Montgomery County Maryland
Fire and Rescue Services

Accreditation

Virtual
Community Risk Assessment:
Standards of Cover
Fourth Accreditation Cycle

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Commission on
Fire Accreditation
International

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Document Change History Table

The table below contains a historical catalog of the history of this document.

Description of Change	Author	Revision No.	Covering Timeframe	Date
Initial Release	MCFRS	1	2007-2012	4/22/2007
Reaccreditation	MCFRS	2	2012-2013	May 2013
Revised to 6th ed. CRA:SOC & 9th ed. FESSAM manuals	MCFRS	3	2013-2018	Feb. 2018
Repaired all CountyStat hyperlinks with new website URL's	MCFRS	3b	2013-2018	Nov. 2018
Updated SOC	MCFRS	Virtual	2018 – current date	Ongoing

Significant updates between Revision No. 3b and Virtual include:

- Developed a process to keep CRA-SOC dynamically updated, including many of the imbedded response time data and incident count charts and graphs; hence the name Virtual CRA/SOC. This helps achieve the CFAI 10th Edition Interpretation Guide sample reference secondary to CC 3D.2 "Standards of cover review and updates". The following sub-bullets examples document linked to external data sources, which when updated, will automatically update within the Virtual CRA/SOC:
    - CC2A.3 & CC2A.4 linked fire station new density zone tables
    - 2A.2 Fed. Fire Sta. & Out of County Auto/Mutual Aid count table
    - 2A.6 Linked disaster declaration table
    - CC2C.4 Data tables associated with baseline statements linked
    - CC2C.4 Baseline statements linked to data tables
    - 2B.2: Historic service demand frequency by program/risk within upper tier risk management zones (fire station areas) data charts and graphs are now linked.
    - CC2C.5 Embedded linked multi fiscal year first arriving engine to full assignments and paramedic to ALS total response time charts
    - CC2D.9 Embedded linked tables and charts displaying gaps between baseline response times and benchmark targets
- Updated density zones map based on two-density zones framework
- Updated Mission and Guiding Principles & added Strategic Direction based on FY21 Strategic Plan
- Updated and realigned any performance indicator number changes or additions secondary to the 10th edition self assessment model and applicable to Category 2.

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I. Introduction

This Montgomery County, Maryland, Fire Rescue Service (MCFRS) Community Risk Assessment / Standards of Cover (CRA/SOC) document is updated from the 2013-2018 version when MCFRS achieved accreditation status (the third time) through the Commission on Fire Accreditation International (CFAI).

However, unlike the three preceding CRA/SOC's, which spanned 11 years (2007, 2013, 2018), this CRA/SOC is different. MCFRS is proud to have created this virtual CRA/SOC. It is virtual because when any component is updated, including response times and incident call load charts and graphics, the viewer of this document online will automatically see these updates. This of course includes all of MCFRS' leadership, program managers, responsible government officials, concerned citizens, and fire, rescue, and EMS providers; thus, making this CRA/SOC a valuable planning tool containing relevant updated as well as historical information.

In addition and unlike the third version in 2018, this CRA/SOC manual was formatted using the newest framework provided in the Center for Public Safety Excellence's (CPSE) 10th Edition Fire and Emergency Services Self- Assessment Model (FESSAM).

MCFRS has strived to maintain transparency with the release of this CRA/SOC and will continue to use monitor, evaluate, and modify the information contained within, as well as share the information with our community. MCFRS will use this manual to help guide emergency service delivery and community risk reduction planning efforts and program evaluations and reassessments.

Finally, while hard-copy readers of this CRA/SOC will glean much information, the online reader will have the most current data and will be provided much additional information via internet hyperlinks.

II. Executive Summary

The Montgomery County Fire and Rescue Service (MCFRS) is an "all hazard" department protecting Montgomery County, Maryland. The County is comprised of over 1,000,000 residents distributed over 491 square miles of land area and is located north of Washington, D.C. Residents have come to the County from just about every corner of the globe and live in a mosaic of dense urban areas, suburbs, and farmlands. This diversity of population and density creates a multitude of response challenges for MCFRS. The department has risen to these challenges and readily provides emergency medical, fire suppression, heavy rescue, technical rescue, arson and explosive investigations, and hazardous materials mitigation services. MCFRS seeks to prevent the 911 call with an active Volunteer and Community Services Division focusing on community risk reduction, outreach, and public education.

MCFRS is committed to self-review, analysis, and improvement to maintain and enhance the services its community expects. This process includes Master and Strategic Plan development and implementation, Headline Performance Measures analysis and reporting, and remaining accredited through the Commission on Fire Accreditation International (CFAI).

In an effort to maintain the accreditation status earned in 2007 and improve upon self-assessment efforts, MCFRS initiated a complete review and refresh of both Version No. 2 (in 2013) and Version No. 3 (2018) of this Community Risk Assessment: Standards of Cover (CRA/SOC) during reaccreditation endeavors. MCFRS now submits for review its Virtual CRA/SOC document, which again has been developed in-house and now conforms to the CFAI 10th edition of the Fire and Emergency Services Self-Assessment Model (FESSAM). This Virtual MCFRS CRA/SOC continues to fully define in detail every aspect of this metropolitan fire department, including services currently provided, community expectations and how they are being met, performance measurements, strategic goals, and a detailed description of the diverse community served.

Within this document, the many strengths of the department have been outlined as well as areas of improvement. This analysis continues to be utilized by MCFRS in its never-ending drive to achieve organizational excellence and provide the best services to its community.

III. Organizational Doctrine: Vision, Mission, Guiding Principles [1A.10]

The MCFRS organizational doctrine consists of our vision, mission, guiding principles/values, and goals and objectives which collectively guide and facilitate the delivery of services to our customers—County residents and businesses as well as visitors to our County.

Vision

The Montgomery County Fire and Rescue Service's vision is to enhance public safety and support quality of life through direct immersion in our communities, effectively blending outreach and education, and by leveraging our career and volunteer workforce to deliver exceptional services and improve our resiliency to meet increased challenges.

Mission

The mission of the Montgomery County Fire and Rescue Service is to protect lives, property and the environment with comprehensive risk reduction programs and safe and effective emergency response provided by highly skilled career and volunteer service providers representing the County's diverse population.

Guiding Principles

Our Montgomery County Fire and Rescue Service providers will:

• Deliver services to our customers with impartiality and excellence

• Promote the highest standards of safety and welfare

• Serve with integrity and mutual respect

• Recognize the importance of diversity of our workforce and communities

• Promote the efficient and effective utilization of our resources, and ensure that all organizations and personnel comprising the MCFRS share the responsibility for continuously improving their capabilities, effectiveness, and efficiency

• Be responsible for the honor of our profession and public service

• Promote equity and harmony among career and volunteer personnel

• Maintain and promote open honest communication, creativity, and competence

• Be accountable and ethical

• Continuously improve public confidence and trust

Strategic Direction

The mission, vision, and principles of the MCFRS inform these strategic directions:

• To maintain our operational readiness for an all-hazards mission and response capability, including emergency medical services, fire suppression, technical rescue, water/ice rescue, aviation fire-rescue, hazardous material, and explosive device emergency services by effective deployment and leverage of career and volunteer resources (i.e., staffing and equipment) in a fiscally responsible manner.

• To minimize the number of deaths and number/severity of injuries to our customers through a comprehensive, all-hazards, risk reduction strategy implemented through our community outreach program.

• To ensure that MCFRS embraces diversity and continuously recruits the career and volunteer personnel required to effectively deliver our services and programs, and undertakes the steps needed to address the current and projected training needs for career and volunteer leadership and workforce development (e.g., PSTA classes, online training, in-service training, station drills, classes provided by the Maryland Fire-Rescue Institute, etc.) and retain these individuals for long-term service to the community.

• To provide for and enhance the wellness, safety, training, and development of our personnel, including implementation of risk reduction strategies to improve occupational safety and to improve the health and wellness of MCFRS personnel.

• To seek, create and maintain strong partnerships with municipal, regional, State and federal agencies, the citizenry, and private and nonprofit organizations and institutions within Montgomery County so that we may enhance our capabilities and responsiveness

to their needs/concerns and leverage their collective capabilities to assist us in our life safety, community risk reduction, injury prevention and property protection efforts to keep the community safe.

• To maintain and grow our infrastructure, including facilities, apparatus, equipment, communications systems, and information technology systems to support our mission.

• To establish an organizational commitment to evaluate, develop, and implement new technologies and innovations on a continuous basis that will enhance the effective delivery of services and performance of business processes.

• To ensure the transparency of our business operations and that open lines of communication are maintained with our customers.

• To set a desirable and attainable course for the future through strategic planning and with the establishment and periodic reassessment and refinement of our mission, vision, strategic direction, and objectives.

• To evaluate our progress and strive for continual improvement through accreditation, program appraisals, performance measurement, and technological enhancements that allow for comprehensive analysis of all aspects of MCFRS operations and administration.

Goals and Objectives [CC 3B.1]

MCFRS has established a general, overarching goal as well as a set of broad departmental goals to guide the Fire and Rescue Service. Goals and objectives have also been established at the division/section level that address these departmental goals in greater detail. The following overarching and departmental goals are published in the MCFRS 2016 – 2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan. The Master Plan also provides an Issues and Needs section (Section 5) and an Initiatives and Priorities section (Section 6) where specific goals are identified and prioritized to guide the agency in maintaining or achieving these goals. The highest priorities requiring initiation, continuation, or completion are then published in an annual MCFRS Strategic Plan and provide the focus and measurable elements of time, quantity, and quality.

Overarching Departmental Goal

To comprehensively plan for the future needs of the Montgomery County Fire and Rescue Service and its customers by addressing all aspects of MCFRS capabilities to deliver effective and efficient emergency and non-emergency services as well as capabilities to address the functional, developmental, wellness, and safety needs of the organization.

Departmental Goals

1. To maintain our operational readiness at all times for an all-hazards mission and response capability, including emergency medical services, fire suppression, technical rescue, water/ice rescue, aviation fire-rescue, hazardous material, and explosive device emergency services.
2. To minimize the number of deaths and number/severity of injuries to our customers through a comprehensive, all-hazards, risk reduction strategy implemented through our community outreach program.
3. To ensure that sufficient numbers of personnel, apparatus, equipment, and facilities are in place to effectively and efficiently deliver emergency services and achieve our

adopted standards of response coverage.

4. To set a desirable and attainable course for the future through strategic planning and with the establishment and periodic updating of "SMART8" goals and objectives.

5. To reassess and refine our vision, mission, and guiding principles periodically.

6. To maximize the utilization of our career and volunteer resources to achieve our mission.

7. To deploy and leverage our resources to best serve our customers' needs while maximizing our effectiveness, efficiency and fiscal responsibility.

8. To ensure the transparency of our business operations and that open lines of communication are maintained with our customers.

9. To create and maintain strong partnerships with the citizenry, businesses, organizations and institutions within Montgomery County so that we may improve our responsiveness to their needs/concerns and leverage their collective capabilities to assist us in our community risk reduction, injury prevention and property protection efforts.

10. To seek and sustain tactical and strategic partnerships with other County, municipal, regional, State and federal agencies and private sector organizations to enhance our capabilities to prevent, respond to, and mitigate emergency incidents locally and regionally in keeping our homeland safe.

11. To maintain and grow our infrastructure, including facilities, apparatus, equipment, communications systems, and information technology systems to support our mission.

12. To provide for and enhance the wellness, safety, training, and development of our personnel, including implementation of risk reduction strategies to improve occupational safety and to improve the health and wellness of MCFRS personnel.

13. To ensure that MCFRS continuously recruits the career and volunteer personnel required to effectively deliver our services and programs and undertakes the steps needed to retain these individuals for long-term service to the community.

14. To address the current and projected training needs for career and volunteer leadership and workforce development. This includes classes provided at the Public Safety Training Academy, online training, in-service training, station drills, and

classes provided by the Maryland Fire-Rescue Institute.

15. To ensure MCFRS embraces diversity, that our membership is reflective of the community served, and that our environment is open and accepting to all members of the community.

16. To establish an organizational commitment to evaluate, develop, and implement new technologies and innovations on a continuous basis that will enhance the effective delivery of services and performance of business processes.

17. To evaluate our progress, measure our performance, and strive for continual improvement through accreditation, performance measurement, dashboard monitoring, and program appraisal.

IV. Legal Establishment of MCFRS and Legislative Milestones [CC 1A.1]

The Montgomery County Fire & Rescue Service (MCFRS) has evolved from a loosely knit confederation of locally based volunteer fire-rescue departments to become a single countywide entity that is an integral part of the County government. Over the years, this progression had been marked by occasional strife and disagreements between the various stakeholders. This strife has been responsible for the generation of much of the present legal framework for the MCFRS.

The Charter of Montgomery County is the "constitution" of the County and outlines the functions of the Legislative and Executive branches of the government, and the Montgomery County Code encompasses all of the County regulations and laws. The original Code was adopted in 1948. The current Code of Maryland County Regulations (COMCOR) was adopted in November 1968, with amendments made throughout the succeeding years.

Chapters 2, 21, and 22 are the three chapters out of over 70 that regulate the County fire department and code enforcement as it pertains to fire safety and hazardous materials.

Chapter 2, Section 02.39A establishes the structure of the Fire-Rescue system, which includes the roles of the Fire and Rescue Commission [later renamed Fire and Emergency Services Commission], the County Fire-Rescue Service, and the Local Fire and Rescue Departments.

Chapter 21 of the County Code is the legal framework of the fire department. It sets the minimum standards and regulations for the operation of the Fire & Rescue Service.

Chapter 22 defines all of the Montgomery County fire safety code regulations including:

- Hazardous Materials permits
- Fire Protection equipment
- Permitting and licenses
- Building and fire codes

- Fire Department accesses and water supply
- Code enforcement and fire department fees

While the County Code Chapters 2, 21 and 22 define and regulate the department, there are also numerous legislative bills, laws and referenda that have shaped MCFRS into its present form:

1949 Division of Fire Protection was created by the County Council in the first attempt to administer and centralize the laws and enforce fire codes. It also established the Fire Investigations and Arson Unit [known now as the Fire & Explosives Investigations Section].

1967 Bill 1 – Created by the County Government to have one Fire Chief to oversee the 15 independent fire corporations; provided control of County funds.

1968 Referendum to repeal Bill 1 – the 15 fire corporations banded together to repeal this bill to remain autonomous – passed, Bill 1 repealed.

1968 Chapter 21 created - section of the County Code that regulates the Montgomery County Fire Department.

1972 Bill 25-72 – Created Department of Fire Rescue Services (DFRS) and created a Director as the head of Fire-Rescue for the first time.
The bill centralized and coordinated:

- Fire Rescue Operations
- Communications
- Training
- Fire Prevention

1976 Montgomery County is the first county in U.S. to mandate smoke detectors in not only new but existing residential structures, by law.

1979 Bill 16-79 – Created Uniformed Command Structure for all Volunteer and Career Employees in DFRS.

1986 FLSA Law Suit – Norman Conway, Inc. et al v Takoma Park Volunteer Fire Department. At the time, all paid fire fighters were employees of the individual corporations; this lawsuit resulted in the Bill 42-87

1987 Bill 42-87 - As a result of the FLSA lawsuit, all paid uniformed employees were transferred from the private corporations to become County merit system employees.

1988 Legislation to mandate sprinklers in townhouses.

1994 County Code Section 510A – Allows collective bargaining and binding arbitration for the County Fire Fighters – enacted 11/8/94.

1996 Question E – An attempt by referendum to get a single County Fire Chief, which was defeated.

1997 Bill 37-97:

- Department of Fire Rescue becomes the Division of Fire-Rescue
- Created a Fire Administrator
- Restructured Chapter 21 of the Montgomery County Code and created a uniform set of rules that apply to all elements of the fire and rescue system, including career Service employees and local department volunteers.
- Amended Chapters 2 and 21 of the Montgomery County Code to reorganize the administration and delivery of fire and rescue services in Montgomery County.

2003 Bill 36-03 Creates a Uniformed County Fire Chief:

- Full operational authority over the fire rescue service, paid and volunteer personnel
- Full authority over the fire-rescue budget
- Became law 1/1/05

2010 Question A – referendum to allow for billing for ambulance transports for all EMS service provided in Montgomery County, which was defeated.

2012 Expedited Bill 17-12 authorized County to impose and collect a reimbursement to recover costs generated by providing EMS transports – enacted 5/15/12; effective 1/1/13.

2016 Expedited Bill 29-16 transfers Fire Prevention and Code Compliance Section from MCFRS to the Department of Permitting Services to realize the efficiencies of costs and staffing – enacted 9/20/16; effective 9/28/16.

National Fire Protection Association (NFPA) Consensus Standards

In addition to the laws and standards that impact MCFRS in a broad sense, there are other laws and codes that pertain to specific MCFRS functional areas such as fire code enforcement (e.g., Montgomery County Fire Safety Code, Code of Maryland Regulations, Annotated Code of Maryland, and NFPA codes that have been adopted by the County, etc.). NFPA Standard 1710, the *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*, for example, while not legally binding in Montgomery County because it has not been adopted by the County Council into County Code, is a voluntary national standard to which the MCFRS has chosen to follow to the greatest extent possible, as many fire departments across the nation have adopted its provisions or have likewise chosen to follow them to the greatest extent possible.

V. Documentation of Montgomery County Area Characteristics [2A]

Brief History of Montgomery County, Maryland

The land that makes up Montgomery County, Maryland today was first settled in the early 1600's. Montgomery County was formed into a county in September 1776 and was named after Richard Montgomery. Montgomery was a British Officer who became a Brigadier General in the Colonial Army, although he never set foot in Maryland. In December 1791, the Maryland General assembly ceded 36 square miles of southern Montgomery County to the Federal Government. That land today is what makes up part of the District of Columbia.

The following excerpts are quoted from the January 2010 Montgomery County Office of Public Information document titled Montgomery County Maryland Our History and Government.

> It was more than 300 years ago when the first European settlers arrived in what is now Montgomery County, an area stretching from the mouth of Rock Creek in the south to the Monocacy River in the north, the Potomac River on the west and the Patuxent River on the east. They found evidence of occupation by Indians of the Piscataway Confederation. It was a beautiful forested area rich in game that included deer, buffalo, bear and wild turkey, with rivers and streams teeming with fish. Captain John Smith of Virginia explored the Potomac River in 1608 andwas the first European to map the area.

Principle Historic Events

1776 – 1948:	Montgomery County governed under the County Commissioner system.
1777:	County seat established at the town of Williamsburg, site of present City of Rockville.
1791:	Georgetown, then a part of Montgomery County, is ceded to the Federal government to form part of the new District of Columbia.
1828 – 1850:	Decline in County agriculture, due to overproduction of tobacco, poor farming methods, and emigration of farm labor. Prosperity returned when Quakers in the Sandy Spring area introduced imported fertilizer and farm machinery.
1861 – 1865:	During the Civil War, both Union and Confederate troops passed through the County several times.
1948:	Home rule charter adopted, allowing for a Council-form of county government. Montgomery was the first county in Maryland to establish a charter form of government.
1968:	New charter adopted, allowing for an elected County Executive, and a seven-member elected County Council.
1970:	First County Executive takes office under the new charter.
1990:	Council expanded from seven to nine members.
1997:	Unification of the City of Takoma Park into Montgomery County.

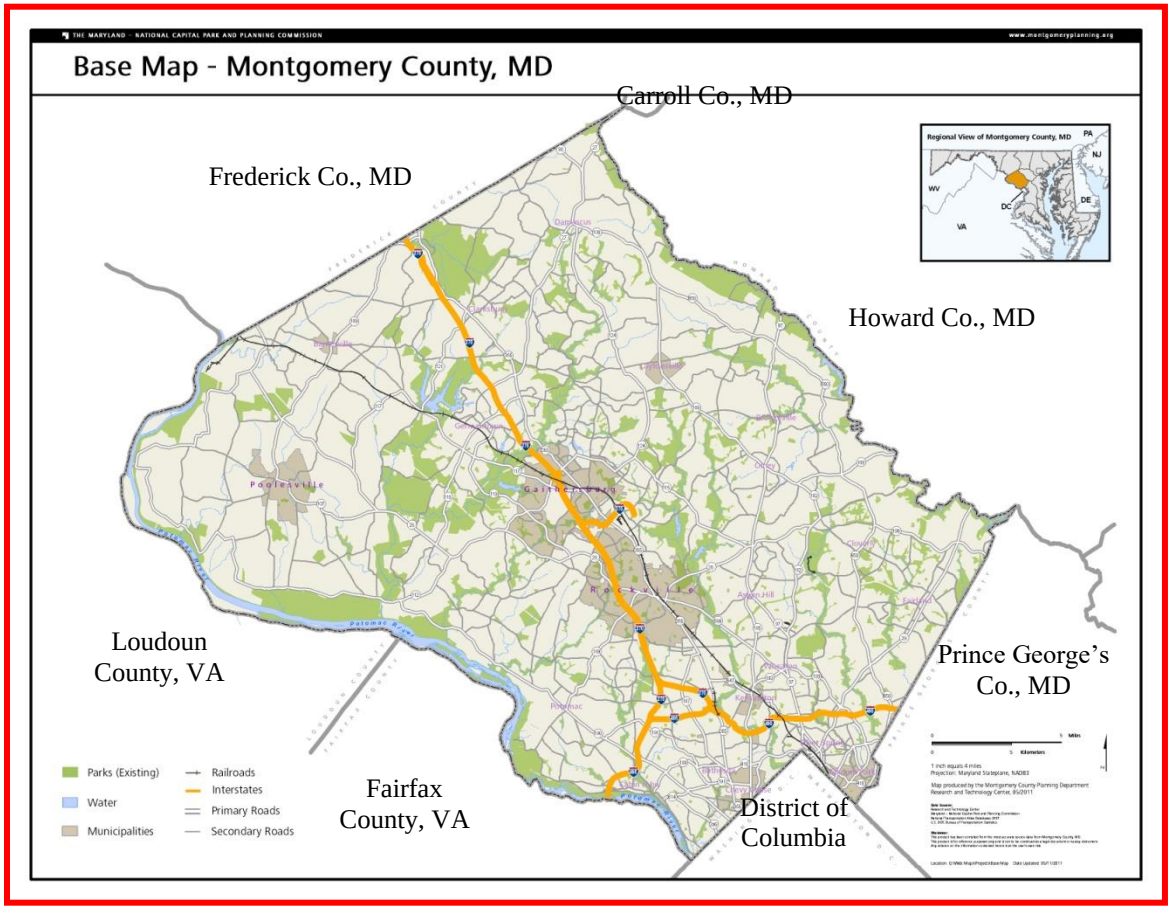
21st Century – Today

Montgomery County remains the most populous jurisdiction in the State of Maryland. The County boasts one of the country's most educated workforces, leading the nation with the highest percentage of residents who hold advanced degrees. Research institutes – including Johns Hopkins University's Montgomery County Campus, Howard Hughes Medical Institute, the National Institutes of Health and the University of Maryland – have campuses in Montgomery County.

Located at the epicenter of the Mid-Atlantic's thriving federal and advanced technology marketplace, Montgomery County is home to more than 200 biotech companies – representing two-thirds of all those located in Maryland and the third largest cluster in the nation. With a hugely successful business incubator network, a nationally renowned 93,000-acre agricultural preserve, an award-winning Small Business Mentorship Program, and world-class conference and performing arts facilities, Montgomery County is in an ideal location for both large and small businesses.

MCFRS Service Boundaries [2A.1] Including Topography

Montgomery County is the 5th largest land-mass county in the state of Maryland and the most populous. The County is positioned in the southern portion of central Maryland and is bordered by the Potomac River to the West, Frederick County to the North, Howard and Prince Georges Counties to the East and Washington DC to the South. The County consists of 491.25 square miles of land area and 15.69 square miles of water area.



The highest point of elevation in Montgomery County is in the north-eastern tip of the County at 880 feet above sea level. The lowest point is 10 feet above sea level at the bank of the Potomac River at Little Falls. Montgomery County is a relatively flat land mass with no major high points or "mountains." There are gentle rolling hills in the northern, rural portion of the County.

The Potomac River is the western border of the County and it, along with bordering parkland, draws many hikers, bikers, kayakers and tourists. The Patuxent River provides a significant portion of the County's eastern border and the Hawlings River traverses parts of the eastern sections of the County.

Running parallel to the Potomac River is the Chesapeake & Ohio (C&O) Canal National Historical Park and Trail. The canal is 184.5 miles long running from Georgetown in Washington, DC to Cumberland, Maryland. The canal is a national park and is popular with hikers and bikers. Approximately 36 miles of the C&O Canal run through Montgomery County.

Great Falls in Potomac, Maryland is a series of cascades and rapids over the course of two-thirds of a mile. The river drops 76 feet over this distance with no greater than a 20-foot drop in any one place.

While there are many smaller bodies of water in the County, there are three major reservoirs: the Tridelphia and Rocky Gorge Reservoirs, and Little Seneca Lake. The first two of these reservoirs are approximately 800 acres each. Both reservoirs span the Montgomery/Howard County line. They are both maintained as a source for drinking water for the metropolitan area by the Washington Suburban Sanitary Commission. As with the Potomac River, these bodies of water attract many outdoor enthusiasts, for paddling, bird watching, hiking and fishing. Little Seneca Lake is a 500-acre reservoir serving as the backup water supply for the County. All three reservoirs and adjoining parkland are used for recreational purposes.

MCFRS Automatic Aid Boundaries and Service Responsibilities [2A.2]

Montgomery County is part of the National Capital Region (NCR) and, more specifically, within the area of the Metropolitan Washington Council of Governments (MWCOG). During the mid-2000s, MWCOG helped facilitate a broad mutual aid agreement with state, local, and federal stakeholders within the NCR.

Subsequently, on April 18, 2006, the Montgomery County Council adopted the approval of the Mutual Aid Agreement between Federal, State, and local governments in the National Capital Region.

In addition to the NCR Mutual Aid Agreement (NCR-MAA), the MWCOG Fire Chiefs Committee maintains an approved Fire and Rescue Mutual Aid Operations Plan (MAOP). As stated within the Fire and Rescue MAOP:

> "It is the intent of this Fire and Rescue MAOP to ensure the fullest cooperation among fire prevention and suppression and emergency medical services agencies in the National Capital Region. Such cooperation will ensure the maintenance of good order, public safety, and the protection of life, property and the environment within the region during a state of emergency or public service situation that requires fire and rescue assistance beyond the capacity of a single signatory jurisdiction or agency. It shall be the duty of each signatory jurisdiction and agency to ensure that individuals discharging functions and responsibilities on behalf of the jurisdiction or agency, whether requesting assistance under this Operations Plan or receiving and authorizing responses to such requests, have been properly delegated authority to do so by the chief operating officer or other authorized representative of the jurisdiction or agency specified in P.L. 108-458."

> "It is the intent of the Fire and Rescue MAOP to create and describe relationships and to provide general direction and guidance rather than specify the operations of responding agencies. Therefore, although all functions and responsibilities under this Operations Plan may be assigned to employees or units of multiple jurisdictions or agencies, it will remain the duty of the Incident Jurisdiction to coordinate the appropriate tasks required."

It is through the NCR-MAA, the Montgomery County Council adoption of the NCR-MAA, and the MAOP that MCFRS confidently participates in cross-jurisdictional automatic and mutual aid with NCR partners, who also reciprocate services within Montgomery County. These agreements are complimented by the long-term public safety relationships and collaborative efforts which greatly enhance public safety regardless of jurisdictional boundary lines. For MCFRS automatic aid arrangements, the closest appropriate emergency resource responds no matter what side of the County line they are located.

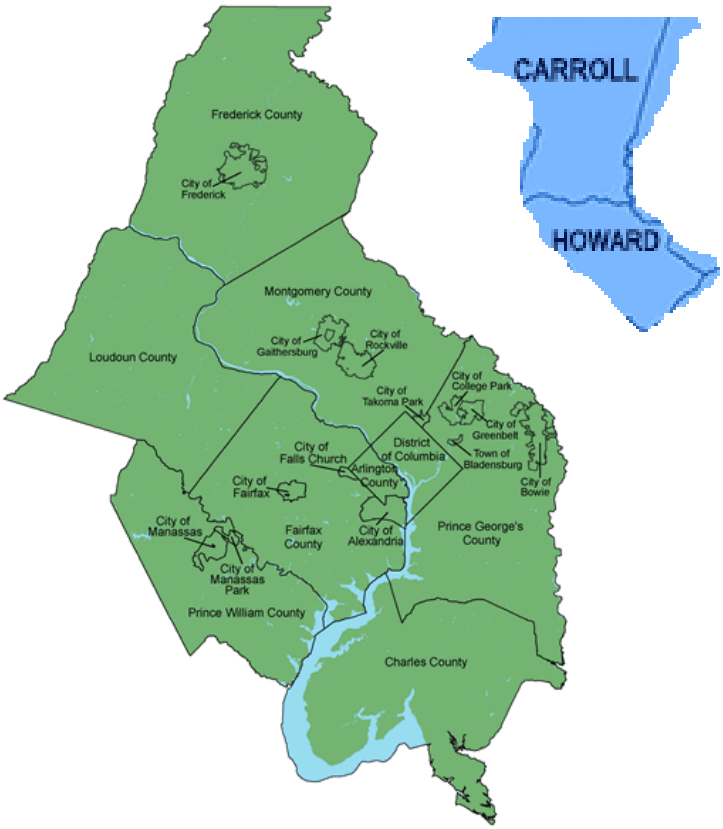
The following map depicts the National Capital Region inclusive of the jurisdictions participating with MWCOG and covered by the NCR-MAA and MAOP.

District of Columbia: District of Columbia

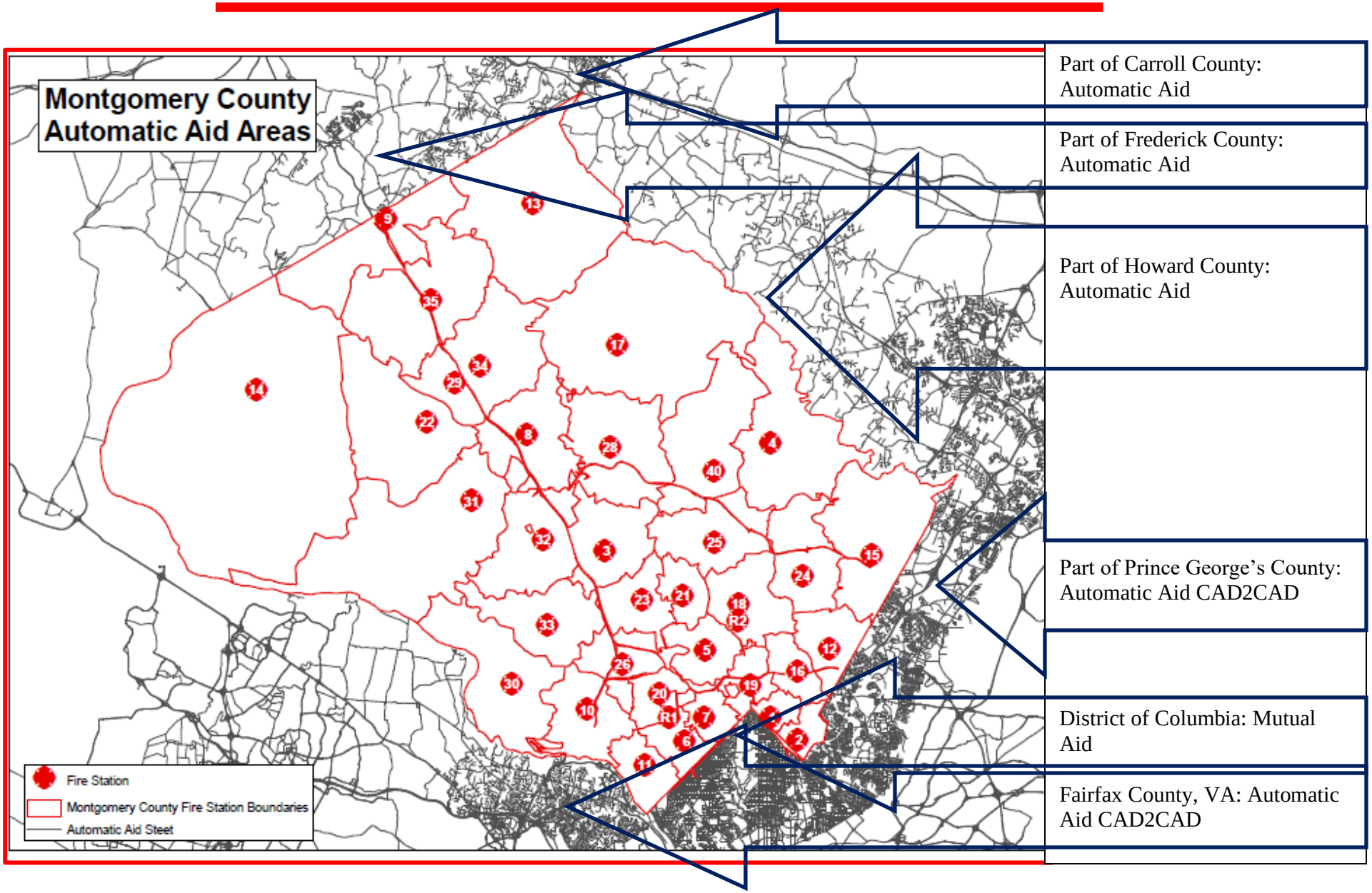
Maryland : Bladensburg (*adjunct member*); City of Bowie; Charles County; College Park City; Frederick City; Frederick County; Gaithersburg City; Greenbelt; Montgomery County; Prince George's County; Rockville City; City of Takoma Park.

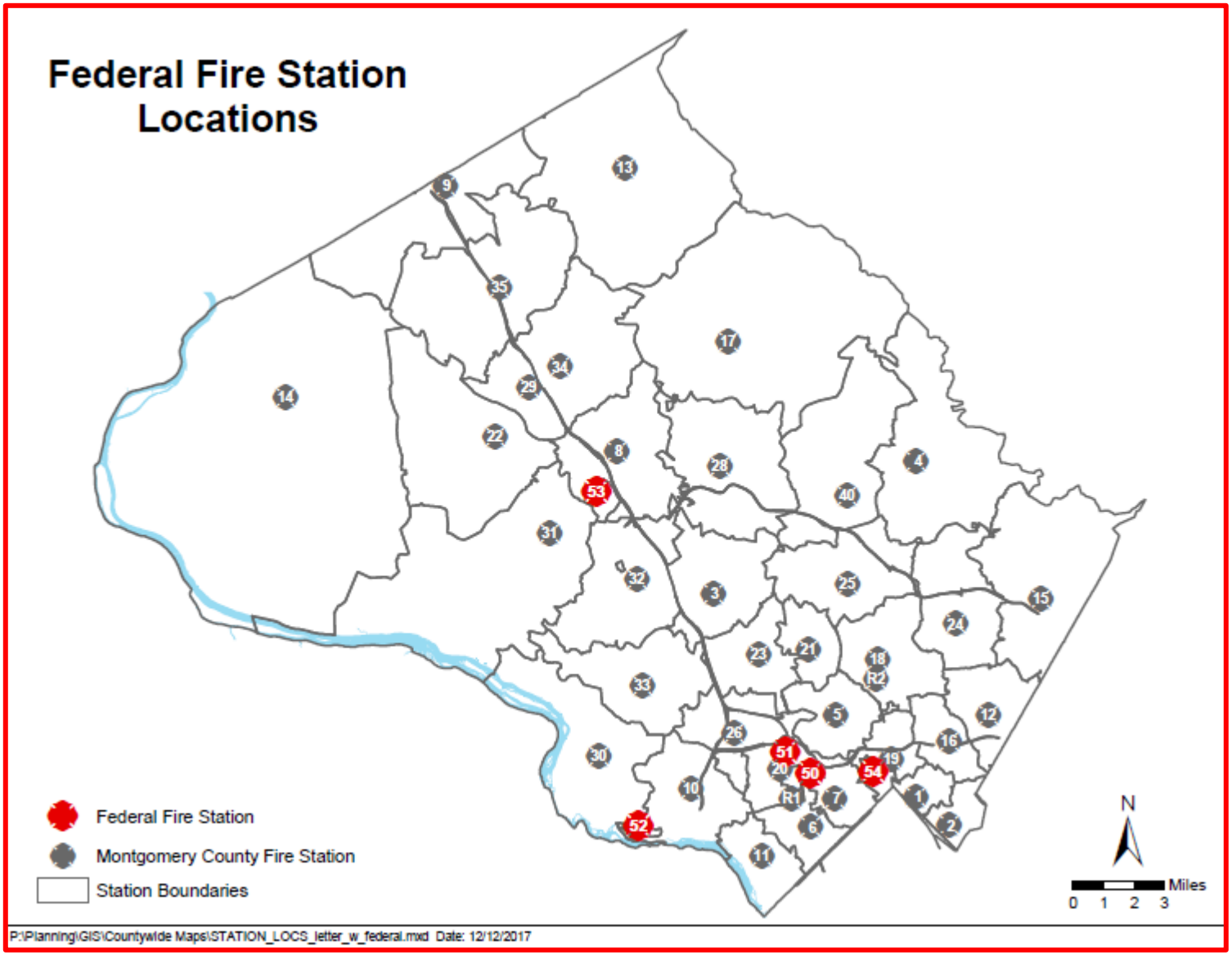
Virginia: Alexandria City; Arlington County; Fairfax City; Fairfax County; Falls Church City; Loudoun County; Manassas City; City of Manassas Park; Prince William County.

