk)	0	0	0	0	0	0	0	0
Water Rescue	0	0	0	0	1	1	1	2
Non Emergent Other	66	69	64	48	47	294	43	34
Emergent Other	215	197	181	143	174	919	164	144
Total	**1,267**	**1,287**	**1,245**	**1,154**	**1,286**	**6,239**	**1,293**	**1,308**

Planning Zone 10 - Station Availability

Year	Station Responses	Planning Zone Station 10 Calls	Station Availability
2017	1,186	1,267	93.60%
2018	1,191	1,287	92.50%
2019	1,171	1,245	94.06%
2020	1,108	1,154	96.01%
2021	1,223	1,286	95.10%
Total	**5,879**	**6,239**	**94.23%**

Planning Zone 10 - Ambulance Availability

Year	Ambulance 10 Responses	Planning Zone Station 10 EMS	Ambulance 10 Availability
2017	787	928	84.81%
2018	827	980	84.33%
2019	845	941	89.80%
2020	828	896	92.41%
2021	899	1,005	89.45%
Total	**4,186**	**4,750**	**88.13%**

Historical Service Demands (2B.2)

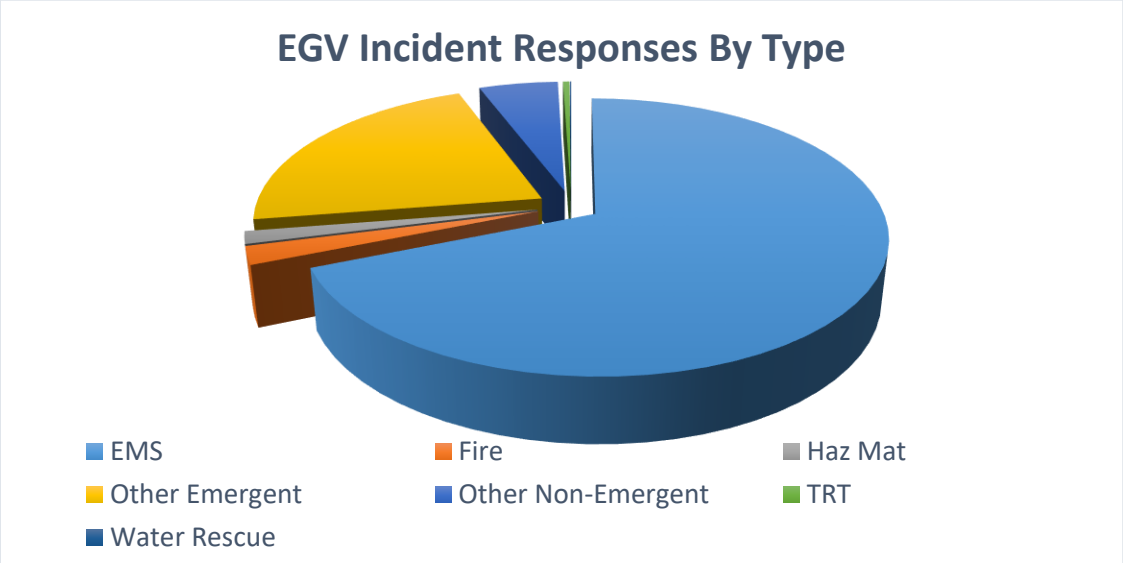
Capturing information on frequency, type and timing of incidents aids in identifying: risks, service demands and outside influences in the planning zones and area wide. Analyzing historical incident data allows the Elk Grove Village Fire Department to calculate future incident probability, and thereby project future service demands.

The following table shows the frequency of each risk type, area wide including out of town calls for the Elk Grove Village Fire Department. EMS calls are the Department's most frequent type of incident risk.

Incident Responses by Risk Category (including Mutual/auto aid)

Risk Type	2017	2018	2019	2020	2021	1 Year Projection	3 Year Projection
EMS	4,000	4,258	4,158	3,809	4,157	4,227	4,366
Fire	124	125	114	102	112	103	85
Haz Mat	86	88	99	84	78	74	65
Other Emergent	1,262	1,148	1,088	1,026	969	901	765
Other Non-Emergent	305	379	406	274	306	299	284
TRT	25	34	54	43	39	41	44
Water Rescue	5	3	3	6	3	3	3
Grand Total	**5,807**	**6,035**	**5,922**	**5,344**	**5,664**	**5,646**	**5,291**

Incident Responses by Category 2017-2021



The following table shows the number of incidents that occur in each planning zone by time of day. Elk Grove Village Fire Department has fewer calls during the overnight hours with the busiest time of day occurring between 9 am and 5 pm.

Incidents by Station and Hours of Day

Incidents by Hour of Day and Planning Zone 2017-2021						
Hour of Day	**7**	**8**	**9**	**10**	**Aid Given**	**Total**
0	254	125	149	172	23	723
1	227	109	127	141	26	630
2	221	104	121	138	18	602
3	205	98	108	133	17	561
4	194	101	115	110	15	535
5	207	106	128	149	28	618
6	259	142	179	146	25	751
7	396	193	261	224	36	1,110
8	498	288	316	292	69	1,463
9	589	307	334	292	102	1,624
10	625	283	346	377	93	1,724
11	602	357	372	327	96	1,754
12	625	322	319	326	89	1,681
13	568	312	346	335	82	1,643
14	645	284	342	344	78	1,693
15	691	325	273	360	99	1,748
16	575	319	272	334	78	1,578
17	620	290	225	365	66	1,566
18	632	269	208	319	55	1,483
19	525	246	176	308	61	1,316
20	522	211	170	263	58	1,224
21	435	208	182	274	49	1,148
22	392	165	144	212	45	958
23	291	167	134	200	36	828
Grand Total	**10,798**	**5,331**	**5,347**	**6,141**	**1,344**	**28,961**

The following table shows incident occurrences by time of day. The most frequent time of day for each risk type is:

- EMS - 3 pm
- Fire - 3 pm
- Hazardous Material – 9 am

The data sample sizes for technical rescue and water incident types are too small to be a reliable predictor; however, Elk Grove Village Fire Department does continue to monitor all incident types by time of day for trends.

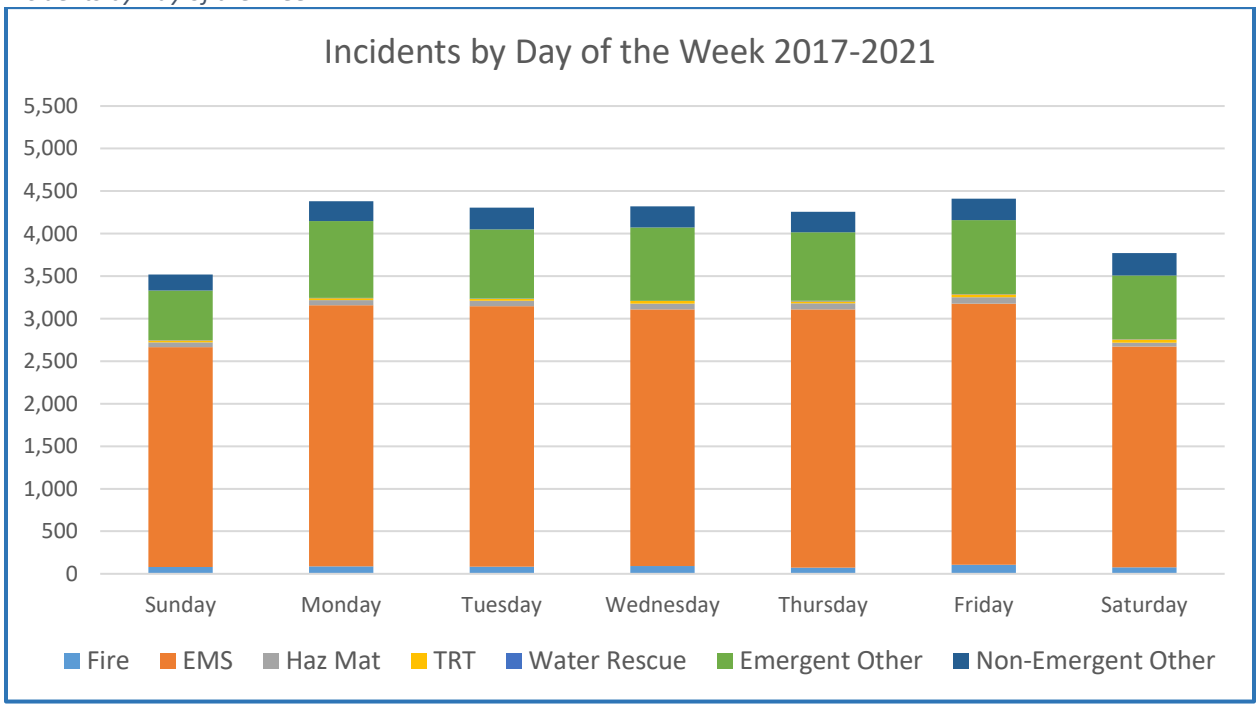
Incident Count by Hour of Day and Risk

Hour of Day	EMS	Fire	Haz Mat	TRT	Water	Emergent Other Service	Non Emergent Other	Total
0	530	15	7	2	0	132	37	723
1	471	16	7	0	1	103	32	630
2	450	10	2	1	0	111	28	602
3	425	7	3	1	0	94	31	561
4	395	12	7	0	0	92	29	535
5	449	9	7	1	0	113	39	618
6	510	14	14	3	0	170	40	751
7	738	14	20	9	1	261	67	1,110
8	1,006	20	22	8	4	324	79	1,463
9	1,113	18	34	18	1	371	69	1,624
10	1,207	28	21	15	0	385	68	1,724
11	1,215	26	27	15	2	369	100	1,754
12	1,208	22	25	14	2	331	79	1,681
13	1,157	43	25	14	0	332	72	1,643
14	1,173	50	24	14	0	322	110	1,693
15	1,237	52	22	16	2	294	125	1,748
16	1,070	46	31	16	0	277	138	1,578
17	1,090	34	31	13	1	287	110	1,566
18	1,057	40	22	8	3	251	102	1,483
19	944	39	20	5	1	234	73	1,316
20	894	25	20	3	1	234	73	1,224
21	794	21	25	7	0	218	83	1,148
22	701	18	12	6	1	167	53	958
23	607	21	9	7	1	139	44	828
Grand Total	**20,441**	**600**	**437**	**196**	**21**	**5,589**	**1,677**	**28,961**

Calls by Day of the Week & Risk

2017 – 2021	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Total
Fire	80	87	84	91	74	108	76	600
EMS	2,586	3,072	3,064	3,019	3,034	3,070	2,596	20,441
Haz Mat	57	58	64	66	73	74	45	437
TRT	20	23	22	34	24	35	38	196
Water Rescue	4	3	2	1	5	2	4	21
Emergent Other	585	905	813	863	807	869	748	5,590
Non-Emergent Other	168	233	256	245	240	252	264	1,676
Grand Total	**3,518**	**4,381**	**4,305**	**4,319**	**4,257**	**4,410**	**3,771**	**28,961**

Incidents by Day of the Week



Fire Risk Incidents

Elk Grove Village Fire Department responds to all fires within the jurisdiction. For the purposes of the Community Risk Assessment and Standards of Cover, only the types of fire listed below are included as "Fire Risk." Other National Fire Incident Reporting System code types for fire are included in "Emergent Other Services".

The following table outlines the quantity and National Fire Incident Reporting System code types for each of the past 5 years:

Quantity & National Fire Incident Recording System Type Code (includes Auto/Mutual Aid)

Fire Incident Type	2017	2018	2019	2020	2021	Total
Low Risk Fires						
118 Trash or rubbish fire, contained	1	2	3	0	2	8
130 Mobile property (vehicle) fire-other	0	0	4	0	1	5
131 Passenger vehicle fire	6	14	14	13	15	62
140 Natural vegetation fire, Other	3	5	10	2	4	24
142 Brush or brush-and-grass mixture fire	22	6	2	6	1	37
143 Grass fire	0	1	0	1	0	2
1431 Mulch Fire	0	0	0	11	23	34
150 Outside rubbish fire, Other	3	1	2	4	3	13
151 Outside rubbish, trash or waste fire	5	3	0	1	3	12
154 Dumpster/other outside trash receptacle	6	2	8	6	3	25
160 Special outside fire-other	0	0	1	0	2	3
1641 Fence	0	0	0	0	0	0
Low Risk Fires Total	**46**	**34**	**44**	**44**	**57**	**225**
Moderate Risk Fire						
132 Road freight or transport vehicle fire	1	1	2	3	8	15
133 Rail vehicle fire	0	0	1	0	0	1
138 Off-road vehicle or heavy equipment fire	0	0	0	0	2	2
161 Outside storage fire	0	1	0	1	0	2
162 Outside equipment fire	3	2	3	1	2	11
Moderate Risk Fire Total	**4**	**4**	**6**	**5**	**12**	**31**

Cont. Quantity & National Fire Incident Recording System Type Code (includes Auto/Mutual Aid)

Fire Incident Type	2017	2018	2019	2020	2021	Total
High and Maximum Risk Fires						
111 Building Fire	26	40	14	9	14	103
1111 Building fire-Vacant	1	1	0	0	0	2
1112 Vehicle fire in building	0	0	1	0	0	1
1113 Machine fire in building	13	8	2	0	0	23
1114 Building fire – Out of town	1	0	16	19	0	36
112 Fires in structure other than in a building	1	0	2	2	0	5
113 Cooking fire, confined to container	12	13	5	12	13	55
114 Chimney/flue fire, confined to chimney or flue	1	0	4	2	1	8
115 Incinerator overload or malfunction, fire confined	0	0	1	0	0	1
116 Fuel burner/boiler malfunction, fire confined	0	2	1	0	0	3
117 Commercial Compactor fire, confined to rubbish	0	3	0	1	2	6
120 Fire in mobile prop used as a fixed structure, Other	1	1	0	0	0	2
121 Fire in mobile home used as fixed residence	0	2	0	0	0	2
123 Fire in portable building, fixed location	0	0	0	0	0	0
141 Forest, woods or wildland fire	4	1	0	0	1	6
173 Cultivated trees or nursery stock fire	0	0	0	0	0	0
200 Overpressure rupture, explosion, overheat other	3	1	1	0	0	5
240 Explosion (no fire), Other	0	0	0	1	0	1
244 Dust explosion (no fire)	0	0	0	0	0	0
251 Excessive heat, scorch burns with no ignition	10	13	11	6	8	48
742 Extinguishing system activation	1	2	6	1	4	14
High and Maximum Risk Fires Total	**74**	**87**	**64**	**53**	**43**	**321**
Total	**124**	**125**	**114**	**102**	**112**	**577**

Emergency Medical Responses

Elk Grove Village Fire Department is an Advanced Life Support transport agency under the direction of Dr. Matt Jordan of the Northwest Community Hospital EMS System. The chart below represents the types of medical risks Elk Grove Village Fire Department responded to from 2017-2021: (new response codes were added in 2020)

Emergency Medical Responses (includes Auto/Mutual Aid)

EMS Incident Type	2017	2018	2019	2020	2021	Total
3001 Medical Alert-False Activation	N/A	N/A	N/A	29	44	73
3002 Check on Well Being – No patient	N/A	N/A	N/A	3	12	15
3003 EMS Call, No patient contact	N/A	N/A	N/A	18	30	48
311 Medical assist, assist EMS crew	10	8	16	6	7	47
3111 Medical assist, investigate only – no treatment	25	45	50	0	0	120
320 Emergency medical service, other	14	9	17	10	12	62
321 EMS call, excluding vehicle accident with injury	3,559	3,786	3,698	3,403	3,617	18,063
322 Motor vehicle accident with injuries	263	241	228	168	197	1,097
3222 Accident involving bicycle	N/A	N/A	N/A	5	13	18
3223 Accident involving motorcycle	N/A	N/A	N/A	3	4	7
323 Motor vehicle/pedestrian accident (MV Ped)	13	15	14	7	8	57
324 Motor Vehicle Accident with no injuries	46	43	33	23	21	166
371 Electrocution or potential electrocution	0	0	0	1	0	1
381 Rescue or EMS standby	4	2	2	0	1	9
554 Assist invalid	65	108	100	133	189	595
661 EMS call, party transported by non-fire agency	1	1	0	0	2	4
Total	**4,000**	**4,258**	**4,158**	**3,809**	**4,157**	**20,382**

Hazardous Material Responses

Elk Grove Village is home to one of the largest industrial parks in the country. Our 3,500+ businesses engage in a wide variety of processes. To protect against the potential life, property and environmental losses associated with hazardous materials, the Department has a properly trained Hazardous Materials Team. The chart below represents the types of hazardous material risks Elk Grove Village Fire Department responded to from 2017-2021:

Hazardous Material Responses (includes Auto/Mutual Aid)

Haz Mat Incident Type	2017	2018	2019	2020	2021	Total
Low Risk Haz Mat						
424 Carbon monoxide incident	**21**	**17**	**29**	**27**	**18**	**112**
Moderate Risk Haz Mat						
412 Gas leak (natural gas or LPG)	**43**	**51**	**47**	**39**	**44**	**224**
High and Maximum Risk Haz Mats						
220 Overpressure rupture from air or gas, Other	0	0	0	0	0	0
221 Overpressure rupture-air/gas pipe/pipeline	0	0	2	0	0	2
231 Chemical reaction-rupture of process vehicle	0	0	1	0	0	1
410 Combustible/flammable gas/liquid, other	1	0	2	1	1	5
411 Gasoline or other flammable liquid spill	4	8	6	8	6	32
413 Oil or other combustible liquid spill	3	5	2	3	2	15
420 Toxic condition, Other	3	1	0	2	2	8
421 Chemical hazard (no spill or leak)	2	1	2	2	2	9
422 Chemical spill or leak	6	3	4	1	1	15
423 Refrigeration leak	1	0	1	0	0	2
451 Biological hazard, confirmed or suspected	0	0	1	1	0	2
671 HazMat release investigation w/no HazMat	2	2	2	0	2	8
High and Maximum Risk Haz Mats Total	**22**	**20**	**23**	**18**	**16**	**99**
Total	**86**	**88**	**99**	**84**	**78**	**435**

Technical Rescue Responses

In late 2018 it was discovered that Elk Grove Village Fire Department had been using the incorrect NFIRS code for motor vehicle extrications for several years (including them in the EMS numbers). Training has taken place to correct this error going forward.