MCFRS also participates in automatic and mutual aid agreements with non-NCR partners; specifically, Carroll County, Maryland and Howard County, Maryland and with Federal fire departments within the boundaries of Montgomery County. For these jurisdictions, MCFRS maintains individual written mutual aid agreements.



Whether it is automatic aid or specifically requested assistance through mutual aid, any MCFRS service requested is provided. Examples include fire suppression, EMS, hazmat, technical rescue, tactical communication support, mass casualty resources, including medical ambulance buses, strike teams, and task forces.


Montgomery County
Automatic Aid Areas
Fire Station
Montgomery County Fire Station Boundaries
Automatic Aid Steet
Part of Carroll County: Automatic Aid
Part of Frederick County: Automatic Aid
Part of Howard County: Automatic Aid
Part of Prince George's County: Automatic Aid CAD2CAD
District of Columbia: Mutual Aid
Fairfax County, VA: Automatic Aid CAD2CAD


Federal Fire Station Locations
Federal Fire Station
Montgomery County Fire Station
Station Boundaries
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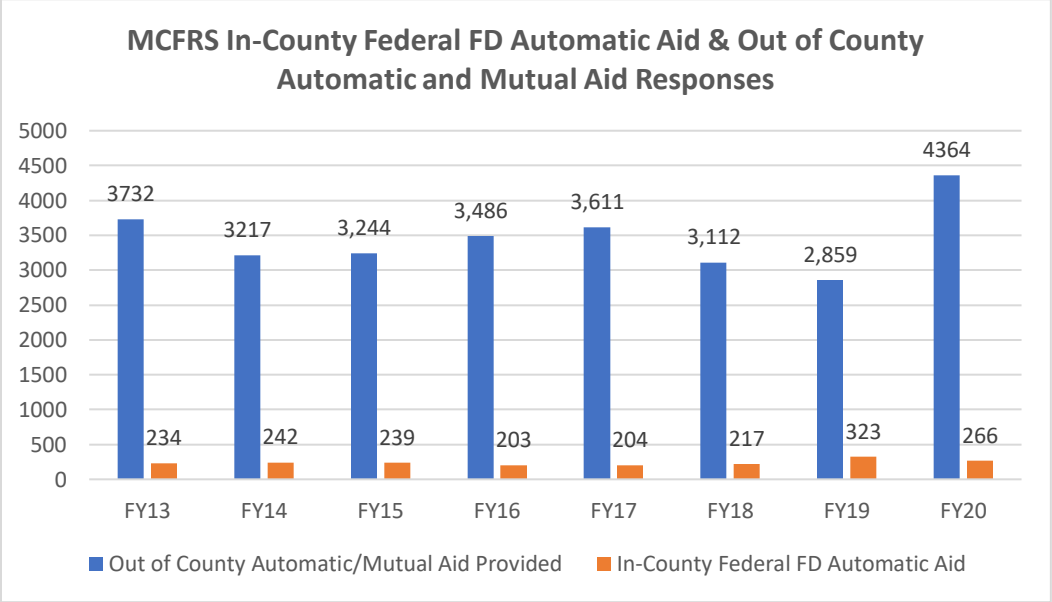
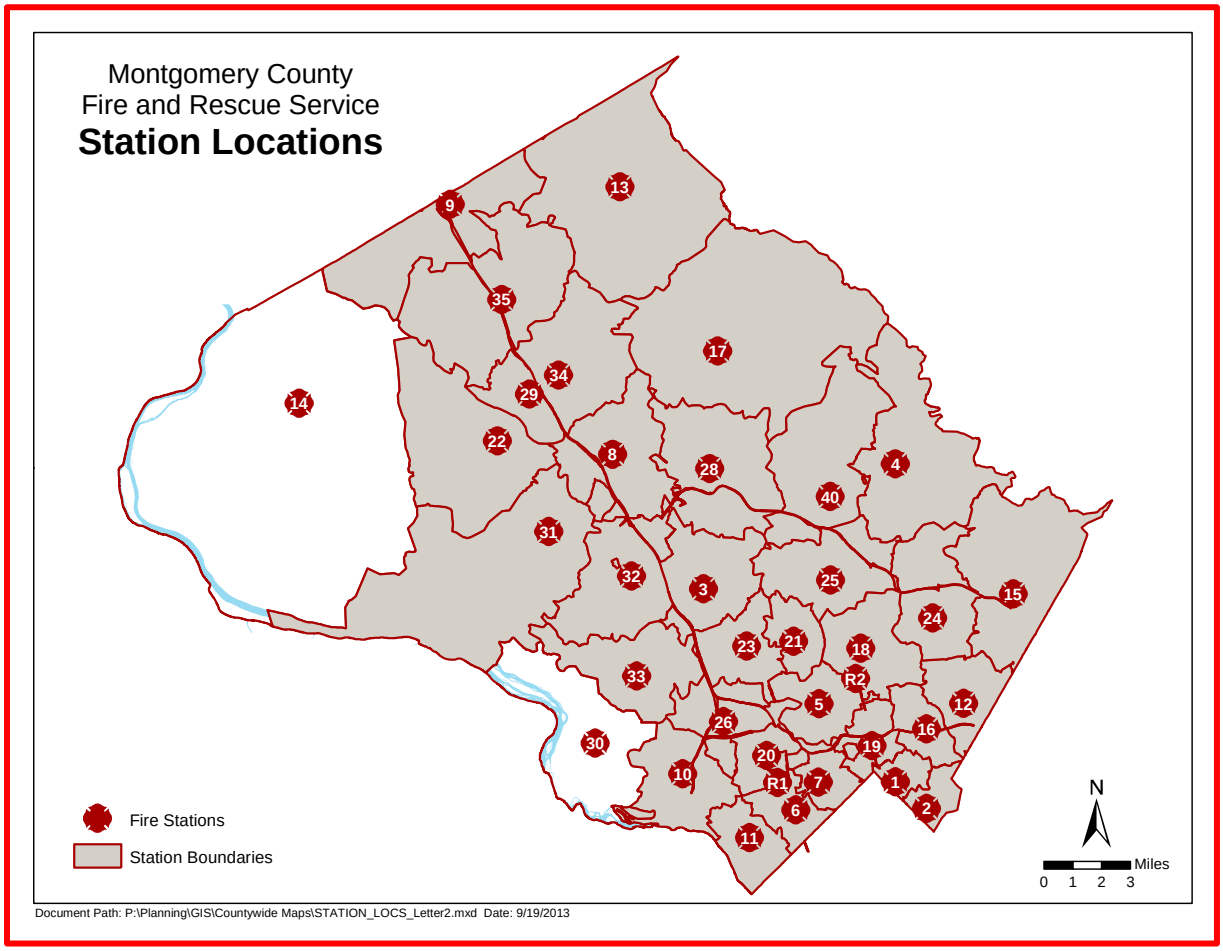
MCFRS monitors the additional service demands that automatic and mutual aid places upon its emergency response deployment model. MCFRS understands the critical importance of maintaining automatic and mutual aid relationships and will continue to enhance automatic aid processes by introducing CAD-to-CAD technologies with automatic aid partners. CAD-to-CAD will expedite resource deployment and eventually leverage automatic vehicle locator (AVL)/Automatic Routing Logic (ARL) technologies.

Finally, the chart below depicts MCFRS automatic aid provided to in-County Federal fire-rescue departments and out-of-county automatic and mutual aid provided each fiscal year between FY13 to FY20. Over these eight years, there has not been a significant increase in automatic and mutual aid requests, other than in FY20. The FY20 increase is believed to be attributed to the CAD2CAD connection with Prince George's County and is being analyzed and researched.



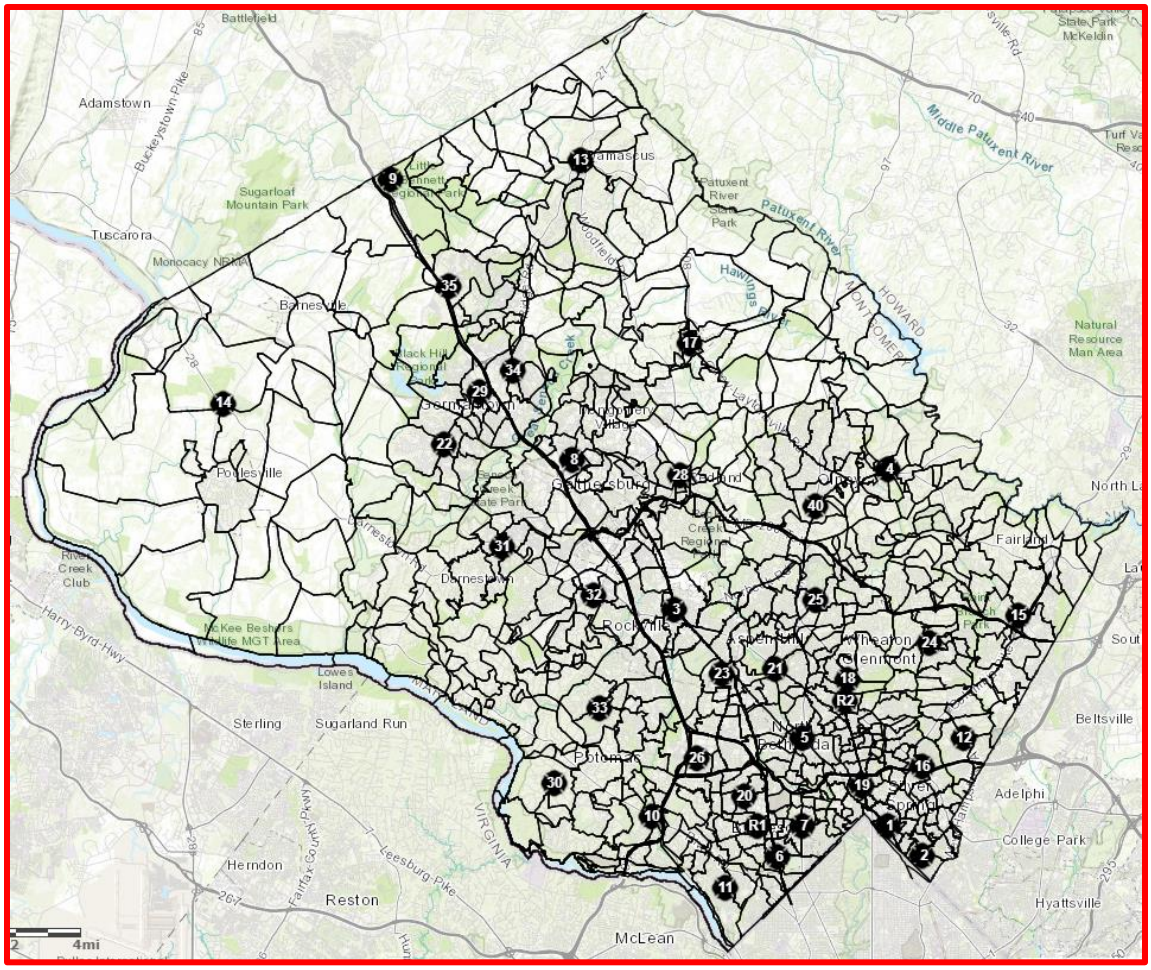
Methods for Organizing Response Areas into Geographical Planning Zones [CC 2A.3]
Community Assessment & Population Density by Risk Management Zones [CC 2A.4]



MCFRS bases its emergency response resources from 37 fire-rescue stations. Of these stations, 35 have at least one Class A pumper assigned and two rescue-only stations are dedicated with heavy rescue and EMS capabilities, but without engine company capabilities.

It is from the 35 first-due fire station response areas that MCFRS bases its upper tier geographical planning zones. These station response areas serve as the footprint for the distribution of resources for initial intervention within the communities served by those stations. These station response areas combined encompass the entire MCFRS response area.

MCFRS' geographic planning zone methodology also includes a lower tier and more granular approach to analyzing risks, service demands, workload, and operational and statistical reporting. This approach maintains 850 smaller geographic risk management zones (RMZ) spread throughout the entire response area. These RMZs are essentially the fire box areas within the fire station response areas.



This map depicts each of the 850 MCFRS Risk Management Zones (Box Areas)

MCFRS values and understands the importance of measuring its emergency response time programs' performance. It achieves this through constant quantitative evaluation of each component of the response time continuum by risk categories and within these established planning zones (i.e., Station Response Areas and Risk Management Zones).

MCFRS leverages geographic information system (GIS) technologies and sophisticated Crystal Reports algorithms to analyze risks, trending, workload, and performance to name a few. Each planning zone is represented as a polygon which allows for integration of multiple additional data layers using GIS. Every MCFRS call for service through the Emergency Communication Center (ECC) produces a geocoded address within the Computer-Aided Dispatch (CAD) system. Every address and incident are also linked to the MCFRS planning zones. All this data is linked to timestamped response time data, and all of this "big data" gets exported into the MCFRS data warehouse and into the FireApp records management system (RMS). The RMS data is two-way back and forth into the data warehouse that MCFRS analysts can utilize for decisionmaker analysis and consumption.

In addition, MCFRS assesses many different features within its geographical planning zones, including population density. Since these planning zone boundaries do not align exactly with U.S. Census block boundaries, population densities are determined through a calculation based on a percentage of the census block that falls within the station and box areas (RMZ). The MCFRS GIS Specialist leverages GIS technologies to produce these assessments.

Finally, the following pages provide a table listing the population density per Fire Station Response Area planning zones (upper tier) and numerous tables listing the population density per box area Risk Management Zones planning zones (lower tier). It is also important to note population density zones are designated Urban (2500> people per sq. mi.) and Rural (<2500 people per sq. mi.) and are based on the Commission on Fire Accreditation International's (CFAI) 10th edition Fire and Emergency Services Self-Assessment Model (FESSAM). Prior to 2019, MCFRS followed the CFAI guidance within the 8th edition FESSAM and utilized four density zones for analysis and planning. MCFRS is now institutionalizing and utilizing Urban and Rural density zones.

Population Density per Fire Station Response Area (Upper Tier) Planning Zones

Fire Station Response Area	Sq.Mi.	Population	Pop. Density (people/sq mi) 2010 Census	Predominant Density Zone
1	2.1	26823	12,617	Urban
2	2.5	23740	9,531	Urban
3	14.3	50822	3,684	Urban
4	20	10720	526	Urban
5	6	30192	5,070	Urban
6	4	28944	7,267	Urban
7	3.6	13716	3,918	Urban
8	12.7	75489	6,116	Urban
9	15.4	1355	91	Rural
10	9.5	14051	1,460	Urban
11	5.2	19209	3,678	Urban
12	6.4	30349	4,783	Urban
13	33.3	19947	611	Rural
14	86.7	7543	87	Rural
15	18.8	48241	2,573	Urban
16	4.3	30272	7,058	Urban
17	41.4	17347	426	Rural
18	8.7	46423	5,294	Urban
19	3.8	22948	5,934	Urban
20	4.1	27314	6,616	Urban
21	4.1	25287	6,212	Urban
22	20.5	33641	1,555	Rural
23	6.6	32782	4,958	Urban
24	10.4	24086	2,326	Urban
25	10.8	50576	4,871	Urban
26	6.5	21938	3,488	Urban
28	16.4	31226	1,939	Urban
29	4.7	29037	6,158	Urban
30	17.2	12298	640	Urban
31	38.5	56326	1,155	Urban
32	13	39780	3,052	Urban
33	15.1	32103	2,355	Urban
34	13.3	30696	2,030	Urban
35	21.5	13760	623	Rural
40	16.8	32878	1,901	Urban

Population Density per Fire Station Box Areas (Lower Tier) Planning Zones

Box Area	SQ MI	2010 Census Population	Population Density per Sq. Mi.	Zone	NonHydrant
0101	0.374	4939	13205	Urban	
0102	0.438	6777	15477	Urban	
0103	0.467	2981	6379	Urban	
0104	0.071	1533	21698	Urban	
0105	0.143	1265	8826	Urban	
0106	0.122	2126	17389	Urban	
0107	0.212	2415	11371	Urban	
0108	0.148	779	5264	Urban	
0110	0.132	3903	29672	Urban	
0180	0.001	0	0	Urban	
0181	0.000	0	0	Urban	
0182	0.001	0	0	Urban	
0185	0.000	0	0	Urban	
0186	0.000	0	0	Urban	
0187	0.001	0	0	Urban	
0188	0.001	0	0	Urban	
0189	0.001	0	0	Urban	
0190	0.002	0	0	Urban	
0191	0.001	0	0	Urban	
0192	0.000	0	0	Urban	
0193	0.003	76	25472	Urban	
0194	0.007	27	3726	Urban	
0202	0.251	2428	9668	Urban	
0203	0.309	3564	11519	Urban	
0204	0.212	1635	7723	Urban	
0205	0.408	2695	6608	Urban	
0206	0.210	1564	7463	Urban	
0207	0.405	2704	6671	Urban	
0208	0.152	2780	18283	Urban	
0209	0.188	2816	15006	Urban	
0210	0.251	1776	7087	Urban	
0213	0.066	362	5465	Urban	

0214	0.065	1591	24441	Urban
0290	0.000	0	0	Urban
0291	0.000	0	0	Urban
0292	0.000	0	0	Urban
0294	0.001	0	0	Urban
0301	0.275	2274	8261	Urban
0302	0.496	2052	4137	Urban
0303	0.584	231	396	Rural
0304	0.439	5478	12471	Urban
0305	0.877	1978	2254	Urban
0306	1.050	4474	4261	Urban
0307	1.172	4240	3618	Urban
0308	0.806	3425	4246	Urban
0309	0.497	2389	4802	Urban
0310	0.107	291	2719	Urban
0311	0.685	2944	4300	Urban
0312	0.226	166	733	Urban
0314	0.321	1118	3488	Urban
0317	0.060	78	1292	Urban
0319	1.030	271	263	Urban
0320	0.643	546	850	Urban
0321	0.637	5131	8056	Urban
0324	0.027	58	2135	Urban
0327	0.026	19	720	Urban
0328	0.017	48	2825	Urban
0331	0.023	8	332	Urban
0332	0.012	0	0	Urban
0349	0.001	0	0	Urban
0350	0.002	0	0	Urban
0351	0.000	0	0	Urban
0352	0.001	0	0	Urban
0353	0.001	0	0	Urban
0354	0.001	0	0	Urban
0355	0.001	5	5979	Urban
0356	0.001	8	6002	Urban
0357	0.000	2	5105	Urban
0358	0.000	0	0	Urban
0359	0.001	0	0	Urban

0360	0.000	0	0	Urban	
0361	0.002	0	0	Urban	
0362	0.000	0	0	Urban	
0363	0.002	16	6843	Urban	
0364	0.001	5	6843	Urban	
0365	0.001	6	6843	Urban	
0366	0.000	3	6843	Urban	
0367	0.002	11	6843	Urban	
0368	0.002	14	6843	Urban	
0369	0.001	3	3959	Urban	
0370	0.001	0	475	Urban	
0371	0.001	0	209	Urban	
0372	0.001	0	43	Urban	
0373	0.001	0	0	Urban	
0374	0.001	0	0	Urban	
0375	0.001	0	0	Urban	
0376	0.001	0	0	Urban	
0377	0.001	0	0	Urban	
0378	0.001	0	0	Urban	
0379	0.001	0	0	Urban	
0380	0.002	0	0	Urban	
0381	0.000	0	43	Urban	
0382	0.001	0	43	Urban	
0383	0.002	0	43	Urban	
0384	0.001	0	43	Urban	
0385	0.003	0	43	Urban	
0386	0.002	0	7	Urban	
0387	0.001	0	0	Urban	
0388	0.002	0	0	Urban	
0389	0.001	0	0	Urban	
0390	0.001	0	0	Urban	
0393	0.066	0	0	Urban	
0401	1.594	334	209	Rural	Y
0403	1.661	690	415	Rural	Y
0404	2.650	513	194	Rural	Y
0405	0.423	1005	2379	Urban	
0406	0.463	347	748	Urban	
0407	1.434	756	527	Urban	

0408	0.685	565	825	Urban	
0409	0.281	237	846	Urban	
0410	2.049	1166	569	Urban	
0411	0.266	138	518	Urban	Y
0413	0.078	44	567	Urban	Y
0416	0.528	325	615	Urban	Y
0417	1.536	457	298	Rural	Y
0418	0.106	103	977	Urban	Y
0419	0.545	358	658	Urban	
0420	1.806	625	346	Rural	Y
0421	0.256	193	755	Urban	
0422	0.508	239	471	Urban	Y
0423	0.233	238	1023	Urban	
0425	0.278	264	949	Urban	
0426	0.287	227	793	Urban	
0427	0.113	102	899	Urban	
0428	0.177	129	731	Urban	Y
0429	0.251	182	727	Urban	Y
0430	0.300	228	761	Urban	
0431	0.181	84	464	Rural	Y
0432	0.770	368	478	Rural	
0433	0.100	115	1150	Urban	
0434	0.509	125	245	Urban	
0435	0.093	48	520	Rural	Y
0436	0.465	333	716	Urban	
0437	0.200	363	1817	Urban	
0439	0.040	35	881	Urban	Y
0501	0.629	3248	5165	Urban	
0502	0.677	4080	6029	Urban	
0503	0.685	2863	4179	Urban	
0504	0.302	2685	8890	Urban	
0505	0.110	80	729	Urban	
0506	0.387	1903	4922	Urban	
0507	0.348	1603	4601	Urban	
0508	0.217	701	3222	Urban	
0509	0.276	840	3045	Urban	
0510	0.421	2736	6495	Urban	
0511	0.240	1222	5083	Urban	

0512	0.103	664	6463	Urban
0513	0.339	1494	4408	Urban
0514	0.179	682	3810	Urban
0515	0.298	2009	6743	Urban
0516	0.180	424	2364	Urban
0517	0.148	943	6385	Urban
0518	0.422	1779	4214	Urban
0519	0.031	413	13229	Urban
0601	0.220	1464	6655	Urban
0602	0.457	2941	6442	Urban
0603	0.391	6239	15946	Urban
0604	0.303	1379	4546	Urban
0605	0.397	1749	4409	Urban
0606	0.398	897	2257	Urban
0607	0.302	2175	7203	Urban
0608	0.213	3067	14418	Urban
0609	0.167	2421	14537	Urban
0610	0.441	4444	10073	Urban
0611	0.594	1436	2419	Urban
0691	0.005	38	7035	Urban
0692	0.006	32	5117	Urban
0693	0.001	2	2630	Urban
0694	0.002	23	10059	Urban
0701	0.497	1541	3099	Urban
0702	0.834	4259	5105	Urban
0703	0.144	642	4469	Urban
0705	0.218	257	1182	Urban
0707	0.356	2264	6361	Urban
0709	0.510	1618	3171	Urban
0711	0.406	1817	4476	Urban
0713	0.072	556	7766	Urban
0714	0.119	353	2960	Urban
0715	0.162	158	978	Urban
0716	0.088	41	466	Urban
0717	0.032	11	347	Urban
0718	0.028	60	2129	Urban
0801	0.996	8144	8176	Urban
0802	0.261	3851	14769	Urban

0803	1.011	3472	3434	Urban	
0804	0.761	5395	7090	Urban	
0805	0.293	1604	5473	Urban	
0806	0.436	1364	3126	Urban	
0807	1.267	6078	4798	Urban	
0808	0.883	5577	6314	Urban	
0812	0.238	4180	17565	Urban	
0813	0.133	814	6143	Urban	
0814	0.675	6777	10046	Urban	
0815	0.071	155	2186	Urban	
0816	0.378	4552	12029	Urban	
0821	0.241	493	2050	Urban	
0822	0.545	1271	2330	Urban	
0823	1.746	9396	5382	Urban	
0825	0.030	4	133	Urban	Y
0826	0.580	360	621	Urban	Y
0827	0.376	2592	6893	Urban	
0828	0.292	2379	8156	Urban	
0829	0.554	4018	7254	Urban	
0830	0.373	2281	6112	Urban	
0845	0.067	98	1473	Urban	
0846	0.011	0	0	Urban	
0847	0.065	94	1452	Urban	
0901	2.322	249	107	Rural	Y
0902	2.944	238	81	Rural	Y
0903	5.820	300	51	Rural	Y
0909	1.867	265	142	Rural	Y
0910	1.521	199	131	Rural	Y
0914	0.329	109	333	Rural	Y
0915	0.160	7	45	Rural	Y
0916	0.003	0	109	Rural	Y
0917	0.005	0	1	Rural	Y
1001	0.435	826	1899	Urban	
1002	0.165	334	2022	Urban	
1003	1.332	1276	958	Urban	
1004	0.560	499	891	Urban	
1005	0.350	653	1867	Urban	
1006	0.206	213	1032	Urban	

1007	0.426	840	1971	Urban	
1008	0.176	423	2408	Urban	
1009	0.323	742	2295	Urban	
1010	0.253	1157	4571	Urban	
1011	0.204	924	4539	Urban	
1012	0.835	1220	1460	Urban	
1013	0.725	1040	1436	Urban	
1014	0.440	580	1319	Urban	
1015	0.033	90	2747	Urban	
1016	0.164	123	751	Urban	Y
1017	0.288	533	1851	Urban	
1018	0.452	215	477	Urban	
1020	0.032	63	1950	Urban	
1021	0.007	1	99	Urban	
1022	0.026	19	737	Urban	
1023	0.577	1425	2468	Urban	
1024	0.382	75	196	Urban	
1025	0.311	0	0	Rural	
1026	0.004	0	0	Urban	
1027	0.171	281	1639	Urban	
1028	0.061	190	3119	Urban	
1030	0.089	64	716	Urban	
1031	0.034	71	2094	Urban	
1032	0.470	0	0	Urban	
1033	0.029	68	2377	Urban	
1034	0.017	39	2270	Urban	
1101	0.907	4459	4916	Urban	
1102	1.930	8112	4203	Urban	
1103	0.211	618	2930	Urban	
1104	0.045	114	2550	Urban	
1105	0.544	849	1559	Urban	
1106	0.775	3942	5086	Urban	
1107	0.271	1088	4015	Urban	
1108	0.557	0	0	Urban	
1201	0.418	3198	7657	Urban	
1202	0.947	3071	3242	Urban	
1203	0.723	1620	2240	Urban	
1204	0.464	1286	2775	Urban	

1206	0.239	3032	12694	Urban	
1207	0.321	3619	11258	Urban	
1208	0.062	1574	25568	Urban	
1209	0.603	1684	2795	Urban	
1210	0.582	8163	14030	Urban	
1211	0.488	2213	4532	Urban	
1212	0.003	0	149	Urban	
1213	0.004	2	424	Urban	
1214	0.033	86	2575	Urban	
1255	0.699	36	51	Urban	
1256	1.007	488	485	Urban	
1301	1.819	685	377	Rural	
1302	0.910	191	210	Urban	
1303	0.746	1290	1729	Urban	
1304	1.715	3645	2125	Urban	
1305	0.929	324	349	Rural	
1306	0.782	142	181	Rural	
1307	0.278	248	892	Urban	
1308	0.068	21	312	Rural	
1309	0.798	786	985	Urban	
1310	0.128	69	539	Urban	Y
1311	2.227	287	129	Rural	Y
1313	1.464	209	143	Rural	Y
1314	2.298	3001	1306	Urban	
1315	1.233	426	345	Urban	Y
1316	1.166	55	47	Rural	Y
1317	0.867	136	156	Rural	Y
1318	0.085	367	4317	Urban	
1319	0.138	228	1648	Urban	
1320	0.646	64	99	Rural	Y
1321	1.055	170	162	Rural	Y
1322	1.636	3019	1846	Urban	
1323	1.597	1069	669	Urban	Y
1324	0.155	1057	6838	Urban	
1325	0.200	22	111	Rural	Y
1326	0.891	477	536	Urban	Y
1327	0.275	117	425	Rural	Y
1329	3.134	489	156	Rural	Y

1332	0.860	143	167	Rural	Y
1333	1.014	264	261	Rural	Y
1334	0.382	71	186	Urban	Y
1335	0.292	22	75	Rural	Y
1336	1.948	272	140	Rural	Y
1401	2.333	3906	1675	Urban	
1402	5.360	379	71	Rural	Y
1403	0.265	148	560	Urban	
1404	3.494	161	46	Rural	Y
1405	12.208	602	49	Rural	Y
1406	2.612	52	20	Rural	Y
1407	4.012	96	24	Rural	Y
1408	5.299	254	48	Rural	Y
1409	1.499	6	4	Rural	Y
1410	7.359	114	15	Rural	Y
1412	10.836	233	22	Rural	Y
1413	2.966	181	61	Rural	Y
1414	6.372	61	10	Rural	Y
1415	4.086	119	29	Rural	Y
1416	4.329	774	179	Rural	Y
1417	6.576	335	51	Rural	Y
1418	2.147	123	58	Rural	Y
1421	1.971	0	0	Rural	
1422	1.358	0	0	Rural	
1423	0.916	0	0	Rural	
1424	0.485	0	0	Rural	
1501	1.243	3511	2826	Urban	
1502	2.436	1665	684	Rural	
1503	0.686	1735	2530	Urban	
1504	0.769	1549	2014	Urban	
1505	1.048	2219	2118	Urban	
1506	1.262	2336	1851	Urban	
1507	0.175	633	3616	Urban	
1508	0.426	192	451	Rural	
1510	0.248	1138	4590	Urban	
1511	0.152	24	157	Rural	Y
1512	0.714	7874	11024	Urban	
1513	0.332	421	1269	Urban	

1514	0.850	1587	1868	Urban	
1515	0.477	1010	2117	Urban	
1516	0.745	2951	3960	Urban	
1518	0.887	3284	3704	Urban	
1519	0.451	1983	4401	Urban	
1520	1.704	225	132	Rural	Y
1525	0.726	295	407	Rural	
1526	1.021	6178	6053	Urban	
1527	0.476	1943	4085	Urban	
1528	0.660	3605	5461	Urban	
1529	0.155	1426	9191	Urban	
1530	0.058	83	1427	Urban	
1531	0.022	86	3977	Urban	
1532	0.020	63	3079	Urban	
1533	0.538	156	290	Rural	Y
1534	0.220	61	276	Rural	Y
1535	0.315	60	189	Rural	Y
1601	0.589	2933	4976	Urban	
1602	0.154	2124	13827	Urban	
1603	0.245	1649	6732	Urban	
1604	0.203	833	4098	Urban	
1605	0.372	2305	6190	Urban	
1606	0.263	2104	7987	Urban	
1607	0.453	2705	5971	Urban	
1608	0.350	4816	13755	Urban	
1609	0.430	2956	6879	Urban	
1610	0.196	1452	7397	Urban	
1611	0.250	1491	5956	Urban	
1612	0.196	963	4902	Urban	
1613	0.285	944	3316	Urban	
1614	0.201	2710	13483	Urban	
1615	0.013	1	54	Urban	
1616	0.025	42	1696	Urban	
1617	0.010	14	1421	Urban	
1618	0.033	101	3030	Urban	
1701	0.736	547	744	Urban	Y
1702	3.883	563	145	Rural	Y
1703	3.221	122	38	Rural	Y

1704	1.141	736	645	Urban	
1705	1.113	81	73	Rural	Y
1706	1.506	199	132	Rural	
1707	2.904	184	63	Rural	Y
1708	0.518	259	500	Urban	
1709	0.130	774	5971	Urban	
1710	0.091	57	627	Urban	
1711	0.409	137	335	Rural	Y
1712	2.192	1511	689	Urban	Y
1713	0.817	3503	4289	Urban	
1714	2.040	327	160	Rural	Y
1715	0.828	141	170	Rural	
1716	0.859	253	295	Rural	Y
1717	1.979	912	461	Urban	Y
1718	5.355	508	95	Rural	Y
1719	1.586	379	239	Rural	Y
1720	0.628	442	703	Urban	Y
1721	0.550	2960	5383	Urban	
1722	1.797	282	157	Rural	Y
1723	0.443	768	1733	Urban	
1724	0.366	218	597	Urban	Y
1725	0.572	470	822	Urban	
1726	0.840	51	60	Rural	
1727	1.977	249	126	Rural	Y
1728	0.896	142	158	Rural	Y
1729	0.574	192	334	Rural	
1730	0.213	115	539	Urban	
1731	0.740	344	465	Urban	Y
1801	0.342	1933	5657	Urban	
1802	0.531	697	1312	Urban	
1803	0.522	4608	8829	Urban	
1804	0.272	2315	8510	Urban	
1805	0.412	698	1695	Urban	
1806	0.755	7178	9510	Urban	
1807	0.354	1498	4235	Urban	
1808	1.076	4010	3728	Urban	
1809	0.251	749	2983	Urban	
1810	0.192	2261	11774	Urban	

1811	0.142	1200	8422	Urban
1812	0.837	3655	4366	Urban
1813	0.477	2913	6106	Urban
1814	0.197	2404	12174	Urban
1815	0.195	1240	6350	Urban
1816	0.349	3163	9056	Urban
1817	0.125	582	4665	Urban
1818	0.130	1177	9027	Urban
1821	1.249	1919	1537	Urban
1824	0.257	1739	6780	Urban
1890	0.006	57	9449	Urban
1891	0.001	0	0	Urban
1892	0.007	28	3892	Urban
1893	0.011	84	7555	Urban
1894	0.002	6	3834	Urban
1895	0.004	14	3838	Urban
1896	0.001	2	3490	Urban
1897	0.005	18	3490	Urban
1898	0.048	169	3490	Urban
1901	0.310	4168	13440	Urban
1902	0.183	906	4958	Urban
1903	0.367	1358	3696	Urban
1904	0.141	761	5409	Urban
1905	0.287	2186	7625	Urban
1906	0.363	3005	8270	Urban
1907	0.072	157	2190	Urban
1908	0.162	1205	7440	Urban
1909	0.179	1434	8007	Urban
1910	0.063	496	7828	Urban
1911	0.071	270	3818	Urban
1912	0.106	176	1656	Urban
1913	0.178	306	1720	Urban
1914	0.146	1271	8718	Urban
1915	0.395	1604	4058	Urban
1916	0.234	1150	4917	Urban
1917	0.200	890	4460	Urban
1918	0.161	1207	7490	Urban
1922	0.080	310	3861	Urban

1923	0.110	51	467	Urban
1924	0.051	81	1589	Urban
1925	0.022	43	1915	Urban
1990	0.008	16	2161	Urban
1991	0.001	4	7127	Urban
1992	0.004	45	12594	Urban
2001	0.331	1988	6015	Urban
2002	0.219	1080	4924	Urban
2003	0.246	739	3002	Urban
2004	0.160	1025	6385	Urban
2005	0.147	525	3565	Urban
2006	0.444	1769	3988	Urban
2007	0.253	2948	11632	Urban
2008	0.152	891	5849	Urban
2009	0.385	4799	12476	Urban
2010	0.099	350	3520	Urban
2011	0.025	29	1157	Urban
2012	0.031	99	3191	Urban
2013	0.025	102	4159	Urban
2014	0.028	43	1522	Urban
2015	0.065	391	6005	Urban
2016	0.194	1265	6509	Urban
2018	0.045	100	2236	Urban
2019	0.521	4620	8871	Urban
2020	0.029	193	6765	Urban
2022	0.213	1245	5839	Urban
2023	0.283	1636	5778	Urban
2090	0.006	65	10993	Urban
2091	0.003	3	995	Urban
2092	0.009	4	463	Urban
2093	0.008	37	4446	Urban
2094	0.007	6	941	Urban
2095	0.002	15	8507	Urban
2096	0.012	166	13783	Urban
2097	0.012	30	2403	Urban
2101	0.385	2233	5796	Urban
2102	0.334	3021	9057	Urban
2103	0.610	5122	8399	Urban

2104	0.959	3278	3420	Urban	
2105	0.124	345	2791	Urban	
2106	0.269	1494	5559	Urban	
2107	0.048	464	9670	Urban	
2108	0.652	5397	8275	Urban	
2112	0.149	1050	7071	Urban	
2113	0.357	1742	4877	Urban	
2114	0.164	1156	7048	Urban	
2201	0.393	2628	6690	Urban	
2202	1.052	6479	6160	Urban	
2203	0.296	2088	7062	Urban	
2204	0.474	4429	9341	Urban	
2206	0.932	90	97	Urban	Y
2207	0.772	5123	6633	Urban	
2208	0.409	1973	4823	Urban	
2209	0.856	1061	1240	Urban	
2210	1.038	829	798	Urban	Y
2211	1.816	588	324	Rural	Y
2212	1.541	181	118	Rural	Y
2213	2.198	118	54	Rural	Y
2214	1.700	7502	4413	Urban	
2215	2.745	71	26	Rural	Y
2216	1.721	375	218	Rural	Y
2217	3.775	249	66	Rural	Y
2301	0.817	7066	8647	Urban	
2302	0.251	1067	4259	Urban	
2303	0.316	875	2770	Urban	
2304	0.515	949	1844	Urban	
2305	0.554	3743	6760	Urban	
2306	0.728	4659	6398	Urban	
2307	0.363	2668	7349	Urban	
2308	0.842	1478	1756	Urban	
2309	1.214	3313	2730	Urban	
2310	0.195	704	3613	Urban	
2311	0.138	1526	11095	Urban	
2312	0.202	1850	9163	Urban	
2313	0.367	2654	7240	Urban	
2314	0.024	24	1001	Urban	

2315	0.060	52	865	Urban	
2317	0.036	20	567	Urban	
2380	0.019	59	3099	Urban	
2381	0.003	18	6687	Urban	
2382	0.014	263	19423	Urban	
2383	0.007	5	680	Urban	
2384	0.002	0	0	Urban	
2385	0.001	0	0	Urban	
2386	0.001	0	0	Urban	
2387	0.002	0	0	Urban	
2388	0.002	0	0	Urban	
2389	0.001	0	0	Urban	
2390	0.002	0	0	Urban	
2391	0.001	0	0	Urban	
2392	0.001	0	0	Urban	
2393	0.001	0	0	Urban	
2394	0.000	0	0	Urban	
2395	0.001	0	0	Urban	
2401	0.783	2364	3019	Urban	
2402	0.643	1194	1856	Urban	
2403	0.268	1345	5019	Urban	
2404	1.002	2122	2117	Urban	
2407	0.344	320	932	Urban	
2408	0.647	2577	3981	Urban	
2409	0.583	1703	2919	Urban	
2410	0.276	886	3211	Urban	
2412	0.895	2437	2723	Urban	
2413	0.646	317	490	Urban	Y
2415	0.797	2692	3378	Urban	
2416	0.310	232	748	Urban	Y
2418	0.650	985	1517	Urban	
2419	0.370	798	2156	Urban	
2420	0.411	1121	2726	Urban	
2421	0.450	775	1722	Urban	
2422	0.524	560	1068	Urban	
2423	0.138	151	1095	Urban	
2424	0.475	1337	2814	Urban	
2425	0.070	44	619	Urban	

2426	0.062	105	1694	Urban	
2501	0.328	1166	3554	Urban	
2502	0.203	1353	6656	Urban	
2503	0.288	2341	8133	Urban	
2504	0.468	2479	5296	Urban	
2505	0.091	250	2744	Urban	
2506	0.119	659	5534	Urban	
2507	0.156	1095	7010	Urban	
2508	0.813	11901	14640	Urban	
2509	0.900	6701	7442	Urban	
2510	0.076	426	5572	Urban	
2511	0.546	745	1365	Urban	
2512	0.160	343	2141	Urban	
2513	0.591	1574	2662	Urban	
2514	0.890	2385	2678	Urban	
2515	0.735	3614	4919	Urban	
2516	0.608	3095	5088	Urban	
2517	0.065	372	5715	Urban	
2518	0.159	840	5278	Urban	
2519	0.696	1081	1555	Urban	
2520	0.963	3483	3615	Urban	
2521	0.202	245	1212	Urban	Y
2522	0.233	452	1941	Urban	
2523	0.180	283	1572	Urban	
2524	0.345	947	2744	Urban	
2525	0.215	2099	9768	Urban	
2526	0.100	151	1511	Urban	
2527	0.057	182	3206	Urban	
2528	0.063	47	741	Urban	
2529	0.083	34	406	Urban	Y
2601	0.697	2819	4043	Urban	
2603	0.348	1694	4866	Urban	
2604	0.210	1261	6018	Urban	
2605	0.540	720	1333	Urban	
2606	0.533	4927	9245	Urban	
2607	0.187	384	2053	Urban	
2609	0.853	3048	3571	Urban	
2610	0.624	1666	2670	Urban	

2612	0.274	267	974	Urban	
2614	0.615	1475	2399	Urban	
2615	0.027	11	413	Urban	
2616	0.034	61	1806	Urban	
2617	0.024	18	756	Urban	
2618	0.424	1152	2715	Urban	
2619	0.020	39	1951	Urban	
2621	0.028	47	1691	Urban	
2622	0.031	61	1999	Urban	
2623	0.041	51	1231	Urban	
2625	0.312	1463	4688	Urban	
2626	0.549	1057	1924	Urban	
2702	0.124	6	50	Urban	
2801	1.163	722	620	Urban	
2802	0.142	314	2204	Urban	
2803	0.339	189	558	Urban	
2804	2.046	1047	511	Urban	Y
2805	1.097	239	218	Rural	
2806	0.546	178	326	Rural	
2807	1.755	3713	2116	Urban	
2808	0.865	144	166	Rural	
2809	0.615	549	893	Urban	
2810	0.797	2130	2672	Urban	
2811	1.083	7387	6819	Urban	
2812	0.629	757	1203	Urban	
2813	0.765	285	372	Rural	Y
2815	0.817	6427	7871	Urban	
2816	0.098	65	665	Urban	
2817	0.236	794	3359	Urban	
2820	0.941	1455	1547	Urban	
2821	0.668	2186	3273	Urban	
2824	0.020	24	1168	Urban	
2825	0.141	616	4381	Urban	
2827	0.139	80	580	Urban	Y
2828	0.290	1086	3742	Urban	
2829	0.152	146	956	Urban	Y
2830	0.212	113	531	Urban	Y
2831	0.240	117	488	Urban	Y

2832	0.132	134	1017	Urban	
2833	0.021	41	1921	Urban	
2834	0.004	7	1667	Urban	
2835	0.006	11	1752	Urban	
2901	1.004	6131	6107	Urban	
2902	0.208	1031	4955	Urban	
2906	0.151	1627	10772	Urban	
2909	1.024	5387	5260	Urban	
2910	0.518	3608	6969	Urban	
2911	0.204	2185	10707	Urban	
2913	0.218	592	2713	Urban	
2915	0.925	5235	5662	Urban	
2924	0.343	2891	8425	Urban	
2942	0.077	158	2042	Urban	
2944	0.017	0	13	Urban	
3001	1.761	2679	1521	Urban	
3002	2.448	2014	823	Urban	
3003	1.390	1800	1296	Urban	
3004	0.488	529	1085	Urban	
3005	0.698	0	0	Rural	
3006	0.507	658	1298	Urban	
3007	2.283	1164	510	Urban	
3008	0.275	0	0	Rural	
3009	1.048	606	578	Urban	
3010	0.694	0	0	Rural	
3011	1.180	1793	1519	Urban	
3012	1.330	0	0	Rural	
3013	0.280	181	647	Urban	Y
3014	0.501	274	547	Urban	Y
3015	0.107	40	371	Urban	Y
3016	0.104	50	480	Urban	Y
3017	0.072	21	297	Urban	Y
3018	1.023	663	648	Urban	
3019	0.150	89	593	Urban	Y
3020	0.113	73	643	Urban	Y
3021	1.447	76	52	Urban	Y
3022	0.092	97	1056	Urban	Y
3023	1.147	0	0	Rural	

3024	1.143	149	130	Rural	Y
3025	0.089	47	529	Urban	Y
3101	4.220	47	11	Rural	Y
3102	1.710	0	0	Rural	
3103	0.054	37	674	Urban	Y
3104	3.198	369	115	Rural	Y
3105	1.884	1027	545	Urban	
3108	1.488	528	355	Rural	Y
3111	1.349	835	619	Urban	Y
3112	0.214	172	804	Urban	
3113	1.667	6229	3736	Urban	
3115	0.443	1203	2719	Urban	
3116	0.820	3198	3902	Urban	
3117	1.898	1435	756	Urban	Y
3118	1.652	3175	1922	Urban	
3119	1.068	584	547	Rural	
3120	0.588	1882	3200	Urban	
3121	0.712	319	448	Urban	Y
3122	0.704	304	432	Urban	Y
3123	0.893	287	321	Rural	Y
3124	0.687	489	712	Urban	
3125	0.344	1149	3339	Urban	
3127	0.345	74	214	Rural	Y
3128	0.668	26	39	Rural	Y
3129	0.129	15	118	Rural	Y
3130	1.209	174	144	Rural	Y
3132	1.962	4756	2424	Urban	
3133	0.502	3872	7708	Urban	
3135	0.443	4015	9060	Urban	
3137	0.523	0	0	Rural	
3201	0.456	489	1073	Urban	
3202	0.581	1235	2128	Urban	
3203	0.287	1528	5325	Urban	
3204	0.600	4973	8289	Urban	
3205	0.887	4905	5529	Urban	
3206	0.384	96	249	Urban	
3207	0.628	206	329	Urban	
3208	0.045	154	3427	Urban	

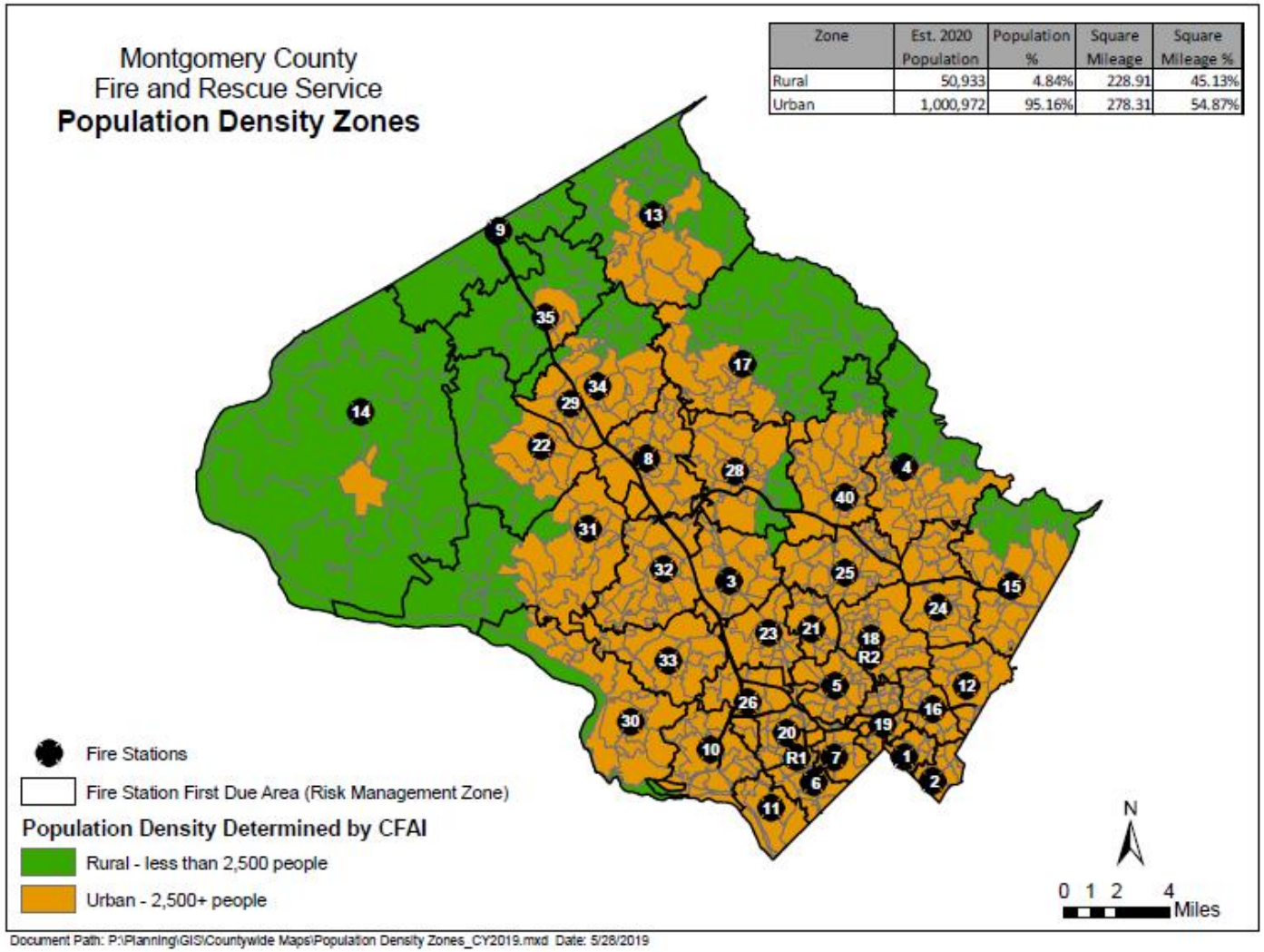
3209	0.604	2581	4276	Urban	
3210	0.389	3095	7955	Urban	
3211	0.355	342	965	Urban	
3212	0.997	3875	3888	Urban	
3213	0.091	102	1124	Urban	
3214	0.703	664	944	Urban	Y
3215	0.663	1597	2409	Urban	
3216	0.595	634	1065	Urban	
3217	0.066	44	658	Urban	Y
3218	0.413	2116	5119	Urban	
3219	0.455	291	640	Urban	Y
3220	0.693	343	495	Urban	
3221	0.090	52	575	Urban	Y
3222	0.434	1450	3345	Urban	
3223	0.825	4703	5704	Urban	
3224	0.660	1607	2436	Urban	
3225	0.770	1932	2510	Urban	
3226	0.069	16	226	Urban	
3227	0.043	68	1572	Urban	
3228	0.018	0	0	Urban	
3229	0.021	0	0	Urban	
3230	0.026	0	0	Urban	
3231	0.012	61	5238	Urban	
3232	0.026	44	1679	Urban	
3233	0.022	3	136	Urban	
3234	0.010	0	0	Urban	
3235	0.040	281	6947	Urban	
3236	0.018	11	641	Urban	
3237	0.026	15	581	Urban	Y
3238	0.004	0	127	Urban	
3239	0.081	423	5213	Urban	
3301	1.475	5579	3783	Urban	
3302	0.319	1258	3945	Urban	
3303	0.873	3254	3730	Urban	
3304	0.631	2574	4081	Urban	
3305	0.945	3430	3631	Urban	
3306	1.124	2140	1905	Urban	
3307	1.315	3965	3015	Urban	Y

3308	0.624	543	870	Urban	
3309	0.757	317	419	Urban	
3310	0.496	333	671	Urban	
3312	0.221	572	2585	Urban	
3315	0.124	546	4417	Urban	
3316	0.736	745	1012	Urban	
3322	0.094	50	536	Urban	Y
3323	0.092	48	520	Urban	Y
3324	0.883	971	1100	Urban	
3325	0.245	160	654	Urban	
3326	0.089	45	505	Urban	Y
3328	0.267	104	390	Urban	
3401	1.057	2097	1984	Urban	
3402	1.008	4637	4601	Urban	
3403	0.254	416	1640	Urban	Y
3404	0.456	1266	2777	Urban	
3405	0.101	39	389	Rural	Y
3406	0.135	105	782	Urban	Y
3407	1.004	1273	1268	Rural	
3408	1.082	216	200	Rural	Y
3409	1.087	141	130	Rural	Y
3410	1.045	208	199	Rural	Y
3411	1.243	367	296	Urban	Y
3412	0.424	416	983	Urban	Y
3414	0.058	42	726	Urban	
3415	0.466	2918	6258	Urban	
3416	1.250	906	724	Urban	Y
3417	0.069	201	2890	Urban	
3419	0.421	1453	3454	Urban	
3420	0.858	4765	5551	Urban	
3421	0.151	1976	13115	Urban	
3422	0.898	5255	5851	Urban	
3423	0.664	3064	4615	Urban	
3424	0.638	186	292	Rural	
3425	0.022	0	1	Urban	
3426	0.072	79	1100	Urban	
3427	1.452	832	573	Rural	
3428	0.391	235	600	Rural	

3501	0.559	1660	2969	Rural	
3503	1.841	154	84	Rural	Y
3506	5.661	553	98	Rural	Y
3507	0.555	711	1281	Rural	
3508	2.040	6292	3085	Urban	
3509	0.511	683	1336	Urban	
3510	1.216	49	40	Rural	Y
3512	0.761	71	93	Rural	Y
3513	2.137	290	136	Rural	Y
3514	0.220	85	387	Urban	
3516	1.156	764	661	Rural	
3517	0.561	26	46	Rural	Y
3518	1.076	159	148	Rural	Y
3525	0.055	1	21	Urban	
3526	0.129	13	104	Rural	
4001	0.747	155	207	Rural	Y
4002	0.926	228	246	Rural	Y
4003	1.695	208	123	Rural	Y
4004	0.501	199	398	Urban	Y
4005	0.895	2462	2749	Urban	
4006	1.076	3810	3540	Urban	
4007	1.377	5700	4139	Urban	
4008	0.093	306	3288	Urban	
4009	1.010	3574	3538	Urban	
4010	0.958	1754	1830	Urban	
4011	1.264	3480	2753	Urban	
4012	1.410	1464	1039	Urban	
4013	0.608	1210	1991	Urban	
4014	0.736	164	223	Urban	Y
4015	0.321	83	258	Urban	Y
4016	0.795	3384	4254	Urban	
4017	0.814	3087	3791	Urban	
4018	0.281	269	955	Urban	Y
4019	0.349	193	552	Urban	Y
4020	0.278	146	526	Urban	Y
4021	0.334	164	491	Urban	Y
4022	0.201	209	1041	Urban	
4023	0.195	76	391	Rural	

4024	0.260	334	1286	Urban
4025	0.133	140	1055	Urban
4026	0.052	176	3380	Urban
4027	0.046	12	258	Urban

Population Density Zones Map within MCFRS Planning Zones

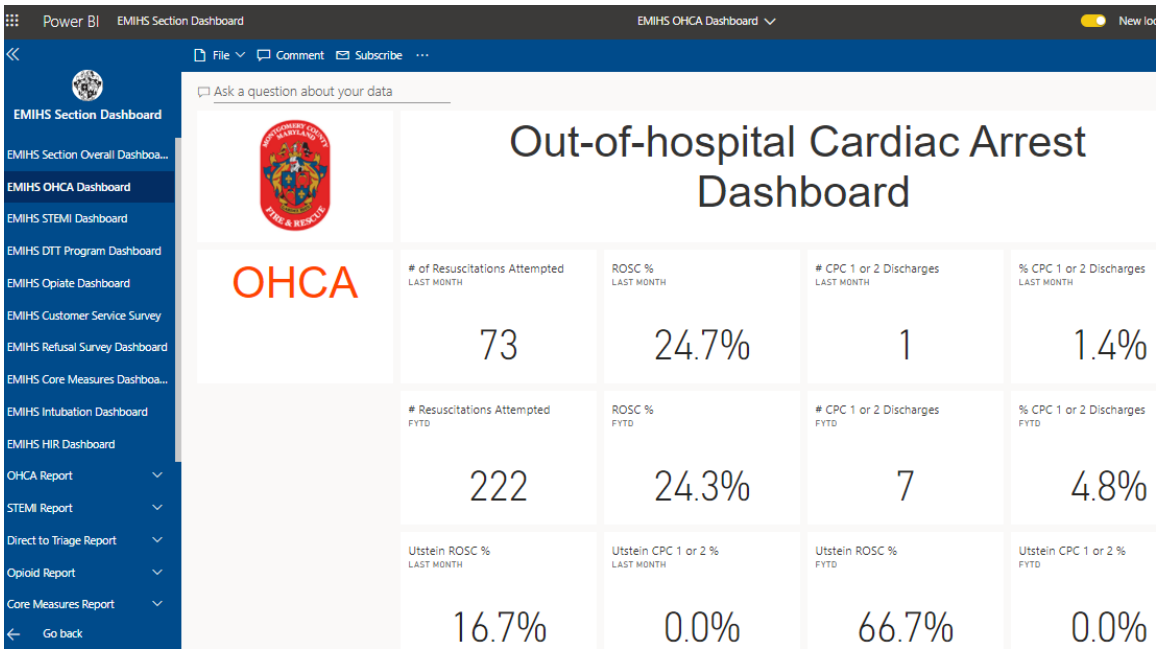


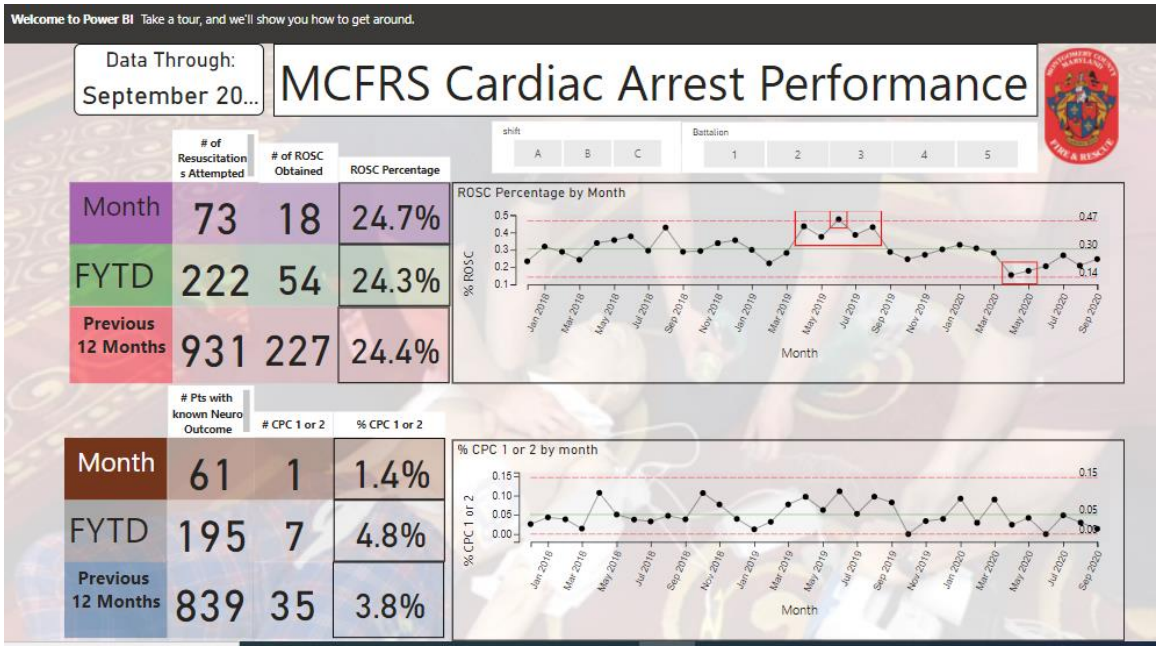
Zone	Est. 2020 Population	Population %	Square Mileage	Square Mileage %
Rural	50,933	4.84%	228.91	45.13%
Urban	1,000,972	95.16%	278.31	54.87%

Document Path: P:\Planning\GIS\Countywide Maps\Population Density Zones_CY2019.mxd Date: 5/28/2019

Positive and Negative Service Delivery Outcomes Methodology and Analysis [2A.5]

Event Outputs and Outcomes Assessed for Five Years [2B.3]





The data displayed above are actual cardiac arrest patients who presented with Return of Spontaneous Circulation (ROSC) after MCFRS lifesaving interventions and are projected as percentages of patient "saves."

The CFAI mandate for accredited fire departments to document negative and positive outcomes in its service delivery programs was articulated during the mid-2015 release of the reimagined 9th edition FESSAM manual. Prior to this and within the 8th edition FESSAM, the requirement within Performance Indicator 2A.4 was to collect fire loss, injury and life loss, property loss, and other associated loss data.

MCFRS maintains a well-established methodology which allows it to continue collecting property loss figures due to fire, civilian injuries and fatalities due to fire, and firefighter injuries and fatalities due to fires. This methodology includes tracking these negative consequences within the MCFRS National Fire Incident Reporting System (NFIRS)-compliant records management system (RMS) called FireApp, and for firefighter injuries, more granularly, within the MCFRS Risk Map (RMAP) system. For the collection of granular EMS patient positive and negative consequences, the data is collected within the electronic patient care reporting (ePCR) system called eMEDS®.

All data within the RMS, ePCR, and RMAP is available for several years and is routinely used by decision-makers and planners to:

- Analyze historic versus current consequence data secondary to service demand and incident response to determine trending in loss prevention and community asset preservation.
- Determine significant negative consequence trending within planning zones so effective mitigation strategies can be proposed and implemented.
- Monitor the effectiveness of current emergency response and community outreach prevention strategies.
- Assist with categorizing risks and updating the Community Risk Assessment.
- Determine the effectiveness of service delivery programs.
- Report quarterly positive and negative trending to the AHJ and external and internal stakeholders via the Montgomery County Office of Performance Measurement and Management's CountyStat online system.
- Assist with monitoring and analyzing firefighter and wellness injury trending.

- Export aggregated data for State and nationwide consequence analysis via NFIRS, and participation in annual surveys such as the NFPA Survey of Fire Departments for the U.S. Fire Experience.
- Participate in the Fire-Community Assessment Response Evaluation System (FireCares).
- Export aggregated data for local, State, and national EMS patient consequence and outcome analysis via the Cardiac Arrest Registry to Enhance Survival (CARES) program.

While MCFRS' methodology to determine when a fire incident positive outcome is considered a "save" has not caught up yet with the newly released 9th edition FESSAM, it did begin in Calendar Year 2014 (prior to the release of the reimagined FESSAM) and after implementing high-performance CPR guidelines, collecting return of spontaneous circulation (ROSC) patient "save" data. The monitoring and analysis of this and other critical and positive consequence EMS data is managed by the EMS Section's Office of Quality Improvement.

For the first time in the last 4 years since I've been tracking our performance, this month all three shifts are equal in the % of coded patients with whom we have achieved ROSC; also, during this month we've have had the highest monthly average ever for patients with whom we've been able to achieve ROSC. Please continue your outstanding efforts, and review the CPR reports from Codestat with your shift mates and your EMS Duty officer to see how you can improve and fine tune your performance. This truly translates into extending the time we are able to have these people continue living with their loved ones.

Shift	Codes	ROSC	DOA/DNR	TOR	Trauma	Unknown	Saves	YTD Saves
A	19	9	7	7	0	3	47.3684	
B	21	10	8	9	0	2	47.6190	
C	19	9	8	5	0	5	47.3684	
Oct Total	59	28	23	21	0	10	47.4576	35.02%

The above 2017 data is routinely shared, along with other headline measure EMS performance data and other MCFRS EMS information, within the MCFRS EMS Blog.

In addition to ROSC data, MCFRS maintains a methodology for collecting, analyzing, monitoring, and reporting critical data elements surrounding ST elevation myocardial infarction (STEMI/heart attack) patients and cerebral vascular attack (CVA/Stroke) patients. This information is collected to establish positive and negative trending to determine programmatic baselines, efficiencies, deficiencies, and mitigation efforts.

EMS Matters December 4th, 2017

Pasted below are the stats from last month showing your documentation for the Key Performance Indices for treating patients with a Stroke or a STEMI. Remember we are striving for compliance of 90% or greater. I know you're doing many of these, but you're not documenting them in your patient care reports. Please document them.

	# Patients	% Scene <15 min	Average scene time	% E2D <30 min	Average E2D time	Acquire 12-lead	Transmit 12-lead	% Consult		% ASA
STEMI	24	87.500	11:11	79.1667	23:48	100%	66.6667	79.1667		95.8000

							% Time Normal		% BGL	% Use of Anticoags
Stroke	70	78.5714	11:27	81.429	22:39		97.14	72.857	84.3	68.57

Year	Estimated Population	Tot. Struct. Fires	Civilian Struct. Fire Deaths	Civilian Struct. Fire Injuries	Struct. Fire Loss	Total Fires (Struct + Others)	Civilian Other Fire Deaths	Total Fire-related Civilian Deaths	Total Fire Loss
2014	1,020,036	618	6	37	55,493,809	1276	1	7	58,617,610
2015	1,030,447	594	0	25	24,812,594	1183	2	2	27,405,839
2016	1,040,116	533	5	66	21,118,384	1214	1	6	23,619,964
2017	1,043,863	542	2	26	21,015,602	1221	1	3	23,621,870

The above table serves as an example of MCFRS' methodology that includes monitoring and measuring negative fire consequences (and with 2015's zero structure fire deaths, positive consequences) within the service area.

The aggregated data used in the preceding table was obtained through one of the many robust and sophisticated Crystal Reports written by MCFRS data experts and analysts. The data projected within these Crystal Reports is obtained via the MCFRS RMS, ePCR, RMAP and other databases and is part of MCFRS' methodology to accumulate and monitor positive and negative consequences within the response area.

The following screenshot is from a Crystal Report used to aggregate and project MCFRS fire-related consequence data:

Calendar Year 2017 Fire Deaths, Injuries, and Loss Data:

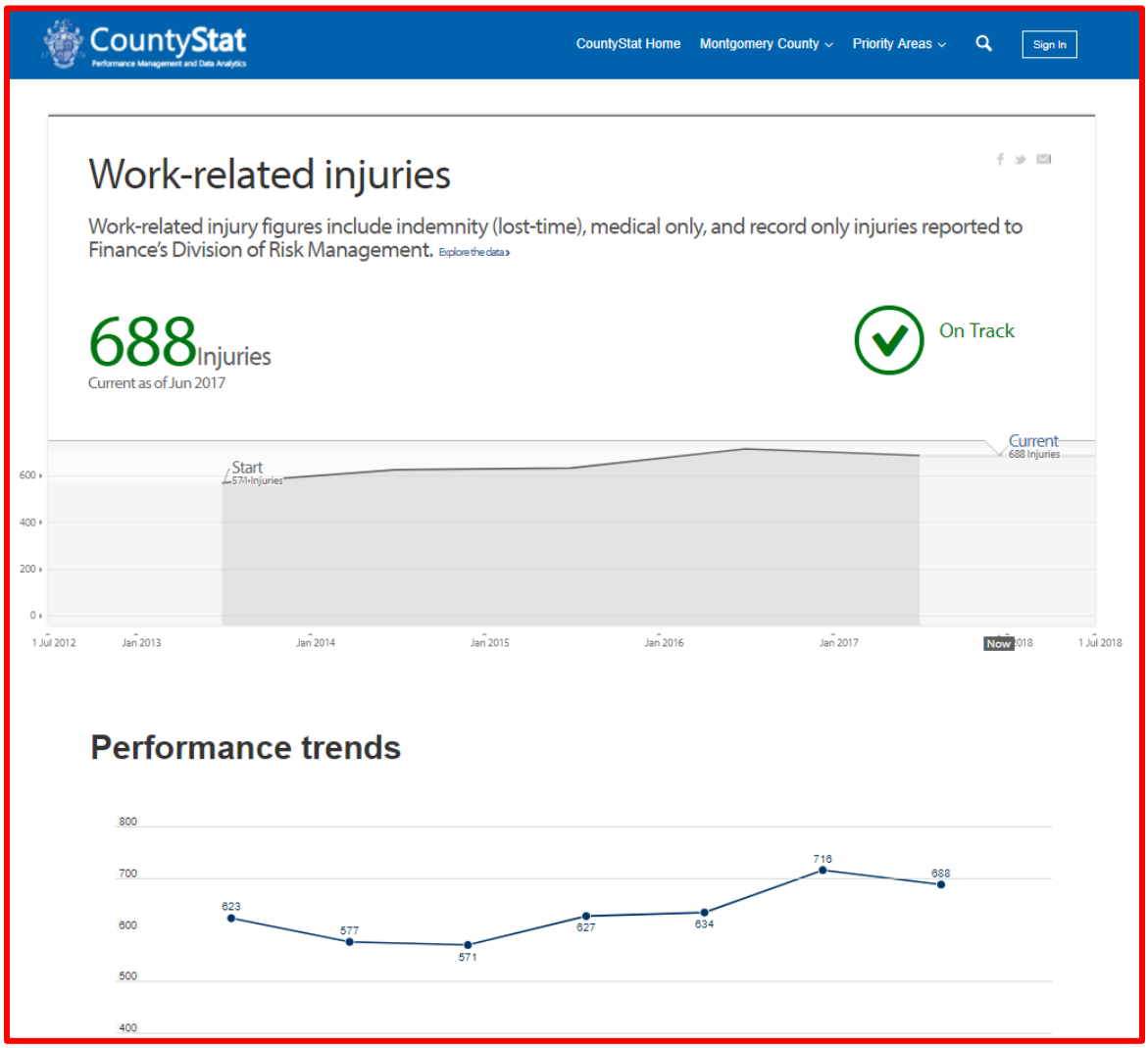
Part II: Major Fires

Please list below all multiple-death fires (3 or more deaths), and all large-loss fires ($1 million or more) that occurred for the year. If none, please list below the three highest loss of life fires (if any) and also the three fires with the highest property damage. (Please attach additional sheet if necessary.)