TRT Responses (includes Auto/Mutual Aid)

TRT Incident Type	2017	2018	2019	2020	2021	Total
Low Risk TRT						
353 Removal of victim(s) from stalled elevator	13	20	32	30	29	124
Moderate Risk TRT						
3221 Motor vehicle accident with extrication	0	5	9	3	6	23
350 Extrication, rescue, Other	1	0	5	0	2	8
352 Extrication of victim(s) from vehicle	1	0	1	0	0	2
461 Building or structure weakened or collapsed	7	9	7	7	2	32
Moderate Risk TRT Total	9	14	22	10	10	65
High and Maximum Risk TRT						
343 Search for person underground	1	0	0	0	0	1
354 Trench/below-grade rescue	1	0	0	1	0	2
355 Confined space rescue	1	0	0	0	0	1
356 High angle rescue	0	0	0	2	0	2
High and Maximum Risk TRT Total	3	0	0	3	0	6
Total	**25**	**34**	**54**	**43**	**39**	**195**

Water Rescue Responses

The Elk Grove Village Fire Department has a Water Rescue Team trained in surface/below surface rescues, swift water rescues, and sonar victim location. This team is responsible for water rescues throughout our MABAS/mutual aid area. The chart below depicts only water rescues in our jurisdiction:

Water Rescue Responses (includes Auto/Mutual Aid)

Water Incident Type	2017	2018	2019	2020	2021	Total
342 Search for person in water	0	0	1	0	0	1
360 Water & ice-related rescue, other	1	1	1	3	3	9
361 Swimming/recreational water areas rescue	2	2	1	1	0	6
363 Swift water rescue	0	0	0	1	0	1
365 Watercraft rescue	2	0	0	1	0	3
All Water Total	**5**	**3**	**3**	**6**	**3**	**20**

Emergent Other Services Responses

The Elk Grove Village Fire Department will respond to any call for assistance within the community. Some incidents are emergent but do not fit into the previous risk categories. The chart below outlines the types of "*Emergent Other Services*" risks the Elk Grove Village Fire Department responds to:

Emergent Other Service Responses

Emergent Other Services Incident Type		2017	2018	2019	2020	2021	Total
210	Overpressure rupture from steam, other	0	0	0	0	1	1
213	Steam rupture of pressure or process vehicle	0	0	0	0	1	1
331	Lock-in (if lock out , use 511)	5	5	4	5	6	25
340	Search for lost person, other	0	0	0	0	0	0
3701	Electrical wires down	0	0	0	0	0	0
440	Electrical wiring/equipment problem, Other	10	13	20	7	17	67
441	Heat from short circuit (wiring)	2	4	2	2	2	12
442	Overheated motor	12	8	5	10	4	39
443	Breakdown of light ballast	3	1	0	0	0	4
444	Power line down	11	19	9	4	12	55
445	Arcing, shorted electrical equipment	6	10	8	7	10	41
460	Accident, potential accident, Other	2	3	0	0	1	6
471	Explosive, bomb removal	0	0	0	0	0	0
500	Service Call, other	1	0	0	0	0	1
510	Person in distress, Other	16	9	6	4	9	44
520	Water problem, Other	9	10	9	11	8	47
522	Water or steam leak	12	16	19	6	5	58
531	Smoke or odor removal	10	6	10	6	4	36
5312	Odor Investigation	56	53	45	47	52	253
5511	TSA alarm	0	2	5	0	0	7
600	Good intent call, Other	1	1	13	15	7	37
6001	Good intent call, No patient contact	N/A	N/A	N/A	5	8	13
6002	Wires down, not power lines	N/A	N/A	N/A	12	6	18
611	Dispatched & cancelled en route	107	88	101	196	33	525
6112	Dispatched & returned by another agency	193	88	57	42	18	398
6119	Errant dispatch – dispatcher error	N/A	N/A	N/A	11	17	28
621	Wrong location	1	1	0	0	2	4
622	No Incident found at dispatch address	90	81	22	29	25	247
631	Authorized controlled burning	8	7	5	2	5	27
6311	Allowable use of outdoor fireplace	3	2	3	1	2	11
632	Prescribed fire	2	0	0	0	1	3
641	Vicinity alarm (incident in other location)	0	1	0	0	0	1

Emergent Other Services Incident Type (continued)		2017	2018	2019	2020	2021	Total
650	Steam, Other gas mistaken for smoke, Other	2	4	3	4	2	15
651	Smoke scare, odor of smoke	15	11	27	16	22	91
652	Steam, vapor, fog or dust thought to be smoke	4	6	0	3	0	13
653	Smoke from barbecue, tar kettle	0	0	2	0	0	2
7001	Open 911-line, ambulance response	N/A	N/A	N/A	1	2	3
710	Malicious/mischievous call-other	0	0	6	4	2	12
711	Municipal alarm system, malicious false alarm	2	6	3	1	3	15
712	Direct tie to FD, malicious false alarm	0	0	2	0	0	2
713	Telephone, malicious false alarm	0	0	2	0	0	2
714	Central station, malicious false alarm	5	2	0	1	0	8
715	Local alarm system, malicious false alarm	5	3	3	1	2	14
721	Bomb scare - no bomb	2	7	28	0	0	37
730	System malfunction, Other	72	94	0	33	22	221
731	Sprinkler activation due to malfunction	9	8	5	4	6	32
7311	Dry valve tripped – No fire	N/A	N/A	N/A	2	8	10
732	Extinguishing system activation (malfunction)	4	3	2	4	6	19
733	Smoke detector activation (malfunction)	41	45	40	48	67	241
7331	Smoke alarm – low batter, end of life	N/A	N/A	N/A	0	4	4
734	Heat detector activation due to malfunction	7	7	3	2	4	21
735	Alarm system sounded due to malfunction	61	43	70	70	102	346
736	CO detector activation due to malfunction	11	13	15	9	4	52
740	Unintentional transmission of alarm, Other	64	48	40	22	18	192
741	Sprinkler activation, no fire - unintentional	10	14	14	7	14	59
7411	Broken sprinkler pipe	28	41	38	3	6	116
7412	Broker sprinkler due to being struck	N/A	N/A	N/A	10	11	21
7413	Broken sprinkler due to freezing	N/A	N/A	N/A	2	16	18
743	Smoke detector activation, unintentional	126	138	122	126	117	629
744	Detector activation, unintentional	38	25	46	30	52	191
745	Alarm system activation, unintentional	178	188	243	170	209	988
746	Carbon monoxide detector activation, no CO	18	14	31	31	15	109
751	Biological hazard, malicious false report	0	0	0	0	1	1
Emergent Other Services Total		**1,262**	**1,148**	**1,088**	**1,026**	**969**	**5,493**

Non-Emergent Other Services Responses

The Elk Grove Village Fire Department will respond to any call for assistance within the community. Some incidents are non-emergent calls for service. The chart below outlines the types of "*Non-Emergent Other Services"* risks the Elk Grove Village Fire Department responds to:

Non-Emergent Other Services Responses

Non-Emergent Other Services Incident Type		2017	2018	2019	2020	2021	Total
4441	Power outage	5	5	0	0	0	10
463	Vehicle accident, general cleanup	1	0	1	1	0	3
511	Lock-out	150	167	178	105	139	739
512	Ring or jewelry removal	0	1	3	0	0	4
540	Animal problem, Other	1	0	1	0	0	2
541	Animal problem	0	1	0	0	0	1
542	Animal rescue	2	3	3	1	1	10
550	Public service assistance – Other	N/A	N/A	N/A	9	10	19
551	Assist police or other governmental agency	8	14	12	7	2	43
552	Police matter	17	18	31	25	47	138
553	Public service	19	24	29	13	8	93
5531	Special event standby	N/A	N/A	N/A	2	18	20
5533	EGVFD event standby	0	6	0	0	0	6
5539	Smoke Detector install	0	43	43	14	0	100
555	Defective elevator, no occupants	10	6	2	9	7	34
5551	Elevator, open line – no occupants	N/A	N/A	N/A	3	3	6
561	Unauthorized burning	2	2	0	1	0	5
5611	Improper use of outdoor fireplace	1	1	1	0	0	3
571	Cover assignment, standby, move up	38	34	18	4	0	94
7301	Trouble alarm	46	54	83	35	35	253
7302	Trouble alarm, reset	N/A	N/A	N/A	11	6	17
7303	Supervisory (tamper, low temp/pressure)	N/A	N/A	N/A	2	2	4
7304	Trouble alarm, due to power outage	N/A	N/A	N/A	3	4	7
7305	Trouble alarm, unknown reason	N/A	N/A	N/A	11	4	15
7307	Trouble alarm, radio transmitter problem	N/A	N/A	N/A	1	0	1
7308	Trouble alarm, loss of signal/comm failure	N/A	N/A	N/A	12	8	20
7361	CO detector / low battery / end of life	N/A	N/A	N/A	3	9	12
812	Flood assessment	0	0	0	0	0	0
813	Wind storm, tornado/hurricane assessment	4	0	0	0	1	5
814	Lightning strike (no fire)	0	0	1	0	0	1
900	Special type of incident, other	0	0	0	0	2	2
9001	Training	1	0	0	1	0	2
911	Citizen complaint	N/A	N/A	N/A	1	0	1
Non-Emergent Other Services Total		**305**	**379**	**406**	**274**	**306**	

Fire Loss and Fire Save Information (2A.5)

Fire loss and fire save listed below is for only those NFIRS codes included in the fire risk incidents outlined in table 32:

Fire Loss 2017

Fire Loss 2017	Property Loss	Content Loss	Total Loss
Residential Loss Planning Zone 7	$6,000	$900	$6,900
Residential Loss Planning Zone 8	$0	$1,100	$1,100
Residential Loss Planning Zone 9	$30,000	$500	$30,500
Residential Loss Planning Zone 10	$120,400	$41,500	$161,900
Total Residential Loss Department Wide	**$156,400**	**$44,000**	**$200,400**
Non-residential Loss Planning Zone 7	$10,000	$0	$10,000
Non-residential Loss Planning Zone 8	$1,500	$2,501	$4,001
Non-residential Loss Planning Zone 9	$624,200	$760,900	$1,385,100
Non-residential Loss Planning Zone 10	$6,373	$510	$6,883
Non-Residential Loss Department Wide	**$642,073**	**$763,911**	**$1,405,984**
Total Loss Planning Zone 7	$16,000	$900	$16,900
Total Loss Planning Zone 8	$1,500	$3,601	$5,101
Total Loss Planning Zone 9	$654,200	$761,400	$1,415,600
Total Loss Planning Zone 10	$126,773	$42,010	$168,783
Total Loss Department Wide	**$798,473**	**$807,911**	**$1,606,384**

Fire Loss 2018

Fire Loss 2018	Property Loss	Content Loss	Total Loss
Residential Loss Planning Zone 7	$100,500	$75,540	$176,040
Residential Loss Planning Zone 8	$270,700	$82,050	$352,750
Residential Loss Planning Zone 9	$0	$0	$0
Residential Loss Planning Zone 10	$103,500	$19,650	$123,150
Total Residential Loss Department Wide	**$474,700**	**$177,240**	**$651,940**
Non-residential Loss Planning Zone 7	$17,500	$600	$18,100
Non-residential Loss Planning Zone 8	$92,500	$6,300	$98,800
Non-residential Loss Planning Zone 9	$48,700	$82,000	$130,700
Non-residential Loss Planning Zone 10	$43,000	$10,790	$53,790
Non-Residential Loss Department Wide	**$201,700**	**$99,690**	**$301,390**
Total Loss Planning Zone 7	$118,000	$76,140	$194,140
Total Loss Planning Zone 8	$363,200	$88,350	$451,550
Total Loss Planning Zone 9	$48,700	$82,000	$130,700
Total Loss Planning Zone 10	$146,500	$30,440	$176,940
Total Loss Department Wide	**$676,400**	**$276,930**	**$953,330**

Fire Loss 2019

Fire Loss 2019	Property Loss	Content Loss	Total Loss
Residential Loss Planning Zone 7	$300	$10	$310
Residential Loss Planning Zone 8	$77,000	$70,700	$147,700
Residential Loss Planning Zone 9	$2,000	$2,000	$4,000
Residential Loss Planning Zone 10	$61,500	$64,000	$125,500
Total Residential Loss Department Wide	**$140,800**	**$136,710**	**$277,510**
Non-residential Loss Planning Zone 7	$35,000	$10,200	$45,200
Non-residential Loss Planning Zone 8	$7,225	$725	$7,950
Non-residential Loss Planning Zone 9	$212,000	$38,050	$250,050
Non-residential Loss Planning Zone 10	$0	$0	$0
Non-residential Loss Department Wide	**$254,225**	**$48,975**	**$303,200**
Total Loss Planning Zone 7	$35,300	$10,210	$45,510
Total Loss Planning Zone 8	$84,225	$71,425	$155,650
Total Loss Planning Zone 9	$214,000	$40,050	$254,050
Total Loss Planning Zone 10	$61,500	$64,000	$125,500
Total Loss Department Wide	**$395,025**	**$185,685**	**$580,710**

Fire Loss 2020

Fire Loss 2020	Property Loss	Content Loss	Total Loss
Residential Loss Planning Zone 7	$400	$0	$400
Residential Loss Planning Zone 8	$600	$10	$610
Residential Loss Planning Zone 9	$0	$0	$0
Residential Loss Planning Zone 10	$60,600	$2,095	$62,695
Total Residential Loss Department Wide	**$61,600**	**$2,105**	**$63,705**
Non-residential Loss Planning Zone 7	$23,720	$1,300	$25,020
Non-residential Loss Planning Zone 8	$40,650	$1,000	$41,650
Non-residential Loss Planning Zone 9	$137,050	$510,600	$647,650
Non-residential Loss Planning Zone 10	$2,000	$0	$2,000
Non-Residential Loss Department Wide	**$203,420**	**$512,900**	**$716,320**
Total Loss Planning Zone 7	$24,120	$1,300	$25,420
Total Loss Planning Zone 8	$41,250	$1,010	$42,260
Total Loss Planning Zone 9	$137,050	$510,600	$647,650
Total Loss Planning Zone 10	$62,600	$2,095	$64,695
Total Loss Department Wide	**$265,020**	**$515,005**	**$780,025**

Fire Loss 2021

Fire Loss 2021	Property Loss	Content Loss	Total Loss
Residential Loss Planning Zone 7	$60,000	$28,000	$88,00
Residential Loss Planning Zone 8	$9,000	$1,000	$10,000
Residential Loss Planning Zone 9	$0	$0	$0
Residential Loss Planning Zone 10	$85,150	$36,517	$121,667
Total Residential Loss Department Wide	**$154,150**	**$65,517**	**$219,667**
Non-residential Loss Planning Zone 7	$81,010	$1,000	$82,010
Non-residential Loss Planning Zone 8	$148,824	$36,800	$185,624
Non-residential Loss Planning Zone 9	$1,188,105	$181,400	$1,369,505
Non-residential Loss Planning Zone 10	$24,956	$18,100	$43,056
Non-Residential Loss Department Wide	**$1,442,895**	**$237,300**	**$1,680,195**
Total Loss Planning Zone 7	$141,010	$29,000	$170,010
Total Loss Planning Zone 8	$157,824	$37,800	$195,624
Total Loss Planning Zone 9	$1,188,105	$181,400	$1,369,505
Total Loss Planning Zone 10	$110,106	$54,617	$164,723
Total Loss Department Wide	**$1,597,045**	**$302,817**	**$1,899,862**

During the 2021 calendar year the Fire Department has made it a priority to start tracking dollar amount saved through quick responses, allocating the needed resources, and use of tactics and strategy. This calculation is done by estimating the property value and the contents within the property minus the dollar amount loss through contents and property. (2A.5)

Fire Save 2021

Fire Saved 2021	Property Saved	Content Saved	Total Saved
Residential Save Planning Zone 7	$1,093,200	$225,200	$1,318,400
Residential Save Planning Zone 8	$3,791,000	$69,700	$3,860,700
Residential Save Planning Zone 9	$0	$0	$0
Residential Save Planning Zone 10	$13,649,150	$597,883	$14,247,033
Total Residential Save Department Wide	**$18,533,350**	**$892,783**	**$19,426,133**
Non-residential Save Planning Zone 7	$65,230	$4,000	$69,230
Non-residential Save Planning Zone 8	$31,863,190	$16,263,400	$48,126,590
Non-residential Save Planning Zone 9	$45,067,850	$10,372,000	$55,439,850
Non-residential Save Planning Zone 10	$31,326,649	$20,784,405	$52,111,054
Non-Residential Save Department Wide	**$108,322,919**	**$47,423,805**	**$155,746,724**
Total Save Planning Zone 7	$1,158,430	$229,200	$1,387,630
Total Save Planning Zone 8	$35,654,190	$16,333,100	$51,987,290
Total Save Planning Zone 9	$45,067,850	$10,372,000	$55,439,850
Total Save Planning Zone 10	$44,975,799	$21,382,288	$66,358,087
Total Save Department Wide	**$126,856,269**	**$48,316,588**	**$175,172,857**

Fire Casualties

Casualties/Injuries

Fire Casualties	2017	2018	2019	2020	2021	Total
Civilian Injuries	1	1	4	2	3	1
Civilian Deaths	0	0	0	0	0	0
Firefighter Injuries	1	1	2	3	5	12
Firefighter Deaths	0	0	0	0	0	0
Total	**2**	**2**	**6**	**5**	**8**	**23**

Emergency Medical Services Loss and Save

Cardiac Arrest Saves

Elk Grove Village Fire Department has implemented several initiatives to improve survivability of cardiac arrest patients (moderate risk EMS incidents) including a “pit crew approach”, mechanical CPR device and video laryngoscopes.

Cardiac Arrest Patients with ROSC

Cardiac Arrest Patients with Return of Spontaneous Circulation		
Year	Percent with ROSC	Total Patients w/CPR Started
2017	54%	37
2018	51%	27
2019	42%	43
2020	29%	35
2021	64%	33

Opioid Overdoes Resuscitations

The “Elk Grove Cares” program has brought additional training and focus on mitigating the opioid addiction problem in our region. As a result, the fire department has seen increased success in resuscitating victims of this epidemic.

Opioid Overdose Incident

Opioid Overdose Incident			
Year	Possible Over Dose Patients	Narcan Given	Narcan Saves
2017	17	17	100%
2018	20	18	90%
2019	21	21	100%
2020	18	18	100%
2021	26	25	96%

Current Deployment & Performance

Fire Department History

The Elk Grove Village Fire Department began on February 8, 1960. Since then, the department has grown from an all-volunteer force to a full-time career department with 88 uniformed members and 9 civilian support personnel. The department was first located in an old barn located at 780 Tonne Road. The building was donated by Charles (Chuck) Hodlmair, the first Village President. The Department remained at this location until December 1961, when it moved to its first permanent station at 666 Landmeier Road. The first equipment purchased by the Department consisted of two 1960 Seagrave Pumpers.

First Fire Station Located at 780 Tonne Rd

In 1971, two stations were added to accommodate the growing population and the thriving industrial park. Station 9 on Greenleaf Avenue near Busse Road was chosen due to its centralized location within the Elk Grove Village Industrial Park. The Elk Grove Village Industrial Park brings in over 100,000 people daily to Elk Grove Village. The other station added during 1971 is located at 101 Biesterfield and is attached to the Elk Grove Village Hall. The village hall building is also the location of the fire department administration offices. The fourth station, Station 10, was opened in 1976, at 676 Meacham Road (just south of Biesterfield Road) to provide improved protection for the residents and businesses located west of the I-290 expressway.

In 1998, Station 8 was relocated approximately 1 mile from the Landmeier Avenue location to 1000 Oakton Street. In 2019, Stations 8 and 9 were combined at 700 Fargo to make way for the 85 acre, $1 billion Technology Park. This move allowed Station 8 to house our special rescue resources for hazardous materials, and water operations all in one place.

Today each of the three fire stations house an Advance Life Support (ALS) Paramedic Engine, Quint, and/or Squad apparatus and a Paramedic Ambulance. The on-duty Battalion Chief is housed at the Biesterfield.

The Elk Grove Village Fire Department covers all of Elk Grove Village proper, as well as some unincorporated areas. The Fire Department covers 11.1 squares miles, plus two thirds of the Cook County Busse Woods Forest Preserve (3,558 acres total), with its lake of over 450 acres, and 10.6 miles of trails. The Department's area of responsibility spans Cook and DuPage County and is part of

the Mutual Aid Box Alarm System (MABAS) Division 1. This means that the Elk Grove Village Fire Department assists many others communities including, but not limited to: Schaumburg, Itasca, Roselle, Mt. Prospect, Arlington Heights, Wood Dale, Bensenville, Des Plaines, and Elk Grove Township. The Elk Grove Village Fire Department responds to over 5,800 calls yearly. These calls range from fires, to medical services, hazardous materials, technical rescue and water rescue.

In addition to emergency responses, the Elk Grove Village Fire Department actively engages in community risk reduction through our public education programs, Inspectional Services Division and the Village's Department of Community Development (2A.8). Programs. Included in these risk reduction efforts are:

- Building construction plan reviews
- Fire/life safety code enforcement
- Fire Protection system acceptance testing
- Occupancy approvals
- In company fire inspections
- Residential smoke detector installation
- Business, school or residential fire drills
- Citizen's Fire Academy
- Business Fire Academy
- Senior citizen wellness checks
- Blood drives
- Severe weather planning
- Elementary school visits
- CPR/First aid classes
- High school practicum

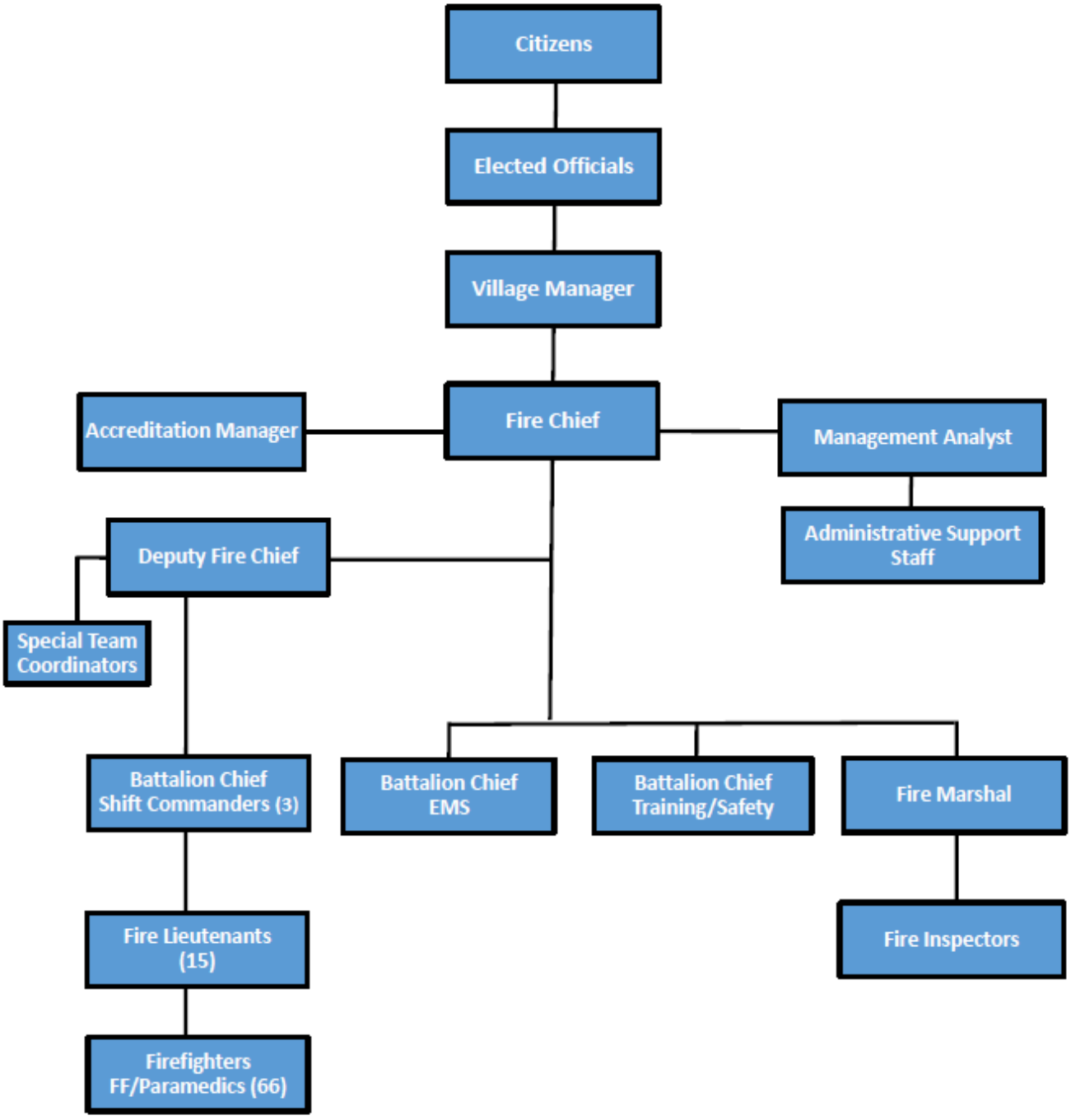
Elk Grove Village is particularly proud of its innovative, community-based strategy to tackle opioid addiction with our Elk Grove Cares initiative. This program is a shift from treating the opioid epidemic as a law enforcement problem, to one that prioritizes compassion and assistance to those needing help. Through this effort, the Village of Elk Grove collaborates with Amita Health, the Gateway Foundation, SHARE, and several community-based organizations to address the problems associated with drug addiction, not just in our community, but regionally.

Current Deployment Description

The Department operates 24 hours on, 48 hours off, schedule. Each of the three shifts has a Lieutenant assigned to each station and a dedicated Battalion Chief (shift commander). Fire Administration consists of an EMS Battalion Chief, Training and Safety Battalion Chief, Fire Marshal, Deputy Chief and Fire Chief.

Org Chart

Fire Department Organizational Chart



To establish efficient and effective responses to calls for service, the Elk Grove Village Fire Department has policies directing the deployment of our resources.

Stations

The Department has three fire stations. Stations 7, 8 and 10 dispersed through the Village to produce similar geographical planning zones. The three stations cover more than 11.1 square miles of Elk Grove Village. Including unincorporated areas that are surrounded by corporate Elk Grove Village, and responded out of town (using MABAS) to assist other villages.

Fire Station 7:
A four bay, 8,000 square foot facility centrally located at 101 Biesterfield Road and attached to the Municipal Complex. This station received a $2.5 million remodel in 2020 providing energy efficient lighting/HVAC, an improved classroom, and new apparatus floor drainage.

Fire Station 8:
Station 8 is a four bay, 17,000 square foot facility at 700 Fargo Avenue built in 2019 that covers the eastern portion of Elk Grove Village. This station includes an 11,000 square foot, four story training tower, a 30-person classroom, a fire fighter fitness facility and a post-incident decontamination area separated from the living quarters. In 2016 plans were made to consolidate former Fire Station 8 and Station 9. This consolidation made room for an expansive economic opportunity for the Village of Elk Grove. The land from former Fire Station 8 was sold to be part of an 85 acre, $1 billion technology park development.

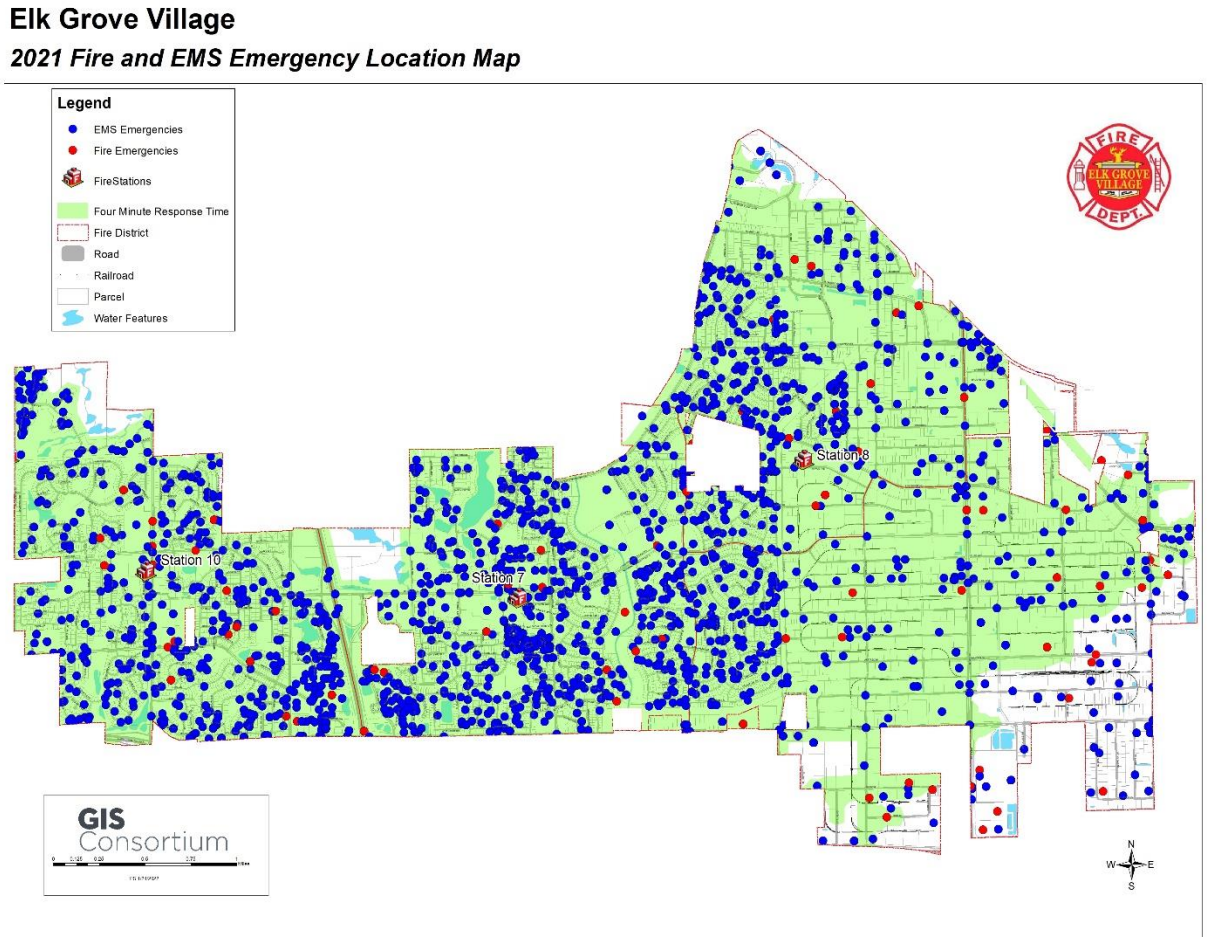
Fire Station 10:
Located at 676 Meacham. Constructed in 2019 to replace the former Station 10 at the same location, this station is a four bay, 15,000 square foot building. Station 10 has a community meeting room, a fire fighter fitness facility and a post-incident decontamination area separated from the living quarters.

These stations are located to maximize the efficiency of operations with consideration of incident travel time outlined in NFPA 1710 and historical call volume.

The three stations responded to 5,644 emergent and non-emergent incidents within the village limits during the 2021 calendar year. EMS was the leading emergency responded by Department personnel and accounted for 70% of the total incidents.

Listed below are Fire and EMS incidents responded within the Village limits. The map does not include mutual aid or automatic aid responses to assist other agencies. Estimated four-minute response times are depicted in green.

Incident Response Map (Fire / EMS) - GIS

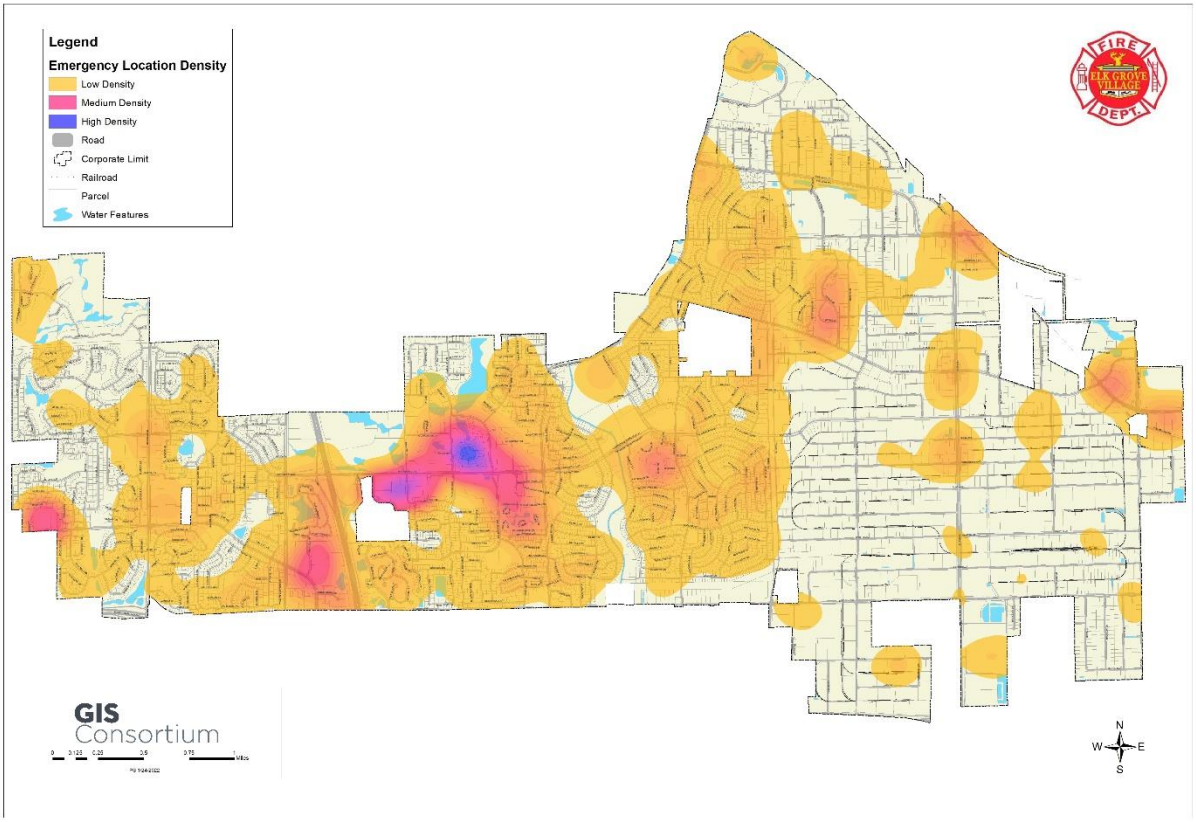


The three strategically located stations responded to calls within residential and business areas. Listed below is a heat map that illustrates high incident locations within the Village Limits.

Incident Response Times - GIS

Elk Grove Village

2021 All Emergency Heat Map



Vehicle Types and Staffing

The Elk Grove Village Fire Department staffs two ALS Engines, two ALS Quints, three ALS Ambulances, and a Battalion Chief (Shift Commander) vehicle at all times. Each shift has 28 firefighters assigned to it, minimum staffing for peak weekday hours is 24, 19 in all other hours.

During peak call volume times (Monday to Thursday from 0800-1600) an ALS squad is staffed with three (3) certified firefighters (at least one of which is a certified paramedic and one who is a certified fire apparatus engineer (FAE). Outside of those hours, the squad can be staffed with two (2) members or cross staffed (3 personnel) with the Quint dependent on staffing. In previous years, during the peak call volume times of Monday-Friday, 08:30-16:30, Ambulance 9 was placed in service as a fourth ALS transport vehicle. Due to the COVID 19 pandemic and reduction in call volume the Ambulance 9 program has been suspended until incident numbers create the need. Ambulance 9 is in service when maximum staffing is achieved.

Engines, Quints and Trucks are primarily considered fire suppression units and are staffed with a minimum of three (3) certified firefighters. Of those three members, at least one is a certified paramedic, and one is a certified fire apparatus engineer (FAE).

Ambulances are staffed with two (2) certified firefighter/paramedics at all times.

The Battalion Chief Vehicle is staffed with one certified fire officer at all times.

Resiliency (2C.8)

Resiliency is the organization's ability to quickly recover from an incident or adjust to changing needs. Resources are only useful if available to respond to calls. Commitment to other emergencies, training and mechanical issues are barriers to resource availability. The Elk Grove Village Fire Department addresses the three components of resiliency: resistance, absorption and restoration.

Resistance, the ability to deploy only necessary resources, is addressed by dispatching the needed effective response force for the situation reported, while maintaining the availability of other resources until the situation is confirmed by further information or by decision of an officer. The Department addresses this with SOG 210: Standard Response Codes and the use of Emergency Medical Dispatch (EMD) Priority Dispatch Response Determinants.

Absorption is the ability to maintain service levels during increased call demand. Elk Grove Village Fire Department manages this challenge through the use of auto/mutual aid agreements as well as increased staffing of an ALS squad during our regular peak demand hours.

Restoration is the ability to return a specific asset to in-service service status efficiently. The Department has policies in place to accomplish this through readily available equipment for restocking and the procedure of prioritizing readiness after each service call.

Plan for Consistent Provision of Services Across the Jurisdiction (2C.1)

In order to provide exceptional and consistent service to all call types across The Village of Elk Grove, the fire department uses the following methodology:

- Conduct a critical task analysis for each service type risk level to determine the appropriate effective response force.
- Set benchmark performance objectives for each service type.
- Measure baseline performance for each service type in each planning zone and the entire response area.
- Compare benchmark objectives to baseline performance.
- Establish goals for maintaining and improving response capabilities.

Critical Task Analysis (2C.4)

Fire Suppression

Low Risk Fire Incidents

Low risk fires (Code 2) are situations with a low potential for loss of life, loss of property, and/or limited financial impact to the community. Service requests for incidents of a limited nature constitute a relatively minor emergency, and can be handled with a single engine. Examples of a low-risk fire include grass fires and car fires. The following table outlines the critical tasks and personnel needed to mitigate low risk fires.

Critical Task Analysis for Low-Risk Fire Incidents

Critical Task	Minimum Personnel
Fire Attack	1
Pump Operator	1
Command	1
Effective Response Force	**3**

Dispatched Units – low risk fire

Dispatched Units	Crew
Engine	3
Total Dispatched	3

Moderate Risk Fire Incidents (2C.3)

Moderate risk fires constitute emergency situations with limited risk for growth, spread, or loss. Responses to moderate fire risk hazards without clarifying information consist of a limited multi-company response of 10-12 personnel. Examples of moderate risk fire incidents include commercial truck fires and activated fire alarms.

The following table outlines the critical tasks and personnel needed to mitigate moderate risk fire incidents.

Critical Task Analysis for Moderate Risk Fire Incidents

Critical Task	Minimum Personnel
Investigation	2
Fire Attack	2
Pump Operator	1
Water Supply Line	1
Back up Line	2
Safety	1
Command	**1**
Effective Response Force	**10**

Dispatched Units – mod risk fire

Dispatched Units	Crew
Truck/Quint	3
2 Engines	6
Ambulance	2
Battalion Chief	1
Total Dispatched	**12**

High Risk Fire Incidents

High risk fire incidents (Code 3) have an increased potential for growth, spread or loss of property, life or the environment. High risks fire incidents require a multi-company response of 18 personnel. Examples of high-risk fire incidents include reports of a fire in any structure meant for occupation that has not been confirmed by fire or police personnel. The following table outlines the critical tasks and personnel needed to mitigate high risk fire incidents.

Critical Task Analysis for High-Risk Fire Incidents

Critical Task	Minimum Personnel
Fire Attack	2
Pump Operator	1
Water Supply/Support	1
Second Line	2
Primary Search	2
Aerial Operator	1
Ladders/Ventilation	2
ALS EMS	2
RIT -Mutual Aid	3
Safety	1
Command- EGV	1
Effective Response Force	**18**

Dispatched Units – high risk fire

Dispatched Units	Crew
Battalion Chief	1
3 Engines	9
2 Trucks	6
2 Ambulances	4
Total Dispatched	**20**

Maximum Risk Fire Incidents

Maximum risk fire incidents (Code 4) have the potential to overwhelm the responding resources or inflict substantial loss of property, life or major environmental impact. These incidents are likely to affect the Department's absorption of other calls for service. Examples of maximum risk fire incidents include confirmed reports of a fire in a classified "High Risk or above" industrial building or high occupancy housing complex. The following table outlines the critical tasks and personnel needed to begin mitigation of maximum risk fire incidents. The Effective Response Force can expand using the Mutual Aid Box Alarm System.

Critical Task Analysis for Maximum Risk Fire Incidents

Critical Task	Minimum Personnel
Fire Attack	2
Pump Operator	2
Water Supply/Attack line	1
Second Line	2
Primary Search and Rescue	4
Aerial Operator	1
Ladders/Ventilation	4
RIT	3
Second line support	1
ALS EMS	2
Safety	1
Command	1
Effective Response Force	**24**

Dispatched units – max risk fire

Dispatched Units	Crew
Chiefs	4
4 Engines	12
3 Trucks	9
3 Ambulances	6
Total Dispatched	**31**

Emergency Medical Incidents

Elk Grove Village Fire Department is an advanced life support emergency medical services (EMS) organization that provides treatment and transport to all BLS and ALS calls within our jurisdiction.

Low Risk Emergency Medical Incidents

Low risk EMS incidents (Code 1 Alpha) are requests for service that Emergency Medical Dispatch (EMD) questioning has determined to be non-life threatening/minimal impact. The following table outlines the critical tasks and personnel needed to mitigate low risk EMS incidents.

Critical Task Analysis for Low-Risk EMS

Critical Task	Minimum Personnel
ALS Treatment/Command	1
Treatment/Transport	1
Effective Response Force	**2**

Dispatched units – low risk EMS

Dispatched Units	Crew
Ambulance	2
Total Dispatched	**2**

Moderate Risk Emergency Medical Incidents

Moderate Risk EMS incidents (Code 1 Bravo, Charlie and Delta) are calls involving one patient that Emergency Medical Dispatch (EMD) questioning has determined to be a priority or require extensive medical interventions. The following table outlines the critical tasks and personnel needed to mitigate moderate risk EMS incidents.