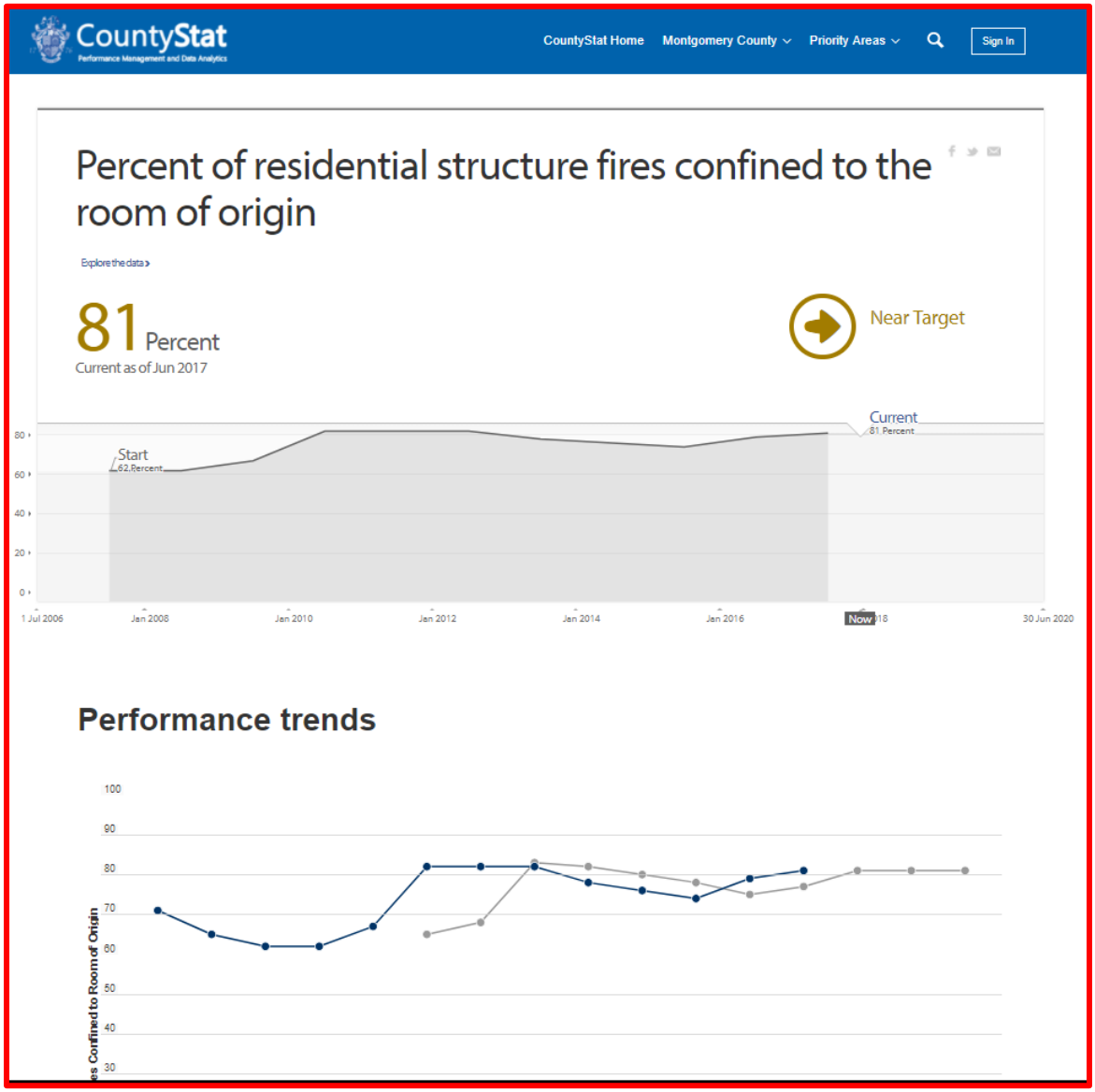
Incident Date	Location	Civilian Fatalities	Total Loss
03/02/2017	16100 WILLOW LA ,MCG	1	$425,000.00
04/02/2017	996 WEST SIDE DR	1	$170,000.00
06/17/2017	1342 EXCALIBER LN	1	$0.00
12/30/2017	10909 LARKMEADE LN	0	$1,100,000.00

A. FIRES IN STRUCTURES BY FIXED PROPERTY USE (OCCUPANCY) (all in Section A are Incident Type 110-129)	# of Fires	Deaths	Injuries	Estimated Property Damage from Fire. If no loss, write 0
01. Private Dwellings (1 or 2 family), including mobile homes (FPU 419)	272	2	17	16,996,676.00
02. Apartments (3 or more families) (FPU 429)	142	0	9	2,067,826.00
03. Hotels and Motels (FPU 449)	3	0	0	702,200.00
04. All Other Residential (dormitories, boarding houses, tents, etc.)	8	0	0	110,000.00
05. TOTAL RESIDENTIAL FIRES (Sum of lines 1 through 4)	425	2	26	19,876,702.00
06. Public Assembly (church, restaurant, clubs, etc.) (FPU 100–199)	18	0	1	43,200.00
07. Schools and Colleges (FPU 200–299)	10	0	0	76,600.00
08. Health Care and Penal Institutions (hospitals, nursing homes,	6	0	0	12,500.00
09. Stores and Offices (FPU 500–599)	19	0	1	703,350.00
10. Industry, Utility, Defense, Laboratories, Manufacturing (FPU 600–799)	2	0	0	0.00
11. Storage in Structures (barns,vehicle storage garages, general	6	0	0	219,505.00
12. Other Structures (outbuildings, bridges, etc.) (FPU 900–999))	56	0	0	83,745.00
13. TOTALS FOR STRUCTURE FIRES (Sum of lines 5 through 12)	542	2	28	21,015,602.00
14a. Fires in Highway Vehicles (autos, trucks, buses, etc.)	258	0	1	2,075,675.00
14b. Fires in Other Vehicles (planes, trains, ships, construction or farm	43	1	1	414,891.00
15. Fires outside of Structures with Value Involved, but Not Vehicles	102	0	0	111,202.00
16. Fires in Brush, Grass, Wildland (excluding crops and timber),	140	0		
17. Fires in Rubbish, Including Dumpsters (outside of structures),	113	0		
18. All Other Fires. (IT 100, 160, 163)	23	0	3	4,500.00
19. TOTALS FOR FIRES (Sum of lines 13 through 18)	1221	3	33	23,621,870.00
20. Rescue, Emergency Medical Responses (ambulance, EMS, rescue)	85,343			
21. False Alarm Responses (malicious or unintentional false calls,	6,643			
22. Mutual Aid Responses Given	2,220			
23a. Hazardous Materials Responses (spills, leaks, etc.) (IT 410–431)	1,339			
23b. Other Hazardous Responses (arcing wires, bomb removal, power line	1,448			
24. All Other Responses (smoke scares, lock-outs, animal rescues, etc.)	21,593			
25. TOTAL FOR ALL INCIDENTS (Sum of lines 19 through 24)	119807			

The following two screenshots applicable to PI 2A.5 and 2B.3 provide positive and negative consequence data trending and analysis and how some of these elements are transparently shared with external and internal stakeholders via the online CountyStat system:



MCFRS work-related injuries


CountyStat
Performance Management and Data Analytics
CountyStat Home
Montgomery County
Priority Areas
Sign In
Percent of residential structure fires confined to the room of origin
Explore the data
81 Percent
Current as of Jun 2017
Near Target
Current
81 Percent
Start
62 Percent
80
60
40
20
0
1 Jul 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Now
30 Jun 2020
Performance trends
100
90
80
70
60
50
40
30
es Confined to Room of Origin

Station Response/Risk Management Zone Response Area Characteristics [2A.6]

Numerous Montgomery County Government agencies, and in particular MCFRS, utilize geographic information system (GIS) technologies and datasets to geospatially identify response area characteristics (population, transportation systems, land use, topography, etc.) within its adopted planning zone methodologies.

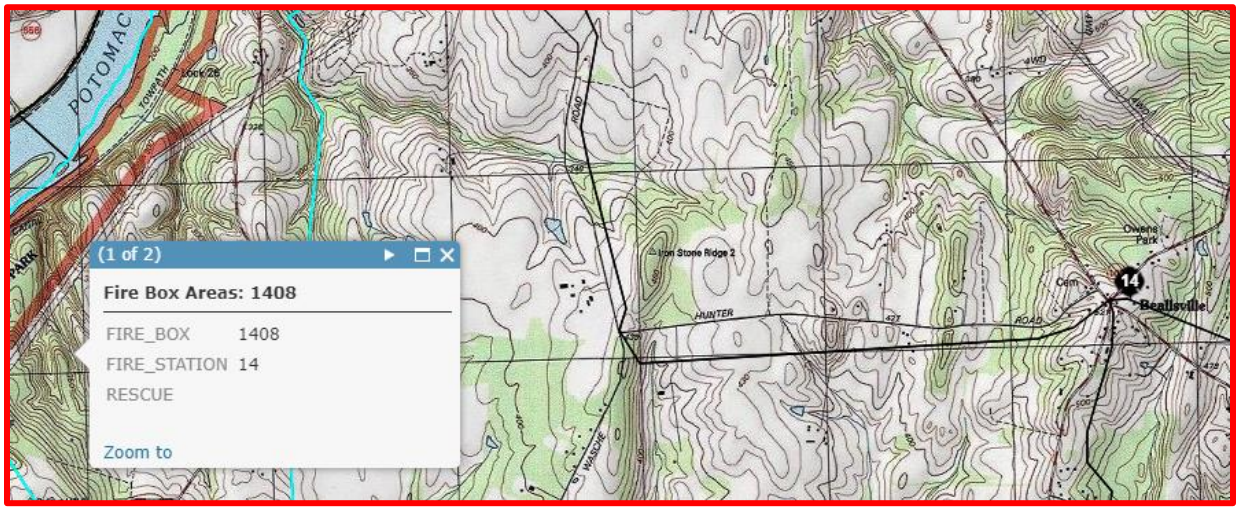
The MCFRS adopted planning zones are comprehensively discussed within the Core Competencies 2A.3 and 2A.4 section of this Community Risk Assessment/Standards of Cover manual. These planning zones (fire station response areas and fire box areas) are included as geospatial layers within GIS; thus, many naturally occurring, human-related, and human-made characteristics are effectively assessed within them.

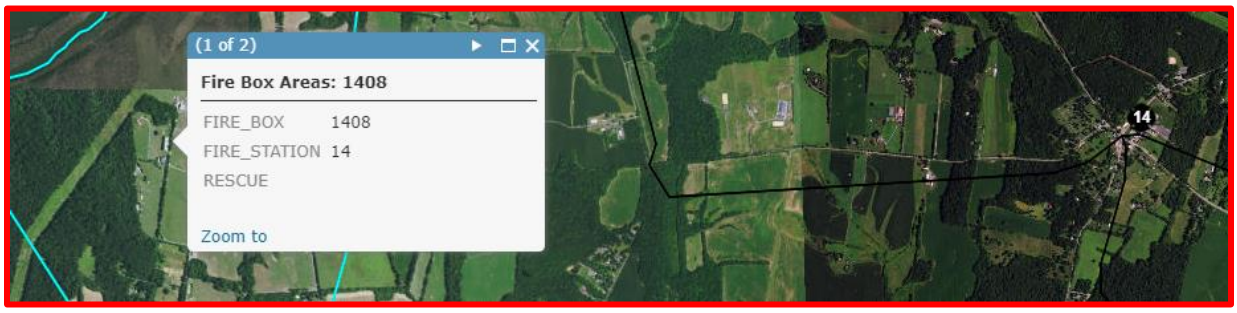
In addition, several of these characteristics and features within the planning zones have been used to develop the updated all-hazard community risk assessment (CRA). Further discussions on the methodologies used to develop the CRA are discussed within the Criterion 2B section of this manual.

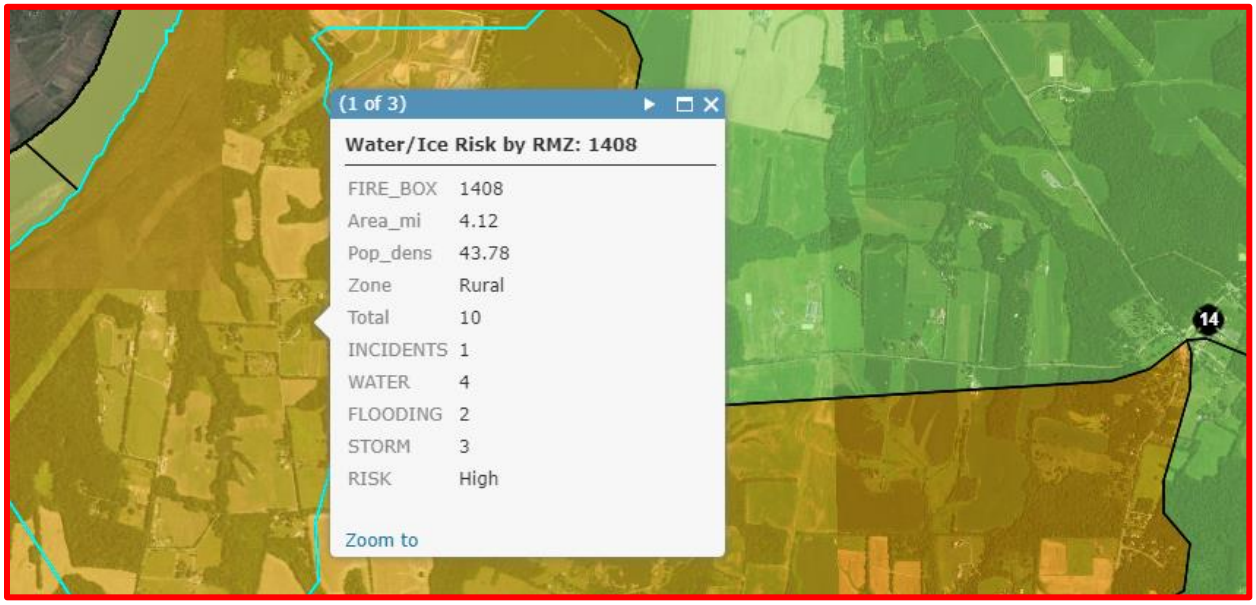
While an overview of MCFRS service boundaries and topographical features are discussed in the PI 2A.1 section of this manual, GIS allows for a robust analysis of these naturally occurring characteristics both Countywide and down to the box area risk management zones (RMZ).

The following screenshots of the MCFRS GIS CRA displays Fire Station 14's area and highlighting RMZ (box area) 1408. The first screenshot has the U.S Topographical Base Layer map enabled while the second has the orthophotography layer enabled. Both provide the viewer with distinct insights of the naturally occurring characteristics of that section of the planning zone. Both map layers display the Potomac River while the TOPO map provides terrain contour lines indicating elevation changes and the ortho map's picture displays the agricultural land features. The third screenshot has the MCFRS Water & Ice Rescue Risk Analysis layer tuned on and one can view the numerous

characteristics that were used to determine this RMZ as a High-Risk area for Water and Ice Rescue.







Finally, the following analysis is offered to document climatic and significant weather-related historical natural disasters and considered part of the naturally occurring characteristics of Montgomery County.

Located in the center of the Mid-Atlantic region of the United States, Montgomery County enjoys four separate and distinct seasons. Because the County lies in the humid subtropical climate zone, summers tend to be humid and warm to hot. The summer months can bring pleasant days in the 80s as well as consecutive days in the mid to high 90s. Winters are generally mild, although, the thermometer can hit zero during the occasional major winter event. Climatic data from the chart below was extracted using the NOAA National Climatic Data Center site (where the Maryland city used was Rockville) and provides the latest three-decade averages of climatological variables, temperature, and precipitation.

Average Annual Winter Temperature	36 degrees
Average Annual Spring Temperature	55 degrees
Average Annual Summer Temperature	75 degrees
Average Annual Autumn Temperature	57 degrees
Average Winter High	43 degrees
Average Winter Low	29 degrees
Average Summer High	83 degrees
Average Summer Low	67 degrees
Average Annual Precipitation	40"
Average Annual Snowfall	17"
Average Humidity	70%

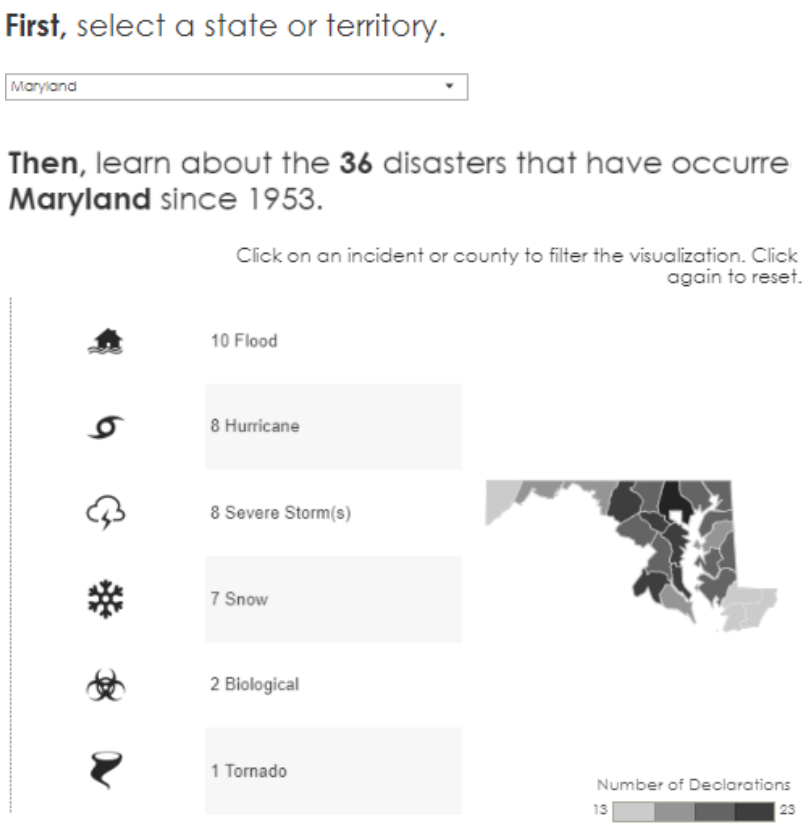
The State of Maryland sees an average of 3.2 tornados per year. These tornados are relatively small with minimal damage and rarely occur within Montgomery County. The County has experienced only 24 documented tornadoes between 1950 and April of 2020. None were greater than an F1 and only one documented injury resulted from these tornados.

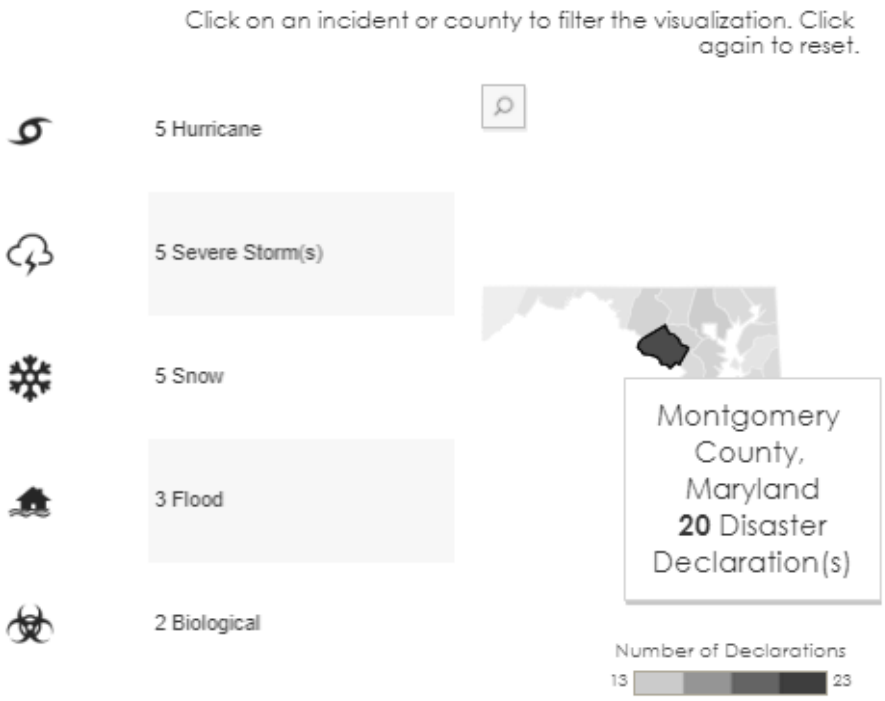
The State of Maryland has had approximately 68 recorded earthquakes either in or very near a bordering state since 1758. Montgomery County had never been the epicenter of

an earthquake until July 16, 2010. On that date, a 3.6 earthquake, centered near Germantown occurred at approximately 5 AM. According to Reger (1987 & rev. 2001) and the Maryland Geological Survey, "Maryland is appropriately placed into a zone of minor expected damage, corresponding to Mercalli intensity V to VI (p. 9)."

Montgomery County's biggest natural disaster threat comes from winter storms, significant spring and summer thunderstorms, hurricanes, and tropical storms. September is the most dangerous and vulnerable month for hurricane damage. Due to the proximity to the Potomac River, flooding is a common occurrence when a hurricane hits the Mid Atlantic. The storm surge and runoff will cause the river to breach its banks and make a raging river of violent rapids at Great Falls. There are also several notorious low areas and small creeks throughout the County that are prone to flash flooding. According to the National Oceanic and Atmospheric Administration (NOAA), there were 163 flash flooding events in Montgomery County between 1/19/1996 and 10/31/2019. Also worth noting, a 2013 Washington Post article indicates the Washington, DC's Maryland suburbs are amongst the nation's lowest natural disaster risk areas.

The number of natural disasters that have occurred in Maryland since 1953 (36) is lower than the US average (42).


First, select a state or territory.
Maryland
Then, learn about the 36 disasters that have occurre Maryland since 1953.
Click on an incident or county to filter the visualization. Click again to reset.
10 Flood
8 Hurricane
8 Severe Storm(s)
7 Snow
2 Biological
1 Tornado
Number of Declarations
13
23

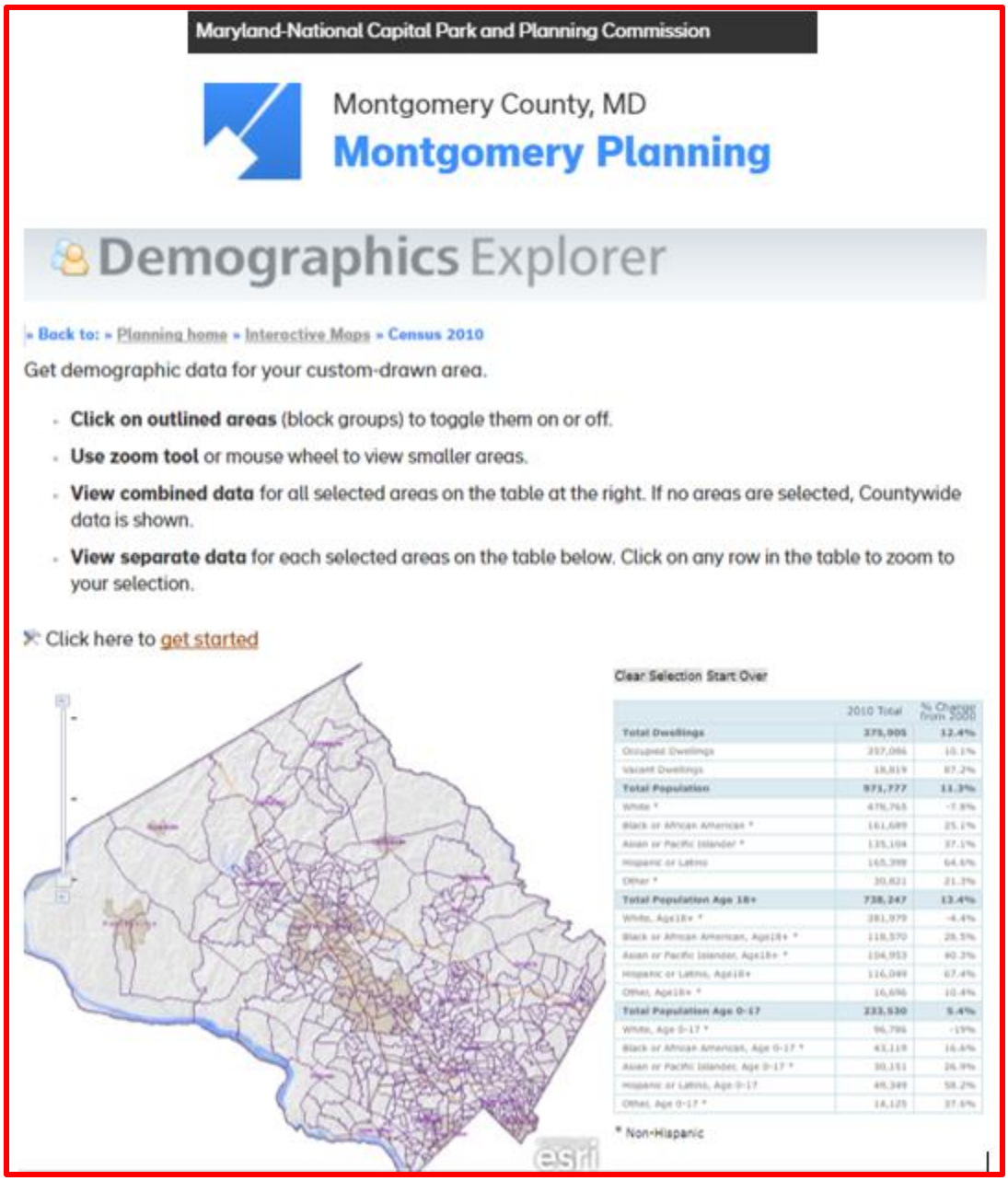

Click on an incident or county to filter the visualization. Click again to reset.
5 Hurricane
5 Severe Storm(s)
5 Snow
3 Flood
2 Biological
Montgomery County, Maryland
20 Disaster Declaration(s)
Number of Declarations
13
23

Source: https://www.fema.gov/data-visualization/disaster-declarations-states-and-counties

Year	Declaration	Effecting Montgomery County?
2020	Maryland COVID-19 PANDEMIC (DR-4491-MD) Incident Period: Jan 20, 2020 and continuing Major Disaster Declaration declared on Mar 26, 2020	Y
2020	Maryland COVID-19 (EM-3430-MD) Incident Period: Jan 20, 2020 and continuing Emergency Declaration declared on Mar 13, 2020	Y
2018	Maryland SEVERE STORM AND FLOODING (DR-4376-MD) Incident Period: May 27, 2018 - May 28, 2018 Major Disaster Declaration declared on Jul 2, 2018 Disaster Federal Register Notices: Disaster 4376 Initial Notice Jul 2, 2018	N
2018	Maryland SEVERE STORMS AND FLOODING (DR-4374-MD) Incident Period: May 15, 2018 - May 19, 2018 Major Disaster Declaration declared on Jun 25, 2018 Disaster Federal Register Notices: Disaster 4374	N
2016	Maryland SEVERE STORM AND FLOODING (DR-4279-MD) Incident Period: Jul 30, 2016 - Jul 31, 2016 Major Disaster Declaration declared on Sep 16, 2016 Disaster Federal Register Notices: Disaster 4279	N
2016	Maryland Severe Winter Storm and Snowstorm, Incident Period: January 22, 2016 to January 23, 2016, Major Disaster (Presidential) Declared DR-4261: March 04, 2016, FEMA Id: 4261, Natural disaster type: Snowstorm, Winter Storm	Y
2014	Maryland SNOWSTORM (DR-4170-MD) Incident Period: Feb 12, 2014 - Feb 13, 2014 Major Disaster Declaration declared on Apr 10, 2014 Disaster Federal Register Notices: Disaster 4170	N
2012	Maryland Hurricane Sandy, Incident Period: October 26, 2012 to November 08, 2012, Emergency Declared EM-3349: October 28, 2012, FEMA Id: 3349, Natural disaster type: Hurricane	Y

2012	Maryland Severe Storms and Straight-line Winds (Derecho), Incident Period: June 29, 2012 to July 08, 2012, Major Disaster (Presidential) Declared DR-4075: August 02, 2012, FEMA Id: 4075, Natural disaster type: Storm, Wind	Y
2011	Maryland Hurricane Irene, Incident Period: August 26, 2011 to September 05, 2011, Emergency Declared EM-3335: August 27, 2011, FEMA Id: 3335, Natural disaster type: Hurricane	Y
2010	Maryland Severe Winter Storms and Snowstorms, Incident Period: February 05, 2010 to February 11, 2010, Major Disaster (Presidential) Declared DR-1910: May	Y
2009	Maryland Severe Winter Storm and Snowstorm, Incident Period: December 18, 2009 to December 20, 2009, Major Disaster (Presidential) Declared DR-1875: February 19, 2010, FEMA Id: 1875, Natural disaster type: Snowstorm, Winter Storm	Y
2006	Maryland Severe Storms, Flooding, and Tornadoes, Incident Period: June 22, 2006 to July 12, 2006, Major Disaster (Presidential) Declared DR-1652: July 02, 2006, FEMA Id: 1652, Natural disaster type: Storm, Tornado, Flood	Y
2005	Maryland Hurricane Katrina Evacuation, Incident Period: August 29, 2005 to October 01, 2005, Emergency Declared EM-3251: September 13, 2005, FEMA Id: 3251, Natural disaster type: Hurricane	Y
2003	Maryland Hurricane Isabel, Incident Period: September 18, 2003 to September 29, 2003, Major Disaster (Presidential) Declared DR-1492: September 19, 2003, FEMA Id: 1492, Natural disaster type: Hurricane	Y
2003	Maryland SNOW (EM-3179-MD) Incident Period: Feb 14, 2003 - Feb 23, 2003 Emergency Declaration declared on Mar 14, 2003	Y
2002	Maryland TORNADO (DR-1409-MD) Incident Period: Apr 28, 2002 Major Disaster Declaration declared on May 1, 2002	N
2000	Maryland SEVERE WINTER STORM (DR-1324-MD) Incident Period: Jan 25, 2000 - Jan 30, 2000 Major Disaster Declaration declared on Apr 10, 200	Y

Station Response/Risk Management Zone Socioeconomic/Demographic Features [2A.7]

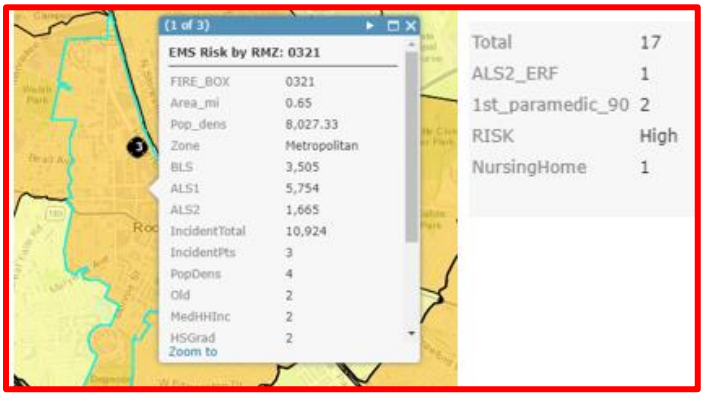


The importance of understanding a community's past, current, and future projections of its population's social, economic, education level, earning potential, cost of living, and cultural and demographic characteristics cannot be overstated for effective public safety agencies charged to protect and help keep those communities safe. Aging communities, young communities experiencing baby booms, transient communities, communities

experiencing significant population growth, communities with large immigrant populations, communities with significant drug and alcohol abuse challenges and high crime rates are just a few of the challenges fire-rescue departments must understand to develop strategies to meet service level demand increases and develop mitigation programs.

Fortunately for MCFRS leadership, Montgomery County's demographic and socioeconomic conditions and data are very well documented, analyzed, and aggregated through many reputable sources. These sources include the Maryland State Department of Planning and Data Center, the Montgomery County Planning Department and the GIS mapping, online tools, and data they make available for consumption, and the Montgomery County Department of Finance.

In addition to the aforementioned and discussed in earlier areas of this Community Risk Assessment/Standards of Cover manual, MCFRS' GIS Specialist maintains access to internal Montgomery County and external (U.S. Census, etc.) local demographic and socioeconomic geospatial data. An excellent example of how MCFRS analyzes and leverages this data is its introduction to the 2017 Community Risk Assessment. The following is a MCFRS GIS screenshot from analyzing EMS risk for RMZ 0321 in Rockville. Based on a point system which analyzed numerous categories, including socioeconomic and demographic, this RMZ is determined to be a high-risk EMS area. The specific demographic and socioeconomic values included in the EMS risk assessment are included on the next page.



Population /square mile within a box area (RMZ)	Estimated population density within the box area calculated on a percentage of the census block that falls within the box area (RMZ)	1 - 1,000 people/sq. mi= 1 pt. 1,000-2,000 people/sq. mi= 2 pt. 2,000-3,000 people/sq. mi= 3 pt. 3,000+ people/sq. mi= 4 pt.
Percentage of population within a box area (RMZ) 65 years or older	Percent of estimated population within the box area (calculated on a percentage of the census block) that are 65 Y.O. or older	1% - 10 % = 1 pt. 10.1% - 20% = 2 pts. 20.1% - 30% = 3 pts. 30.1% + = 4 pts.
Median Household Income within a box area (RMZ)	Median Household Income within the box area (calculated on a percentage of the census block)	$125,001 - $200,000 = 1 pt. $70,001 - $125,000 = 2 pts. $50,001 - $70,000 = 3 pts. $0 - $50,000 = 4 pts.
Percentage of population ≥ 25 YO within a box area (RMZ) that's a HS graduate or more	Percent of estimated population ≥ 25 YO within the box area (calculated on a percentage of the census block) that are at least a HS graduate	94.1% - 95 % = 1 pt. 90.1% - 94% = 2 pts. 70.1% - 89.9% = 3 pts. 1% - 70% = 4 pts.

This table represents the category and hazard descriptions along with the hazard points assigned for socioeconomic and demographic characteristics for MCFRS' EMS Risk Assessment as part of the Community Risk Assessment. Other categories analyzed but not shown here are incident frequency, first-arriving paramedic total response times at the 90th percentile, and ERF total response times for ALS2 incidents at the 90th percentile.

Montgomery County's Department of Finance produces an annual analysis of regional and local economic indicators. MCFRS routinely references these annual reports for planning and analysis. The December 2018 Economic Indicators report may be found here.

Montgomery County, Maryland

DECEMBER 2018 REVENUE UPDATE AND SELECTED ECONOMIC INDICATORS

Department of Finance

December 11, 2018

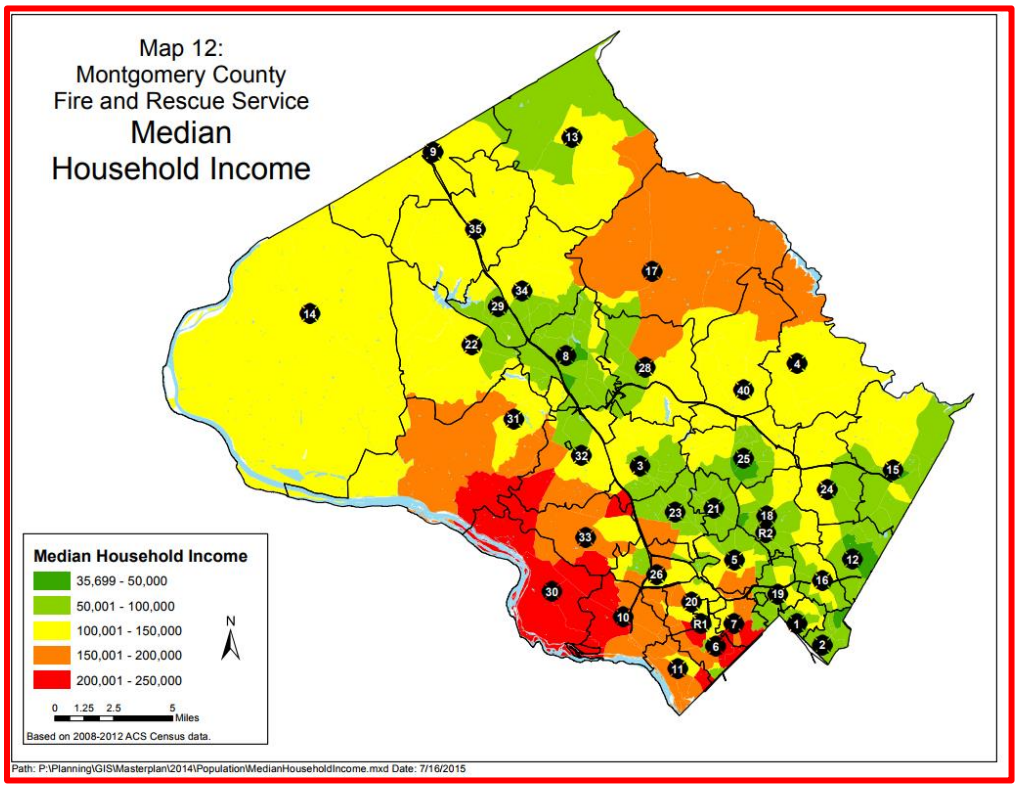
MC Department of Finance December 2018 Economic and Revenue Update 1

Another example of MCFRS' commitment to using socioeconomic and demographic data in planning and evaluation are the inclusion of some of this information in its 2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan specifically within Section 4 (beginning on page 4-1) , which discusses the All-Hazard Risk Assessment and Standards of Cover.

There are also a few maps in the Master Plan within Appendix E. These are hyperlinked for the online viewer below. A visual of Map 12 (median household income) is also shown below.

Appendix E – Demographic Maps

- Map 10
- Map 11
- Map 12
- Map 13



Montgomery County

DEMOGRAPHIC AND SOCIO-ECONOMIC OUTLOOK

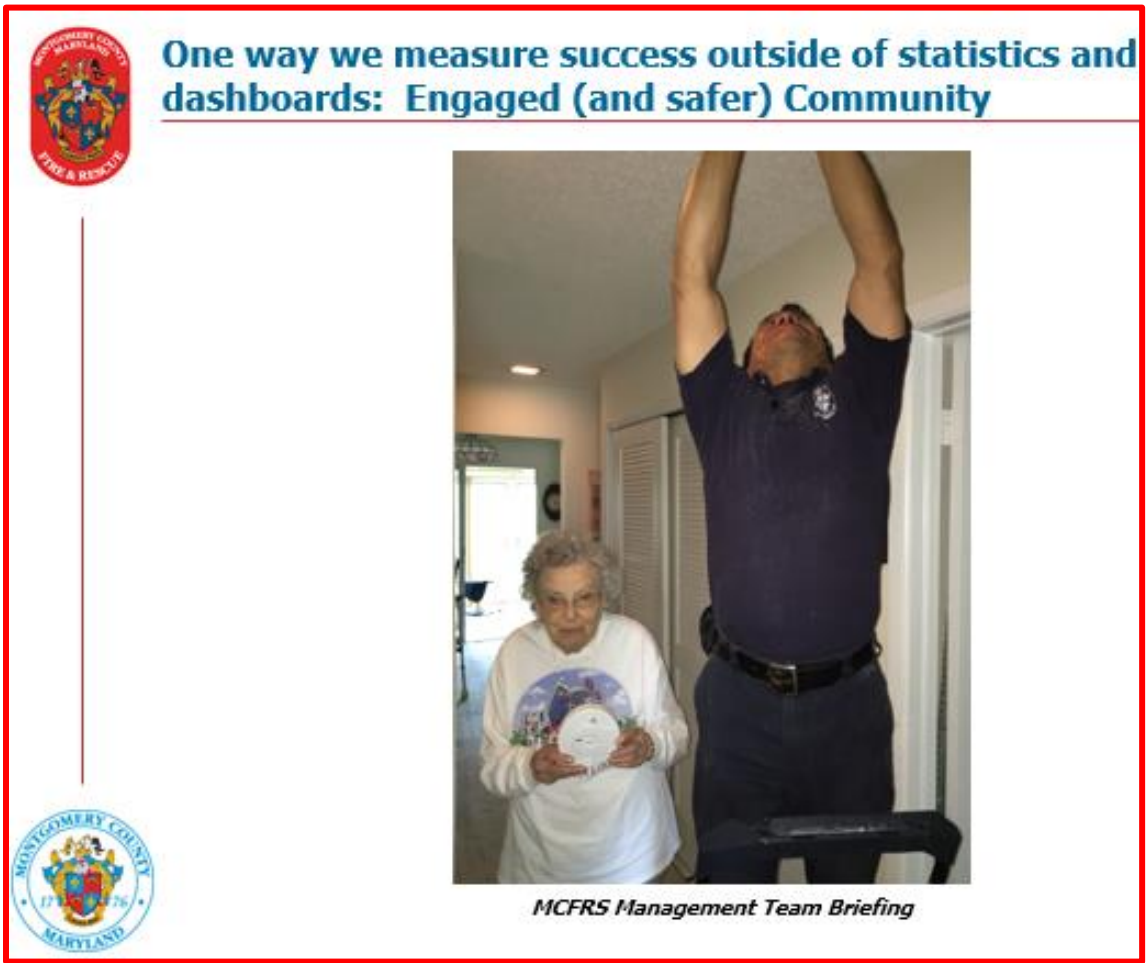
	Historical					Projected					
	1970	1980	1990	2000	2010 *	2015	2020	2025	2030	2035	2040
Population Characteristics:											
Total Population	522,809	579,053	757,027	873,341	971,777	1,036,000	1,067,000	1,110,000	1,153,900	1,186,600	1,206,800
Male	253,242	278,740	364,870	418,622	466,402	497,040	511,670	531,820	552,430	567,970	577,820
Female	269,567	300,313	392,157	454,719	505,375	538,960	555,330	578,180	601,470	618,640	628,980
Non-Hispanic White **	N/A	477,976	549,217	524,251	478,765	471,600	440,930	422,250	408,630	395,270	381,700
All Other **	N/A	101,077	207,810	349,090	493,012	564,400	626,070	687,750	745,270	791,340	825,100
Selected Age Groups:											
0-4	43,074	33,374	58,220	60,173	63,732	63,300	68,610	71,990	73,620	74,390	74,600
5-19	161,380	138,269	137,404	178,040	188,825	197,930	195,440	199,860	208,430	217,130	219,690
20-44	175,059	228,828	334,195	325,959	326,989	345,320	353,120	365,360	371,240	369,800	369,790
45-64	110,677	127,677	150,059	211,012	272,462	285,790	281,640	277,120	279,800	288,920	298,780
65+	32,619	50,905	77,149	98,157	119,769	143,660	168,200	195,680	220,820	236,360	243,940
Total	522,809	579,053	757,027	873,341	971,777	1,036,000	1,067,000	1,110,000	1,153,900	1,186,600	1,206,800
Total Household Population	516,645	573,421	749,257	863,910	962,877	1,026,310	1,056,590	1,098,600	1,141,240	1,172,532	1,191,388
Total Households	156,674	207,195	282,228	324,565	357,075	377,950	394,750	414,875	436,900	450,775	460,575
Average Household Size	3.30	2.77	2.65	2.66	2.70	2.72	2.68	2.65	2.61	2.60	2.59
Labor Force:											
Total Population 16+	355,704	447,521	596,994	675,119	765,580	823,660	852,690	888,090	921,580	948,400	966,530
In Labor Force	226,791	313,248	448,284	477,123	559,430	596,050	607,960	621,560	634,920	644,670	652,450
% in Labor Force *	63.8	70.0	75.1	70.7	73.1	72.4	71.3	70.0	68.9	68.0	67.5
Male Population 16+	167,959	211,574	282,341	316,217	361,300	388,970	402,530	418,980	434,320	446,740	455,360
In Labor Force	141,910	173,715	236,007	246,128	285,880	304,230	310,120	317,680	325,310	330,860	335,340
% in Labor Force *	84.5	82.1	83.6	77.8	79.1	78.2	77.0	75.8	74.9	74.1	73.6
Female Population 16+	187,745	235,947	314,653	358,902	404,280	434,690	450,160	469,110	487,260	501,660	511,170
In Labor Force	84,881	139,533	212,277	230,995	273,550	291,820	297,840	303,880	309,610	313,810	317,110
% in Labor Force *	45.2	59.1	67.5	64.4	67.7	67.1	66.2	64.8	63.5	62.6	62.0
Jobs by Place of Work :	235,394	349,504	512,644	592,976	644,992	676,500	715,200	742,700	759,000	774,800	792,500
Personal Income :											
Total (million of constant 2009$)	$16,934.2	$21,493.1	$36,643.1	$53,917.8	$66,786.2	$73,551.9	$82,222.0	$89,849.0	$96,661.0	$102,879.4	$108,513.0
Per Capita (constant 2009$)	$32,293	$36,926	$48,196	$61,446	$68,454	$70,996	$77,059	$80,945	$83,769	$86,701	$89,918

** For 2010 to 2040 non-hispanic white population is equal to "non-hispanic white alone", and all other population is equal to "all other races", alone and two or more races.

Source: https://planning.maryland.gov/MSDC/Documents/county/mont.pdf and extracted on 08/18/2020

MCFRS Community Safety and Remediation Programs [2A.8]

An integral part of the MCFRS mission is fire and life safety education and risk reduction. The department proactively engages in Community Risk Reduction (CRR) and uses a multi-step approach to identify and prioritize risks and hazards facing the community. All programs are documented in the department's CRR database through incident reports and the department's on-line portal. These resources provide critical information to direct, assess, and improve implementation of CRR programs and to identify high-risk areas to target for education and mitigation strategies**.**



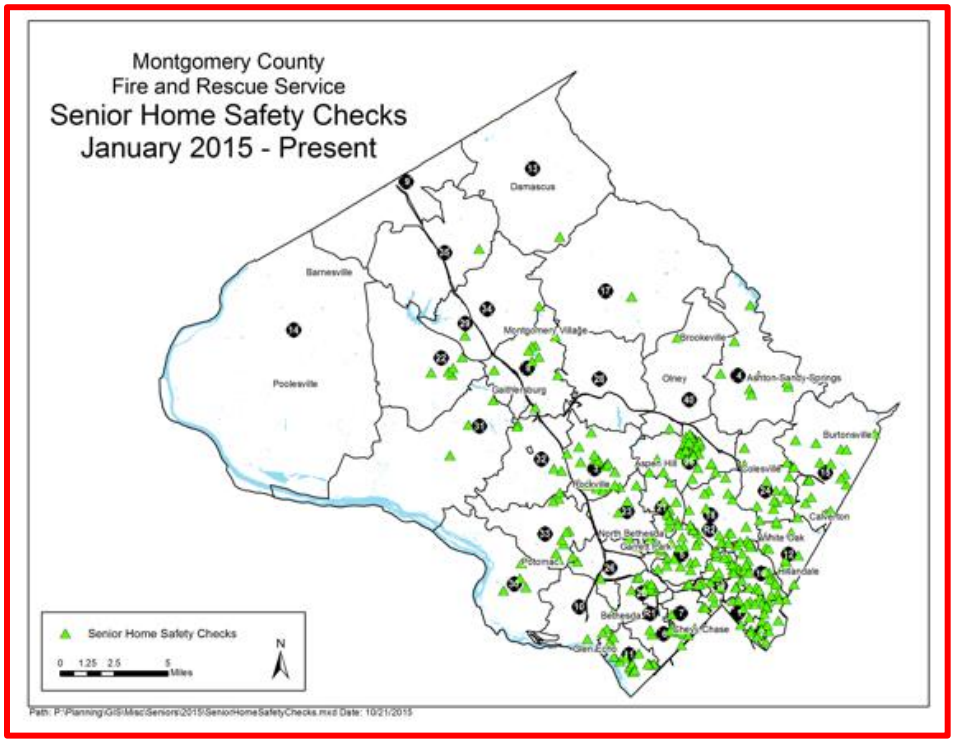
Understanding the importance of a fire department maintaining an effective community risk reduction program (CRR) cannot be overstated. A community that can minimize the occurrences of emergencies is a safer and healthier community.

The following is a definition of CRR provided by respected fire protection engineer, fire marshal, and educator Jim Crawford in a 2014 Fire Rescue Magazine online article:

> "CRR is not actually a name of something; it is a process. The definition developed for the Vision 20/20 Project years ago is as follows: CRR is the identification and prioritization of risks followed by the coordinated application of resources to minimize the probability or occurrence and/or the impact of unfortunate events."
>
> "In a fire service context, it means that the fire department exists not only to respond to emergencies after the fact but to prevent or reduce the effects of their occurrence in the first place. It means the fire service will (and should) act proactively as a risk reduction entity for the community. It also assumes that the fire service can't do it alone and must ultimately partner with other community organizations to accomplish risk-reducing objectives."

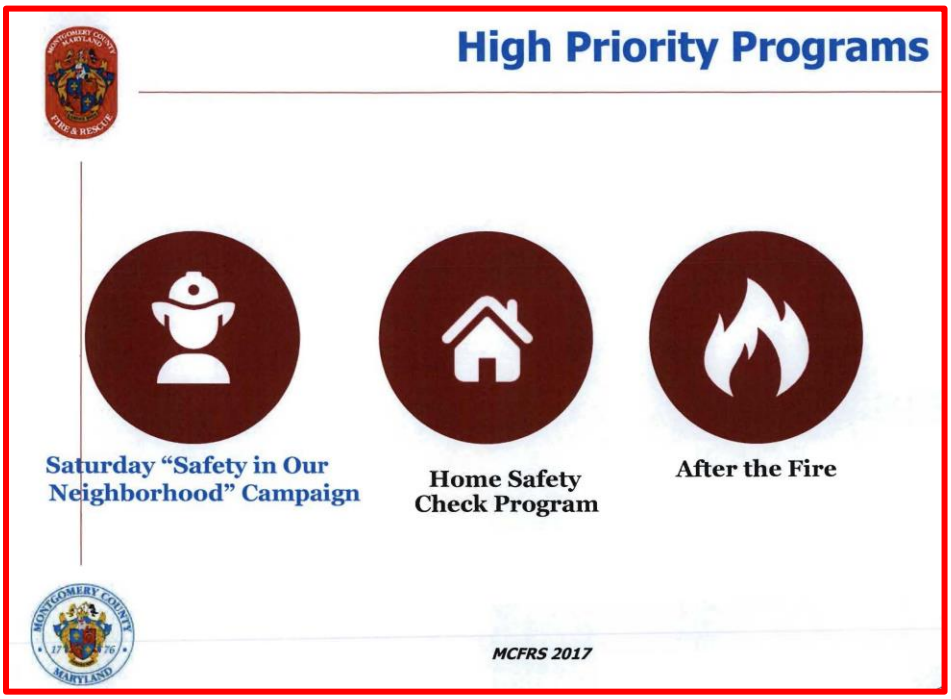
MCFRS has an expansive list of programs that address fire safety, injury prevention and risk reduction programs. These programs build on existing efforts to reduce fire loss, deaths and injuries and to identify critical partnerships in areas where cultural, language or literacy barriers exist in high-risk communities to ensure safety education reaches those who are often hardest to reach.

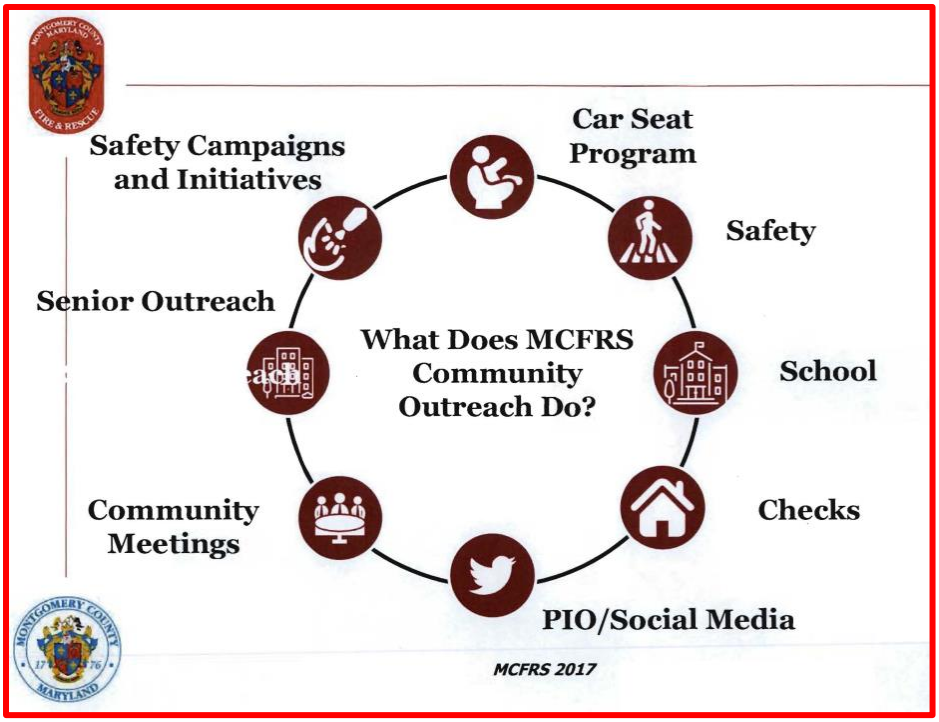
December 2015 "Only a Working Smoke Alarm Can Save Your Life" Campaign marketed on County Ride-On buses and bus stops: https://twitter.com/mcfrsPIO/status/672861531139371008



MCFRS has been conducting appointment-based Home Safety Visits for seniors and high-risk residents since 2016. Data from each home safety visit is captured, mapped and evaluated, and a model program has emerged that assesses fire risk, injury and fall prevention and uses intelligent data and metrics to direct efforts to residents having the highest risk.

Direct-impact programs such as the Home Safety Visits program have ensured hundreds of homes belonging to the County's most vulnerable residents have up-to-date smoke alarms and residents have the knowledge of what to do in the event of a fire; thus, resulting in safer communities and reduced risk to first-responders.





Critical Infrastructure Supporting Emergency Response within RMZs [2A.9]

MCFRS identifies critical infrastructure by individual planning zone (where location-specific) and by county-wide perspective (where certain types of infrastructure can be found throughout Montgomery County). In accordance with the 6th edition CRA-SOC Guide and June 26, 2017 edition FESSAM Interpretation Guide, the department defines critical infrastructure as that being essential to reaching, controlling, and terminating incidents occurring at risk locations.

MCFRS identifies and documents many of these critical infrastructures within its planning zones through geospatial layers within its GIS. This allows the department to better plan and understand the critical and interrelated systems needed to provide effective emergency service delivery to its customers. Using GIS also enhances analysis as other planning zone features, such as those discussed in the response area characteristics (PI 2A.6) section of this manual, can be better understood.

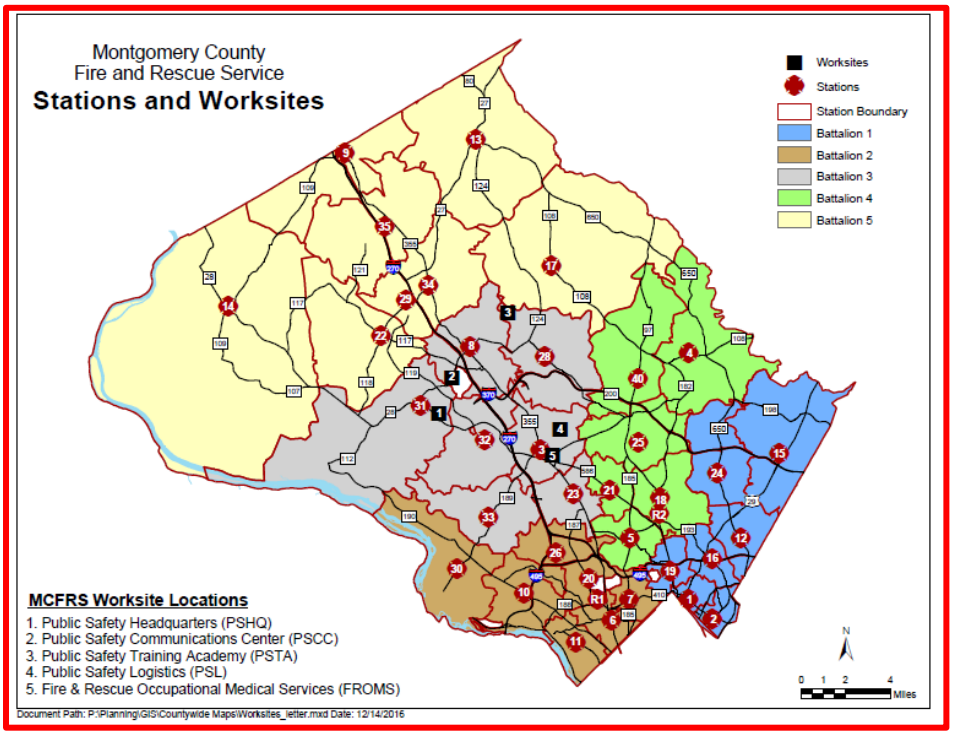
Critical infrastructure identified in specific locations within planning/risk management zones include:

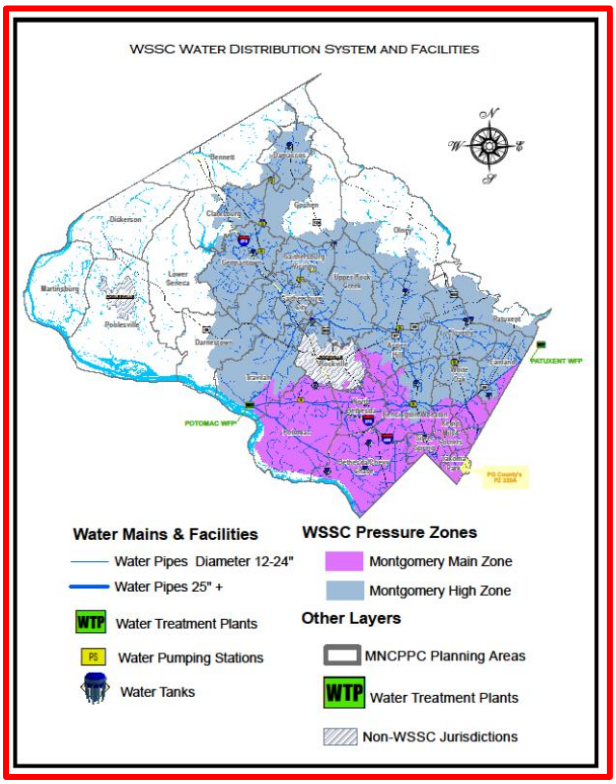
- MCFRS facilities: 37 stations, ECC, PSHQ, Logistics/CMF, PSTA, FEI, Dover Road Warehouse
- Federal fire stations: Stations 50-54
- Refueling facilities
- Drafting sites, cisterns and dry hydrants
- Hospitals and the Adventist HealthCare Germantown Emergency Center (GEC).
- Fire hydrant locations

Critical infrastructure identified as having widespread coverage throughout the County (not limited to a specific planning/risk management zone) include:

- Highway/street network
- Communication systems:
    - County radio sites & data centers (“server farms”)

Examples of critical infrastructure by planning zone and countywide





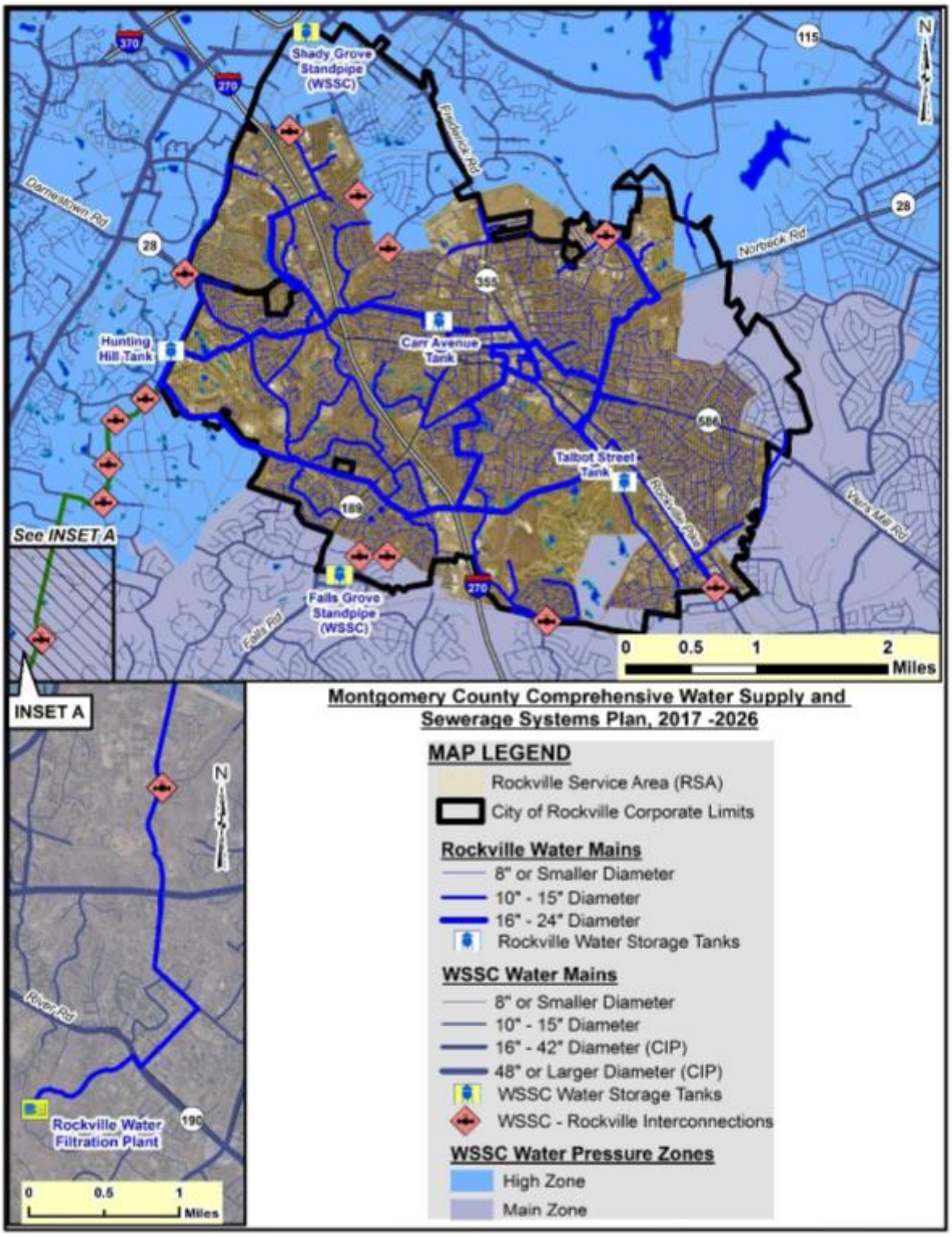
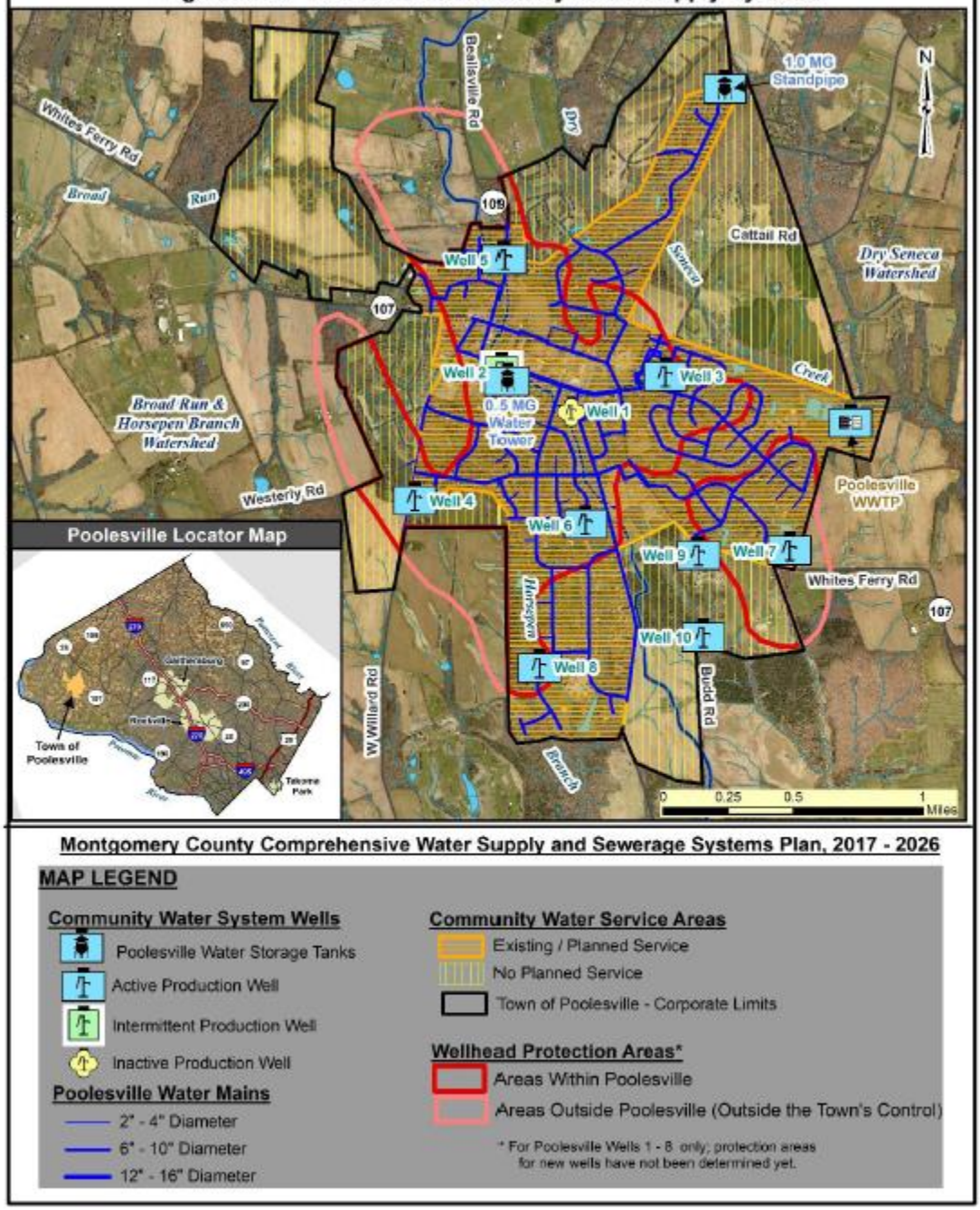

Shady Grove Standpipe (WSSC)
Darnestown Rd
Frederick Rd
Norbeck Rd
Hunting Hill Tank
Carr Avenue Tank
Talbot Street Tank
Falls Grove Standpipe (WSSC)
Falls Rd
Rockville Pike
Veirs Mill Rd
See INSET A
0 0.5 1 2 Miles
INSET A
River Rd
Rockville Water Filtration Plant
0 0.5 1 Miles
Montgomery County Comprehensive Water Supply and Sewerage Systems Plan, 2017 -2026
MAP LEGEND
Rockville Service Area (RSA)
City of Rockville Corporate Limits
Rockville Water Mains
8" or Smaller Diameter
10" - 15" Diameter
16" - 24" Diameter
Rockville Water Storage Tanks
WSSC Water Mains
8" or Smaller Diameter
10" - 15" Diameter
16" - 42" Diameter (CIP)
48" or Larger Diameter (CIP)
WSSC Water Storage Tanks
WSSC - Rockville Interconnections
WSSC Water Pressure Zones
High Zone
Main Zone

Figure 3-F8: Poolesville Community Water Supply Systems



Montgomery County Comprehensive Water Supply and Sewerage Systems Plan, 2017 - 2026

MAP LEGEND

Community Water System Wells
- Poolesville Water Storage Tanks
- Active Production Well
- Intermittent Production Well
- Inactive Production Well

Poolesville Water Mains
- 2" - 4" Diameter
- 6" - 10" Diameter
- 12" - 16" Diameter

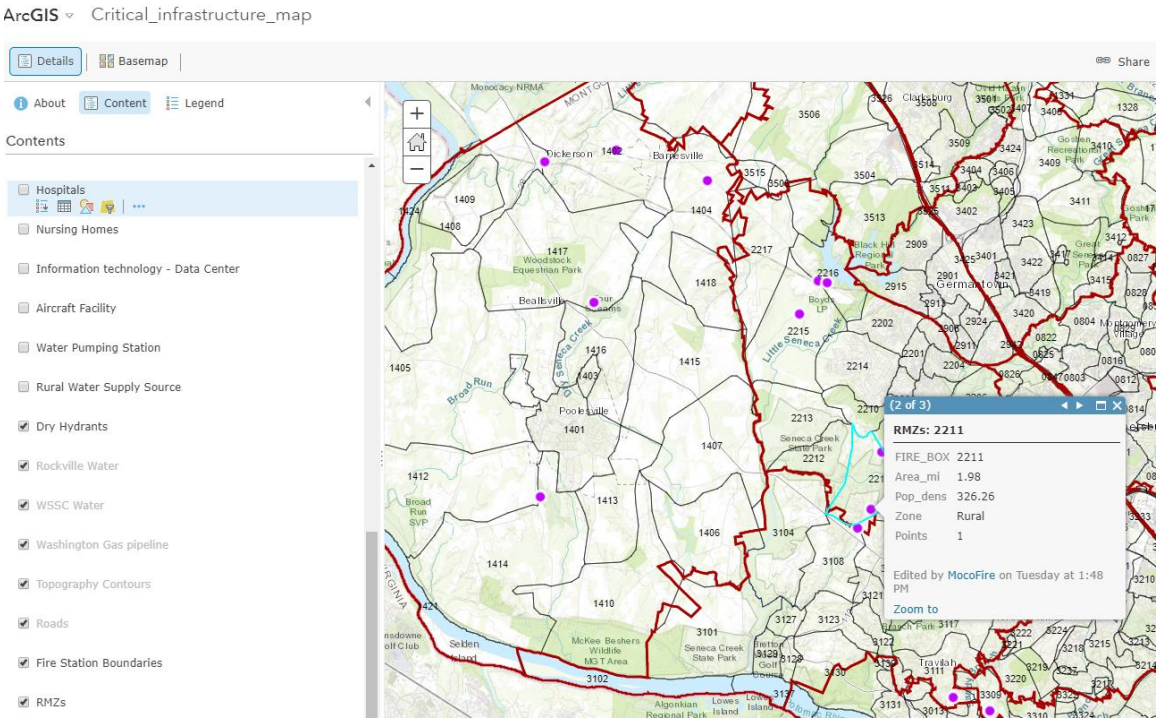
Community Water Service Areas
- Existing / Planned Service
- No Planned Service
- Town of Poolesville - Corporate Limits

Wellhead Protection Areas*
- Areas Within Poolesville
- Areas Outside Poolesville (Outside the Town's Control)

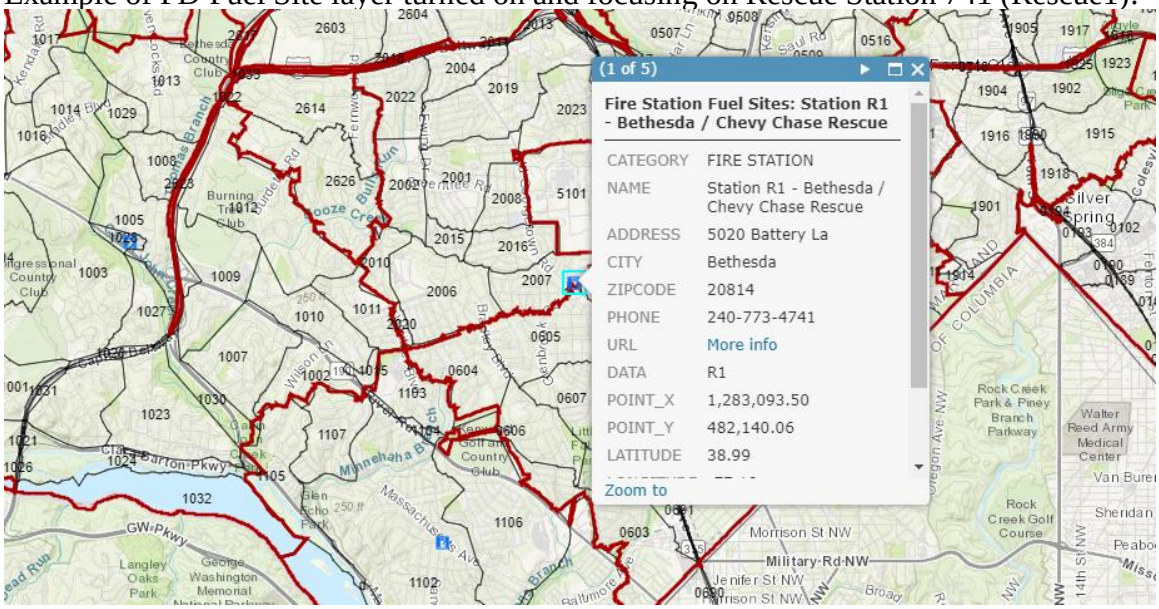
* For Poolesville Wells 1 - 8 only; protection areas for new wells have not been determined yet.

The MCFRS Geographic Information System (GIS) Specialist has created a critical infrastructure mapping system which has assisted in the analysis of how these infrastructure support emergency response within its risk management zones (RMZ).

Example with Dry Hydrant layer turned on and focusing on one in RMZ 2211:



Example of FD Fuel Site layer turned on and focusing on Rescue Station 741 (Rescue1):



VI. Description of MCFRS Programs and Services

The Montgomery County (MD) Fire and Rescue Service (MCFRS), an accredited agency, is a full spectrum, all-hazards life safety department protecting over 1 million residents and many others who work and visit Maryland's most populous jurisdiction. MCFRS is a combination system (career/volunteer) in the suburban Washington, D.C. area, operating with an annual budget of about $220 million dollars and protecting approximately 500 square miles. MCFRS annually handles over 120,000 emergency calls for service and is staffed by nearly 1300 career uniformed personnel and professional civilian staff and an equal number of volunteers, nearly half of whom are actively involved in emergency response.

MCFRS is mandated through Montgomery County Code Chapter 21 and specifically defined under Article I, § 21-1 (b) to achieve the following goals:

(1) Maximum Protection for Life and Property. Provide maximum cost-effective, equitable, and responsive services to all County residents and visitors, including reasonable maximum response times, effective fire and rescue incident supervision, adequate staffing, effective distribution of personnel and apparatus, and timely adaptation to changing service needs. Ensure that all organizations and participants comprising the fire, rescue, and emergency medical services share the responsibility for continuously improving their effectiveness and efficiency.

(2) Maximum Volunteer Participation. Maintain and expand volunteer participation in fire, rescue, and emergency medical service operations and in policy-making.

(3) Optimum Personnel Practices. Promote equity and harmony among County, local fire and rescue department, and volunteer personnel; continually improve the capabilities of all personnel; effectively manage personnel; and achieve job performance and personal conduct of the highest caliber by County, local fire and rescue department, and volunteer personnel.

(4) Adequate Accountability. Account for service delivery, management practices, maintenance of all apparatus and facilities, and the use of public funds.

(5) Improved Operations and Administration. Minimize costs, including administrative overhead, apparatus, and other expenses; and effectively manage personnel, purchasing, maintenance, training, and other programs.

(6) Integration with local, County-wide, regional, State, and national emergency management plans. Plan and coordinate County fire, rescue, and emergency services with services provided by other government and private organizations to provide all needed services while minimizing duplication and conflict.

In an effort to meet the aforementioned mandated goals, and more specifically to achieve the first directive to provide maximum protection for life and property to all County residents and visitors, MCFRS provides the following programs and emergency response/public assistance services:

Community Outreach through the following programs:

- Safety in Our Neighborhood (SION)
- Risk Watch and Safe Kids
- Child Safety Seat Inspections
- Every Call/Every Alarm

The aforementioned programs, more granularly, provide for:

- Outreach services specifically targeting the aging and senior populations.
- Home fire safety visits.
- Smoke alarm assessments and offerings and installations for senior and low-income homeowners.
- “After the Fire” door-to-door safety/smoke alarm surveys in communities affected by a working fire.

- Robust and nationally-recognized child car seat program.
- Elementary School programs featuring NFPA's Risk Watch Curriculum.
- Community emergency response team (CERT) program.
- Fire & life safety programs targeting at-risk communities.
- Mobile Integrated Healthcare Unit - home safety checks conducted in partnership with the Department of Health and Human Services, Aging and Disability Services and local hospitals targeting home-bound, vulnerable populations and frequent 911 callers.
- Seasonal fire and life safety risk public safety announcements and education:
    - Hot ash disposal
    - Child swimming pool safety
    - Candle safety
    - Carbon monoxide awareness
    - Clothes dryer lint and related fire risks
    - Space heater safety and awareness

The Community Outreach Section falls under the Volunteer and Community Services Division. As such, outreach efforts are many times coordinated with Local Volunteer Fire and Rescue Departments' outreach efforts within those stations' communities.