Critical Task Analysis for Moderate Risk EMS Incidents

Critical Task	Minimum Personnel
ALS Treatment/Command	3
Treatment/Transport	1
Effective Response Force	**4**

Dispatched units - mod risk EMS

Dispatched Units	Crew
Ambulance	2
Squad (2)/Engine/Quint	2-3
Total Dispatched	**4-5**

High Risk Emergency Medical Incidents

High risk emergency medical incidents (Code 1 Echo) are cardiac arrest calls involving one patient. In order to ensure proper American Heart Association resuscitation efforts, Elk Grove Village Fire Department has adopted the "pit crew" approach to all cardiac arrests. Not included in the ERF, but also dispatched is a unit from the Elk Grove Village Police Department. The following table outlines the critical tasks and personnel needed to mitigate moderate risk EMS incidents.

Critical Task Analysis for High-Risk EMS Incidents

Critical Task	Minimum Personnel
ALS Treatment	2
BLS Support/Transport	2
ALS Support	3
Command	1
Effective Response Force	**8**

Dispatched units – high risk EMS

Dispatched Units	Crew
Ambulance	2
Squad(2)/Engine/Quint	2-3
Engine	3
Battalion Chief	1
Total Dispatched	**8-9**

Maximum Risk Emergency Medical Incidents

Maximum risk emergency medical incidents include multiple patients (as defined by Northwest Community Hospital EMS System Policy) and will likely outstrip the resources of Elk Grove Village Fire Department requiring the use of the Mutual Aid Box Alarm System. The following table outlines the critical tasks and personnel needed to mitigate maximum risk EMS incidents.

Critical Task Analysis for Maximum Risk EMS Incidents

Critical Task	Minimum Personnel
ALS	7
Transport	7
ALS Support	5
BLS Support	2
Triage Officer	1
Treatment Officer	1
Transportation Officer	1
Staging Officer	1
Safety	1
Command	1
Effective Response Force	**27**

Dispatched unit – max risk EMS

Dispatched Units	Crew
7 Ambulances	14
Truck/Quint	3
4 Engines	12
3 Chief Officers	3
Total Dispatched	**32**

Hazardous Material Incidents

Low Risk Hazardous Material Incidents

Low risk hazardous materials incidents are situations with a low potential for loss of life, loss of property, and/or limited financial impact to the community. Low risk hazardous materials incidents of a limited nature constitute a relatively minor emergency. Example: CO Detector activation without illness. The following table outlines the critical tasks and personnel needed to mitigate low risk hazardous materials incidents.

Critical Task Analysis for Low-Risk Hazardous Material Incidents

Critical Task	Minimum Personnel
Confine/Contain/Mitigate	2
Command	1
Effective Response Force	**3**

Dispatched units – low risk Hazmat

Dispatched Units	Crew
Engine	3
Total Dispatched	**3**

Moderate Risk Hazardous Material Incidents

Moderate risk hazardous material incidents are events that constitute emergency situations with limited risk for growth, spread, or loss, while requiring additional manpower (i.e., gas line break), but not hazmat technician level skills.

Critical Task Analysis for Moderate Risk Hazardous Material Incidents

Critical Task	Minimum Personnel
Investigation	2
Mitigation	3
Pump Operator	1
Water Supply/Attack line	2
Air Monitoring	1
Safety	1
Command	1
Effective Response Force	**11**

Dispatched units – mod risk Hazmat

Dispatched Units	Crew
Truck/Quint	3
2 Engines	6
Ambulance	2
Battalion Chief	1
Total Dispatched	**12**

High Risk Hazardous Material Incidents

High risk hazardous material incidents (Level 1) are situations with increased potential for growth, spread or loss to life, property or the environment. Examples are incidents involving 5-35 gallons of a petroleum product, containers of known substances with damage and materials with no life safety concern. The following table outlines the critical tasks and personnel needed to mitigate high risk hazardous materials incidents.

Critical Task Analysis for High-Risk Hazardous Material Incidents

Critical Task	Minimum Personnel
Drive Hazmat Trailer/ Size Up/ Set Up Hazmat Operations	2
Water Supply/ Support	1
Mitigation Operations	5
EMS	2
Monitoring	1
Safety	1
Command	1
Effective Response Force	**13**

Dispatched units – high risk Hazmat

Dispatched Units	Crew
Battalion Chief	1
2 Engines	5
1 Truck	3
2 Ambulances	4
EGV Hazmat Squad	1
All On Duty HazMat Tech	Varies
Total Dispatched	**14**

Maximum Risk Hazardous Material Incidents

Maximum risk hazardous material incidents (Level 2+) with the potential to overwhelm the resources of the Department or inflict loss of life, substantial property damage or major environmental impact. Examples: pipeline/tanker or large container leaks, any incident requiring Level A protection, or toxic vapor-producing substances.

Critical Task Analysis for Maximum Risk Hazardous Material Incidents

Critical Task	Minimum Personnel
Drive Hazmat Trailer/ Size Up/ Set Up Hazmat Operations	2
Water Supply	1
Monitoring	2
Mitigation	4
EMS	2
Control Zones	2
Hazmat Operations/Technicians	6
Rehab	2
Decon	3
Support	2
Safety	1
Command	1
Effective Response Force	**28**

Dispatched units – max risk Hazmat

Dispatched Units	Crew
Chief Officers	4
3 Engines	9
1 Truck	3
3 Ambulances	6
Hazmat Squads	5
On Duty MABAS HazMat Tech	4
Special Equipment	4
Total Dispatched	**35**

Technical Rescue Incidents

This section covers rescues involving specialized skills and equipment excluding water rescues.

Low Risk Technical Rescue Incidents

Low risk technical rescue incidents are situations with a low potential for loss of life, loss of property, and/or limited financial impact to the community. Example: occupied elevator rescues.

Critical Task Analysis for Low-Risk Technical Rescue Incidents

Critical Task	Minimum
Rescue	5
EMS	2
Safety	1
Command	1
Effective Response Force	**9**

Dispatched units – low risk TRT

Dispatched Units	Crew
Truck/Quint	3
Engine	3
Ambulance	2
Battalion Chief	1
Total Dispatched	**9**

Moderate Risk Technical Rescue Incident

Moderate risk technical rescue incidents constitute emergencies with limited risk for growth, spread, or loss while requiring additional manpower. Example: accidents (vehicle and industrial) with entrapment.

Critical Task Analysis for Moderate Risk Technical Rescue Incidents

Critical Task	Minimum Personnel
Extrication	4
Pump Operator	1
Water Supply/Suppression line	2
EMS	2
Support	2
Safety	1
Command	1
Effective Response Force	**13**

Dispatched units – mod risk TRT

Dispatched Units	Crew
Truck/Quint	3
2 Engines	6
2 Ambulances	4
Battalion Chief	1
Total Dispatched	**14**

High Risk Technical Rescue Incidents

High risk technical rescue incidents are emergencies that require above/below grade, confined space entries, or structural collapse searches to locate and remove a suspected victim. These incidents will require the Mutual Aid Box Alarm System Division 1 Tech Rescue Team. Example: report of a child suspected of entering a drainage pipe.

Critical Task Analysis for High-Risk Technical Rescue Incidents

Critical Task	Minimum Personnel
Size Up	1
Scene Control	3
Tech Rescue Technicians	6
Support	8
Rehab	2
EMS	2
TRT Leader	1
Safety	1
Command	1
Effective Response Force	**25**

Dispatched units – high risk TRT

Dispatched Units	Crew
Chief Officers	5
3 Engines	9
1 Truck	3
2 Ambulances	4
TRT Squads	3
On Duty Technicians	4
Special Equipment	3
Total Dispatched	**31**

Maximum Risk Technical Rescue Incidents

Maximum risk technical rescue incidents are situations that require above/below grade, confined space entries, or structural collapse searches to locate one or more confirmed victims and the potential to overwhelm the resources of the Department or result in loss of life, substantial loss of property or major environmental impact. These incidents may require the Mutual Aid Box Alarm System Tech Rescue Teams from other Divisions in addition to Division 1.

Critical Task Analysis for Maximum Risk Technical Rescue Incidents

Critical Task	Minimum Personnel
Size Up	1
Scene Control	4
Tech Rescue Technicians	12
Support	15
Rehab	3
EMS	4
TRT Leader	1
Safety	2
Command	1
Effective Response Force	**43**

Dispatched units – max risk TRT

Dispatched Units	Crew
Chief Officers	8
5 Engines	15
2 Trucks	6
4 Ambulances	8
TRT Squads	3
On Duty Technicians	12
Special Equipment	5
Total Dispatched	**57**

Water Rescue Incidents

Elk Grove Village Fire Department does not treat any water-based operation as a low or moderate risk event.

High Risk Water Rescue Incident

High risk water rescue (Drowning level 1) incidents are emergencies involving a small body of water (i.e., retention pond, pool or creek) and/or a vehicle in the water with no life-safety concern.

Critical Task Analysis for High-Risk Water Rescue Incidents

Critical Task	Minimal Personnel
Size Up/Determine resources	1
Quick Rescue	4
Communications/shore support	1
EMS	2
Safety	1
Command	1
Effective Response Force	10

Dispatched units – high risk water

Dispatched Units	Crew
Battalion Chief	1
2 Engines	6
1 Truck	3
2 Ambulances	4
Total Dispatched	**14**

Maximum Risk Water Rescue Incidents

Maximum risk water rescue (Drowning level 2) incidents consist of rescues or suspected rescues in a large body of water, or rescues that require submersed search and rescues involving the sonar location system. These incidents will likely require the Mutual Aid Box Alarm System Division 1 Water Rescue Team

Critical Task Analysis for Maximum Risk Water Rescue Incidents

Critical Task	Minimal Personnel
Size Up/ Quick Rescue	3
Diver Operations	4
Dive Back up team	2
Decon	3
EMS	2
Rehab	2
Boat Operations	2
Shore support	6
Dive Leader	1
Safety	1
Command	1
Effective Response Force	27

Dispatched units – max risk water

Dispatched Units	Crew
Chief Officers	5
3 Engines	9
2 Trucks	6
3 Ambulances	6
Dive Squad/Boat	1
On Duty Water Techs	4
Special Equipment	3
Total Dispatched	**34**

Benchmark Performance Objectives (2D.1 and 2D.4)

Elk Grove Village Fire Department establishes benchmark performance objectives for fire suppression, emergency medical, hazardous materials, water rescue and technical rescue incidents. This is done for each response type in terms of total response time and its components, as identified in this document. These objectives are based on:

- Continuous improvement over historical performance data
- NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Department, 2016 edition
- NFPA 1221: Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, 2016 edition.
- Historic response time data for MABAS (mutual aid) assets.

All response time benchmark objectives are based on the US Census Bureau definition of population density. All objectives use the “urban” population for density (2A.4)

The benchmarks are the quality standards Elk Grove Village Fire Department are continuously improving toward. Regular review of our baseline performance, in comparison to these goals, is a tool for monitoring and finding improvements to our service delivery (2C.7).

During the 2019 Center of Public Safety Excellence peer assessment team site visit, it was recommended the Department develop new response time benchmarks. A committee was formed and established the benchmarks that would be reviewed and monitor by all personnel. The information collected is reviewed during weekly, monthly, and yearly meetings. The data collected is distributed to all members on a monthly basis and reviewable via Target Solutions.

The “Response Performance Benchmarks”, Policy 102, revised in 2020, has provided the benchmarks for the 2021 calendar year. If for any reason a first due unit within Village limits exceeds ten (10) minutes the first due officer will state the reason for the response time and forward their findings to their Battalion Chief or designee. Any response time for any vehicle exceeding fifteen (15) minutes shall be documented by the officer of that vehicle and their findings will be forwarded to the Battalion Chief or designee.

Benchmark Performance Objectives Explained

Call Processing Performance Objective:
Call processing is the time interval from receipt of the alarm at the PSAP (emergency communications center) until the beginning of the transmittal of the response information to emergency response units. For all emergency incident types, except fire suppression, the call processing benchmark will be one (1) minute and thirty (30) seconds or less, ninety percent of the time.

Turnout Time Performance Objective:
Turnout time is the time interval from receipt of the alarm by Emergency Response Units (ERUs) until the ERUs start moving towards the incident. The turnout time performance objectives vary depending on the type of incident and the needed resources, including PPE, that need to be donned prior to entry into apparatus. The benchmarks listed will be achieved or better ninety (90%) percent of the time. The turnout times for responding units is listed below:

- Emergency Medical Incidents – One minute and fifty seconds (1:50)
- Fire, HazMat, TRT, and Emergent Other – Two minutes (2:00)
- Water Rescue – Two minutes and fifteen seconds (2:15)
- Non-Emergent Other – Two minutes and thirty seconds (2:30)

Travel Time Definition:
Travel time is the time interval that begins when an ERU is en route to the incident, and ends when the unit arrives on scene.

Total Response Time Definition:
Total response time is the culmination of call processing time, turn out time and travel time to a call for service. Total response time objectives are broken out by hazard classification.

Fire Suppression Benchmark Objectives:

For 90 percent of all fires, the total response time for the arrival of the ***first-due unit***, staffed with 3 firefighters, shall be: seven minutes and forty-five seconds (7:45) Village wide. The first-due unit for all risk levels shall be capable of: providing 300 gallons of water and 1,500 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; containing the fire; and rescuing at-risk victims. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all ***low risk fires*** (i.e. brush fires, dumpster fires not in or near a building), the total response time for the arrival of the effective response force (ERF), and staffed with 3 firefighters shall be: nine minutes thirty seconds (9:30) Village wide. The ERF shall be capable of: establishing command; and advancing an attack line for fire control. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all ***moderate risk fires*** (i.e. commercial truck fires), the total response time for the arrival of the effective response force (ERF), staffed with 10 firefighters and officers, shall be: ten minutes forty-five seconds (10:45) Village wide. The ERF shall be capable of: establishing command; appointing a site safety officer; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the public.

For 90 percent of all ***high risk/maximum fires*** (code 3 or above), the total response time for the arrival of the effective response force (ERF), staffed with 18 firefighters and officers, shall be: eleven minutes and thirty seconds (11:30) Village wide. The ERF shall be capable of: establishing command; appointing a site safety officer; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; conducting ladder operations; searching and rescuing at-risk victims; ventilating the structure; and providing ALS EMS services. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the public.

Transition from High Risk (Code 3) to Maximum Risk (Code 4)

To provide resiliency via resistance, the Elk Grove Village Fire Department and Northwest Central Dispatch Services (911) have historically used a two-tiered response strategy for fire incidents. Upon the initial report of a fire in any structure received by 911, telecommunicators initiate a Code 3 response (high risk). This consists of 3 engine companies, 2 quint/tower/truck companies, 2 ambulances, and 1 shift commander for an initial response of 20 personnel to the incident.

Upon confirmation of a fire by the first arriving fire unit, police unit or at the discretion of any Fire Chief Officer, Northwest Central Dispatch will upgrade the incident response to a Code 4 (maximum risk), bringing additional units to the scene. This upgraded response consists of 2 engine companies, 1 truck company, 1 ambulance, 2-4 chief officers, and mutual aid companies to back-fill department stations for coverage of additional calls. This response brings our number of personnel due to the scene to 32-34.

Effective response force arrival times of Code 4 companies are extended due to the time interval that passes between the initial arrival of Code 3 companies and the request for an upgraded Code 4 response. The Fire Department uses this tactic to avoid draining all fire resources to a single unconfirmed incident. The code 3 ERF is significant enough to begin the critical tasks needed to mitigate the incident.

For 90 percent of all maximum risk fire suppression incidents (code 4), the total response time for the arrival of the ERF shall be 15 minutes.

(Further ERF information found in Critical Tasks Analysis 2C.4.).

Emergency Medical Services Benchmark Objectives:

For 90 percent of all EMS responses, the total response time for the ***arrival of the first-due unit***, of either an ALS Fire Suppression vehicle staffed with 3 firefighters (including at least 1 Paramedic) or an ALS Transport Ambulance staffed with 2 paramedics, shall be: 7 minutes thirty-five seconds (7:35) Village wide. The first-due unit shall be capable of: assessing scene safety and establishing command; sizing-up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing basic life support medical aid including automatic external defibrillation (AED); and assisting transport personnel with packaging the patient.

In the 2018 the Department and the Dispatch Center began a pilot program using Emergency Medical Priority Dispatch Response Determinants. This program allows for further information gathering by the 911 telecommunicator and recommends dispatch priority based on the severity of the EMS incident. Under our current computer aided dispatch system (CAD), the Department is unable to take full advantage of this

differentiation. Therefore, the supplied data maintains consistency of benchmark times across low, moderate and high-risk EMS events. When the new CAD system is deployed in the second quarter of 2021, the Department benchmark committee will establish performance objectives specific to each level of risk.

For 90 percent of ***all low risk*** (EMD response determinant Alpha) EMS response incidents, the total response time for the arrival of the effective response force (ERF) of either an ALS Fire Suppression vehicle staffed with 3 firefighters (including at least 1 Paramedic) or an ALS Transport Ambulance staffed with 2 paramedics, shall be: seven minutes and thirty-five (7:35) seconds Village wide. The ERF shall be capable of: providing incident command and producing related documentation; appointing a site safety officer; completing patient assessment; providing appropriate treatment; performing AED; initiating cardio-pulmonary resuscitation (CPR); and providing intravenous (IV) access-medication administration.

For 90 percent of all ***moderate risk*** (EMD response determinants Bravo, Charlie, Delta) EMS response incidents, the total response time for the arrival of the effective response force (ERF) of 4 firefighters (including at least 3 paramedics), shall be: seven minutes and thirty-five (7:35) seconds Village wide. The ERF shall be capable of: providing incident command and producing related documentation; appointing a site safety officer; completing patient assessment; providing appropriate treatment; performing and transmitting 12 lead ECGs; providing intravenous (IV) access-medication administration and transporting the patient.

For 90 percent of all ***high risk*** (EMD response determinant Echo) EMS response incidents, the total response time for the arrival of the effective response force (ERF) of 11 firefighters (including at least 4 paramedics), shall be: seven minutes and thirty-five (7:35) seconds Village wide. The ERF shall be capable of: providing incident command and producing related documentation; appointing a site safety officer; completing patient assessment; providing appropriate treatment; conducting on going cardio-pulmonary resuscitation (CPR); providing an advanced airway; providing intravenous (IV) access-medication administration and transporting the patient.

For 90 percent of all ***maximum risk*** EMS response incidents, the total response time for the arrival of the effective response force (ERF) of 27 firefighters (including at least 14 paramedics), shall be: 15 minutes in all areas. The ERF shall be capable of: providing incident command and producing related documentation; appointing a site safety officer, triage officer, treatment officer, transport officer, staging officer; completing patient assessment; providing appropriate treatment; providing intravenous (IV) access-medication administration and transporting the patients.

(Further ERF information found in Critical Tasks Analysis 2C.4.)

Hazardous Materials Benchmark Objectives:

For 90 percent of moderate, high and maximum risk hazardous materials response incidents, the ***total response time for the arrival of the first-due unit***, staffed with 2 firefighters and 1 officer, shall be: seven minutes and forty-five seconds (7:45) Village wide. The first-due unit shall be capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all ***low hazardous materials response*** incidents (i.e. CO detector alarm), the total response time for the arrival of the first unit and effective response force (ERF) of 3 firefighters and officers shall be: nine minutes and thirty seconds (9:30). The ERF shall be capable of: establishing command; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

For 90 percent of all ***moderate hazardous materials response*** incidents (i.e. small diameter outside gas main break), the total response time for the arrival of the effective response force (ERF) of 11 firefighters and officers, shall be: ten minutes and forty-five seconds (10:45) Village wide. The ERF shall be capable of: appointing a site safety officer; providing a water supply, providing an attack line, and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

For 90 percent of all ***high/maximum risk hazardous materials (HazMat Level 2)*** response incidents, the total response time for the arrival of the effective response force (ERF) including the Mutual Aid Box Alarm System hazardous materials response team, staffed with 13 to 28 firefighters and officers, shall be: twenty-eight minutes and thirty seconds (28:30) Village wide. This response time includes out of town apparatus and personnel. The ERF shall be capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

(Further ERF information found in Critical Tasks Analysis 2C.4.)