Emergency Response and Public Assistance Services:

- Fire Suppression
- Emergency Medical Services
    - Advanced Life Support (ALS) first-responder and transport
    - Basic Life Support (BLS) first-responder and transport
    - Mass casualty
    - Non-emergency community care coordination outreach
- Hazardous Materials Assessment and Mitigation
- Technical Rescue
    - Confined Space
    - High-Angle
    - Trench
    - Building Collapse
- Water and Ice Rescue
    - Swift Water
    - Still Water
- Aircraft Rescue/Firefighting
- Fire & Explosives Investigations
    - Bomb Squad
    - Fire investigation
- Wildland Fire Services
- Urban Search and Rescue (FEMA asset)
- Public Assistance Services

MCFRS' core function/mission is succinctly defined within the CountyStat website as well as within the MCFRS Master Plan (see Section 2): To protect lives, property, and the environment with comprehensive risk reduction programs and safe, efficient, and effective emergency response provided by career and volunteer service providers representing Montgomery County's diverse population.

Below the core function definition within the aforementioned website is a definition of emergency response applicable to the authority having jurisdiction and subsequently MCFRS:

- Response to fires to save lives and property
- Response to Advanced Life Support (ALS) incidents to save lives during life-threatening medical emergencies
- Response to Basic Life Support (BLS) incidents to treat and transport sick/injured persons
- Response to other "all-hazards" incidents

MCFRS provides emergency response staffing 24 hours per day and 365 days per year from 37 fire-rescue stations. These stations are strategically located throughout the County to provide an effective distribution of resources to meet emergency response needs. The location of many of these fire-rescue stations (i.e., those owned by local fire-rescue departments) were decided by local communities needing these services, through dedicated volunteer efforts and commitments, as part of the evolution of Montgomery County. The location of the newer County-owned and exclusively career-staffed fire-rescue stations were determined through processes that include a large-scale fire station location study and intensive growth projections and GIS response time and demand projection analysis.

All MCFRS career firefighters are basic life support (BLS) providers certified to the emergency medical technician (EMT) level and many are advanced life support (ALS) providers certified to the paramedic level. MCFRS qualified volunteer firefighters are also minimally certified as an EMT. The MCFRS system also integrates qualified EMS-only volunteers into its deployment model with EMTs and Paramedics.

MCFRS' minimum daily staffing requirements to support emergency response and public service calls for assistance are 305 fire-rescue personnel.

The current minimum daily staffing arrangement between career and local volunteer fire-rescue department (LFRD) providers are broken down between a weekday plan and a night and weekend plan.

The weekday career staffing compliment is 295 personnel, of which 35 members work "day-work" from 0700 hours to 1700 hours, whereas the balance works a 24-hour shift.

The weekday minimum LFRD staffing compliment is 10 members staffing the following units within the respective volunteer fire and/or rescue departments:

- Fire Station 15 (Burtonsville Volunteer Fire Department):
    - Three staffing heavy Rescue Squad 715
- Fire Station 26 (Bethesda Fire Department):
    - Two from Rescue Station 1 (Bethesda Chevy Chase Rescue Squad) staffing Ambulance 726
- Rescue Station 1 (Bethesda Chevy Chase Rescue Squad):
    - Three staffing heavy Rescue Squad 741
    - Two staffing Ambulance 741

The night and weekend career staffing compliment is 260 personnel and the **minimum LFRD staffing compliment** is 44 personnel.

MCFRS staffs the following resources to meet its emergency response and public service calls for assistance mandates from 35 fire stations, two rescue (heavy rescue & EMS-only) stations, and the Emergency Communication Center:

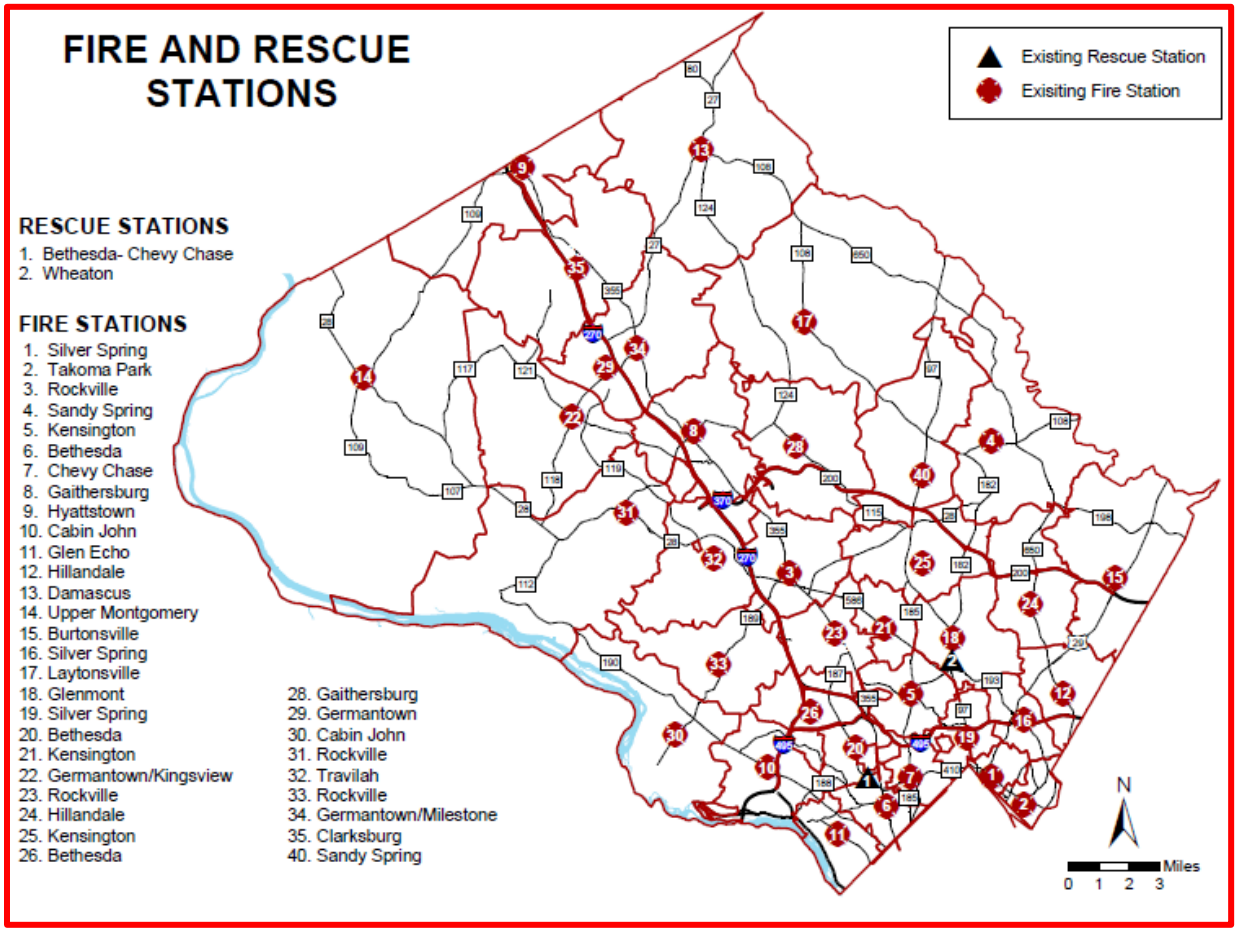
- 35 Class A fire engine companies. Of these, all are staffed daily with an officer and three firefighters, at least one of whom is a paramedic.
- 16 aerial ladder truck/aerial tower companies. Of these, 15 are staffed daily with an officer and two firefighters and one is staffed daily with an officer and three fighters, at least one of whom is a paramedic.
- 6 heavy rescue squad companies, each staffed daily with an officer and two firefighters.

- 11 ALS paramedic (medic) transport units, each staffed daily with a career firefighter-paramedic and career firefighter-EMT.
- 30 BLS ambulance transport units, each staffed daily with two career firefighter-EMTs.
- 3 paramedic chase units, each staffed daily with one firefighter-paramedic or a volunteer non-fire suppression paramedic.
- 2 EMS duty officer vehicles, each staffed with one ALS career firefighter officer.
- 1 Safety Officer vehicle staffed with one career firefighter officer
- 5 Battalion Chief officer vehicles, each staffed with one certified career battalion chief fire officer.
- 1 Duty Operations Chief vehicle, staffed with one certified career assistant chief officer.
- Two Fire Investigator/Explosive Unit officers.
- One Master Firefighter Staffing Specialist.
- Seven qualified Emergency Communications Center members, including one captain, one lieutenant, two master firefighters, and three firefighters.
- 1 mobile health unit for non-emergency patient intervention (M-F, daytime w/OT paramedic; not part of minimum staffing).

In addition to these front-line and daily-staffed apparatus, many additional specialized resources/units are also strategically placed throughout the County and within applicable fire-rescue stations. The following unit types, when needed through an initial response or as a special-called resource, are staffed with existing on-duty career and/or volunteer fire-rescue personnel: brush engines, brush trucks, rescue engines, boats, utility task vehicles (UTV), hazmat units and support units, medical ambulance buses and support units, decontamination units, air units, mobile command units

The response deployment for many of the aforementioned specialized pieces of apparatus rely on the flexibility of the MCFRS system, as these units are generally not staffed with dedicated practitioners. As an example, if swift water boats are due on a special-risk swift water rescue assignment and there are no qualified volunteer members in the particular

fire station, qualified career and/or volunteer members staffing an engine, an aerial, or an EMS unit would respond with the boats to the incident. The flexibility within the system allows for the appropriate specialized resource to respond. However, the risk is, without dedicated staffing when stacked incidents occur in a station response area, the unit that was staffed (e.g., aerial unit), cannot respond due to the personnel taking the specialized unit(s) such as boat(s).


FIRE AND RESCUE STATIONS
Existing Rescue Station
Exisiting Fire Station
RESCUE STATIONS
1. Bethesda- Chevy Chase
2. Wheaton
FIRE STATIONS
1. Silver Spring
2. Takoma Park
3. Rockville
4. Sandy Spring
5. Kensington
6. Bethesda
7. Chevy Chase
8. Gaithersburg
9. Hyattstown
10. Cabin John
11. Glen Echo
12. Hillandale
13. Damascus
14. Upper Montgomery
15. Burtonsville
16. Silver Spring
17. Laytonsville
18. Glenmont
19. Silver Spring
20. Bethesda
21. Kensington
22. Germantown/Kingsview
23. Rockville
24. Hillandale
25. Kensington
26. Bethesda
28. Gaithersburg
29. Germantown
30. Cabin John
31. Rockville
32. Travilah
33. Rockville
34. Germantown/Milestone
35. Clarksburg
40. Sandy Spring
N
Miles
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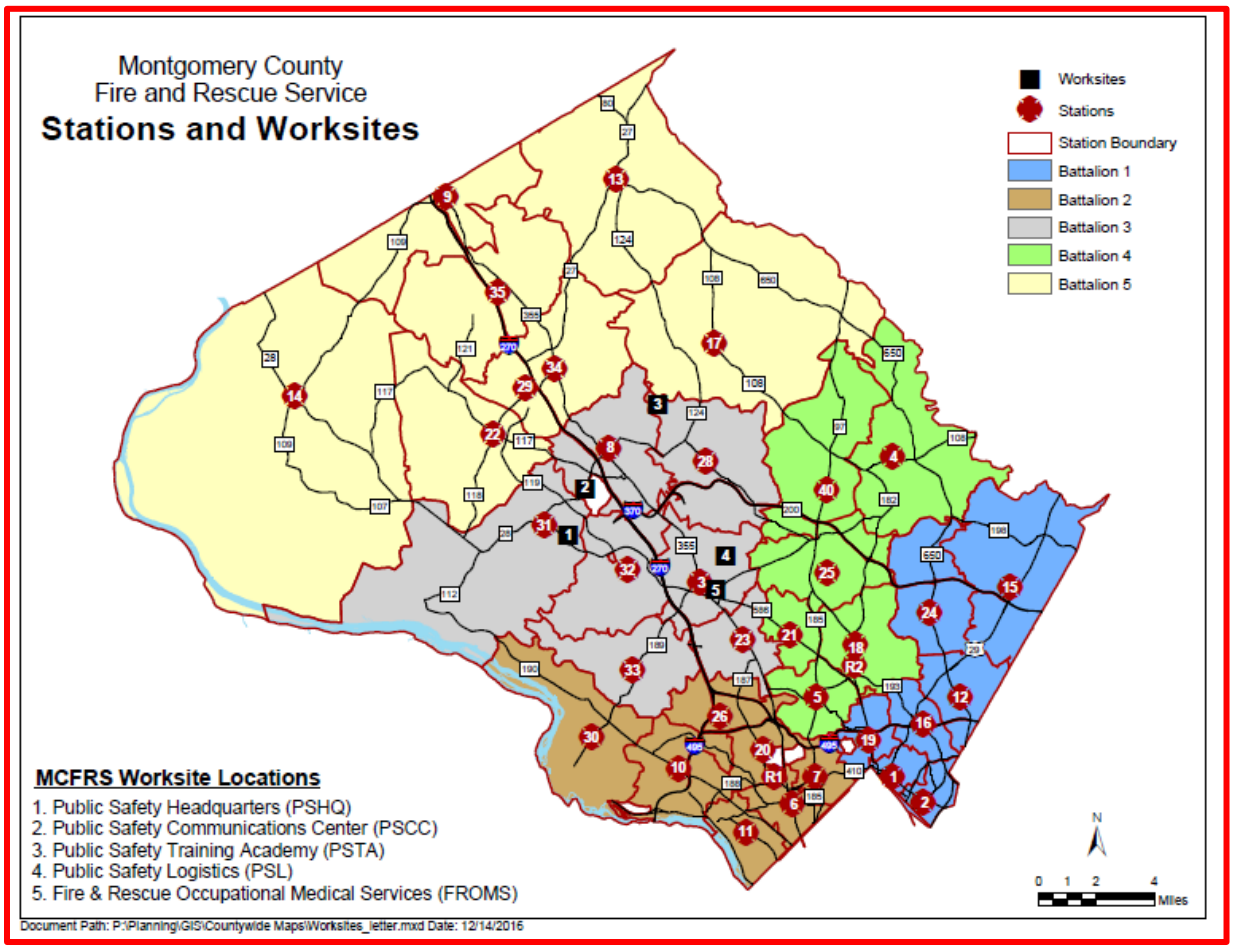
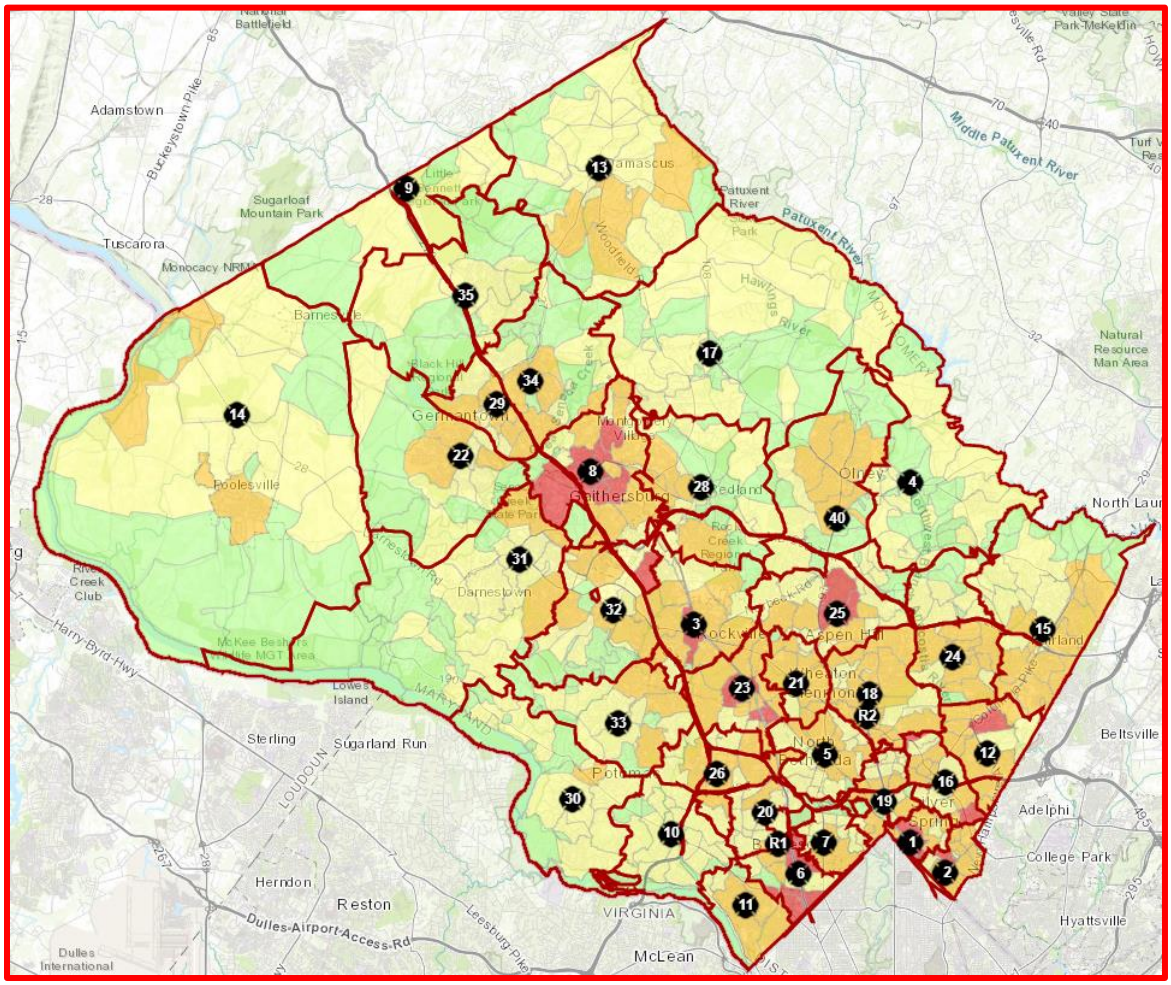

Montgomery County
Fire and Rescue Service
Stations and Worksites
Worksites
Stations
Station Boundary
Battalion 1
Battalion 2
Battalion 3
Battalion 4
Battalion 5
MCFRS Worksite Locations
1. Public Safety Headquarters (PSHQ)
2. Public Safety Communications Center (PSCC)
3. Public Safety Training Academy (PSTA)
4. Public Safety Logistics (PSL)
5. Fire & Rescue Occupational Medical Services (FROMS)
N
0 1 2 4
Miles
Document Path: P:\Planning\GIS\Countywide Maps\Worksites_letter.mxd Date: 12/14/2016

VII. MCFRS All-Hazard Risk Assessment and Response Strategies [Criterion 2B]



- [x] 2017 RMZ Risk - Fire Risk by RMZ
- [ ] 2017 RMZ Risk - EMS Risk by RMZ
- [ ] 2017 RMZ Risk - Bomb Squad Risk by RMZ
- [ ] 2017 RMZ Risk - Technical Rescue Risk by RMZ
- [ ] 2017 RMZ Risk - ARFF Risk by RMZ
- [ ] 2017 RMZ Risk - Water/Ice Risk by RMZ
- [ ] 2017 RMZ Risk - Hazmat Risk by RMZ
- [ ] 2017 RMZ Risk - Population Density Zone
- [ ] 2017 RMZ Risk - Median Household Income
- [ ] 25 YO that is HS graduate or more
- [ ] 2017 RMZ Risk - % Population 65+

Legend

2017_RMZ_Risk - Fire Station Points

2017_RMZ_Risk - Fire Station Boundaries

2017_RMZ_Risk - Fire Risk by RMZ

- Low
- Moderate
- High
- Special

MCFRS Methodology: ID'ing, Assessing, Categorizing, Classifying Risks[CC 2B.1]

MCFRS has been an accredited fire-rescue department since 2007. As a critical and required component to achieving an accredited status, a community risk assessment (CRA) was conducted then (2007), and an updated CRA was conducted again during the 2012-2013 reaccreditation efforts.

In 2017, as MCFRS moved to a candidate status while seeking reaccreditation again in 2018, another CRA was conducted. The updated and improved methodology used to design this CRA was based on guidance provided within the Center for Public Safety Excellence's 6th edition Community Risk Assessment: Standards of Cover manual.

The identified community risks assessed are based on those that the Montgomery County Fire Rescue Service, an all-hazard fire-rescue department, has been charged by the authority having jurisdiction to respond to and mitigate. These risk programs are listed within the #1 MCFRS Department goal and are documented within the FY2018 Strategic Plan on page 31 (pasted below).

> *To maintain our operational readiness at all times for an all-hazards mission and response capability, including emergency medical services, fire suppression, technical rescue, water/ice rescue, aviation fire-rescue, hazardous material, and explosive device emergency services.*

The methodology begins with data collection and mining from multiple sources (e.g., MCFRS data warehouse and various databases, U.S. Census, County Office of Emergency Management & Homeland Security, zoning database, Maryland Department of Assessment and Taxation, etc.) concerning the following topics and characteristics:

- incident frequency/count
- 90th percentile response time
- fire loss (dollar loss)
- number of high-rises

- demographics: population density, age and education level of residents, median household income
- zoning classifications
- housing stock that is sprinklered/not sprinklered
- number of health care facilities
- number of SARA-Title III hazmat facilities
- location of major highways, railroads and pipelines
- location of airports, helipads and airstrips
- location of bodies of water: rivers, reservoirs, lakes and ponds
- roadways/intersections prone to flash flooding

Data that has been collected/mined is then aggregated and analyzed for use in risk categorization, risk scoring, and mapping of levels of risk throughout the County. A risk scoring system developed by the Accreditation Manager and the Planning & Accreditation Section Manager is used by the GIS Manager in preparing risk maps. The scoring system is comprised of several individual scoring systems tailored specifically to each category of risk present within the County, as a single system applicable to all risk categories would not be practical or effective.

Using the multiple types of risk-related data and the risk scoring system, the GIS Manager performs the required geocoding and analytical processes to create a set of color-coded countywide maps displaying levels of risk by risk management zones-RMZs (i.e., fire box areas) throughout the County. A separate map is created for each risk category: Fire, EMS, Hazmat, Water /Ice, Bomb, Aviation, and Technical Rescue. The online maps allow the user to drill down to individual RMZs to view specific data for each RMZ related to the risk category. For example, the data displayed for each RMZ within the EMS risk map includes: area (in sq. mi.); population density (residents/sq. mi.); MCFRS population zone (metropolitan, urban, suburban or rural); number of ALS1, ALS2 and BLS incidents/year; total EMS incidents/year; and risk scoring points assigned for number/type of EMS incidents, population density, senior population (residents ≥65

years of age), number of health care facilities, and education level of residents (high school graduates and above).

The following risk scoring system was developed and tailored for each Montgomery County risk category and used to create the GIS analysis for this community risk assessment. Incident frequency, fire loss, and response time data used was that between fiscal year (FY) 2013 and FY2017 (five-years).

Fire Risk

Category Description	Hazard Description	Hazard Points
Incident Frequency: Special, High, & Moderate Risk Structure Fires & Moderate & Low Risk Fire Incidents (Grp. 4 "structure fire" & "structure fire hazmat" + "A1F" & "A2-3" & "FFA"	# of dispatched reported structure fires, moderate risk fire incidents, and low risk fire incidents reported in box areas (RMZs)	1 - 20 = 1 point 21 - 40 = 2 points 41 - 60 = 3 points 61 + = 4 points
Total Structure Fire Loss (Grp. 4 "Structure Fire" & Structure Fire Hazmat"	Total Fire Loss from all structure fires documented by each incident within each box area (RMZ)	$1 - $49,999 = 1 pt. $50,000 - $249,999 = 2 pts. $250,000 + = 3 pts. (per incident x points within each RMZ)
90th Percentile 1st Engine Travel Time (FFA Top Program)	1st arriving engine travel time at the 90th percentile to all reported fire full assignment structure fires (not including upgraded incidents) within each box area (RMZ)	00:00 - 04:00 mins. = 0 pts. 04:01 - 06:00 mins. = 1 pt. 06:01 - 10:00 mins. = 2 pts. 10:01 + minutes = 3 pts.
90th Percentile Total Response Time for the ERF for FFA-HY (Grp. 3)	90th percentile total response time for the ERF in dispatched reported fire full assignment structure fires in hydranted box areas (RMZs) (not including upgraded incidents)	09:00 - 16:00 mins. = 0 pts. 16:01 - 23:00 mins. = 1 pt. 23:01 - 30:00 mins. = 2 pts. 30:01 + minutes = 3 pts.
90th Percentile Total Response Time for the ERF for FFA-NH (Grp. 3)	90th percentile total response time for the ERF in dispatched reported fire full assignment structure fires in non-hydranted box areas (RMZs) (not including upgraded incidents)	17:00 - 23:00 mins. = 0 pts. 23:01 - 29:00 mins. = 1 pt. 29:01 - 36:00 mins. = 2 pts. 36:01 + minutes = 3 pts.

Fire Risk Score Matrix (continued)		
Population/square mile within a box area (RMZ)	Estimated population within the box area calculated on a percentage of the census block that falls within the box area (RMZ)	1 - 10,000 = 1 pt. 10,001 - 15,000 = 2 pts. 15,001 - 20,000 = 3 pts. 20,001 + = 4 pts.
Percentage of population within a box area (RMZ) 65 years or older	Percent of estimated population within the box area (calculated on a percentage of the census block) that are 65 Y.O. or older	1% - 10 % = 1 pt. 10.1% - 20% = 2 pts. 20.1% - 30% = 3 pts. 30.1% + = 4 pts.
Median Household Income within a box area (RMZ)	Median Household Income within the box area (calculated on a percentage of the census block)	$125,001 - $200,000 = 1 pt. $70,001 - $125,000 = 2 pts. $50,001 - $70,000 = 3 pts. $0 - $50,000 = 4 pts.
Percentage of population ≥ 25 YO within a box area (RMZ) that's a HS graduate or more	Percent of estimated population ≥ 25 YO within the box area (calculated on a percentage of the census block) that are at least a HS graduate	94.1% - 95 % = 1 pt. 90.1% - 94% = 2 pts. 70.1% - 89.9% = 3 pts. 1% - 70% = 4 pts.
Predominant residential zoned housing stock within a box area (RMZ) is sprinklered	SFH's built beginning in 2005 & garden apts. and townhouses built beginning in 1989 shall be considered sprinklered.	Sprinklered = 0 points Not sprinklered = 3 points
Number of high-rise buildings within a box area (RMZ)		1 - 2 = 2 points 3 - 4 = 4 points 5 - 7 = 6 points ≥8 = 8 points

EMS Risk

Category Description	Hazard Description	Hazard Points
Incident Frequency to Low Risk BLS call types in each box area (RMZ)	# of dispatched BLS incidents within box areas (RMZs)	Each BLS incident = 1 point
Incident Frequency to Moderate Risk ALS1 call types in each box area (RMZ)	# of dispatched ALS1 incidents within box areas (RMZs)	Each ALS1 incident = 3 points
Incident Frequency to High Risk ALS2 call types in each box area (RMZ)	# of dispatched ALS2 incidents within box areas (RMZs)	Each ALS2 incident = 5 points
90th Percentile 1st arriving unit (paramedic) Total Response Time (Grp. 2)	1st arriving paramedic total response time at the 90th percentile to all dispatched ALS incidents within each box area (RMZ)	00:00 - 06:30 mins. = 0 pts. 06:31 - 09:00 mins. = 1 pt. 09:01 - 12:00 mins. = 2 pts. 12:01 + mins = 3 pts.
90th Percentile Total Response Time for the ERF ALS2 (Grp. 3)	90th percentile total response time for the ERF to dispatched ALS2 incidents in box areas (RMZs)	00:01 - 10:30 mins. = 0 pts. 10:31 - 15:00 mins. = 1 pt. 15:01 - 20:00 mins. = 2 pts. 20:01 + minutes = 3 pts.
Population /square mile within a box area (RMZ)	Estimated population within the box area calculated on a percentage of the census block that falls within the box area (RMZ)	1 - 10,000 = 1 pt. 10,001 - 15,000 = 2 pts. 15,001 - 20,000 = 3 pts. 20,001 + = 4 pts.
Percentage of population within a box area (RMZ) 65 years or older	Percent of estimated population within the box area (calculated on a percentage of the census block) that are 65 Y.O. or older	1% - 10 % = 1 pt. 10.1% - 20% = 2 pts. 20.1% - 30% = 3 pts. 30.1% + = 4 pts.
Median Household Income within a box area (RMZ)	Median Household Income within the box area (calculated on a percentage of the census block)	$125,001 - $200,000 = 1 pt. $70,001 - $125,000 = 2 pts. $50,001 - $70,000 = 3 pts. $0 - $50,000 = 4 pts.

EMS Risk Score Matrix (continued)		
Percentage of population ≥ 25 YO within a box area (RMZ) that's a HS graduate or more	Percent of estimated population ≥ 25 YO within the box area (calculated on a percentage of the census block) that are at least a HS graduate	94.1% - 95 % = 1 pt. 90.1% - 94% = 2 pts. 70.1% - 89.9% = 3 pts. 1% - 70% = 4 pts.
Number of assisted living health care facilities within a box area (RMZ)		1 - 3 = 1 point 4 - 5 = 2 points 6 - 8 = 3 points ≥9 = 4 points

Bomb Squad/Explosive Risk

Category Description	Hazard Description	Hazard Points
Incident Frequency: All dispatched Bomb Squad incidents (Grp. 2 "Bomb Squad") where at least one unit arrived (Crystal reports Top Program "BOMB" and filtered by First Arriving Unit TRT	Total # of bomb squad incidents dispatched and where at least one unit arrived in station response areas	Each incident is worth 1 point

Technical Rescue Risk

Category Description	Hazard Description	Hazard Points
Incident Frequency: All dispatched Technical Rescue incidents (Grp. 2 "Technical Rescue"	Total # of technical rescue incidents dispatched in station response areas	0 - 1 = 0 points 2 - 3 = 1 points 4 + = 2 points

Aircraft Rescue Firefighting Risk

Category Description	Hazard Description	Hazard Points
Incident Frequency Dispatched Aircraft Emergency incidents (Grp. 2 "Aircraft Rescue Firefighting"	Total # of aircraft emergency incidents dispatched in box areas (RMZs)	Each incident = 1 point
Location of Airpark and Airfield	Box areas (RMZs) that encompass Montgomery Airpark and Davis Airfield	3 points for each location
Location of Helipads	Box areas (RMZs) that encompass known helipads	1 point for each helipad location
Location of private airstrips	Box areas (RMZs) that encompass known private airstrips	2 points for each private airstrip

Water and Ice Rescue Risk

Category Description	Hazard Description	Hazard Points
Incident Frequency All dispatched Water/Ice Rescue incidents (Grp. 2 "Water Ice Rescue"	Total # of water/ice rescue incidents dispatched in box areas (RMZs)	1 - 2 = 1 points 3 - 5 = 2 points 6 - 10 = 3 points 11 - 20 = 4 points 21 + = 5 points
Large bodies of water	Large bodies of water within box areas (RMZ) Potomac River, Blackhills & Clopper Lakes, Rocky Gorge & Tridelphia Reservoirs	Potomac River and C & O Canal = 4 points Others noted: 2 points
Intersections Subject to Periodic Flooding	Specific intersections within box areas (RMZs) prone to periodic flooding	Each intersection = 1 point
Storm Water Management Ponds	Each storm water management pond within each box area (RMZ)	Storm Water Management Pond = 1 point

Hazardous Materials Response Risk

Category Description	Hazard Description	Hazard Points
Incident Frequency All dispatched Hazmat incidents (Grp. 2 "Hazardous Materials"	Total # of hazmat call types dispatched in box areas (RMZs)	0 - 1 = 0 points 2 - 3 = 1 points 4 - 6 = 2 points 7 - 9 = 3 points 10 + = 4 points
SARA Title 3 Facilities within each box area	Total # of SARA Title 3 facilities within box areas (RMZs)	1 - 2 = 1 points 3 - 4 = 2 points 5 - 6 = 3 points 7 - 8 = 3 points 8 + = 4 points
Each Railroad Box Area		Railroad Box = 1 point
Each Highway Box Area		Highway Box = 1 point
Each Box that a pipeline runs through		Pipeline Box Area = 1 point

Historical and Future Probability of Service Demands by RMZ [2B.2]

MCFRS identifies and documents historical service demand frequency and future probability of service demand, by service type, on an as-needed basis or at least annually. This data is queried and/or calculated, as well as documented, by fire station response area (i.e., first-due area).

Historical demand frequency is queried using a Crystal Report prepared by the MCFRS IT Section that is tied to the department's data warehouse. The user selects the service type (i.e., emergency program) and time frame of interest – typically a fiscal year or calendar year – and then selects the station response area(s) of interest.

Future service demand is based upon examining past annual demand to identify a trend that is expected to carry forward. The process begins with calculating average percent change over the most recent 5-year period (e.g., FY2013-FY2017) which is then used to calculate a projected service demand for the next year (i.e., FY2018, if using FY13-17 for the average percent change). For example, if the average percent change for ALS1 incidents is found to be 1.4%/year, then the projected demand for the upcoming year would be the service demand frequency for the most recent year plus a 1.4% increase. The service demand for the out years (e.g., 2, 3, 4 and 5 years into the future) can be calculated similarly using the most recent five years of data which will be a combination of historical (actual) service demand frequency and projected demand frequency. MCFRS has automated the mathematical process of calculating projections to make projections easy and fast to calculate.

The following chart represents countywide historic and projected future emergency programmatic service demands by program. An analysis of non-emergency public service call load is also included.

FY2018 - FY2020 INCIDENT COUNT PROJECTIONS

Program - Group 2	Avg %Δ FY13-17	FY17 Count	FY18 Proj.	Avg %Δ FY14-18	FY19 Proj.	Avg %Δ FY15-19	FY20 Proj.
ALS	3.4%	40,406	41,760	4.9%	43,806	4.0%	45,536
BLS	3.4%	51,936	53,702	3.6%	55,635	3.9%	57,777
FFA*	-11.6%	617	545	-13.2%	473	-18.4%	386
Adaptive	2.9%	15,844	16,303	4.0%	16,955	4.2%	17,667
Hazmat	2.3%	165	169	-1.4%	167	-5.2%	158
Water-ice	8.6%	81	90	-1.7%	88	-1.5%	87
Tech Rescue	22.3%	13	16	38.1%	22	22.5%	27
ARFF	150.0%	1	2	75.0%	3	12.5%	3
Bomb	4.3%	546	569	4.4%	594	8.2%	643
Service Call	-2.0%	7511	7359	-4.6%	7021	-6.6%	6558

*FFA count decreased beginning in FY16 due to some FFAs being dispatched instead as "light smoke conditions" (i.e., a reduced response adaptive call type).

MCFRS' robust data warehouse and Crystal reporting tools allows for additional data retrieval and a more granular analysis to help determine more localized historical demand and future projections.