Technical Rescue Benchmark Objectives:

For 90 percent of moderate, high and maximum risk technical rescue incidents, the ***total response time for the arrival of the first-due unit***, staffed with 2 firefighters, shall be: seven minutes and forty-five seconds (7:45) Village wide. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all ***low risk technical rescue incidents***, the total response time for the arrival of the first unit and effective response force (ERF), staffed with 9 firefighters and officers shall be: nine minutes and thirty seconds (9:30) Village wide. The ERF shall be capable of: appointing a site safety officer; establishing patient contact; controlling a disabled elevator, providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

For 90 percent of all ***moderate risk technical rescue incidents***, the total response time for the arrival of the effective response force (ERF), staffed with 6-15 firefighters and officers shall be: nine minutes and forty-five seconds (9:45) Village wide. The ERF shall be capable of: appointing a site safety officer; establishing patient contact; extricating a patient, providing a suppression line, providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

For 90 percent of all ***high risk technical rescue (MABAS Response)*** incidents, the total response time for the arrival of the effective response force (ERF), staffed with 25 firefighters and officers including the Mutual Aid Box Alarm System Technical Rescue team shall be: twenty-eight minutes and thirty seconds (28:30) Village wide. The ERF shall be capable of: appointing a site safety officer; establishing patient contact; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

For 90 percent of all ***maximum risk technical rescue (MABAS Response)*** incidents, the total response time for the arrival of the effective response force (ERF), staffed with 43 firefighters and officers including the Mutual Aid Box Alarm System Technical Rescue Team shall be: twenty-eight minutes and thirty seconds (28:30) Village wide. The ERF shall be capable of: appointing a site safety officer; establishing patient contact; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

(Further ERF information found in Critical Tasks Analysis 2C.4.)

Water Rescue Benchmark Objectives:

For 90 percent of all water rescue incidents, the ***total response time for the arrival of the first-due unit,*** staffed with 2 firefighters, shall be: 8 minutes (8:00) Village wide.). The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; marking "last seen point"; effecting basic reach or throw rescues and providing basic life support to any victim without endangering response personnel.

Elk Grove Village Fire Department does not consider any water-based operations as a low or moderate risk event.

For 90 percent of all ***high risk water rescue incidents (Drowning Level 1)***, the total response time for the arrival of the effective response force (ERF), staffed with 14 firefighters and officers shall be: thirteen minutes and forty-five seconds (13:45) Village wide. The ERF shall be capable of: appointing a site safety officer; establishing patient contact; effecting entry rescues for small bodies of water (pool) or non-submerged vehicles; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

For 90 percent of all ***maximum risk water rescue incidents (Drowning Level 2)***, the total response time for the arrival of the effective response force (ERF), staffed with 20-30 firefighters, paramedics, and officers including the Mutual Aid Box Alarm System Water Rescue Team shall be: twenty-eight minutes and forty-five seconds (28:45) Village wide. The ERF shall be capable of: appointing a site safety officer; establishing patient contact; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

(Further ERF information found in Critical Tasks Analysis 2C.4.)

Emergent Other Services Benchmark Objectives:

For 90 percent of all emergent other services incidents, the ***total response time for the arrival of the first-due unit***, staffed with 2 or 3 firefighters including an officer, shall be: nine minutes and fifteen seconds (9:15) Village wide. The first-due unit shall be capable of: establishing command; sizing up the event; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all emergent other services incidents, the total response time for the ***arrival of the effective response force*** (ERF), staffed with up to 8 firefighters and officers shall be: ten minutes and twenty seconds (10:20) Village wide. The ERF shall be capable of: appointing a site safety officer, providing technical expertise, knowledge, skills, and mitigating the incident.

A list of incident types included in Emergent Other Services can be found in Table 37

Non-Emergent Other Services Benchmark Objectives:

For 90 percent of all non-emergent other services incidents, the ***total response time for the arrival of the first-due unit***, staffed with 2 or 3 firefighters, including an officer, shall be: eleven minutes and thirty seconds (11:30) Village wide. The first-due unit shall be capable of: establishing command; sizing up the event; requesting additional resources.

For 90 percent of all non-emergent other services incidents, the total response time for the ***arrival of the effective response force*** (ERF), staffed with up to 7 to 8 firefighters and officers shall be: eleven minutes and thirty seconds (11:30) Village wide. The ERF shall be capable of: appointing a site safety officer, providing technical expertise, knowledge, skills, and mitigating the incident.

A list of incident types included in Non-Emergent Other Services can be found in Table 38.

Evaluation of Baseline Performance (2C.5 and 2C.6)

The following data tables show Elk Grove Village Fire Department's actual performance for alarm handling time, turn out time, travel time and total response time for events occurring within our jurisdiction. The data is measured in the 90th percentile for each year and for the combined time period of 2017-2021. The data was analyzed by hazard class, population density (all urban) and planning zone.

Fire Suppression Baseline Performance Response (all area)

The Department's baseline statements reflect actual performance during 2017-2021. The Department relies on the use of automatic aid from neighboring fire departments to provide its effective response force complement of personnel. These resources are immediately available as part of a seamless response system. The Department's actual baseline service level performance is as follows:

For 90 percent of all ***high/maximum risk fires*** during the 2017-2021 time period, the total response time for arrival of the first unit is: eight minutes and twenty-one seconds (8:17). Benchmark is being missed by thirty-two seconds (0:32). In 2021 the total response time was nine minutes and eight seconds (9:08) exceeding the benchmark by one minute andtwenty-three seconds (1:23). The first on scene unit, generally an engine or quint, is capable of providing personnel for rescue and fire suppression abilities. The first due unit, and all subsequent arriving apparatus, follow standard operating procedures established in the agency standard operating procedures.

For 90 percent of all high/maximum risk fires, the total response baseline time in 2017-2021 for the arrival of the ERF, staffed with 18 firefighters and officers, is: eighteen minutes and forty seconds (18:40) missing the benchmark by seven minutes and ten seconds (7:10). For the 2021 calendar year the response time was twenty-two minutes and forty seconds (22:40) exceeding the benchmark by eleven minutes and ten seconds (11:10). The ERF used during this period is capable of the following actions: establishing formal command, uninterrupted water supply, fire attack, search group, ventilation, rapid intervention team (RIT), and medical care. All of the operations described above are based on the agency standard operating procedures.

High/Maximum Risk Fire Suppression All Area 90th Percentile Times			Bench-mark	2017 - 2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:02	1:22	2:14	2:05	1:47	2:02
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:22	2:16	2:21	2:27	2:20	2:22
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:01	4:42	4:38	4:29	5:12	5:50
	Travel Time, ERG **Concentration**	Urban	8:00	9:18	9:30	9:02	9:30	8:55	9:56
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:17	8:12	8:20	7:30	8:54	9:08
				n=209	n=43	n=53	n=38	n=32	n=43
	Total Response Time, ERF **Concentration**	Urban	11:30	18:40	21:32	19:36	13:05	14:31	22:40

For 90 percent of all ***moderate risk fires*** during 2017-2021 time period, the total response baseline time for arrival of the first unit is: nine minutes (9:00) Village wide. The benchmark is surpassed by one minute and fifteen seconds (1:15). In 2021 the baseline was surpassed by three seconds further at nine minutes and three seconds (9:03). The first on scene unit, generally an engine or quint, is capable of providing personnel for rescue and fire suppression abilities. The first due unit, and all subsequent arriving apparatus, follow standard operating procedures established in the agency standard operating procedures.

For 90 percent of all moderate risk fires, the total response time in 2017-2021 for the arrival of the ERF, staffed with 10 firefighters and officers, is: fourteen minutes and forty seconds (14:40) surpassing the benchmark by three minutes and fify-five seconds (3:55). 2021 saw a decrease to meet the ERF at fourteen minutes and thirty-one seconds (14:31) exceeding the benchmark by three minutes and fourty-six seconds (3:46). The ERF used during this period is capable of the following actions: establishing formal command, establishing a safety officer, uninterrupted water supply, fire attack, back up line and medical care. All of the operations described above are based on the agency standard operating procedures.

**The sample size of this response type adds difficulty in using this metric for analysis*.

Moderate Risk Fire Suppression All Area 90th Percentile Times			**Bench-mark**	**2017-2021**	**2017**	**2018**	**2019**	**2020**	**2021**
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:29	2:20	1:46	2:17	2:14	2:25
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:23	2:38	2:24	2:34	2:03	1:57
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:33	5:02	2:37	5:24	4:02	5:42
	Travel Time ERF **Concentration**	Urban	7:15	10:18	5:38	7:56	26:21*	9:43	10:33
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	9:00	9:38	6:44	9:06	7:37	9:03
				n=28	n=4	n=2	n=5	n=5	n=12
	Total Response Time ERF **Concentration**	Urban	10:45	14:40	10:40	12:09	14:02	26:48	14:31

For 90 percent of all ***low-risk fires*** during the 2017-2021 time period, the total response time for arrival of the first unit/ERF is: nine minutes and thirty-seven seconds (9:37) missing the benchmark by only seven seconds (0:07). During 2021 the department missed the benchmark by three minutes andfour seconds (3:04) with a total response time of twelve minutes and thirty-four seconds (12:34). The ERF used during this period is capable of the following actions: establishing formal command, fire attack. All of the operations described above are based on the agency standard operating procedures.

**The 2020 sample size of this response type adds difficulty in using this metric for analysis*.

Low Risk Fire Suppression All Area 90th Percentile Times			Bench-mark	2017 - 2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:38	1:17	2:28	2:11	2:46	3:13
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:17	2:21	2:20	2:05	2:23	2:08
Travel Time	Travel Time 1st Unit/ERF **Distribution & Concentration**	Urban	6:00	6:46	5:12	6:42	6:30	6:19	7:49
Total Response Time	Total Response Time 1st Unit/ERF **Distribution & Concentration**	Urban	9:30	9:37	7:39	10:16	7:41	9:32	12:34
				n=222	n=46	n=34	n=44	n=44	n=57

Emergency Medical Baseline Performance Response (all area)

The Department's baseline statements reflect actual performance during 2017-2021. The Department relies on the use of automatic aid from neighboring fire departments to provide its effective response force complement of personnel. These resources are immediately available as part of a seamless response system. The Department's actual baseline service level performance is as follows:

For 90 percent of ***all EMS responses***, the total response baseline time in 2017-2021 for the arrival of the first-due unit, staffed with at least 1 firefighter and 1 paramedic, is: seven minutes and fifty-five seconds (7:55) which exceeds the Departments benchmark by eighteen seconds (0:18). In 2021 the Department response moved to eight minutes and twenty-two seconds (8:22) exceeding the benchmark by forty-eight seconds (0:47). The first-due unit is capable of: establishing command; maintaining scene safety; evaluating the need for additional resources; initiating basic life support and early defibrillation; and assisting transportation of the patient to the appropriate receiving facility.

The Department had no maximum risk EMS responses during the timeframe.

For 90 percent of all EMS response incidents, the total 2017-2021 baseline response time for the arrival of the effective response force (ERF), staffed with up to 9 firefighters (including at least 4 paramedics), is: nine minutes and twenty seconds (9:20) which exceeded the benchmark by one minute and forty-five seconds (1:45). In 2021 the Department response lowered to nine minutes and forty-one seconds (9:41) exceeding the benchmark by two minutes six seconds (2:06). The ERF is capable of: maintaining command and scene safety; delivering advanced life support including the appropriate treatment; and transporting the patient to the appropriate receiving facility.

Until the implementation of the new CAD system targeted for the second quarter of 2021, the Elk Grove Village Fire Department is unable to differentiate between EMS risk levels of low, moderate and high for the purposes of performance times. Therefore, all EMS calls for service are held to the same benchmarks.

EMS All Area 90th Percentile Times Baseline Performance			Bench-mark	2017-2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:40	1:21	2:45	2:46	2:53	2:46
Turnout Time	Turnout Time 1st Unit	Urban	1:50	2:04	2:04	2:09	2:03	2:07	1:56
Travel	Travel Time 1st Unit/ERF **Distribution**	Urban	4:15	4:41	4:23	4:35	4:47	4:39	5:59
Time	Travel Time ERF **Concentration**	Urban	4:15	5:46	5:27	5:39	5:43	6:07	5:57
Total Response Time	Total Response Time 1st Unit/ **Distribution**	Urban	7:35	7:53	6:50	8:11	8:16	8:23	8:22
				n=20,033	n=3,881	n=4,170	n=4,089	n=3,736	n=4,157
	Total Response Time ERF **Concentration**	Urban	7:35	9:20	8:24	9:36	8:49	11:08	9:41

Hazardous Material Baseline Performance Response (all area)

The Department's baseline statements reflect actual performance during 2017-2021. The Department relies on the use of automatic aid from neighboring fire departments to provide its effective response force complement of personnel. These resources are immediately available as part of a seamless response system. The department's actual baseline service level performance is as follows:

**The sample size of this response type adds difficulty in using this metric for analysis*.

For 90 percent of ***all high-risk hazardous materials response*** incidents, the total baseline response time for the arrival of the first-due unit, staffed with 2 firefighters and 1 officer is: eleven minutes and thirty-two seconds (11:32) exceeding the benchmark by three minutes and forty-seven seconds (3:47). The Department reduced the response time yet exceeded the benchmark by three minutes (4:09) for the 2021 year with a time of ten minutes and forty-five seconds (10:45). The first-due unit shall be capable of: establishing command; evaluating the need for additional resources; establishing the initial isolation distance; and assessing the situation to determine the presence of a potential hazardous material or explosive device.

For 90 percent of ***all high/maximum risk hazardous materials response*** incidents, the total response baseline time in 2017-2021 for the arrival of the effective response force (ERF) including the Department hazardous materials response team, staffed with 13 to 28 firefighters and officers, is: twenty minutes and nine seconds (20:09) surpassing the benchmark by eight minutes and twenty-one seconds (8:21). The Department meet the benchmark in 2021 by fifteen minutes and nineteen seconds (15:19) with a time of thirteen minutes and eleven (13:11). This response time includes out of town apparatus and personnel. The ERF is capable of: providing a dedicated incident safety officer; emergency or mass decontamination; defensive containment measures; and providing the knowledge, skills, and abilities to mitigate a hazardous materials incident.

High Risk Haz Mat All Area 90th Percentile Times Baseline Performance			**Bench-mark**	**2017-2021**	**2017**	**2018**	**2019**	**2020**	**2021**
Alarm Handling	Pick-up to Dispatch	Urban	1:30	3:44	2:27	3:14	3:36	4:21	3:11
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:47	2:19	2:43	2:18	3:49	1:58
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	7:52	4:51	5:54	8:39	5:51	6:34
	Travel Time ERF **Concentration**	Urban	25:00	11:40	8:04	8:26	9:31	31:22	8:24
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	11:32	8:56	10:47	12:41	11:56	10:45
				n=89	n=18	n=17	n=20	n=16	n=16
	Total Response Time ERF **Concentration**	Urban	28:30	20:09	17:57	21:25	15:39	56:14	13:11

For 90 percent of ***all moderate hazardous materials response*** incidents, the total baseline response time in 2017-2021 for the arrival of the first-due unit, staffed with 2 firefighters and 1 officer, is: nine minutes and fifteen seconds (9:15) exceeding the benchmark by one minute and thirty seconds (1:30). In 2021 the Department exceeding the benchmark by two minutes and twenty-one seconds (2:21) at a time of ten minutes and six seconds (10:06). The first-due unit shall be capable of: establishing command; evaluating the need for additional resources; establishing the initial isolation distance; and assessing the situation to determine the presence of a potential hazardous material or explosive device.

For 90 percent of ***all moderate risk hazardous materials response*** incidents, the total baseline response time in 2017-2021 for the arrival of the effective response force (ERF) including the hazardous materials response team, staffed with 11 firefighters and officers, is: twelve minutes and forty-one seconds (12:41) exceeding the benchmark by one minute and fifty-six seconds (1:56). The Hazmat response benchmark was exceeded by two minutes and twenty-seven seconds (2:27) during the 2020 calendar year with a total response time of thirteen minutes and four seconds (13:04). The ERF is capable of: providing a dedicated incident safety officer; emergency or mass decontamination; defensive containment measures; and providing the knowledge, skills, and abilities to mitigate a hazardous materials incident.

**The 2020 sample size of this response type adds difficulty in using this metric for analysis*.

Moderate Risk Haz Mat All Area 90th Percentile Times Baseline Performance			**Bench-mark**	**2017-2021**	**2017**	**2018**	**2019**	**2020**	**2021**
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:31	1:31	2:30	2:10	3:23	2:36
Turnout Time	Turnout Time 1st Unit	Urban	2:20	2:24	2:41	2:17	2:17	2:20	2:20
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:51	4:52	5:54	4:20	4:28	6:43
	Travel Time ERF **Concentration**	Urban	7:45	7:43	7:36	6:59	7:12	9:03	8:40
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	9:15	7:25	10:05	8:44	8:52	10:06
				n=215	n=40	n=48	n=45	n=37	n=44
	Total Response Time ERF **Concentration**	Urban	10:45	12:41	18:18	11:51	10:43	13:16	13:04

For 90 percent of ***all low hazardous materials response*** incidents, the total baseline response time in 2017-2021 for the arrival of the first-due unit, staffed with 2 firefighters and 1 officer, is: ten minutes and thirty-five seconds (10:35) exceeding the benchmark by thirty seconds (0:30). The benchmark further exceeded in 2020 by two minutes and thirty-six seconds (2:36) with a response time of twelve minutes and six seconds (12:06). The first-due unit shall be capable of: establishing command; evaluating the need for additional resources; establishing the initial isolation distance; and assessing the situation to determine the presence of a potential hazardous material.

For 90 percent of ***all low-risk hazardous materials response*** incidents, the total baseline response time for the arrival of the effective response force (also the first on-scene unit) staffed with 2 firefighters and 1 officer, is: ten minutes (10:00) exceeding the benchmark by one minute and five seconds (1:05)). In 2021 the ERF was obtained with a response time of ten minutes and forty-five seconds (10:45). This exceeded the benchmark by one minutes and fiftee seconds (1:15) The ERF is capable of: monitoring for hazardous materials, ventilation, defensive containment measures; and providing the knowledge, skills, and abilities to mitigate a hazardous materials incident.

**The 2020 sample size of this response type adds difficulty in using this metric for analysis*.

Low Risk Haz Mat All Area 90th Percentile Times Baseline Performance			**Bench-mark**	**2017-2021**	**2017**	**2018**	**2019**	**2020**	**2021**
Alarm Handling	Pick-up to Dispatch	Urban	1:30	3:16	1:11	2:47	3:16	3:21	3:37
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:16	2:06	2:34	2:12	2:10	2:18
Travel Time	Travel Time 1st Unit/ERF **Distribution & Concentration**	Urban	6:00	6:29	5:37	7:03	5:18	6:00	6:12
Total Response Time	Total Response Time 1st Unit/ERF **Distribution & Concentration**	Urban	9:30	10:35	8:03	10:49	11:20	12:06	10:45
				n=96	n=19	n=17	n=28	n=24	n=18

Technical Rescue Baseline Performance Response (all area)

The Department's baseline statements reflect actual performance during 2017-2021. The Department relies on the use of automatic aid from neighboring fire departments to provide its effective response force complement of personnel. These resources are immediately available as part of a seamless response system. The Department's actual baseline service level performance is as follows:

For 90 percent of ***all high/maximum risk technical rescue incidents***, the total baseline response time for 2017-2021 using only the 2020 calendar year the arrival of the first-due unit, staffed with a minimum of 2 firefighters, is: eight minutes and forty-four seconds (8:44) Village wide. The benchmark is exceeded by fifty-nine seconds (0:59). The first-due unit is capable of: establishing command; evaluating the need for additional resources; and controlling immediate hazards and life safety issues.

For 90 percent of ***all high/maximum risk technical rescue incidents***, the total baseline response time in 2017-2021 for the arrival of the effective response force (ERF), staffed with 20-30 firefighters and officers including the technical response team utilizing MABAS to achieve the desired numbers of members, is: fifteen minutes and fifty-one seconds (15:51) which occurred during the 2020 calendar year. This response surpassed the benchmark by twelve minutes and thirty-nine seconds (12:39). The ERF is capable of: appointing a site safety officer; hazard control; primary/secondary teams, and patient stabilization and transport. There were no high/maximum risk technical rescue incidents for 2021.

**The sample size of this response type adds difficulty in using this metric for analysis*.

High/Maximum Risk TRT All Area 90th Percentile Times Baseline Performance			Bench-mark	2017 to 2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	3:19	N/A	N/A	N/A	3:19	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:00	0:38	N/A	N/A	N/A	0:38	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	4:15	4:16	N/A	N/A	N/A	4:16	N/A
	Travel Time ERF **Concentration**	Urban	25:00	7:29	N/A	N/A	N/A	7:29	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:44	N/A	N/A	N/A	8:44	N/A
				n=2	n=0	n=0	n=0	n=2	n=0
	Total Response Time ERF **Concentration**	Urban	28:30	15:51	N/A	N/A	N/A	15:51	N/A

For 90 percent of ***all moderate risk technical rescue incidents***, the total response baseline time in 2017-2021 for the arrival of the first-due unit, staffed with a minimum of 2 firefighters, is: nine minutes and forty-four seconds (9:44). With the benchmark being seven minutes and forty-five seconds (7:45) the benchmark was exceeded by one minute and fifty-nine seconds (1:59). In 2021 the first unit arrived with a time of nine minutes and forty-nine seconds (9:49) exceeding the benchmark for 2021 by two minutes and four seconds (2:04). The first-due unit is capable of: establishing command; evaluating the need for additional resources; and controlling immediate hazards and life safety issues.

For 90 percent of ***all moderate risk technical rescue incidents***, the total baseline response time in 2017-2021 for the arrival of the effective response force (ERF), staffed with 13 firefighters and officers including the technical response team, is: thirteen minutes and forty-one seconds (13:41). With a benchmark of nine minutes and forty-five seconds (9:45) the Department exceeded its benchmark by three minutes and fifty-six seconds (3:56). In 2021 the baseline ERF was better at twelve minutes and forty-five seconds (12:45) yet still exceeded the benchmark by three minutes (3:00).). The ERF is capable of: appointing a site safety officer; hazard control; and patient stabilization and transport.

**The sample size of this response type adds difficulty in using this metric for analysis*.

Moderate Risk TRT All Area 90th Percentile Times Baseline Performance			Bench-mark	2017-2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:29	1:26	2:52	2:32	2:27	2:10
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:18	2:17	2:20	2:25	2:03	2:15
Travel Time	Travel Time 1st Unit Distribution	Urban	4:15	6:53	4:38	6:19	5:23	9:18	6:46
	Travel Time ERF **Concentration**	Urban	6:15	9:39	5:58	10:57	7:20	9:18	10:20
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	9:44	7:07	9:49	8:02	11:36	9:45
				n=63	n=9	n=13	n=21	n=10	n=10
	Total Response Time ERF **Concentration**	Urban	9:45	13:41	12:54	17:26	9:37	12:44	12:45

For 90 percent of ***all low risk technical rescue incidents***, the total baseline response time in 2016-2020 for the arrival of the first-due unit, staffed with a minimum of 2 firefighters, is: seven minutes and twenty-three seconds (7:23). With a benchmark of nine minutes and thirty seconds (9:30) the Department surpassed the benchmark by two minutes and seven seconds (2:07). In 2021 the Department continued to better the response and surpassed its benchmark by two minutes and twenty-nine seconds (2:29) with a baseline response of eight minutes and one second (8:01). The first-due unit is capable of: establishing command; evaluating the need for additional resources; and controlling immediate hazards and life safety issues.

For 90 percent of all ***low-risk technical rescue incidents***, the total baseline response time in 2017-2021 for the arrival of the effective response force (ERF), staffed with 9 firefighters and officers, including the technical response team, is: nine minutes and sixteen seconds (9:16) surpassing the benchmark of nine minutes and thirty seconds (9:30) by fourteen seconds (0:14). In 2021 the benchmark for total ERF was met by two seconds (0:02) with a baseline time of nine minutes and twenty-eight seconds (9:28). The ERF is capable of: appointing a site safety officer; hazard control; and patient stabilization and transport.

**The 2020 sample size of this response type adds difficulty in using this metric for analysis*.

Low Risk TRT All Area 90th Percentile Times Baseline Performance			Bench-mark	2017-2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:10	2:05	2:10	1:59	1:55	2:17
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:51	1:50	1:39	1:38	1:52	2:02
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	4:30	4:12	4:09	4:25	4:29	4:54
	Travel Time ERF **Concentration**	Urban	6:00	6:03	5:49	5:51	5:56	5:41	6:25
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	7:23	7:15	7:23	6:53	7:01	8:01
				n=124	n=13	n=20	n=32	n=30	n=29
	Total Response Time ERF **Concentration**	Urban	9:30	9:16	9:40	9:24	8:41	9:40	9:28

***Water Rescue Baseline Performance Response* (all area)**

The Department's baseline statements reflect actual performance during 2017-2021. The Department relies on the use of automatic aid from neighboring fire departments to provide its effective response force complement of personnel. These resources are immediately available as part of a seamless response system. The Department's actual baseline service level performance is as follows:

The Department had no maximum risk Water Rescue Incidents during this time frame. The Department does not consider any Water Rescue Incident low or moderate risk.

**The sample size of this response type adds difficulty in using this metric for analysis*.

For 90 percent of ***all water rescue incidents***, the total baseline response time in 2017-2021 for the arrival of the first-due unit, staffed with a minimum of 2 firefighters and 1 officer, is: seventeen minutes and fifty-three seconds (17:53). With a benchmark of eight minutes (8:00) the Department exceeds the benchmark by nine minutes and fifty-three seconds (9:53). In 2021 the baseline response elevated to eighteen minutes and four seconds (18:04) greatly exceeding the benchmark by ten minutes and four seconds (10:04). The first-due unit is capable of: establishing command; evaluating the need for additional resources; and controlling immediate hazards and life safety issues.

For 90 percent of ***all high/Drowning Level 1 risk water rescue incidents***, the total baseline response time in 2017-2021 for the arrival of the effective response force (ERF), staffed with 14 firefighters and officers, including the mutual aid response team, is: twenty-four minutes and two seconds (24:02). The benchmark is currently thirteen minutes and forty-five seconds (13:45) meaning the baseline exceeds the benchmark by ten minutes and seventeen seconds (10:17). In 2021 the baseline response for ERF had a response of eighteen minutes and four seconds (18:04) exceeding the benchmark by ten minutes and four seconds (10:04). The ERF is capable of: appointing a site safety officer; hazard control; and patient stabilization and transport.

For 90 percent of ***all maximum/Drowning Level 2 risk water rescue incidents***, the total benchmark response time for 2021 the arrival of the effective response force (ERF), staffed with 20 to 30 firefighters and officers, including the water response team and MABAS personnel and assets, is: thirty-four minutes and eight seconds (34:08). The Department is currently unable to determine a baseline for such incident due to lack of data at the maximum risk for water rescue The ERF is capable of: appointing a site safety officer; dive team leader, primary/secondary teams, hazard control, decon, patient stabilization, patient treatment, and transport

Water Rescue All Area 90th Percentile Times Baseline Performance			Bench-mark	2017-2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	4:46	5:33	n/a	2:57	2:47	4:34
Turnout Time	Turnout Time 1st Unit	Urban	2:15	4:34	1:12	n/a	1:46	5:33	1:19
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	14:08	13:35	n/a	20:40	5:45	10:05
	Travel Time ERF **Concentration**	Urban	10:00	17:28	12:26	n/a	20:13	11:15	17:58
Total Response Time	Total Response Time 1st Unit on Scene	Urban	8:00	17:53	19:16	n/a	9:31	11:45	18:04
	Distribution			n=13	n=2	n=0	n=3	n=5	n=3
	Total Response Time ERF **Concentration**	Urban	13:45	24:02	23:57	n/a	25:33	19:35	34:08

Emergent Other Services Baseline Performance Response (all area)

The Department's baseline statements reflect actual performance during 2017-2021. The Department relies on the use of automatic aid from neighboring fire departments to provide its effective response force complement of personnel. These resources are immediately available as part of a seamless response system. The Department's actual baseline service level performance is as follows:

For 90 percent of ***all Emergent Other Services incidents***, the total response baseline time in 2017-2021 for the arrival of the first-due unit, staffed with a minimum of 1 to 2 firefighters and 1 officer, is: nine minutes and thirty-nine seconds (9:39) with a benchmark of nine minutes and fifteen seconds (9:15). The benchmark is surpassed by twenty-four seconds (0:24). For 2021 the baseline increased to ten minutes and twenty-six seconds (10:26) exceeding the benchmark by one minute and eleven second (1:11). The first-due unit is capable of: establishing command; evaluating the need for additional resources; and controlling immediate hazards and life safety issues.

For 90 percent of all Emergent Other Services incidents, the total baseline response time in 2016-2020 for the arrival of the effective response force (ERF), staffed with up to 8 firefighters and officers is: eleven minutes and thirteen seconds (11:13) exceeding the benchmark by fifty-three seconds (0:53). In 2021 the baseline increased to eleven minutes and fifty-seven seconds (11:57) exceeding the benchmark by one minute and fifty-seven seconds (1:57). The ERF is capable of: appointing a site safety officer; hazard control; and patient stabilization and transport.

A list of incident types included in Emergent Other Services Responses can be found on Page 48.

Emergent Other All Area 90th Percentile Times Baseline Performance			Bench-mark	2017-2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:25	1:38	2:33	2:25	2:36	2:28
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:28	2:28	2:30	2:28	2:25	2:21
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:45	6:12	5:05	5:25	6:25	6:16	6:41
	Travel Time ERF **Concentration**	Urban	6:50	7:33	7:06	7:36	7:32	7:14	7:56
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:15	9:39	8:12	9:42	10:02	10:16	10:26
				n=4,798	n=981	n=1,046	n=974	n=828	n=969
	Total Response Time ERF **Concentration**	Urban	10:20	11:13	10:45	11:47	10:27	11:18	11:57

Non-Emergent Other Services Baseline Performance Response (all area)

The Department's baseline statements reflect actual performance during 2017-2021. The Department does not rely on the use of automatic aid from neighboring fire departments to provide its effective response force complement of personnel. The Department's actual baseline service level performance is as follows:

For 90 percent of ***all Non-Emergent Other Services incidents***, the total response baseline time in 2017-2021 for the arrival of the first-due unit, staffed with a minimum of 2 to 3 firefighters and 1 officer, is: eleven minutes and forty-seven seconds (11:47) exceeding the benchmark by only seventeen seconds (0:17). In 2021 the baseline increased to twelve minutes and eighteen seconds (12:18) and exceeded the benchmark by only forty-eight seconds (0:48). The first-due unit is capable of: establishing command; evaluating the need for additional resources; and controlling hazards.

For 90 percent of ***all Non-Emergent Other Services incidents***, the total baseline response time in 2017-2021 for the arrival of the effective response force (ERF), staffed with up to 8 firefighters and officers is: eleven minutes and fifty-eight seconds (11:58) surpassing the benchmark of eleven minutes and thirty seconds (11:30) by twenty-eight seconds (0:28). In 2021 the baseline increased to twelve minutes and fifty-eight seconds (12:58) exceeding the benchmark by one minute twenty-eight seconds (1:28). The ERF is capable of: appointing a site safety officer; hazard control; and providing the service requested by the citizen.

A list of incident types included in Non-Emergent Other Services Responses can be found on Page 50.

Non-Emergent Other All Area 90th Percentile Time Baseline Performance			Bench-mark	2017-2021	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:55	2:19	2:43	2:53	3:27	3:04
Turnout Time	Turnout Time 1st Unit	Urban	2:30	2:15	2:18	2:17	2:14	2:12	2:06
Travel Time	Travel Time 1st Unit **Distribution**	Urban	7:30	8:07	6:36	7:18	8:02	8:28	8:31
	Travel Time ERF **Concentration**	Urban	7:30	8:03	6:34	7:17	8:04	8:24	8:25
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	11:30	11:47	9:41	11:04	11:13	12:24	12:18
				n=1,586	n=276	n=350	n=390	n=264	n=306
	Total Response Time ERF **Concentration**	Urban	11:30	11:58	10:13	11:32	10:51	12:13	12:58

Plan for Maintaining and Improving Response Capabilities (2D.1) (2D.7) (2C.2)

The Elk Grove Village Fire Department must institutionalize methods to assess our service delivery, provide effective and efficient responses, and address areas of deficiency. In order to continuously monitor, assess and report our response capabilities, the following reports are generated. Each report has a position responsible for creation and dissemination of the information in the specified period.

Monthly Performance Objective Report (2D.2) (2D.6)-
To be completed and sent to the Chief Officers prior to the monthly administrative staff meeting by the Management Analyst. Report includes:

- Turn out, travel and total response times for Fire, EMS, Haz Mat, TRT, Water Rescue and Other calls department wide
- Turn out, travel and total response times by each district for Fire, EMS and Other incident types
- Turn out times by district and shift for Fire and EMS incident types.
- Benchmark time objectives
- Times use the 90th percentile

Monthly Incident Distribution and Concentration Report-
To be completed and delivered to the Chief Officers prior to the monthly administrative staff meeting by the Management Analyst. Report includes:

- Number of incidents by district for the past month
- Types of incidents by district for the past month
- Year to date incident types and total department wide
- Incident types will be Fire, EMS, Haz Mat, TRT, Water Rescue and Other

Reports presented at each monthly administrative staff meeting:

- EMS Activities Report (EMS Battalion Chief)
- Training Activities Report (Training Battalion Chief)
- Inspection Services Activities Report (Fire Marshal)
- Budget Status Report (Management Analyst)
- Fleet Status Report (Deputy Chief)
- Facilities Status Report (Deputy Chief)

Monthly Administrative Staff Meeting
The following documents will be generated for the monthly administrative staff meeting by the Secretary to the Fire Chief or the Management Analyst:

- An Agenda-Distributed to the Chief Officers at least one business day prior to the meeting.
- Meeting Minutes-A draft distributed to the Chief Officers no later than one-business days after the meeting.

Quarterly Reports

To be completed by the Team Leader or Management Analyst and submitted to the Fire Chief by January 15, April 15, July 15, and October 15.

- Special Team/Training/Pub Ed/SOG Activities Report (Team Leader)
- Auto Aid Given/Received Report (Management Analyst)
- Mutual Aid Given/Received Report (Management Analyst)
- Station Reliability Report (Management Analyst)

Annual Activities Using Calendar Year Information (2D.3)

- Organizational Goals- may be included in Annual Report (Fire Chief)
- Annual Report (2D.8)(2D.9) - January (Fire Chief)
- Standards of Cover update (2D.4) - February (Accreditation Manager)
- Community Risk Assessment update - February (Fire Marshal and Accreditation Manager)
- CFAI Annual Compliance (Accreditation Manager)

Annual Activities Using Fiscal Year Information

Program reviews are to be completed annually by the program coordinator and submitted to the Fire Chief by May 15. Program reviews will be conducted for the following areas (2D.5):

- Community Risk Reduction Program (Fire Marshal)
- Public Education Program (Program Coordinator)
- Fire Investigation, Origin, and Cause Program (Team Leader)
- Fire Suppression (Deputy Chief)
- Emergency Medical Services (EMS Battalion Chief)
- Technical Rescue (Team Leader)
- Hazardous Materials (Team Leader)
- Water Rescue (Team Leader)
- Wellness/Fitness Programs (EMS Coordinator or Fitness Committee)
- Communication Systems (Deputy Chief)

Budget

The budget development process begins in September and is facilitated by the Management Analyst, in coordination with Finance Department policies.

Other Objective Development Reports

- Strategic Plan update, Bi-Annual (Fire Chief)
- External Stakeholder report (2D.10)-every 3 years (Fire Chief)

Conclusions / Recommendations

The Elk Grove Village Fire Department aims to provide exceptional service to the community in a fiscally responsible manner. The Standards of Cover and the Center for Public Safety Excellence Accreditation process provides a path to reveal opportunities for positive change in achieving that goal. During our self-assessment and evaluation of deployment performance, the following conclusions and recommendations were produced.

Benchmark Times and Performance-The Department is not meeting the benchmark for several components of response time. In the second quarter of 2021 the Department will assign a chief officer the role of performance manager. The position continues to seek out performance gaps and recommend steps to bring response times into alignment with the Department performance benchmarks.

Peak Hour Staffing- Call volume data indicates that Monday thru Friday during normal business hours are the peak hours for incidents within the Village. Currently an ALS Squad is “staffed up” during the hours of 0800-1600 Monday thru Thursday to assist with the increased emergencies. During the suspension of the 4th ambulance program, the Department will consider adding Friday to peak staffing for the Squad.

Resource Resistance on Fire Alarms- Currently, the computer aided dispatch (CAD) cannot be differentiated responses based on structure/occupancy risk, resulting in the same resources being dispatched to a high-risk occupancy and a low risk occupancy. In the second quarter of 2021 the Department and Dispatch Center will transition to the new CAD. This new CAD will allow for the use of quantitative risk classification in assigning resources dispatched to specific occupancy risks. When available, the Department will scale fire suppression and alarm responses to meet the risk associated with specific occupancy risks.

EMD Response Determinants-The Department and Dispatch center are in the early stages of using Emergency Medical Priority Dispatch Response Determinants. This system prioritizes EMS calls from low to maximum risk. Our current computer aided dispatch system is unable to take full advantage of this differentiation. Therefore, the Department uses the same benchmark times across low, moderate and high-risk EMS events. With implementation of the new CAD system in the second quarter of 2021, the Department will collect call volume and performance data on EMS calls separated by risk.

Call Volume and Type Projections- The Chief Officers and the Accreditation Manager should monitor the accuracy on the newly created call volume and type projection methodology (tables 12, 16, 22, 24 and 27).

Water Rescue- EGVFD expends a significant amount of resources to address the potential of a water rescue within our jurisdiction. While our call volume for these incidents is low, our stakeholders expect a high level of service in this area.

Correlation of CRA-SOC Document to CFAI Accreditation Model

The Elk Grove Village Fire Department Community Risk Assessment and Standards of Cover contains specific elements correlating to the Center for Public Safety Excellence 9th edition accreditation model found in the Fire and Emergency Services Self-Assessment.

		CFAI FESSAM 9th Edition - Performance Indicator/ Core Competency	CRA-SOC Page(s)
	2A.1	Service area boundaries for the agency are identified, documented, and legally adopted by the authority having jurisdiction.	21
	2A.2	Boundaries for other service responsibility areas, such as automatic aid, mutual aid, and contract areas, are identified, documented, and appropriately approved by the authority having jurisdiction.	22
CC	2A.3	The agency has a documented and adopted methodology for organizing the response area(s) into geographical planning zones.	31
CC	2A.4	The agency assesses the community by planning zone and considers the population density within planning zones and population areas, as applicable, for the purpose of developing total response time standards.	31
	2A.5	Data that includes property, life, injury, environmental, and other associated losses, as well as the human and physical assets preserved and or saved, are recorded for a minimum of three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.	52-54
	2A.6	The agency utilizes its adopted planning zone methodology to identify response area characteristics such as population, transportation systems, area land use, topography, geography, geology, physiography, climate, hazards and risks, and service provision capability demands.	31-39
	2A.7	Significant socio-economic and demographic characteristics for the response area are identified, such as key employment types and centers, assessed values, blighted areas, and population earning characteristics.	18-20
	2A.8	The agency identifies and documents all safety and remediation programs, such as fire prevention, public education, injury prevention, public health, and other similar programs, currently active within the response area.	57-58
	2A.9	The agency identifies critical infrastructure within the planning zones.	31
CC	2B.1	The agency has a documented and adopted methodology for identifying, assessing, categorizing, and classifying risks throughout the community or area of responsibility.	24
	2B.2	The historical emergency and non-emergency service demands frequency for a minimum of three immediately previous years and the future probability of emergency and non-emergency service demands, by service type, have been identified and documented by planning zone.	32,34,36,38,40
	2B.3	Event consequence loss and save data that includes property, life, injury, environmental, and other losses and saves are assessed for three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.	52-54

		CFAI FESSAM 9th Edition - Performance Indicator/ Core Competency	CRA-SOC Page(s)
CC	2B.4	The agency's risk identification, analysis, categorization, and classification methodology has been utilized to determine and document the different categories and classes of risks within each planning zone	32,34,36,38
	2B.5	Fire protection and detection systems are incorporated into the risk analysis.	25-27
	2B.6	The agency assesses critical infrastructure within the planning zones for capabilities and capacities to meet the demands posed by the risks.	31
CC	2C.1	Given the levels of risks, area of responsibility, demographics, and socio-economic factors, the agency has determined, documented, and adopted a methodology for the consistent provision of service levels in all service program areas through response coverage strategies.	61-62
CC	2C.2	The agency has a documented and adopted methodology for monitoring its quality of emergency response performance for each service type within each planning zone and total response area.	97
	2C.3	Fire protection systems and detection systems are identified and considered in the development of appropriate response strategies.	28
CC	2C.4	A critical task analysis of each risk category and risk class has been conducted to determine the first-due and effective response force capabilities, and a process is in place to validate and document the results.	64-73
CC	2C.5	The agency has identified the total response time components for delivery of services in each service program area and found those services consistent and reliable within the entire response area.	75
	2C.6	The agency has identified the total response time components for delivery of services in each service program area and assessed those services in each planning zone	75
CC	2C.7	The agency has identified efforts to maintain and improve its performance in the delivery of its emergency services for the past three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.	74
	2C.8	The agency's resiliency has been assessed through its deployment policies, procedures, and practices.	33,35,37,39
CC	2D.1	The agency has documented and adopted methodology for assessing performance adequacies, consistencies, reliabilities, resiliencies, and opportunities for improvement for the total response area.	74
	2D.2	The agency continuously monitors, assesses, and internally reports, at least quarterly, on the ability of the existing delivery system to meet expected outcomes and identifies the remedial actions most in need of attention.	97
CC	2D.3	The performance monitoring methodology identifies, at least annually, future external influences, altering conditions, growth and development trends, and new or changing risks, for purposes of analyzing the balance of service capabilities with new conditions or demands.	98
	2D.4	The performance monitoring methodology supports the annual assessment of the efficiency and effectiveness of each service program at least annually in relation to industry research.	74

		CFAI FESSAM 9th Edition - Performance Indicator/ Core Competency	CRA-SOC Page(s)
	2D.5	Impacts of incident mitigation program efforts, (such as community risk reduction, public education, and community service programs), are considered and assessed in the monitoring process.	98
CC	2D.6	Performance gaps for the total response area, such as inadequacies, inconsistencies, and negative trends, are determined at least annually.	99
CC	2D.7	The agency has systematically developed a continuous improvement plan that details actions to be taken within an identified timeframe to address existing gaps and variations.	97-100
	2D.8	On at least an annual basis, the agency formally notifies the authority having jurisdiction (AHJ) of any gaps in the operational capabilities and capacity of its current delivery system to mitigate the identified risks within its service area, as identified in its standards of cover.	98
	2D.9	On at least an annual basis, the agency formally notifies the AHJ of any gaps between current capabilities, capacity, and the level of service approved by the AHJ.	98
	2D.10	The agency interacts with external stakeholders and the AHJ at least once every three years, to determine the stakeholders' and AHJ's expectations for types and levels of services provided by the agency.	98

APPENDIX

Response Performance Planning Zone 7 (2C2 and 2C6).