Trend CY13 - CY16

Category	CY2013	CY2014	CY2015	CY2016	% Change
Fire	14,843	15,729	16,571	17,388	4.9
EMS	83,794	86,378	90,298	94,514	4.7
Other	9,217	10,258	9,557	8,395	-12.2
Total	107,854	112,365	116,426	120,297	3.3

Category	CY2013	CY2014	CY2015	CY2016	% Change
ALS1	28,587	30,567	32,021	33,602	4.9
ALS2	5,207	5,316	5,756	5,754	0.0
BLS	46,369	47,206	49,147	51,996	5.8
Fire Full	985	1,039	1,030	569	-44.8
Fire Adaptive	13,242	14,097	14,919	16,047	7.6
Service Call	8,212	9,303	8,598	7,449	-13.6
Mutual Aid	4,322	3,940	4,073	4,000	-1.8
Other	930	897	882	880	-0.3

Last updated October 31st 2017

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Source: 2017 Oct. Operations Division Dashboard for Quarterly Leadership Briefing

Trend CY13 – CY16

Annual Transports

- 2013 63,566
- 2014 66,741 4.8%
- 2015 69,268 3.7%
- 2016 71,577 3.3%

Last updated October 31st 2017

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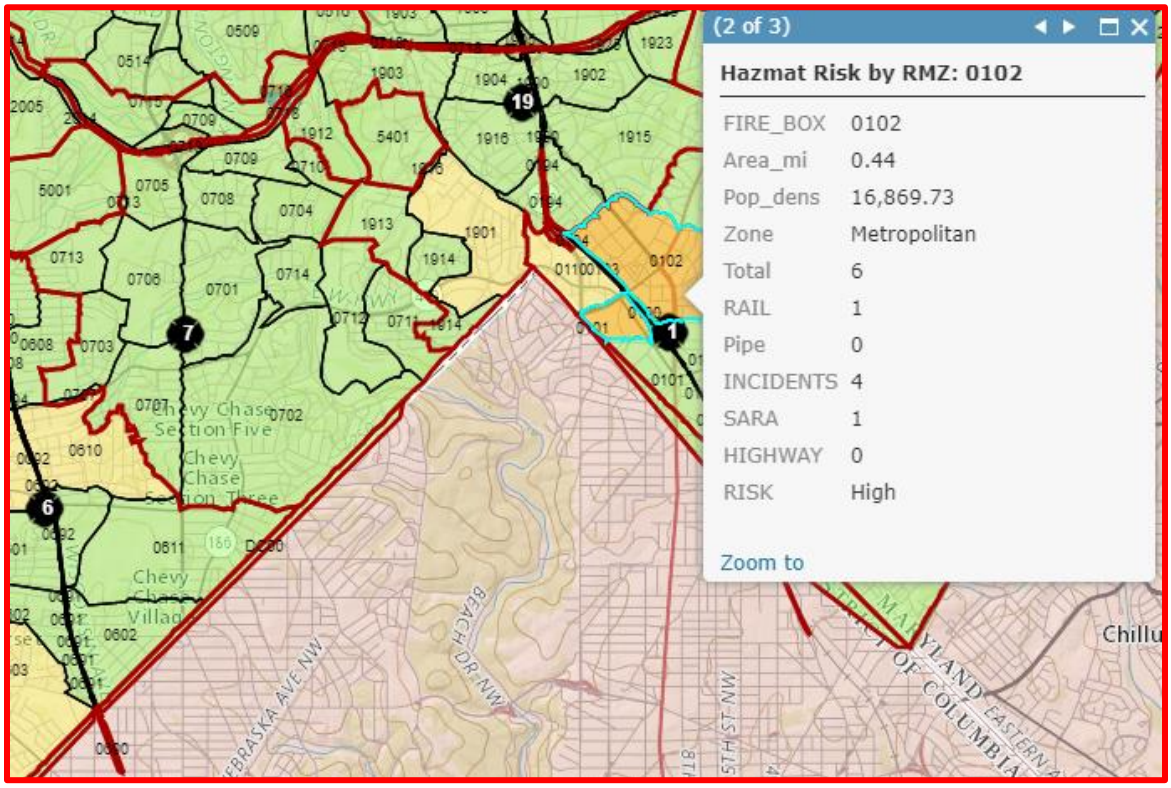
RMZ Risk Identification, Analysis, Categorization & Classification Methods [CC 2B.4]

As discussed in the Methods for Organizing Response Areas into Geographical Planning Zones [CC 2A.3] section of this CRA/SOC manual, MCFRS utilizes its fire station box areas and its more-granular risk management planning zones (RMZ). Through the processes described in the Methodology of Identifying, Assessing, Categorizing, and Classifying Risks [CC 2B.1] section, each of the MCFRS service delivery programs have been assigned an appropriate class of risk within each RMZ.



The above screenshot is from the MCFRS ARC GIS Community Risk Assessment online map viewer drilling down into RMZ 0102 in Silver Spring for Hazardous Materials emergencies risk. Displayed are the square miles of the RMZ, the population density per square mile of the RMZ, the density zone designation (Metropolitan), the points assigned for applicable hazmat risk within the RMZ (SARA facility, freight rail line, and historic hazmat incidents within the RMZ), and the final risk class for hazmat (high). The chart on the following page provides the reader an understanding of MCFRS initial dispatch call types linked to risk class.

Special Risk (SR) • Report of a large airplane (5 or > soles) on fire or crashed anywhere (ARFF) • Bomb Squad special risk responses including confirmed explosive device incidents • Smoke in a house, building, school, apartment, garage, barn, etc. in a non-hydranted box area • Reported fire in a house, building, school, apartment, garage, barn, etc. in a non-hydranted box area • Reported smoke or fire in a high-rise building, apartment, office, etc. • Hazmat box alarms for a report of a building fire involving hazmat or a 2-inch or > high pressure natural gas line break; outside or inside • All technical rescue responses • Swiftwater Potomac River emergencies	**High Risk (HR)** • Smoke in a house, building, school, non-high-rise apartment, garage, barn, etc. • Reported fire in a house, building, school, non-high-rise apartment, garage, barn, etc. • Report of a small airplane (4 or < soles) on fire or crashed anywhere (ARFF) • ALS2 EMS incidents including ALS2 MV Crash with or without reported entrapment • Bomb Squad high risk responses including creditable suspicious and unattended packages/devices • Reported train/metrorail crash/derailment/fire • Hazmat inhalation emergencies including CO alarms with symptomatic patients • Stillwater Potomac River emergencies or incidents involving White's Ferry

Moderate Risk (MR)
• Inside contained appliance fire (dryer, oven, etc.)
• Report of light smoke in a building
• Inside odor of smoke
• Inside natural gas leak
• Inside electrical short circuit
• Detached shed fire
• Large vehicle fire
• Malfunctioning furnace
• ALS1 EMS incidents including ALS1 MV Crash with or without reported entrapment
• Bomb Squad moderate risk responses including suspicious and unattended packages
• Hazmat releases not involving fire; including white powder responses
• Inland water/ice emergency; not including swimming pool, bathtub, etc.
	Low Risk (LR)
	• Automobile fires
	• Brush, grass, leaf, field fire
	• Outside trash, dumpster fires
	• Outside transformer fire
	• Home automatic or commercial fire alarms,
	• Outside natural gas leaks & small fuel spills
	• Outside electrical short circuit
	• Citizen lock-out with hazard (food on stove, baby locked inside, etc.)
	• Outside smoke or odor investigation
	• Stalled elevator with people on board
	• BLS EMS responses including BLS motor vehicle crash
	• Metrorail arcing insulator issue
	• Public service call (performance not measured) Examples:
	  ○ Assist citizen off the floor
	  ○ Water leaking from an above apartment
	  ○ Citizen lock-in
	  ○ Tree down blocking the roadway
	  ○ CO alarm with asymptomatic patients

The following table displays the risk classification for each MCFRS service delivery program category.

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
0101	Special	Moderate	Low	Low	Low	Low	Low
0102	Special	High	Special	Moderate	Low	Low	High
0103	High	Moderate	Low	Low	Low	Low	Low
0104	High	High	Low	Low	Low	Low	Low
0105	Moderate	Moderate	Low	Low	Low	Low	Low
0106	High	High	Low	Low	Low	Low	Low
0107	High	Moderate	Low	Low	Low	Low	Low
0108	Moderate	High	Low	Low	Low	Low	Low
0110	High	Moderate	Low	Low	Low	Low	Moderate
0180	Low	Moderate	Low	Low	Low	Low	Low
0181	Low	Moderate	Low	Low	Low	Low	Low
0182	Low	Moderate	Low	Low	Low	Low	Low
0185	Low	Moderate	Low	Low	Low	Low	Low
0186	Low	Moderate	Low	Low	Low	Low	Low
0187	Low	Moderate	Low	Low	Low	Low	Low
0188	Low	Moderate	Low	Low	Low	Low	Low
0189	Low	Moderate	Low	Low	Low	Low	Low
0190	Low	Moderate	Low	Low	Low	Low	Low
0191	Moderate	Moderate	Low	Low	Low	Low	Low
0192	Low	Moderate	Low	Low	Low	Low	Low
0193	Moderate	Moderate	Low	Low	Low	Low	Low
0194	Low	Moderate	Low	Low	Low	Low	Low
0201	Moderate	High	Low	Low	Moderate	Low	Low
0202	High	Moderate	Low	Low	Low	Low	Low
0203	High	High	Low	Low	Low	Low	Low
0204	High	High	Low	Low	Low	Low	Low
0205	High	High	Low	Low	Low	Moderate	Low
0206	High	High	Low	Low	Low	Low	Low
0207	High	High	Low	Low	Low	Low	Low
0208	High	High	Low	Low	Low	Low	Low
0209	Special	High	Low	Low	Low	Low	Low
0210	Moderate	Moderate	Low	Low	Low	Low	Low
0213	Moderate	High	Low	Low	Low	Low	Low
0214	Moderate	High	Low	Low	Low	Low	Low
0290	Low	Moderate	Low	Low	Low	Low	Low
0291	Low	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
0292	Low	Moderate	Low	Low	Low	Low	Low
0294	Low	Moderate	Low	Low	Low	Low	Low
0301	High	Moderate	Low	Low	Low	Low	Low
0302	High	High	Low	Moderate	Low	Low	Low
0303	Low	Moderate	Low	Low	Low	Low	Low
0304	Moderate	Moderate	Low	Low	Low	Low	Low
0305	Moderate	Moderate	Low	Low	Low	Low	High
0306	High	High	Low	Moderate	Low	Low	Low
0307	High	High	Low	Moderate	Low	Low	High
0308	High	Moderate	Low	Low	Low	Low	Low
0309	High	High	Low	Low	Low	Low	Low
0310	Low	High	Low	Low	Low	Low	Low
0311	High	High	Low	Low	Low	Low	Low
0312	Moderate	Moderate	Low	Moderate	Low	Low	Moderate
0314	Moderate	Moderate	Low	Low	Low	Low	Low
0317	Moderate	Moderate	Low	Low	Low	Low	Low
0319	High	Moderate	Low	Moderate	Low	Low	High
0320	Moderate	Moderate	Low	Moderate	Low	Low	Low
0321	Special	High	Moderate	Low	Low	Low	Moderate
0324	Low	Moderate	Low	Low	Low	Low	Low
0327	Low	Moderate	Low	Low	Low	Low	Low
0328	Low	High	Low	Low	Low	Low	Low
0331	Moderate	Moderate	Low	Low	Low	Low	Moderate
0332	Low	Moderate	Low	Low	Low	Low	Low
0349	Moderate	Moderate	Low	Low	Low	Low	Low
0350	Moderate	Moderate	Low	Low	Low	Low	Low
0351	Moderate	Moderate	Low	Low	Low	Low	Low
0352	Moderate	Moderate	Low	Low	Low	Low	Low
0353	Moderate	Moderate	Low	Low	Low	Low	Low
0354	Moderate	Moderate	Low	Low	Low	Low	Low
0355	Moderate	Moderate	Low	Low	Low	Low	Low
0356	Moderate	Moderate	Low	Low	Low	Low	Low
0357	Moderate	High	Low	Low	Low	Low	Low
0358	Moderate	High	Low	Low	Low	Low	Low
0359	Moderate	High	Low	Low	Low	Low	Low
0360	Moderate	Moderate	Low	Low	Low	Low	Low
0361	Moderate	Moderate	Low	Low	Low	Low	Low
0362	Moderate	Moderate	Low	Low	Low	Low	Low
0363	Moderate	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
0364	Low	Moderate	Low	Low	Low	Low	Low
0365	Low	Moderate	Low	Low	Low	Low	Low
0366	Low	Low	Low	Low	Low	Low	Low
0367	Moderate	Moderate	Low	Low	Low	Low	Low
0368	Moderate	Moderate	Low	Low	Low	Low	Low
0369	Low	Moderate	Low	Low	Low	Low	Low
0370	Low	Moderate	Low	Low	Low	Low	Low
0371	Low	Low	Low	Low	Low	Low	Low
0372	Moderate	Moderate	Low	Low	Low	Low	Low
0373	Low	Low	Low	Low	Low	Low	Low
0374	Low	Low	Low	Low	Low	Low	Low
0375	Low	Low	Low	Low	Low	Low	Low
0376	Moderate	Moderate	Low	Low	Low	Low	Low
0377	Low	Low	Low	Low	Low	Low	Low
0378	Moderate	Moderate	Low	Low	Low	Low	Low
0379	Moderate	Moderate	Low	Low	Low	Low	Low
0380	Low	Low	Low	Low	Low	Low	Low
0381	Low	Low	Low	Low	Low	Low	Low
0382	Low	Low	Low	Low	Low	Low	Low
0383	Low	Low	Low	Low	Low	Low	Low
0384	Low	Low	Low	Low	Low	Low	Low
0385	Low	Low	Low	Low	Low	Low	Low
0386	Low	Low	Low	Low	Low	Low	Low
0387	Low	Low	Low	Low	Low	Low	Low
0388	Low	Low	Low	Low	Low	Low	Low
0389	Low	Moderate	Low	Low	Low	Low	Low
0390	Low	Moderate	Low	Low	Low	Low	Low
0393	Moderate	Moderate	Low	Low	Low	Low	Low
0401	Low	Moderate	Low	Low	Low	Low	Low
0403	Low	Moderate	Low	Low	Low	Low	Low
0404	Moderate	Moderate	Low	Low	Low	High	Low
0405	Moderate	Moderate	Low	Low	Low	Low	Low
0406	Moderate	Moderate	Low	Low	Low	Low	Low
0407	Moderate	Moderate	Low	Low	Low	Low	Low
0408	Low	Moderate	Low	Low	Low	Low	Low
0409	Moderate	Moderate	Low	Low	Low	Low	Low
0410	Moderate	Moderate	Low	Low	Low	Low	Low
0411	Low	Moderate	Low	Low	Low	Low	Low
0413	Moderate	Low	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
0416	Low	Moderate	Low	Low	Low	Low	Low
0417	Moderate	Moderate	Low	Low	Low	Low	Low
0418	Moderate	Moderate	Low	Low	Low	Low	Low
0419	Low	Moderate	Low	Low	Low	Low	Low
0420	Moderate	Moderate	Low	Low	Low	Moderate	Low
0421	Moderate	Moderate	Low	Low	Low	Low	Low
0422	Low	Moderate	Low	Low	Low	Low	Low
0423	Low	Moderate	Low	Low	Low	Low	Low
0424	Low	Low	Low	Low	Low	Low	Low
0425	Moderate	Low	Low	Low	Low	Low	Low
0426	Low	Moderate	Low	Low	Low	Low	Low
0427	Low	Moderate	Low	Low	Low	Low	Low
0428	Moderate	Moderate	Low	Low	Low	Low	Low
0429	Low	Low	Low	Low	Low	Low	Low
0430	Low	Moderate	Low	Low	Low	Low	Low
0431	Low	Moderate	Low	Low	Low	Low	Low
0432	Moderate	Moderate	Low	Low	Low	Low	Low
0433	Low	Low	Low	Low	Low	Low	Low
0434	Moderate	Moderate	Low	Low	Low	Low	Low
0435	Low	Low	Low	Low	Low	Low	Low
0436	Low	Low	Low	Low	Low	Low	Low
0437	Moderate	Moderate	Low	Low	Low	Low	Low
0438	Low	Moderate	Low	Low	Low	Low	Low
0439	Low	Low	Low	Low	Low	Low	Low
0501	High	High	Low	Low	Low	Low	Moderate
0502	High	High	Low	Low	Low	Low	Low
0503	Moderate	Moderate	Low	Low	Low	Low	Low
0504	High	High	Low	Low	Low	Low	Low
0505	Moderate	Moderate	Low	Low	Low	Low	Low
0506	High	Moderate	Low	Low	Low	Low	Low
0507	Moderate	Moderate	Low	Low	Low	Low	Low
0508	Moderate	Moderate	Low	Low	Low	Low	Low
0509	Moderate	Moderate	Low	Low	Low	Low	Low
0510	Moderate	High	Low	Low	Low	Low	Low
0511	Moderate	Moderate	Low	Low	Low	Low	Low
0512	Moderate	High	Low	Low	Low	Low	Low
0513	High	High	Low	Low	Low	Low	Low
0514	Moderate	Moderate	Low	Low	Low	Low	Low
0515	High	High	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
0516	Low	Moderate	Low	Low	Low	Low	Low
0517	Moderate	High	Low	Low	Low	Low	Low
0518	Moderate	Moderate	Low	Low	Low	Low	Low
0519	Moderate	High	Low	Low	Low	Low	Low
0601	Moderate	Moderate	Low	Moderate	Low	Low	Low
0602	Special	High	Low	Moderate	Low	Low	Low
0603	Special	High	Low	Low	Low	Low	Moderate
0604	Moderate	High	Low	Low	Low	Low	Low
0605	High	Moderate	Low	Low	Low	Low	Low
0606	Low	Moderate	Low	Low	Low	Low	Low
0607	High	Moderate	Low	Moderate	Low	Low	Low
0608	Special	Moderate	Low	Moderate	Low	Low	Low
0609	Special	Moderate	Low	Low	Low	Low	Low
0610	Special	Moderate	High	Moderate	Low	Low	Moderate
0611	Moderate	Moderate	Low	Low	Low	Low	Low
0690	Moderate	Moderate	Low	Low	Low	Low	Low
0691	Low	Moderate	Low	Low	Low	Low	Low
0692	Moderate	Moderate	Low	Low	Low	Low	Low
0693	Moderate	Moderate	Low	Low	Low	Low	Low
0694	Moderate	Moderate	Low	Low	Low	Low	Low
0701	High	High	Low	Low	Low	Low	Low
0702	High	Moderate	Low	Low	Low	Low	Low
0703	Moderate	Moderate	Low	Low	Low	Low	Low
0704	Moderate	Moderate	Low	Low	Low	Low	Low
0705	Moderate	Moderate	Low	Low	Low	Low	Low
0706	Moderate	Moderate	Low	Low	Low	Low	Low
0707	High	Moderate	Low	Low	Low	Low	Low
0708	Moderate	High	Low	Low	Low	Low	Low
0709	Low	Moderate	Low	Low	Low	Low	Low
0710	Low	High	Low	Low	Low	Low	Low
0711	Moderate	Moderate	Low	Low	Low	Low	Low
0712	Moderate	Moderate	Low	Low	Low	Low	Low
0713	Moderate	High	Low	Low	Low	Low	Low
0714	Moderate	High	Low	Low	Low	Low	Low
0715	Low	Low	Low	Low	Low	Low	Low
0716	Low	Moderate	Low	Low	Low	Low	Low
0717	Low	Moderate	Low	Low	Low	Low	Low
0718	Moderate	High	Low	Low	Low	Low	Low
0801	High	High	Low	Low	Low	Low	Moderate

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
0802	High	High	Low	Low	Low	Low	Low
0803	Special	High	Low	Low	Low	Low	Special
0804	High	High	Low	Low	Low	Low	Moderate
0805	Moderate	Moderate	Low	Low	Low	Low	Low
0806	Moderate	High	Low	Low	Low	Low	Low
0807	High	High	Low	Low	Low	Low	Moderate
0808	High	High	Low	Low	Low	Low	Low
0812	High	High	Low	Low	Low	Low	Low
0813	Special	Special	Low	Low	Low	Low	Low
0814	Special	Special	Low	Low	Low	Low	Moderate
0815	Moderate	Moderate	Low	Low	Low	Low	Low
0816	Special	High	Low	Low	Low	Low	Low
0821	Moderate	Moderate	Low	Low	Low	Low	Low
0822	Moderate	Moderate	Low	Low	Low	Low	Low
0823	Special	High	Low	Low	Low	Low	High
0825	Low	Moderate	Low	Low	Low	Low	Low
0826	Low	Moderate	Low	Low	Low	Low	Low
0827	High	High	Low	Low	Low	Low	Low
0828	High	High	Low	Low	Low	Low	Low
0829	Special	High	Low	Low	Low	Low	Low
0830	Moderate	High	Low	Low	Low	Low	Low
0845	Moderate	Moderate	Low	Low	Low	Low	Low
0846	Low	Low	Low	Low	Low	Low	Low
0847	Moderate	Moderate	Low	Low	Low	Low	Low
0901	Moderate	Moderate	Low	Low	Low	Low	Low
0902	Moderate	Moderate	Low	Low	Low	Moderate	Low
0903	Low	Moderate	Low	Low	Moderate	Low	Low
0909	Moderate	Moderate	Low	Low	Low	Low	Low
0910	Moderate	Moderate	Low	Low	Low	Low	Low
0914	Low	Moderate	Low	Low	Low	Low	Low
0915	Low	Moderate	Low	Low	Low	Low	Low
0916	Low	Moderate	Low	Low	Low	Low	Low
0917	Low	Moderate	Low	Low	Low	Low	Low
1001	Moderate	Moderate	Low	Low	Low	Low	Low
1002	Low	Moderate	Low	Low	Low	Low	Low
1003	Moderate	Moderate	Low	Low	Low	Low	Low
1004	Moderate	Moderate	Low	Low	Low	Low	Low
1005	Moderate	Moderate	Low	Low	Low	Low	Low
1006	Moderate	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
1007	Moderate	Moderate	Low	Low	Low	Low	Low
1008	Moderate	Moderate	Low	Low	Low	Low	Low
1009	Moderate	Moderate	Low	Low	Low	Low	Low
1010	Moderate	Moderate	Low	Low	Low	Low	Low
1011	Moderate	Moderate	Low	Low	Low	Low	Low
1012	Moderate	Moderate	Low	Low	Low	Low	Low
1013	Moderate	Moderate	Low	Low	Low	Low	Low
1014	Moderate	Moderate	Low	Low	Low	Low	Low
1015	Low	Moderate	Low	Low	Low	Low	Low
1016	Low	Moderate	Low	Low	Low	Low	Low
1017	Moderate	Moderate	Low	Low	Low	Low	Low
1018	Low	Moderate	Low	Moderate	Low	Low	Low
1020	Low	Moderate	Low	Low	Low	Low	Low
1021	Low	Moderate	Low	Moderate	Low	Low	Low
1022	Low	Moderate	Low	Low	Low	Low	Low
1023	Moderate	High	Low	Low	Low	Low	Low
1024	Low	Moderate	Low	Low	Low	Low	Low
1025	Low	Moderate	Low	Low	Low	Moderate	Low
1026	Low	Moderate	Low	Low	Low	Low	Low
1027	Moderate	Moderate	Low	Low	Low	Low	Low
1028	Low	Moderate	Low	Low	Low	Low	Low
1029	Moderate	Moderate	Low	Low	Low	Low	Low
1030	Low	Moderate	Low	Moderate	Low	Low	Low
1031	Low	Moderate	Low	Low	Low	Low	Moderate
1032	Low	Low	Low	Low	Low	Moderate	Low
1033	Low	Moderate	Low	Low	Low	Low	Low
1034	Low	Moderate	Low	Low	Low	Low	Low
1101	High	Moderate	Low	Moderate	Low	Low	Moderate
1102	High	Moderate	Low	Moderate	Low	Moderate	Moderate
1103	Low	Moderate	Low	Low	Low	Low	Low
1104	Moderate	Moderate	Low	Low	Low	Low	Low
1105	Moderate	Moderate	Low	Low	Low	Moderate	Low
1106	High	Moderate	Low	Low	Low	Low	Moderate
1107	Moderate	High	Low	Low	Low	Low	Low
1108	Low	Low	Low	Low	Low	Moderate	Low
1201	High	High	Low	Low	Low	Low	Low
1202	High	Moderate	Low	Special	Low	Low	High
1203	High	Moderate	Low	Low	Low	Low	Low
1204	High	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
1205	Moderate	High	Low	Moderate	Low	Low	Low
1206	High	High	Low	Low	Low	Low	Low
1207	High	Moderate	Low	Low	Low	Low	Low
1208	High	High	Low	Low	Low	Low	Low
1209	High	High	Low	Low	Low	Low	Moderate
1210	Special	High	Low	Low	Moderate	Low	High
1211	High	Moderate	Low	Low	Low	Low	Low
1212	Moderate	Moderate	Low	Low	Low	Low	Low
1213	Low	Moderate	Low	Low	Low	Low	Low
1214	Moderate	High	Low	Low	Low	Low	Low
1255	Moderate	High	Low	Low	Low	Low	Low
1256	Moderate	Moderate	Low	Low	Low	Low	Low
1301	Moderate	Moderate	Low	Low	Low	Low	Low
1302	Moderate	Moderate	Low	Low	Low	Low	Low
1303	Low	Moderate	Low	Low	Low	Low	Low
1304	High	Moderate	Low	Low	Low	Low	Low
1305	Moderate	Low	Low	Low	Low	Low	Low
1306	Moderate	Moderate	Low	Low	Low	Low	Low
1307	Moderate	Moderate	Low	Low	Low	Low	Low
1308	Low	Low	Low	Low	Low	Low	Low
1309	Moderate	Moderate	Low	Low	Low	Low	Low
1311	Moderate	Moderate	Low	Low	Low	Low	Low
1313	Low	Moderate	Low	Low	Low	Low	Low
1314	High	Moderate	Low	Low	Low	Low	Low
1315	Moderate	Moderate	Low	Low	Low	Low	Low
1316	Low	Low	Low	Low	Low	Low	Low
1317	Moderate	Moderate	Low	Low	Low	Low	Low
1318	Moderate	Moderate	Low	Low	Low	Low	Low
1319	Moderate	Low	Low	Low	Low	Low	Low
1320	Low	Moderate	Low	Low	Low	Low	Low
1321	Moderate	Moderate	Low	Low	Low	Low	Low
1322	High	Moderate	Low	Low	Low	Low	Low
1323	Moderate	Moderate	Low	Low	Low	Low	Low
1324	Moderate	High	Low	Low	Low	Low	Low
1325	Low	Moderate	Low	Low	Low	Low	Low
1326	Moderate	Moderate	Low	Low	Low	Low	Low
1327	Low	Moderate	Low	Low	Low	Low	Low
1328	Moderate	Moderate	Low	Low	Low	Low	Low
1329	High	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
1331	Low	Low	Low	Low	Low	Low	Low
1332	Moderate	Moderate	Low	Low	Low	Low	Low
1333	Low	Moderate	Low	Low	Low	Low	Low
1334	Low	Low	Low	Low	Low	Low	Low
1335	Low	Low	Low	Low	Low	Low	Low
1336	Low	High	Low	Low	Low	Low	Low
1401	High	Moderate	Low	Low	Low	Low	Moderate
1402	Moderate	Moderate	Low	Low	Low	Low	Low
1403	Low	Moderate	Low	Low	Low	Low	Low
1404	Low	Moderate	Low	Low	Low	Moderate	Low
1405	Moderate	Moderate	Low	Low	Low	High	Low
1406	Low	Moderate	Low	Low	Low	Low	Low
1407	Moderate	Moderate	Low	Low	Low	Low	Low
1408	High	Moderate	Low	Moderate	Low	High	High
1409	Low	Low	Low	Low	Low	Low	Low
1410	Low	Moderate	Low	Low	Low	High	Low
1412	Low	Moderate	Low	Moderate	Low	Special	Low
1413	Low	Moderate	Low	Low	Low	Low	Low
1414	Low	Moderate	Low	Low	Low	High	Low
1415	Moderate	Moderate	Low	Low	Low	Low	Low
1416	Moderate	Moderate	Low	Low	Low	Low	Low
1417	Moderate	Moderate	Low	Low	Low	Low	Low
1418	Low	Moderate	Low	Low	Low	Low	Low
1421	Low	Low	Low	Low	Low	Moderate	Low
1422	Low	Low	Low	Low	Low	Moderate	Low
1423	Low	Low	Low	Low	Low	Moderate	Low
1424	Low	Low	Low	Low	Low	Moderate	Low
1501	High	High	Low	Low	Low	Low	Low
1502	Moderate	Moderate	Low	Low	Low	Moderate	Low
1503	High	Moderate	Low	Low	Low	Low	Moderate
1504	Moderate	Moderate	Low	Low	Low	Low	Low
1505	High	Moderate	Low	Low	Low	Low	Low
1506	Moderate	Moderate	Low	Moderate	Low	Low	Low
1507	Moderate	Moderate	Low	Low	Low	Low	Low
1508	Low	Moderate	Low	Low	Low	Low	Low
1509	Low	Low	Low	Low	Low	Low	Low
1510	Moderate	High	Low	Low	Low	Low	Low
1511	Low	Moderate	Low	Low	Low	Low	Low
1512	High	High	Low	Low	Low	Low	Moderate

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
1513	Moderate	Moderate	Low	Low	Low	Low	Low
1514	Moderate	Moderate	Low	Low	Low	Low	Low
1515	Moderate	Moderate	Low	Low	Low	Low	Low
1516	High	High	Low	Low	Low	Low	Low
1518	High	High	Low	Moderate	Low	Low	Moderate
1519	High	High	Low	Moderate	Low	Low	Low
1520	Low	Low	Low	Low	Low	Low	Low
1525	Low	Moderate	Low	Low	Low	Low	Low
1526	High	High	Low	Low	Low	Low	Low
1527	High	High	Low	Low	Low	Low	Low
1528	High	High	Low	Low	Low	Low	Low
1529	High	High	Low	Low	Low	Low	Low
1530	Low	Moderate	Low	Low	Low	Low	Low
1531	Moderate	Moderate	Low	Low	Low	Low	Low
1532	Moderate	Moderate	Low	Low	Low	Low	Low
1533	Low	Moderate	Low	Low	Low	Low	Low
1534	Low	Low	Low	Low	Low	Low	Low
1535	Low	Moderate	Low	Low	Low	Low	Low
1601	Moderate	Moderate	Low	Moderate	Low	Low	Low
1602	High	High	Low	Low	Low	Low	Low
1603	High	Moderate	Low	Low	Low	Low	Low
1604	Moderate	Moderate	Low	Low	Low	Low	Low
1605	Moderate	Moderate	Low	Low	Low	Low	Low
1606	Moderate	Moderate	Low	Low	Low	Low	Low
1607	High	High	Low	Low	Low	Low	Low
1608	Special	High	Low	Low	Low	Low	Low
1609	High	High	Low	Low	Low	Low	Low
1610	High	High	Low	Low	Low	Low	Low
1611	Moderate	High	Low	Low	Low	Low	Low
1612	Moderate	High	Low	Low	Low	Low	Low
1613	High	Moderate	Low	Low	Low	Low	Low
1614	Special	High	Low	Low	Low	Low	Low
1615	Low	Low	Low	Low	Low	Low	Low
1616	Moderate	Moderate	Low	Low	Low	Low	Low
1617	Low	Moderate	Low	Low	Low	Low	Low
1618	Moderate	High	Low	Low	Low	Low	Low
1701	Low	Moderate	Low	Low	Low	Low	Low
1702	Moderate	Moderate	Low	Low	Low	Low	Low
1703	Moderate	Moderate	Low	Low	Moderate	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
1704	Moderate	Moderate	Low	Low	Low	Low	Low
1705	Low	Moderate	Low	Low	Low	Low	Low
1706	Low	Low	Low	Low	Moderate	Low	Low
1707	Moderate	Moderate	Low	Low	Low	Moderate	Low
1708	Moderate	Moderate	Low	Low	Low	Low	Low
1709	Moderate	Moderate	Low	Low	Low	Low	Low
1711	Low	Moderate	Low	Low	Low	Low	Low
1712	Moderate	Moderate	Low	Low	Low	Low	Low
1714	Moderate	Moderate	Low	Low	Low	Low	Low
1715	Low	Low	Low	Low	Low	Low	Low
1716	Low	Moderate	Low	Low	Low	Low	Low
1717	Moderate	Moderate	Low	Low	Low	Low	Low
1718	Moderate	Moderate	Low	Low	Moderate	Low	Low
1719	Moderate	Moderate	Low	Low	Low	Low	Low
1720	Low	Low	Low	Low	Low	Low	Low
1721	Moderate	Moderate	Low	Low	Low	Low	Low
1722	Low	Moderate	Low	Low	Low	Low	Low
1723	Moderate	Moderate	Low	Low	Low	Low	Low
1724	Low	Moderate	Low	Low	Low	Low	Low
1725	Low	Low	Low	Low	Low	Low	Low
1726	Moderate	Moderate	Low	Low	Low	Low	Low
1727	Low	Moderate	Low	Low	Low	Low	Low
1728	Low	Moderate	Low	Low	Low	Low	Low
1729	Low	Moderate	Low	Low	Low	Low	Low
1801	High	High	Low	Low	Low	Low	Low
1802	Moderate	Moderate	Low	Low	Low	Low	Low
1803	High	High	Low	Low	Low	Low	Low
1804	High	High	Low	Low	Low	Low	Low
1805	Moderate	Moderate	Low	Low	Low	Low	Low
1806	High	High	Low	Moderate	Low	Low	High
1808	High	High	Low	Moderate	Low	Low	Low
1809	Moderate	Moderate	Low	Low	Low	Low	Low
1810	High	High	Low	Low	Low	Low	Low
1811	Moderate	Moderate	Low	Low	Low	Low	Low
1812	High	High	Low	Low	Low	Low	Low
1813	High	High	Low	Low	Low	Low	Low
1814	High	High	Low	Low	Low	Low	Low
1815	High	High	Low	Low	Low	Low	Low
1816	High	High	Low	Moderate	Low	Low	Moderate