Appendix 1.

High/Maximum Risk Fire Suppression Planning Zone 7 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:23	1:59	2:18	1:49	2:10
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:51	2:28	3:01	1:59	2:17
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	6:58	4:17	3:19	2:38	5:13
	Travel Time ERF **Concentration**	Urban	8:00	6:01	7:48	5:18	4:38	15:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	10:14	7:26	6:40	5:05	7:51
				n=13	n=18	n=7	n=4	n=10
	Total Response Time ERF **Concentration**	Urban	11:30	10:47	11:04	8:07	7:50	30:26

Appendix 2.

High/Maximum Risk Fire Suppression Planning Zone 8 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:25	2:08	1:47	1:58	1:51
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:13	2:07	2:04	2:04	2:10
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	3:33	5:00	6:23	3:55	5:06
	Travel Time ERF **Concentration**	Urban	8:00	7:40	9:55	9:23	8:37	6:27
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	7:04	9:08	8:03	8:55	8:04
				n=7	n=10	n=8	n=5	n=8
	Total Response Time ERF **Concentration**	Urban	11:30	12:30	34:45	16:34	12:41	9:44

Appendix 3.

High/Maximum Risk Fire Suppression Planning Zone 9 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:06	1:42	1:33	1:43	1:57
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:10	2:13	2:15	2:24	2:10
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:10	4:25	4:33	6:22	5:57
	Travel Time ERF **Concentration**	Urban	8:00	10:57	9:09	10:11	9:13	9:34
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:28	8:09	7:33	9:14	9:12
				n=17	n=15	n=9	n=12	n=12
	Total Response Time ERF **Concentration**	Urban	11:30	37:49	20:55	16:05	20:32	22:39

Appendix 4.

High/Maximum Risk Fire Suppression Planning Zone 10 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:36	1:09	2:08	1:41	1:53
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:02	2:37	2:05	2:05	2:21
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	3:50	4:41	4:10	3:55	3:55
	Travel Time ERF **Concentration**	Urban	8:00	8:48	8:55	9:18	8:09	9:57
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	7:16	7:55	7:34	7:38	7:38
				n=6	n=10	n=14	n=11	n=13
	Total Response Time ERF **Concentration**	Urban	11:30	15:05	18:33	12:19	11:50	18:25

Appendix 5.

Moderate Risk Fire Suppression Planning Zone 7 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	n/a	n/a	n/a	1:08	2:17
Turnout Time	Turnout Time 1st Unit	Urban	2:00	n/a	n/a	n/a	1:34	0:59
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	n/a	n/a	n/a	2:22	9:40
	Travel Time ERF **Concentration**	Urban	7:15	n/a	n/a	n/a	6:16	11:03
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	n/a	n/a	n/a	4:55	13:28
				n=0	n=0	n=0	n=2	n=2
	Total Response Time ERF **Concentration**	Urban	10:45	n/a	n/a	n/a	10:30	14:56

Appendix 6.

Moderate Risk Fire Suppression Planning Zone 8 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	0:51	n/a	1:28	n/a	1:44
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:04	n/a	:47	n/a	2:03
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	3:11	n/a	5:04	n/a	5:41
	Travel Time ERF **Concentration**	Urban	7:15	3:11	n/a	5:05	n/a	5:41
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	6:06	n/a	7:21	n/a	9:01
				n=1	n=0	n=2	n=0	n=6
	Total Response Time ERF **Concentration**	Urban	10:45	6:06	n/a	6:48	n/a	14:01

Appendix 7.

Moderate Risk Fire Suppression Planning Zone 9 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:31	:53	2:24	2:21	2:24
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:44	2:24	2:36	2:09	1:49
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:12	1:38	5:01	4:10	4:47
	Travel Time ERF **Concentration**	Urban	7:15	5:33	7:57	31:20	13:12	7:11
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	10:27	4:55	9:27	7:41	7:42
				n=2	n=1	n=3	n=3	n=4
	Total Response Time ERF **Concentration**	Urban	10:45	9:58	12:11	20:27	39:17	11:50

Appendix 8.

Moderate Risk Fire Suppression Planning Zone 10 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	0:35	1:52	n/a	n/a	n/a
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:01	2:20	n/a	n/a	n/a
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	4:05	2:44	n/a	n/a	n/a
	Travel Time ERF **Concentration**	Urban	7:15	7:13	2:44	n/a	n/a	n/a
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	6:41	6:56	n/a	n/a	n/a
				n=1	n=1	n=0	n=0	n=0
	Total Response Time ERF **Concentration**	Urban	10:45	9:26	6:56	n/a	n/a	n/a

Appendix 9.

Low Risk Fire Suppression Planning Zone 7 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:38	1:58	2:22	2:55	2:50
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:51	2:20	2:17	2:15	2:05
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	5:07	5:39	3:43	6:36	7:15
	Travel Time ERF **Concentration**	Urban	6:00	6:02	9:10	7:42	7:04	10:58
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	8:45	8:37	8:05	9:32	16:24
				n=14	n=12	n=16	n=18	n=14
	Total Response Time ERF **Concentration**	Urban	9:30	10:18	12:19	10:34	10:46	52:12

Appendix 10.

Low Risk Fire Suppression Planning Zone 8 90th Percentile Times			Bench-Mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:32	2:57	1:52	2:39	3:16
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:35	2:04	2:09	2:19	2:00
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	5:42	5:56	4:28	5:21	8:08
	Travel Time ERF **Concentration**	Urban	6:00	5:42	6:05	5:12	11:26	8:11
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	8:26	10:37	7:18	9:39	12:37
				n=8	n=10	n=6	n=11	n=11
	Total Response Time ERF **Concentration**	Urban	9:30	8:26	10:27	9:01	14:16	11:47

Appendix 11.

Low Risk Fire Suppression Planning Zone 9 90th Percentile Times			Bench-mark	2017	2018	2019	2020	
Alarm Handling	Pick-up to Dispatch	Urban	1:30	0:56	1:34	2:10	1:53	3:16
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:27	2:11	2:01	2:20	1:59
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	3:20	3:26	8:36	4:58	7:57
	Travel Time ERF **Concentration**	Urban	6:00	5:51	7:28	8:16	7:16	7:52
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	6:17	6:50	11:22	8:53	12:00
				n=9	n=6	n=13	n=9	n=19
	Total Response Time ERF **Concentration**	Urban	9:30	13:40	12:24	11:26	12:14	12:02

Appendix 12.

Low Risk Fire Suppression Planning Zone 10 90th Percentile Times			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:11	1:28	2:09	2:43	2:40
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:17	2:19	1:58	4:44	1:58
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	4:35	9:26	4:45	5:15	5:31
	Travel Time ERF **Concentration**	Urban	6:00	4:49	9:27	4:57	6:42	8:14
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	7:07	12:37	8:37	11:00	8:45
				n=14	n=4	n=9	n=6	n=13
	Total Response Time ERF **Concentration**	Urban	9:30	15:53	12:58	7:37	12:31	12:26

Appendix 13.

EMS Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:21	2:45	2:46	2:54	2:44
Turnout Time	Turnout Time 1st Unit	Urban	1:50	1:58	2:00	1:57	2:09	1:52
Travel Time	Travel Time 1st Unit/ERF **Distribution & Concentration**	Urban	4:15	3:53	4:05	4:09	4:13	4:21
	Travel Time All Units Dispatched	Urban	4:15	4:50	5:08	5:04	5:39	5:15
Total Response Time	Total Response Time 1st Unit/ERF **Distribution & Concentration**	Urban	7:35	6:18	7:30	7:33	7:59	7:43
				n=1,640	n=1,837	n=1,847	n=1,662	n=1,779
	Total Response Time All Units Dispatched	Urban	7:35	7:44	8:48	8:06	10:33	9:08

Appendix 14.

EMS Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:27	2:46	2:50	2:53	2:43
Turnout Time	Turnout Time 1st Unit	Urban	1:50	2:10	2:05	2:02	2:05	1:54
Travel Time	Travel Time 1st Unit/ERF **Distribution & Concentration**	Urban	4:15	4:31	4:24	4:54	4:34	5:05
	Travel Time All Units Dispatched		4:15	5:45	5:52	6:03	5:53	6:14
Total Response Time	Total Response Time 1st Unit/ERF **Distribution & Concentration**	Urban	7:35	7:04	7:53	8:20	8:15	8:33
				n=783	n=773	n=743	n=649	n=769
	Total Response Time All Units Dispatched		7:35	8:45	9:51	9:09	10:20	10:00

Appendix 15.

EMS Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:22	2:39	2:41	2:45	2:37
Turnout Time	Turnout Time 1st Unit	Urban	1:50	2:10	2:13	2:10	2:09	2:03
Travel Time	Travel Time 1st Unit/ERF **Distribution & Concentration**	Urban	4:15	4:45	5:01	5:51	6:07	6:15
	Travel Time All Units Dispatched		4:15	6:24	6:38	7:05	7:02	7:09
Total Response Time	Total Response Time 1st Unit/ERF **Distribution & Concentration**	Urban	7:35	7:28	8:49	9:27	9:39	9:29
				n=565	n=604	n=558	n=529	n=604
	Total Response Time All Units Dispatched		7:35	9:27	10:29	9:58	11:17	11:01

Appendix 16.

EMS Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:16	2:48	2:45	2:51	2:37
Turnout Time	Turnout Time 1st Unit	Urban	1:50	2:01	2:19	2:09	2:06	1:58
Travel Time	Travel Time 1st Unit/ERF **Distribution & Concentration**	Urban	4:15	4:15	4:39	4:33	4:15	4:32
	Travel Time All Units Dispatched		4:15	5:11	5:35	5:15	6:09	5:21
Total Response Time	Total Response Time	Urban	7:35	6:42	8:35	8:16	7:58	7:56
	1st Unit/ERF **Distribution & Concentration**			n=893	n=956	n=941	n=896	n=1,005
	Total Response Time All Units Dispatched		7:35	8:07	9:47	8:24	12:08	9:01

Appendix 17.

High/Maximum Risk Haz Mat Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:26	2:19	3:09	5:28	1:49
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:13	1:08	2:06	3:07	1:18
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:29	2:18	4:11	5:14	4:53
	Travel Time ERF **Concentration**	Urban	25:00	5:29	6:14	4:39	7:18	7:52
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:07	5:45	8:48	11:49	7:59
				n=2	n=1	n=5	n=4	n=2
	Total Response Time ERF **Concentration**	Urban	28:30	8:07	9:58	9:49	13:29	10:35

Appendix 18.

High/Maximum Risk Haz Mat Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:03	3:22	0:59	2:10	1:47
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:22	2:50	2:41	1:47	1:56
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:05	3:40	3:37	3:59	7:48
	Travel Time ERF **Concentration**	Urban	25:00	6:22	5:23	3:37	8:22	10:33
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	7:31	8:36	6:28	7:56	10:26
				n=5	n=5	n=3	n=1	n=7
	Total Response Time ERF **Concentration**	Urban	28:30	40:00	11:15	6:40	11:31	24:29

Appendix 19.

High/Maximum Risk Haz Mat Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:18	2:49	3:42	3:15	4:08
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:07	2:33	2:01	2:48	1:58
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	3:20	6:15	9:12	7:12	6:34
	Travel Time ERF **Concentration**	Urban	25:00	8:18	11:42	11:22	36:50	7:44
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	9:17	14:02	13:18	12:15	10:45
				n=10	n=9	n=11	n=9	n=6
	Total Response Time ERF **Concentration**	Urban	28:30	16:50	23:05	20:22	1:02:23	12:23

Appendix 20.

High/Maximum Risk Haz Mat Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:58	1:21	Not Available	3:58	0:49
Turnout Time	Turnout Time 1st Unit	Urban	2:00	0:51	2:18	2:26	6:15	0:28
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	4:27	4:45	3:12	3:37	3:38
	Travel Time ERF **Concentration**	Urban	25:00	4:27	4:56	7:36	13:53	3:38
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:16	7:56	7:06	8:42	4:55
				n=1	n=2	n=1	n=2	n=1
	Total Response Time ERF **Concentration**	Urban	28:30	8:16	7:56	8:24	19:49	4:55

Appendix 21.

Moderate Risk Haz Mat Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:04	2:38	1:59	3:24	2:56
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:32	2:14	2:11	2:53	2:01
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	3:34	5:52	3:52	3:36	6:37
	Travel Time ERF **Concentration**	Urban	7:45	7:08	6:35	6:42	6:26	7:36
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	6:51	9:37	7:40	8:12	10:55
				n=18	n=24	n=18	n=15	n=17
	Total Response Time ERF **Concentration**	Urban	10:45	12:05	12:32	10:40	10:12	13:12

Appendix 22.

Moderate Risk Haz Mat Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:27	2:03	1:59	1:43	1:50
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:25	2:17	2:18	1:46	2:30
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	4:51	3:22	4:04	3:42	5:21
	Travel Time ERF **Concentration**	Urban	7:45	7:27	5:26	6:36	10:42	7:16
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:05	7:40	7:43	6:57	8:29
				n=4	n=12	n=6	n=2	n=9
	Total Response Time ERF **Concentration**	Urban	10:45	10:40	9:36	9:24	17:56	11:53

Appendix 23.

Moderate Risk Haz Mat Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:47	2:25	1:51	3:07	2:36
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:45	2:33	2:12	2:07	1:51
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:20	8:53	8:03	7:38	7:18
	Travel Time ERF **Concentration**	Urban	7:45	7:46	8:38	7:42	9:29	9:16
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	7:54	12:43	12:36	11:54	10:19
				n=8	n=9	n=7	n=8	n=7
	Total Response Time ERF **Concentration**	Urban	10:45	26:11	12:18	11:11	14:15	13:32

Appendix 24.

Moderate Risk Haz Mat Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:53	2:45	2:36	2:16	1:57
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:17	2:15	2:29	1:59	2:23
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	4:06	5:11	4:16	4:27	4:17
	Travel Time ERF **Concentration**	Urban	7:45	7:51	7:02	7:11	9:27	7:07
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	7:19	10:13	9:15	7:25	7:54
				n=10	n=3	n=14	n=12	n=11
	Total Response Time ERF **Concentration**	Urban	10:45	22:04	11:16	10:51	13:31	13:02

Appendix 25.

Low Risk Haz Mat Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	0:53	1:42	3:10	2:58	3:22
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:00	1:37	2:00	2:52	2:20
	Travel Time 1st Unit **Distribution**	Urban	6:00	5:05	8:00	5:17	4:45	5:27
	Travel Time ERF **Concentration**	Urban	6:00	5:05	7:29	6:30	5:51	5:49
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	7:00	11:17	9:19	9:36	10:05
				n=6	n=3	n=14	n=10	n=6
	Total Response Time ERF **Concentration**	Urban	9:30	7:00	10:41	12:20	1:01:07	14:29

Appendix 26.

Low Risk Haz Mat Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:31	2:23	n/a	0:56	1:43
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:17	2:23	n/a	1:42	1:30
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	5:03	3:06	n/a	4:40	6:13
	Travel Time ERF **Concentration**	Urban	6:00	5:03	5:48	n/a	4:40	6:13
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	8:12	9:26	n/a	7:18	9:26
				n=3	n=4	n=0	n=1	n=1
	Total Response Time ERF **Concentration**	Urban	9:30	8:12	9:33	n/a	7:18	9:26

Appendix 27.

Low Risk Haz Mat Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:02	2:07	2:31	3:13	2:03
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:47	2:30	2:25	2:42	1:56
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	3:17	5:09	5:08	8:09	6:28
	Travel Time ERF **Concentration**	Urban	6:00	10:18	5:04	6:16	8:09	6:28
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	6:06	9:25	5:44	13:07	10:07
				n=1	n=2	n=6	n=4	n=6
	Total Response Time ERF **Concentration**	Urban	9:30	15:12	9:25	11:09	13:07	10:07

Appendix 22.

Low Risk Haz Mat Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:02	3:07	3:31	3:05	3:39
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:54	2:11	2:10	1:42	2:12
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	5:52	7:02	6:01	6:27	5:29
	Travel Time ERF **Concentration**	Urban	6:00	8:40	7:41	5:59	6:27	6:22
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	8:13	10:47	10:25	10:34	10:31
				n=9	n=8	n=8	n=9	n=5
	Total Response Time ERF **Concentration**	Urban	9:30	20:16	22:37	9:45	10:34	12:55

Appendix 28.

High/Maximum Risk TRT Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	n/a	n/a	n/a	3:19	n/a
Turnout Time	Turnout Time 1st Unit	Urban	2:00	n/a	n/a	n/a	0:38	n/a
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	n/a	n/a	n/a	4:16	n/a
	Travel Time ERF **Concentration**	Urban	25:00	n/a	n/a	n/a	7:29	n/a
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	n/a	n/a	n/a	8:44	n/a
				n=0	n=0	n=0	n=2	n=0
	Total Response Time ERF **Concentration**	Urban	28:30	n/a	n/a	n/a	15:51	n/a

Appendix 29.

Moderate Risk TRT Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:20	1:36	2:34	2:08	2:03
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:37	3:26	1:48	2:00	1:10
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	1:03	6:36	2:14	8:51	8:53
	Travel Time ERF **Concentration**	Urban	6:15	1:03	11:13	2:06	10:26	12:01
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	4:00	9:43	6:01	10:49	11:12
				n=1	n=3	n=3	n=3	n=3
	Total Response Time ERF **Concentration**	Urban	9:45	4:00	15:37	6:35	12:41	14:12

Appendix 30.

Moderate Risk TRT Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	0:44	2:52	1:22	2:44	2:19
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:01	2:10	1:50	1:28	3:06
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	2:10	3:50	4:47	7:42	4:29
	Travel Time ERF **Concentration**	Urban	6:15	5:59	3:50	6:25	7:42	8:09
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	4:55	6:47	6:59	10:58	8:19
				n=1	n=3	n=6	n=4	n=3
	Total Response Time ERF **Concentration**	Urban	9:45	14:48	6:47	8:39	10:58	10:59

Appendix 31.

Moderate Risk TRT Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:29	3:03	2:27	1:57	1:26
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:17	2:00	2:44	2:07	1:32
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	5:55	5:08	5:28	8:07	6:09
	Travel Time ERF **Concentration**	Urban	6:15	5:55	7:19	8:37	6:57	16:52
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:22	9:43	9:14	11:19	7:53
				n=5	n=6	n=11	n=3	n=2
	Total Response Time ERF **Concentration**	Urban	9:45	8:22	20:10	10:09	13:02	19:39

Appendix 32.

Moderate Risk TRT Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	0:51	0:48	0:35	n/a	1:47
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:52	0:56	0:56	n/a	1:14
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	2:19	4:57	5:36	n/a	4:07
	Travel Time ERF **Concentration**	Urban	6:15	2:59	4:47	5:36	n/a	7:06
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	5:11	6:41	7:07	n/a	6:54
				n=2	n=1	n=1	n=0	n=2
	Total Response Time ERF **Concentration**	Urban	9:45	6:55	10:37	7:07	n/a	9:08

Appendix 33.

Low Risk TRT Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:57	1:51	2:04	1:55	1:38
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:52	1:42	1:25	1:38	1:45
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	2:41	3:44	3:46	3:45	2:54
	Travel Time ERF **Concentration**	Urban	6:00	3:56	5:58	5:58	6:37	5:02
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	5:56	7:49	6:47	6:30	5:19
				n=5	n=7	n=14	n=9	n=9
	Total Response Time ERF **Concentration**	Urban	9:30	9:33	9:40	7:56	13:00	7:58

Appendix 34.

Low Risk TRT Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	0:54	2:03	1:51	n/a	2:21
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:37	1:16	1:29	n/a	1:29
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	4:48	3:43	4:15	n/a	3:15
	Travel Time ERF **Concentration**	Urban	6:00	5:26	5:26	5:35	n/a	6:08
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	7:19	7:03	6:09	n/a	7:01
				n=2	n=2	n=5	n=0	n=2
	Total Response Time ERF **Concentration**	Urban	9:30	8:01	8:05	9:04	n/a	9:37

Appendix 35.

Low Risk TRT Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:20	1:53	1:18	2:10	2:03
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:21	1:21	1:32	2:26	1:36
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	3:40	3:19	4:25	4:45	6:06
	Travel Time ERF **Concentration**	Urban	6:00	7:46	7:19	5:57	5:48	8:03
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	6:21	5:55	7:15	8:17	9:05
				n=1	n=3	n=1	n=3	n=4
	Total Response Time ERF **Concentration**	Urban	9:30	9:50	10:11	8:17	9:37	11:47

Appendix 36.

Low Risk TRT Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:53	1:59	1:46	1:51	2:31
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:49	1:44	1:42	1:51	2:12
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	4:11	4:43	4:34	4:11	4:08
	Travel Time ERF Concentration	Urban	6:00	6:08	5:31	5:27	5:10	5:22
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:30	7:13	7:16	6:52	6:58	7:39
				n=5	n=8	n=12	n=18	n=14
	Total Response Time ERF **Concentration**	Urban	9:30	9:22	8:35	8:53	7:55	9:13

Appendix 37.

Water Rescue Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	n/a	n/a	n/a	0:45	n/a
Turnout Time	Turnout Time 1st Unit	Urban	2:15	n/a	n/a	n/a	1:07	n/a
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	n/a	n/a	n/a	5:19	n/a
	Travel Time ERF **Concentration**	Urban	10:00 / 25:00	n/a	n/a	n/a	5:19	n/a
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	n/a	n/a	n/a	7:11	n/a
				n=0	n=0	n=0	n=1	n=0
	Total Response Time ERF **Concentration**	Urban	13:45 / 28:45	n/a	n/a	n/a	7:11	n/a

Appendix 38.

Water Rescue Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	5:33	n/a	2:57	2:49	4:57
Turnout Time	Turnout Time 1st Unit	Urban	2:15	1:12	n/a	1:37	5:47	0:46
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	13:35	n/a	6:24	5:46	10:49
	Travel Time ERF **Concentration**	Urban	10:00 / 25:00	12:26	n/a	15:41	11:26	17:59
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	19:16	n/a	9:31	11:59	18:58
				n=2	n=0	n=3	n=3	n=2
	Total Response Time ERF **Concentration**	Urban	13:45 / 28:45	23:57	n/a	23:47	20:30	34:08

Appendix 40.

Water Rescue Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	n/a	n/a	n/a	0:42	n/a
Turnout Time	Turnout Time 1st Unit	Urban	2:15	n/a	n/a	n/a	2:14	n/a
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	n/a	n/a	n/a	4:11	n/a
	Travel Time ERF **Concentration**	Urban	10:00 / 25:00	n/a	n/a	n/a	4:11	n/a
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	n/a	n/a	n/a	7:07	n/a
				n=0	n=0	n=0	n=1	n=0
	Total Response Time ERF **Concentration**	Urban	13:45 / 28:45	n/a	n/a	n/a	7:07	n/a

Appendix 41.

Water Rescue Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	n/a	n/a	n/a	n/a	1:07
Turnout Time	Turnout Time 1st Unit	Urban	2:15	n/a	n/a	n/a	n/a	1:23
Travel Time	Travel Time 1st Unit **Distribution**	Urban	4:15	n/a	n/a	n/a	n/a	3:32
	Travel Time ERF **Concentration**	Urban	10:00 / 25:00	n/a	n/a	n/a	n/a	3:39
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	n/a	n/a	n/a	n/a	6:02
				n=0	n=0	n=0	n=0	n=1
	Total Response Time ERF **Concentration**	Urban	13:45 / 28:45	n/a	n/a	n/a	n/a	6:05

Appendix 42.

Emergent Other Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:42	2:31	2:33	2:38	2:46
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:27	2:29	2:24	2:30	2:20
Travel Time	Travel Time 1st Unit Distribution	Urban	5:45	5:15	4:22	5:07	5:01	5:08
	Travel Time ERF **Concentration**	Urban	6:50	6:13	6:39	6:23	6:15	6:20
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:15	7:55	8:35	9:08	8:44	9:13
				n=238	n=253	n=246	n=210	n=217
	Total Response Time ERF **Concentration**	Urban	10:20	9:32	10:25	9:04	10:05	10:35

Appendix 43.

Emergent Other Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:50	2:26	2:18	2:24	2:36
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:34	2:19	2:25	2:13	2:13
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:45	4:55	5:24	5:54	6:27	6:50
	Travel Time ERF **Concentration**	Urban	6:50	6:56	6:59	7:06	7:04	7:33
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:15	8:05	9:31	9:48	10:07	10:09
				n=219	n=199	n=187	n=171	n=258
	Total Response Time ERF **Concentration**	Urban	10:20	10:07	11:05	10:26	11:32	11:32

Appendix 44.

Emergent Other Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:25	2:33	2:23	2:39	2:14
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:25	2:32	2:31	2:22	2:28
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:45	5:11	5:46	7:22	7:14	7:33
	Travel Time ERF **Concentration**	Urban	6:50	8:23	8:02	8:25	7:52	8:55
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:15	8:23	10:11	11:04	11:12	11:06
				n=349	n=385	n=360	n=295	n=321
	Total Response Time ERF **Concentration**	Urban	10:20	11:50	12:43	11:13	11:51	12:56

Appendix 45.

Emergent Other Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	1:37	2:42	2:23	2:34	2:33
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:25	2:41	2:35	2:45	2:24
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:45	5:00	5:24	5:23	4:46	5:31
	Travel Time ERF **Concentration**	Urban	6:50	6:51	7:52	7:08	6:37	7:20
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:15	8:01	9:54	8:46	9:43	9:07
				n=175	n=170	n=181	n=152	n=174
	Total Response Time ERF **Concentration**	Urban	10:20	10:12	13:11	9:56	10:58	11:02

Appendix 46.

Non-Emergent Other Planning Zone 7 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:34	2:13	2:32	3:28	2:55
Turnout Time	Turnout Time 1st Unit	Urban	2:30	2:22	2:01	2:04	2:11	1:58
Travel Time	Travel Time 1st Unit	Urban	7:30	5:11	5:11	5:28	5:34	5:49
	Travel Time ERF **Concentration**	Urban	7:30	4:52	5:02	5:35	5:15	5:50
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	11:30	9:19	8:33	9:20	10:05	11:55
				n=95	n=130	n=124	n=63	n=101
	Total Response Time ERF **Concentration**	Urban	11:30	10:36	9:20	8:58	10:09	24:10

Appendix 47.

Non-Emergent Other Planning Zone 8 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:26	3:01	3:54	3:26	2:40
Turnout Time	Turnout Time 1st Unit	Urban	2:30	2:10	2:13	2:15	2:08	1:55
Travel Time	Travel Time 1st Unit **Distribution**	Urban	7:30	6:31	7:18	8:31	8:19	9:03
	Travel Time ERF **Concentration**	Urban	7:30	6:28	7:58	8:06	8:05	8:28
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	11:30	9:43	12:30	12:17	12:05	12:24
				n=58	n=64	n=88	n=59	n=71
	Total Response Time ERF **Concentration**	Urban	11:30	10:05	13:10	10:23	12:01	11:18

Appendix 48.

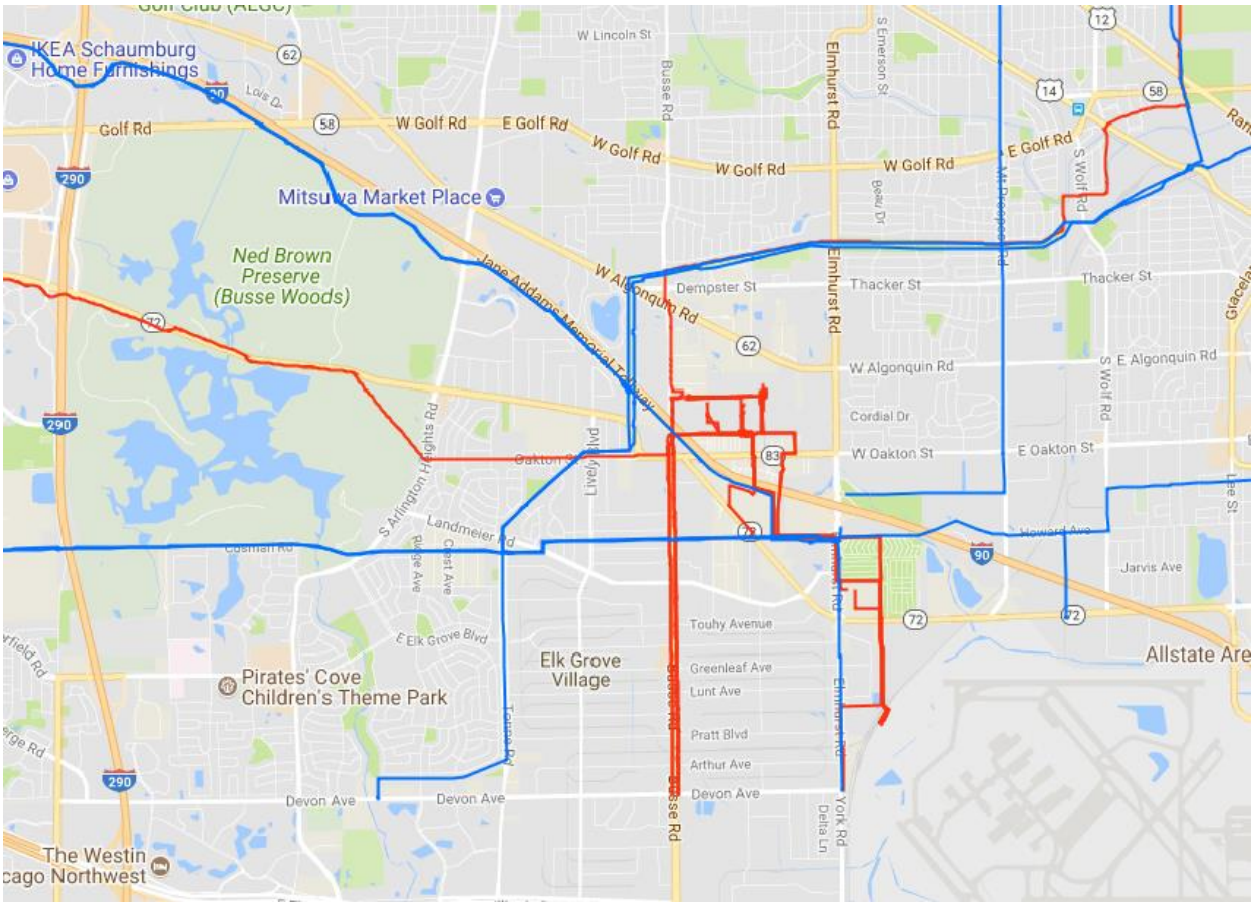
Non-Emergent Other Planning Zone 9 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:10	2:56	2:45	3:23	3:00
Turnout Time	Turnout Time 1st Unit	Urban	2:30	2:18	2:22	2:14	2:10	2:25
Travel Time	Travel Time 1st Unit **Distribution**	Urban	7:30	7:11	7:50	9:47	9:42	9:05
	Travel Time ERF **Concentration**	Urban	7:30	7:19	8:15	9:30	9:41	9:07
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	11:30	10:02	11:55	12:09	13:19	12:55
				n=70	n=97	n=114	n=94	n=87
	Total Response Time ERF **Concentration**	Urban	11:30	10:43	12:18	11:59	13:23	12:59

Appendix 49.

Non-Emergent Other Planning Zone 10 Baseline Performance			Bench-mark	2017	2018	2019	2020	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:30	2:05	2:35	2:46	2:57	3:29
Turnout Time	Turnout Time 1st Unit	Urban	2:30	2:13	2:21	2:05	5:57	1:57
Travel Time	Travel Time 1st Unit **Distribution**	Urban	7:30	6:37	6:59	5:42	5:25	5:51
	Travel Time ERF **Concentration**	Urban	7:30	6:36	6:53	5:35	5:41	5:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	11:30	9:11	10:43	8:57	11:24	10:01
				n=53	n=59	n=64	n=48	n=47
	Total Response Time ERF **Concentration**	Urban	11:30	9:23	10:39	9:08	11:37	10:00

Appendix 23.

NATIONAL PIPELINE MAPPING SYSTEM



Legend

- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

Appendix 24.

SPECIAL INTERESTS ON MAP

Government Infrastructure (Green Dot)	Address	Zone
Elk Grove Village Hall	901 Wellington Ave	Dist 7
U.S. Post Office	611 Landmeier Rd	Dist 8
U.S. Postal Service Chicago Metro Hub	2551 Busse Rd	Dist 9
Illinois Department of Transportation Garage	NB 290 and Biesterfield Exit	Dist 7
Elk Grove Public Works Garage	600 Landmeier Rd	Dist 8
Elk Grove Public Works Garage	1635 Biesterfield Rd	Dist 10
All schools in town		
Public Safety Infrastructure (Red Dot)		
Elk Grove Village Police Department	901 Wellington Ave	Dist 7
Fire Station 7	101 Biesterfield Rd	Dist 7
Fire Station 8	700 Fargo Ave	Dist 8
Fire Station 10	676 Meacham Rd	Dist 10
Healthcare Facilities (Blue Dot)		
Amita Alexian Brothers Medical Center	800 Biesterfield Ave	Dist 7
Amita Health Alexian Brothers Rehabilitation Hospital	935 Beisner Rd	Dist 7
Manor Care Health Service	1920 Nerge Rd	Dist 10
Utility Infrastructure (Orange Dot)		
AT&T North Chicago Switch	10 Scott St	Dist 8
Com Ed Substation TDC225 Landmeier	300 Bonnie Ln	Dist 8
Com Ed Substation TDC207 Tonne	2065 Tonne Rd	Dist 9
Major Natural Gas Pipeline	East/West through Forest Preserve	Dist 7-10
Major Natural Gas Pipeline	North/South along Tonne	Dist 7-8
Major Petroleum Pipeline	East/West along Higgins	Dist 8
Major Petroleum Pipeline	Between Tank Farm & O'Hare	Dist 8-9
Major Petroleum Pipeline	North/South along Busse Rd	Dist 8-9
Pump House # 2	1231 Busse Rd	9
Pump House # 6	1751 Greenleaf Ave	9
Pump House # 7	992 West Glenn Trl	10
Pump House # 8	2790 Lively Blvd	9

Pump House # 9	1400 Brummel Ave	8
Pump House #11	1689 Virginia Ln	10
Pump House #13	931 Mississippi Ln	10
East-West Pumping & Well #14	998 Devon Ave	9
East Elevated Tank	701 Pratt Blvd	9
Pressure Station	889 Rohlwing Rd	10
Gibson Receiving Station	1635 Gibson Dr	10
Biesterfield Receiving Station	200 Biesterfield Rd	7
Lee Street Receiving Station	940 Lee St	8
Dierking Receiving Station	850 Dierking Terr	9
West Elevated Tank	1141 Hawthorne Ln	10
Busse Woods Dam	Forest Preserve	7
Storm Water Pumping Station	2550 Landmeier Rd	9
Moderate Risk District 7 (Purple Dot)		
1000 Wellington Ave - Park District Pavilion		7
700 Wellington Ave		7
720 Wellington Ave		7
850 Wellington Ave		7
898 Wellington Ave		7
1004 Wellington Ave		7
540 Biesterfield Rd		7
520 Biesterfield Rd		7
805 Leicester Rd		7
815 Leicester Rd		7
Moderate Risk District 10 (Purple Dot)		
600 Meacham Rd - Home Depot		10
610 Meacham Rd - Staples		10
801 Meacham Rd - Walmart		10
1013 Charlela Ln		10
1037 Charlela Ln		10
1031 Charlela Ln		10
1033 Charlela Ln		10
1025 Charlela Ln		10
1045 Nerge Rd		10
1041 Nerge Rd		10
High Risk District 8 (Yellow Dot)		
Acme Finishing	1595 Oakton St	8
Rollex	800 Chase Ave	8

Grecian Delight	1201 Tonne Rd	8
Metal Impact	1501 Oakton St	8
T5@Chicago Data Center	1441 Touhy Ave	8
AT&T	10 Scott St	8
High Risk District 9 (Yellow Dot)		
Dupont Fabros-CH1 Facility	2200 Busse Rd	9
Dupont Fabros	2299 Busse Rd	9
Clear Lam Packaging	1950 Pratt Blvd	9
Hearthside Foods	2401 Lunt Ave	9
Vacant	2571 Busse Rd /315	9
Dupont Fabros (See Special)	2210 Busse Rd	9
Becker Specialty Corp.	2500 Delta Ln	9
Amitron Corp	2001 Landmeier Rd	9
Klein Tool	2300 E Devon Ave	9
Chem-Plate	1250 Morse Ave	9
Cyxtera	2425 Busse Rd	9
Chem-Plate	1990 E Devon Ave	9
Magnetic Inspection Lab	1401 Greenleaf Ave	9
Perfection Plating, Inc.	1521 Morse Ave	9
Perfection Plating, Inc.	775 Morse Ave	9
Symons	2400 Arthur Ave	9
Arrow Plastics	701 E Devon Ave	9
Q.A. Products (Kerry)	1301 Mark St	9
Graphic Packaging	1500 Nicholas Blvd	9
D&W Fine Pack	1900 Pratt Blvd	9
Reliable Redistribution Resource	2301 Lunt Ave	9
Equinix	1905 Lunt Ave	9
Clear Lam Packaging	2000 Pratt Blvd	9
Atlas Toyota Material Handing	1850 Touhy Ave	9
B-Way / Ropak Central	1350 Arthur Ave	9
B & M Plastic, Inc.	2001 Arthur Ave	9
Grecian Delight Foods, Inc.	1301 Estes Ave	9
Graphic Packaging	1900 Greenleaf Ave	9
Willie Washer Mfg.	2101 Greenleaf Ave	9
Specialty Finishing Group	1401 Kirk St	9
B-Way Corporation	2350 Lively Ave	9
Stern Pinball Corp	2001 Lunt Ave	9
Lawrence Foods	2200 Lunt Ave	9
Graphic Innovators	855 Morse Ave	9
Acme Industries	1325 Pratt Blvd	9

All-State Industries, Inc.	2651 Carl Blvd	9
Machined Products Co.	2121 Landmeier Rd	9
JP Morgan Chase	2355 Wood Dale Rd	9
Emsur USA LLC	2800 Carl Blvd	9