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
1817	Moderate	Moderate	Low	Low	Low	Low	Low
1818	High	High	Low	Low	Low	Low	Low
1821	High	Moderate	Low	Low	Low	Low	Low
1824	Moderate	High	Low	Low	Low	Low	Low
1890	Moderate	Moderate	Low	Low	Low	Low	Low
1891	Moderate	Moderate	Low	Moderate	Low	Low	Low
1892	Moderate	Moderate	Low	Low	Low	Low	Low
1893	Moderate	Moderate	Low	Low	Low	Low	Low
1894	Moderate	Moderate	Low	Low	Low	Low	Low
1895	Moderate	Moderate	Low	Low	Low	Low	Low
1896	Low	Low	Low	Low	Low	Low	Low
1897	Moderate	Moderate	Low	Low	Low	Low	Low
1898	Moderate	Moderate	Low	Low	Low	Low	Low
1901	High	High	Low	Low	Low	Low	Moderate
1902	Moderate	Moderate	Low	Low	Low	Low	Low
1903	High	High	Low	Low	Low	Low	Low
1904	Moderate	Moderate	Low	Low	Low	Low	Low
1905	High	High	Low	Low	Low	Low	Low
1906	Moderate	High	Low	Low	Low	Low	Low
1907	Moderate	Moderate	Low	Low	Low	Low	Low
1908	Moderate	High	Low	Low	Low	Low	Low
1909	Moderate	Moderate	Low	Low	Low	Low	Low
1910	Moderate	High	Low	Low	Low	Low	Low
1911	Moderate	Moderate	Low	Low	Low	Low	Low
1912	Low	Moderate	Low	Low	Low	Low	Low
1913	Moderate	Moderate	Low	Low	Low	Low	Low
1914	High	High	Low	Low	Low	Low	Low
1915	High	Moderate	Low	Low	Low	Low	Low
1916	Moderate	Moderate	Low	Low	Low	Low	Low
1917	High	Moderate	Low	Low	Moderate	Low	Low
1918	Moderate	Moderate	Low	Low	Low	Low	Low
1922	Moderate	High	Low	Low	Low	Low	Low
1923	Low	Moderate	Low	Low	Low	Low	Low
1924	Low	Moderate	Low	Low	Low	Low	Low
1925	Low	Moderate	Low	Low	Low	Low	Low
1990	Moderate	Moderate	Low	Low	Low	Low	Low
1991	Low	Moderate	Low	Low	Low	Low	Low
1992	Moderate	Moderate	Low	Low	Low	Low	Low
2001	Moderate	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
2002	Moderate	Moderate	Low	Low	Low	Low	Low
2003	Moderate	Moderate	Low	Low	Low	Low	Low
2004	Moderate	Moderate	Low	Low	Low	Low	Low
2005	Moderate	Moderate	Low	Low	Low	Low	Low
2006	Moderate	Moderate	Low	Low	Low	Low	Low
2007	High	Moderate	Low	Low	Low	Low	Low
2008	Moderate	Moderate	Low	Low	Moderate	Low	Low
2009	High	High	Low	Low	Low	Low	Low
2010	Moderate	Moderate	Low	Low	Low	Low	Low
2011	Low	Moderate	Low	Low	Low	Low	Low
2012	Low	Moderate	Low	Low	Low	Low	Low
2013	Moderate	High	Low	Low	Low	Low	Low
2014	Low	Moderate	Low	Low	Low	Low	Low
2015	Moderate	Moderate	Low	Low	Low	Low	Low
2016	Moderate	Moderate	Low	Low	Low	Low	Low
2018	Moderate	High	Low	Low	Low	Low	Low
2019	High	High	Low	Low	Low	Low	Low
2020	Low	Moderate	Low	Low	Low	Low	Low
2022	Moderate	Moderate	Low	Low	Low	Low	Low
2023	Moderate	Moderate	Low	Low	Low	Low	Low
2090	Low	Low	Low	Low	Low	Low	Low
2091	Low	Low	Low	Low	Low	Low	Low
2092	Low	Low	Low	Low	Low	Low	Low
2093	Low	Moderate	Low	Low	Low	Low	Low
2094	Low	Low	Low	Low	Low	Low	Low
2095	Moderate	Moderate	Low	Low	Low	Low	Low
2096	Low	Moderate	Low	Low	Low	Low	Low
2097	Low	Moderate	Low	Low	Low	Low	Low
2101	Moderate	High	Low	Low	Low	Low	Low
2102	High	High	Low	Low	Low	Low	Low
2103	High	High	Low	Low	Low	Low	Low
2104	High	High	Low	Moderate	Low	Low	Low
2105	Low	Moderate	Low	Low	Low	Low	Low
2106	High	High	Low	Low	Low	Low	Low
2107	Moderate	High	Low	Low	Low	Low	Low
2108	High	High	Low	Moderate	Low	Low	Low
2112	High	High	Low	Low	Low	Low	Low
2113	High	High	Low	Low	Low	Low	Low
2114	Moderate	High	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
2201	Moderate	Moderate	Low	Low	Low	Low	Low
2202	High	Moderate	Low	Low	Low	Low	Low
2203	Moderate	Moderate	Low	Low	Low	Low	Low
2204	High	High	Low	Low	Low	Low	Moderate
2206	Low	Moderate	Low	Low	Low	Low	Low
2207	Moderate	Moderate	Low	Low	Low	Low	Low
2208	Moderate	Moderate	Low	Low	Low	Low	Low
2209	Low	Moderate	Low	Low	Low	Low	Low
2210	Moderate	Moderate	Low	Low	Low	Low	Low
2211	Moderate	Moderate	Low	Low	Low	Low	Low
2212	Low	Moderate	Low	Low	Low	Low	Low
2213	Low	Moderate	Low	Low	Low	Low	Low
2214	High	Moderate	Low	Low	Low	Low	Low
2215	Low	Moderate	Low	Low	Low	Low	Low
2216	Low	Moderate	Low	Low	Low	Moderate	Low
2217	Moderate	Moderate	Low	Low	Low	Low	Low
2301	Special	High	Moderate	Moderate	Low	Low	High
2302	High	High	Low	Low	Low	Low	Low
2303	High	Moderate	Low	Low	Low	Low	Moderate
2304	Moderate	Moderate	Low	Low	Low	Low	Low
2305	High	Moderate	Low	Low	Low	Low	Low
2306	High	High	Low	Low	Low	Low	Moderate
2307	High	High	Low	Low	Low	Low	Low
2308	High	Moderate	Low	Low	Low	Low	Low
2309	High	Moderate	Low	Low	Low	Low	Moderate
2310	High	Moderate	Low	Low	Low	Low	Low
2311	Moderate	High	Low	Low	Low	Low	Low
2312	High	High	Low	Low	Low	Low	Low
2313	Special	Moderate	Low	Low	Low	Low	High
2314	Low	Moderate	Low	Low	Low	Low	Low
2315	Low	Moderate	Low	Low	Low	Low	Low
2317	Moderate	High	Low	Low	Low	Low	Low
2380	Low	Low	Low	Low	Low	Low	Low
2381	Low	Low	Low	Low	Low	Low	Low
2382	Moderate	Moderate	Low	Low	Low	Low	Low
2383	Moderate	Moderate	Low	Low	Low	Low	Low
2384	Moderate	Moderate	Low	Low	Low	Low	Low
2385	Moderate	Moderate	Low	Low	Low	Low	Low
2386	Moderate	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
2387	Moderate	Moderate	Low	Low	Low	Low	Low
2388	Moderate	Moderate	Low	Low	Low	Low	Low
2389	Low	Moderate	Low	Low	Low	Low	Low
2390	Moderate	Moderate	Low	Low	Low	Low	Low
2391	Moderate	Moderate	Low	Low	Low	Low	Low
2392	Low	Moderate	Low	Low	Low	Low	Low
2393	Moderate	Moderate	Low	Low	Low	Low	Low
2394	Low	Low	Low	Low	Low	Low	Low
2395	Moderate	Moderate	Low	Low	Low	Low	Low
2401	High	High	Low	Low	Low	Low	Low
2402	Moderate	Moderate	Low	Low	Low	Low	Low
2403	High	High	Low	Low	Low	Low	Low
2404	High	Moderate	Low	Low	Low	Low	Low
2407	Moderate	Moderate	Low	Low	Low	Low	Low
2408	High	High	Low	Low	Low	Low	Low
2409	Moderate	Moderate	Low	Low	Low	Low	Low
2410	Moderate	High	Low	Low	Low	Low	Low
2412	Moderate	Moderate	Low	Low	Low	Low	Low
2413	Low	Moderate	Low	Low	Low	Low	Low
2414	Low	Moderate	Low	Low	Low	Low	Low
2415	High	High	Low	Low	Low	Low	Low
2416	Low	Moderate	Low	Low	Low	Low	Low
2418	High	Moderate	Low	Low	Low	Low	Low
2419	Moderate	Moderate	Low	Low	Low	Low	Low
2420	Moderate	High	Low	Low	Low	Low	Low
2421	Moderate	Moderate	Low	Low	Low	Low	Low
2422	Low	Moderate	Low	Low	Low	Low	Low
2423	Low	Moderate	Low	Low	Low	Low	Low
2424	High	High	Low	Low	Low	Low	Low
2425	Low	Moderate	Low	Low	Low	Low	Low
2426	Low	Moderate	Low	Low	Low	Low	Low
2501	High	High	Low	Moderate	Low	Low	Low
2502	Moderate	High	Low	Low	Low	Low	Low
2503	High	High	Low	Low	Low	Low	Low
2504	High	High	Low	Low	Low	Low	Low
2505	Moderate	Moderate	Low	Low	Low	Low	Low
2506	Moderate	High	Low	Low	Low	Low	Low
2507	High	High	Low	Low	Low	Low	Low
2508	Special	Special	Low	Moderate	Low	Low	Moderate

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
2509	Special	Special	Low	Low	Low	Low	Moderate
2510	Moderate	High	Low	Low	Low	Low	Low
2511	Moderate	Moderate	Low	Low	Low	Low	Low
2512	Low	Moderate	Low	Low	Low	Low	Low
2513	Moderate	Moderate	Low	Low	Low	Low	Low
2514	Moderate	Moderate	Low	Low	Low	Low	Low
2515	High	High	Low	Low	Low	Low	Low
2516	High	High	Low	Low	Low	Low	Low
2517	Moderate	Moderate	Low	Low	Low	Low	Low
2518	Moderate	High	Low	Low	Low	Low	Low
2519	Moderate	Moderate	Low	Low	Low	Low	Low
2520	Moderate	Moderate	Low	Low	Low	Low	Low
2521	Low	Moderate	Low	Low	Low	Low	Low
2522	Moderate	Moderate	Low	Low	Low	Low	Low
2523	Moderate	Moderate	Low	Low	Low	Low	Low
2524	Moderate	High	Low	Low	Low	Low	Low
2525	Moderate	Moderate	Low	Low	Low	Low	Low
2526	Low	Moderate	Low	Low	Low	Low	Low
2527	Moderate	High	Low	Low	Low	Low	Low
2528	Low	Moderate	Low	Low	Low	Low	Low
2529	Low	Moderate	Low	Low	Low	Low	Low
2601	High	High	Low	Low	Low	Low	Low
2603	High	High	Low	Low	Low	Low	Low
2604	Moderate	High	Low	Low	Low	Low	Low
2605	High	Moderate	Low	Moderate	Low	Low	Low
2606	High	High	Low	Low	Low	Low	Low
2607	Moderate	Moderate	Low	Low	Low	Low	Low
2609	High	High	Low	High	Low	Low	Moderate
2610	Moderate	Moderate	Low	Low	Low	Low	Low
2612	Moderate	Moderate	Low	Low	Low	Low	Low
2614	High	Moderate	Low	Low	Low	Low	Low
2615	Low	Moderate	Low	Low	Low	Low	Low
2616	Low	Moderate	Low	Low	Low	Low	Low
2617	Low	Moderate	Low	Low	Low	Low	Low
2618	Moderate	High	Low	Low	Low	Low	Low
2619	Low	Moderate	Low	Low	Low	Low	Low
2621	Low	Moderate	Low	Low	Low	Low	Low
2622	Low	Moderate	Low	Low	Low	Low	Low
2623	Low	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
2625	Moderate	Moderate	Low	Low	Low	Low	Low
2626	Moderate	Moderate	Low	Low	Low	Low	Low
2701	Low	Low	Low	Low	Low	Low	Low
2801	Low	Moderate	Low	Low	Special	Low	Low
2802	Low	Moderate	Low	Low	Low	Low	Low
2803	Low	Low	Low	Low	Low	Low	Low
2804	Moderate	Moderate	Low	Moderate	Low	Low	Low
2805	Moderate	Moderate	Low	Low	Low	Low	Low
2806	Moderate	Moderate	Low	Low	Low	Low	Low
2807	High	Moderate	Low	Low	Low	Moderate	Low
2808	Low	Moderate	Low	Low	Low	Low	Low
2809	Low	Moderate	Low	Low	Low	Low	Low
2810	Moderate	Moderate	Low	Low	Low	Low	Low
2811	High	High	Low	Moderate	Low	Low	Moderate
2812	Moderate	Moderate	Low	Low	Low	Low	Moderate
2813	Low	Moderate	Low	Low	Low	Low	Low
2815	High	High	Low	Low	Low	Low	Low
2816	Moderate	Moderate	Low	Moderate	Low	Low	Moderate
2817	Moderate	Moderate	Low	Low	Low	Low	Low
2820	Moderate	Moderate	Low	Low	Low	Low	Low
2821	High	High	Low	Low	Low	Low	Low
2824	Low	Moderate	Low	Low	Low	Low	Low
2825	Moderate	Moderate	Low	Low	Low	Low	Low
2827	Low	Low	Low	Low	Low	Low	Low
2828	Moderate	Moderate	Low	Low	Low	Low	Low
2829	Low	Moderate	Low	Moderate	Low	Low	Low
2830	Low	Low	Low	Low	Low	Low	Low
2831	Low	Low	Low	Low	Low	Low	Low
2832	Low	Low	Low	Low	Low	Low	Low
2833	Low	Low	Low	Low	Low	Low	Low
2834	Low	Low	Low	Low	Low	Low	Low
2835	Low	Low	Low	Low	Low	Low	Low
2901	High	Moderate	Low	Low	Moderate	Low	Moderate
2902	High	Moderate	Low	Moderate	Low	Low	Low
2906	Moderate	Moderate	Low	Low	Low	Low	Low
2909	Moderate	Moderate	Low	Low	Low	Moderate	Low
2910	High	High	Low	Low	Low	Low	Low
2911	Moderate	High	Low	Low	Low	Low	Low
2913	Moderate	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
2915	High	Moderate	Low	Low	Low	Low	Low
2924	High	Moderate	Low	Low	Low	Low	Moderate
2942	Moderate	Moderate	Low	Low	Low	Low	Low
2944	Low	Moderate	Low	Low	Low	Low	Low
3001	Moderate	Moderate	Low	Low	Low	High	Low
3002	Moderate	Moderate	Low	Moderate	Low	High	Low
3003	Moderate	Moderate	Low	Low	Low	Low	Low
3004	Moderate	Low	Low	Low	Low	Low	Low
3005	Low	Low	Low	Low	Low	High	Low
3006	High	Moderate	Low	Low	Low	Low	Low
3007	Moderate	Moderate	Low	Low	Low	Moderate	Low
3008	Low	Low	Low	Low	Low	High	Low
3009	Low	Moderate	Low	Low	Low	Moderate	Low
3010	Low	Low	Low	Low	Low	Moderate	Low
3011	Moderate	Moderate	Low	Moderate	Low	Low	Low
3012	Low	Low	Low	Low	Low	Moderate	Low
3013	Low	Moderate	Low	Low	Low	Low	Low
3014	Moderate	Moderate	Low	Low	Low	Low	Low
3015	Moderate	Moderate	Low	Low	Low	Low	Low
3016	Low	Low	Low	Low	Low	Low	Low
3017	Low	Moderate	Low	Low	Low	Moderate	Low
3018	Low	Moderate	Low	Low	Low	Moderate	Low
3019	Low	Low	Low	Low	Low	Low	Low
3020	Moderate	Moderate	Low	Low	Low	Low	Low
3021	Low	Moderate	Low	Low	Low	Special	Low
3022	Low	Low	Low	Low	Low	Low	Low
3101	Low	Moderate	Low	Low	Low	High	Low
3102	Low	Low	Low	Low	Low	Moderate	Low
3103	Low	Low	Low	Low	Low	Low	Low
3104	Low	Moderate	Low	Low	Low	Moderate	Low
3105	Moderate	Moderate	Low	Low	Low	Low	Low
3108	Low	Moderate	Low	Low	Low	Low	Low
3111	Moderate	Moderate	Low	Low	Low	Low	Low
3112	Low	Moderate	Low	Low	Low	Low	Low
3113	High	Moderate	Low	Low	Low	Moderate	Low
3114	Moderate	Moderate	Low	Low	Low	Low	Low
3115	Moderate	Moderate	Low	Low	Low	Low	Low
3116	Moderate	Moderate	Low	Low	Low	Low	Low
3117	Moderate	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
3118	Moderate	Moderate	Low	Low	Low	Low	Low
3119	Moderate	Moderate	Low	Low	Low	Low	Low
3120	Moderate	Moderate	Low	Low	Low	Low	Low
3121	Low	Moderate	Low	Low	Low	Low	Low
3122	Low	Moderate	Low	Low	Low	Low	Low
3123	Moderate	Moderate	Low	Low	Low	Low	Low
3124	Low	Low	Low	Low	Low	Low	Low
3125	Moderate	Moderate	Low	Low	Low	Low	Low
3127	Low	Moderate	Low	Low	Low	Low	Low
3128	Low	Moderate	Low	Low	Low	Moderate	Low
3129	Low	Moderate	Low	Low	Low	Moderate	Low
3130	Low	Moderate	Low	Low	Low	Moderate	Low
3131	Moderate	Moderate	Low	Low	Low	Moderate	Low
3132	High	Moderate	Low	Low	Low	Low	Low
3133	Moderate	Moderate	Low	Low	Low	Low	Low
3135	Moderate	Moderate	Low	Low	Low	Low	Low
3136	Low	Low	Low	Low	Low	Moderate	Low
3137	Low	Low	Low	Low	Low	Moderate	Low
3139	Low	Moderate	Low	Low	Low	Low	Low
3201	Moderate	Moderate	Low	Moderate	Moderate	Low	High
3202	Low	Moderate	Low	Low	Low	Low	Moderate
3203	Moderate	Moderate	Low	Low	Low	Low	Low
3204	High	Moderate	Low	Low	Low	Low	Low
3205	High	Moderate	Low	Low	Low	Moderate	Moderate
3206	Moderate	Moderate	Low	Low	Low	Low	Low
3207	Moderate	Moderate	Low	Low	Low	Low	Moderate
3208	Moderate	High	Low	Low	Low	Low	Low
3209	Special	High	Low	Low	Low	Low	Moderate
3210	Moderate	Moderate	Low	Moderate	Low	Low	Low
3211	High	Moderate	Low	Moderate	Low	Low	Low
3212	High	High	Low	Low	Low	Moderate	Moderate
3213	Moderate	High	Low	Low	Low	Low	Low
3214	Low	Moderate	Low	Low	Low	Moderate	Low
3215	Low	Moderate	Low	Low	Low	Low	Low
3216	Low	Low	Low	Low	Low	Low	Low
3217	Low	Low	Low	Low	Low	Low	Low
3218	Moderate	Moderate	Low	Low	Low	Low	Low
3219	Low	Low	Low	Low	Low	Low	Low
3220	Low	Moderate	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
3221	Low	Moderate	Low	Low	Low	Low	Low
3222	Moderate	Moderate	Low	Low	Low	Low	Low
3223	High	Moderate	Low	Low	Low	Low	Moderate
3224	Moderate	Moderate	Low	Low	Low	Low	Low
3225	High	Moderate	Low	Low	Low	Low	Low
3226	Low	Moderate	Low	Low	Low	Low	Low
3227	Low	Moderate	Low	Low	Low	Low	Low
3228	Low	Moderate	Low	Low	Low	Low	Low
3229	Low	Moderate	Low	Low	Low	Low	Low
3230	Low	Moderate	Low	Low	Low	Low	Low
3231	Moderate	Moderate	Low	Low	Low	Low	Low
3232	Low	Moderate	Low	Low	Low	Low	Low
3233	Low	Moderate	Low	Low	Low	Low	Low
3234	Low	Moderate	Low	Low	Low	Low	Low
3235	Moderate	High	Low	Low	Low	Low	Low
3236	Moderate	High	Low	Low	Low	Low	Low
3237	Low	Low	Low	Low	Low	Low	Low
3238	Low	Low	Low	Low	Low	Low	Low
3239	Moderate	High	Low	Low	Low	Low	Low
3301	High	Moderate	Low	Low	Low	Low	Low
3302	Moderate	High	Low	Low	Low	Low	Low
3303	High	Moderate	Low	Low	Low	Low	Low
3304	Moderate	Moderate	Low	Low	Low	Low	Low
3305	High	Moderate	Low	Low	Low	Low	Low
3306	Moderate	Moderate	Low	Low	Low	Low	Low
3307	Moderate	Moderate	Low	Low	Low	Low	Low
3308	Moderate	Moderate	Low	Low	Low	Low	Low
3309	Low	Moderate	Low	Low	Low	Low	Low
3310	Moderate	Moderate	Low	Low	Low	Low	Low
3312	Low	Moderate	Low	Low	Low	Low	Low
3315	Moderate	Moderate	Low	Low	Low	Low	Low
3316	Low	Moderate	Low	Low	Low	Low	Low
3322	Low	Moderate	Low	Low	Low	Low	Low
3323	Low	Low	Low	Low	Low	Low	Low
3324	Moderate	Moderate	Low	Low	Low	Low	Low
3325	Low	Moderate	Low	Low	Low	Low	Low
3326	Low	Low	Low	Low	Low	Low	Low
3328	Low	Moderate	Low	Low	Low	Low	Low
3401	High	Low	Low	Low	Low	Low	Moderate

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
3402	Moderate	Moderate	Low	Low	Low	Low	Low
3403	Low	Moderate	Low	Low	Low	Low	Low
3404	Low	Moderate	Low	Low	Low	Low	Low
3405	Low	Low	Low	Low	Low	Low	Low
3406	Low	Moderate	Low	Low	Low	Low	Low
3407	Moderate	Moderate	Low	Low	Low	Low	Low
3408	Low	Moderate	Low	Low	Low	Low	Low
3409	Low	Moderate	Low	Low	Low	Low	Low
3410	Low	Moderate	Low	Low	Low	Low	Low
3411	Moderate	Moderate	Low	Low	Low	Low	Low
3412	Moderate	Moderate	Low	Low	Low	Low	Low
3413	Low	Moderate	Low	Low	Low	Low	Low
3414	Low	Moderate	Low	Low	Low	Low	Low
3415	High	Moderate	Low	Low	Low	Low	Low
3416	Low	Low	Low	Low	Low	Low	Low
3417	Moderate	Moderate	Low	Low	Low	Low	Low
3418	Low	Low	Low	Low	Low	Low	Low
3419	Moderate	High	Low	Low	Low	Low	Low
3420	High	High	Low	Low	Low	Low	Low
3421	Low	Moderate	Low	Low	Low	Low	Low
3422	High	Moderate	Low	Low	Low	Low	Low
3423	High	Moderate	Low	Low	Low	Low	Low
3424	Low	Moderate	Low	Low	Low	Low	Low
3425	Low	Moderate	Low	Low	Low	Low	Low
3426	Low	Moderate	Low	Low	Low	Low	Low
3501	Moderate	Moderate	Low	Low	Low	Low	Low
3502	Low	Moderate	Low	Low	Low	Low	Low
3503	Low	Low	Low	Low	Low	Low	Low
3504	Low	Moderate	Low	Low	Low	Moderate	Low
3505	Low	Moderate	Low	Low	Low	Low	Low
3506	Moderate	Moderate	Low	Low	Moderate	Moderate	Low
3507	Moderate	Moderate	Low	Low	Low	Low	Low
3508	Moderate	Moderate	Low	Low	Low	Low	Moderate
3509	Moderate	Moderate	Low	Low	Low	Moderate	Low
3510	Low	Moderate	Low	Low	Low	Low	Low
3511	Moderate	Moderate	Low	Low	Low	Low	Low
3512	Moderate	Low	Low	Low	Low	Low	Low
3513	Low	Moderate	Low	Low	Low	Moderate	Low
3514	Low	Low	Low	Low	Low	Low	Low

RMZ	Fire	EMS	Bomb	Tech Rescue	ARFF	Water	Hazmat
3515	Low	Moderate	Low	Low	Low	Low	Low
3517	Low	Low	Low	Low	Low	Low	Low
3518	Low	Moderate	Low	Low	Low	Low	Low
3525	Low	Moderate	Low	Low	Low	Low	Moderate
3526	Low	Moderate	Low	Low	Low	Low	Low
4001	Low	Low	Low	Low	Low	Low	Low
4002	Low	Moderate	Low	Low	Low	Moderate	Low
4003	Low	Moderate	Low	Low	Low	Moderate	Low
4004	Low	Moderate	Low	Low	Low	Low	Low
4005	High	High	Low	Low	Low	Low	Moderate
4006	High	Moderate	Low	Low	Low	Low	Low
4007	High	High	Low	Low	Low	Low	Low
4008	Moderate	Moderate	Low	Low	Moderate	Low	Low
4009	Moderate	Moderate	Low	Low	Low	Moderate	Low
4010	Moderate	Moderate	Low	Low	Low	Low	Low
4011	High	Moderate	Low	Low	Low	Low	Low
4012	Moderate	Moderate	Low	Low	Low	Low	Low
4013	Low	Moderate	Low	Low	Low	Low	Low
4014	Low	Moderate	Low	Low	Low	Low	Low
4015	Low	Moderate	Low	Low	Low	Low	Low
4016	High	Moderate	Low	Low	Low	Low	Low
4017	High	Moderate	Low	Low	Low	Low	Low
4018	Low	Moderate	Low	Low	Low	Low	Low
4019	Low	Moderate	Low	Low	Low	Low	Low
4020	Low	Low	Low	Low	Low	Low	Low
4021	Low	Moderate	Low	Low	Low	Low	Low
4022	Low	Moderate	Low	Low	Low	Low	Low
4023	Low	Moderate	Low	Low	Low	Low	Low
4024	Low	Moderate	Low	Low	Low	Low	Low
4025	Low	Moderate	Low	Low	Low	Low	Low
4026	Moderate	Moderate	Low	Low	Low	Low	Low
4027	Low	Moderate	Low	Low	Low	Low	Low

Fire Protection & Detection Systems Incorporated into MCFRS Risk Analysis [2B.5]

Fire protection systems are incorporated into the risk assessment as one of several elements of risk comprising the overall fire risk within each risk management zone (RMZ). The risk assessment includes a fire risk element examining whether the predominant residential-zoned housing stock within a given RMZ is equipped with sprinklers. Per County law and by Executive Regulation, newly constructed garden apartments and townhouses built since 1988, and newly constructed single-family homes built since 2004, must be sprinklered. Residences of these types built before the respective dates are considered non-sprinklered; although a small percentage of residences - primarily single-family homes - have been equipped with sprinklers in cases where systems had been desired by new home purchasers and specified within new home contracts. Sprinkler systems have been required in newly built residential and office high-rises since 1974, with retrofitting of office high-rises required since 1987.

Fire detection systems are not specifically incorporated into the risk assessment because these systems have been included in new construction of all types within Montgomery County for many decades, and smoke alarms were retroactively required in existing commercial and residential occupancies since 1978. While a small percentage of residences at any given time may lack smoke alarms despite the mandate, the MCFRS risk assessment includes an assumption that all residences are equipped with smoke alarms since it is too difficult, on an ongoing basis concerning over 375,000 residential units County-wide, to determine and record which do not. When MCFRS personnel encounter a residence lacking a smoke alarm during home safety visits or actual incidents, they install a free smoke alarm before departing the premises whenever practicable (except during most EMS incidents when quick departure is required).

As outlined in the Methodology of Identifying, Assessing, Categorizing, and Classifying Risks [CC 2B.1] section of this CRA/SOC, the following table documents the points assigned:

Predominant residential zoned housing stock within a box area (RMZ) is sprinklered	SFH's built beginning in 2005 & garden apts. and townhouses built beginning in 1989 shall be considered sprinklered.	Sprinklered = 0 points Not sprinklered = 3 points

In 2014 MCFRS leadership implemented the Multi-Family Inspection Initiative with the intent of having first-due companies inspect all garden style and low-rise apartment buildings in an effort to build a database that included fire protection and inspection systems documentation. Prior to this initiative, this type of data was only available for high-rise occupancies. This initiative was successful, and the data collected was included in the MCFRS fire risk analysis.

Montgomery County Fire and Rescue Service

Fire Chief's General Order

Rescinded on 7/22/15

NUMBER: 14-18
October 10, 2014

TO: **All MCFRS Personnel**

FROM: **Fire Chief Steve Lohr**

SUBJECT: **Multi-Family Inspection Initiative**

In an attempt to address the hazards caused by fire in multi-family dwellings, MCFRS has embarked on an initiative to inspect all multi-family occupancies in Montgomery County.

Identification of Multi-Family Dwellings

Each Station Officer must ensure that all multi-family dwellings in the station's first-due area are identified and that the corresponding data is collected and reported in the manner prescribed in the training video by December 31, 2014. Station Commanders must coordinate this effort to avoid duplication of effort among shifts. Fire Code Compliance will then use the collected data to build a comprehensive database that will also include data from GIS and Housing Department sources.

Training

A training video explaining the initiative and the responsibilities of field personnel is located on *quicklinks* at: http://youtu.be/nKbZG5dpHUg

Inspection of Multi-Family Dwellings

The Fire Code Compliance Section will be responsible for inspecting all identified multi-family occupancies.

Attachment: Hard copy Data Collection Form

Example of raw collected Multi-Family Initiative data which was eventually geocoded:

Station Area #	Street Num.	Street Name	Suf-fix	# of Stories (in the front)	# of Stories (in the rear)	Total # of units in building	Is there a fire alarm system?	sprinkler system?	Stand-pipe?
2	912	Prospect	ST	2	2	4	No	No	No
2	918	Prospect	ST	2	2	3	No	No	No
2	2	Quebec	TERR	2	2	4	No	No	No
2	1000	Quebec	TERR	3	3	10	Yes	No	No
2	1002	Quebec	TERR	3	3	10	Yes	No	No
2	1005	Quebec	TERR	2	2	4	No	No	No
2	1006	Quebec	TERR	3	4	14	Yes	No	No
2	1008	Quebec	TERR	3	4	14	Yes	No	No
2	1009	Quebec	TERR	2	2	4	No	No	No

Assessment: Critical Infrastructure in RMZs for Capabilities in Meeting Risks [2B.6]

Based on the intent of this PI, as provided in the June 26, 2017 CFAI 9th edition FESSAM Interpretation Guide, MCFRS has assessed its critical infrastructure "that is essential to reaching, controlling, and terminating incidents at risks." Additional guidance on the focus of MCFRS' assessment was gleaned from the Department of Homeland Security (DHS) 2015 Emergency Services Sector Specific Plan (ESSSP), and specifically the following description of identifying these infrastructure:

> "ESS assets, systems, and networks comprise physical, cyber, and human components, each of which contains a variety of specific elements that contribute to the function and protection of the sector (see the sector snapshot). To ensure effective critical infrastructure activity and resource management, the ESS must be able to identify, gather, validate, and update pertinent information on the sector's assets, systems, and networks. The key is to identify the specific infrastructure components that, in their incapacitation or destruction, would result in a debilitating impact on the Nation's security, national economic security, national public health and safety, or public confidence. This perspective of infrastructure criticality is not confined to the national level, but is also present at the regional, State, and local levels."

Based upon the aforementioned guidance and definition, MCFRS has determined and assessed the following critical infrastructure which are essential to reaching, controlling, and terminating incidents occurring at risk locations and, subsequently, meeting its mission.

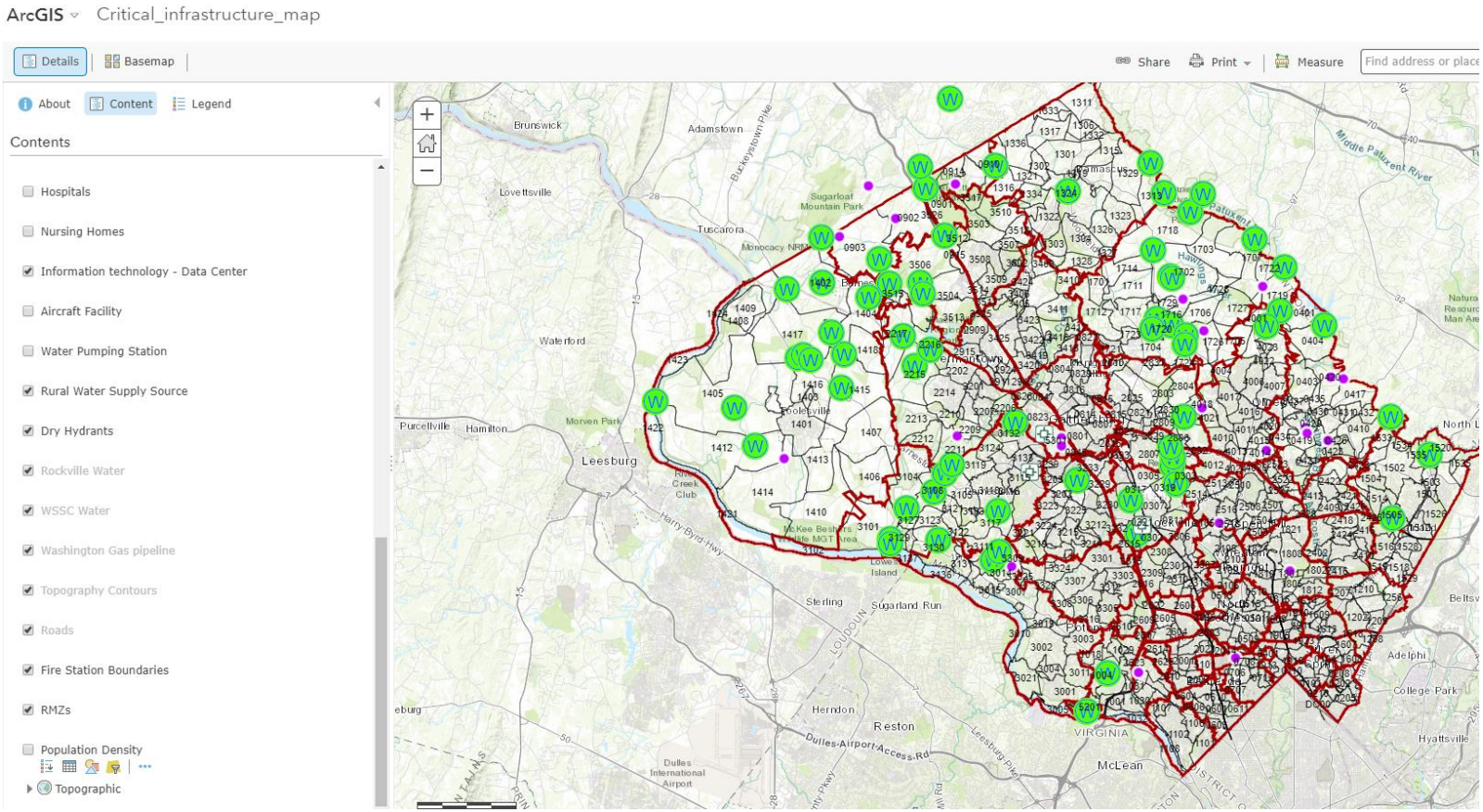
County-wide critical infrastructure (not limited to a planning/risk management zone):

- Highway/street network
- Utilities: water, electric, gas
- Communication systems:
    - MCFRS radio sites
    - MCFRS data centers ("server farms")

Critical infrastructure in specific locations and within specific MCFRS planning/risk management zones:

- MCFRS facilities: 37 stations, ECC, PSHQ, Logistics/CMF, PSTA, FEI, Dover Road Warehouse
- Federal fire stations: Stations 50-54
- Refueling facilities: fire station sites and MCDOT sites/depots
- Drafting sites, cisterns, dry hydrants, and fire hydrants
- Hospitals and the Adventist HealthCare Germantown Emergency Center (GEC)

The following page provides the reader with a screenshot of the MCFRS Critical Infrastructure ARC GIS online map, which enables the agency to assess these critical infrastructure elements within its planning zones.



Screenshot of the MCFRS Critical Infrastructure ARC GIS online map

Engage W/Other Disciplines/Grps. to Compare & ID Future Threats & Risks [2B.7]

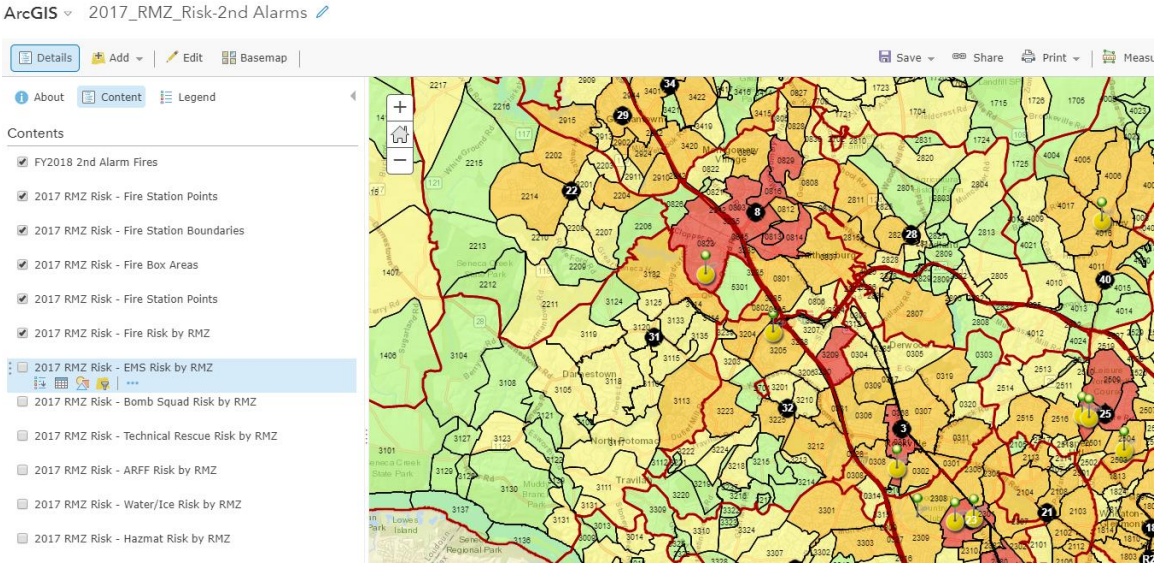
FUTURE

This is a new 10th Edition Model Performance Indicator

VIII. MCFRS Current Deployment and Performance [Criterion 2C]

MCFRS Methodology:Consistent Provision of Service Levels in all Programs[CC 2C.1]

MCFRS has a documented and adopted methodology for determining response strategies for the provision of consistent service levels throughout the County for the department's 21 emergency response programs. The overall methodology includes two components: 1) a methodology to ensure the department's community risk assessment is periodically updated, and 2) a methodology that verifies and validates that resources are optimally deployed to provide consistent service levels throughout the County through response coverage strategies. Each component is described below.



This is a screenshot depicting a portion of the 12 second alarm or greater fires thus far in Fiscal Year 2018 on the updated Community Risk Assessment Map with the Fire Risk layer enabled. All 12 of these significant building fire incidents thus far have fallen within defined Special and High Risk Management Zones. Not one has fallen within Moderate or Low Risk Zones, thus validating the methodology utilized to define community fire risk locations.

The first methodology involves ongoing efforts by the MCFRS Accreditation Manager, GIS specialist, IT data team, and others to update the community risk assessment. During the current accreditation cycle, these individuals have revised and improved the risk assessment framework, including revision of risk criteria, development of a new risk scoring system, and development of improved risk maps (i.e., content, format and scale).

The following 2019 email from the Fire Chief to the Accreditation Manager and GIS Specialist displays MCFRS' commitment to an ongoing methodology of continuing to evaluate and update risk assessments throughout the life-cycle of the MCFRS Community Risk Assessment: Standards of Cover. The Fire Chief understood the importance of continuous improvement and best practices when he mandated the newest guidance within the 9th, and now subsequent editions, of the CFAI model. The map screenshots after this email depict the older four population density zones and the now adopted two population density zones. This initiative was complicated and involved updating SQL Crystal reports algorithms and many other reporting processes but was successfully accomplished and displays the continuous self-improvement mantra.

From: Goldstein, Scott
Sent: Wednesday, May 22, 2019 11:19 AM
To: Vlassopoulos, Demetrios (Jim) <Demetrios.Vlassopoulos@montgomerycountymd.gov>; Ierley, Sarah <Sarah.Ierley@montgomerycountymd.gov>
Cc: Howard Richards, Dorcus <Dorcus.Howard@montgomerycountymd.gov>; Gutschick, Scott <Scott.Gutschick@montgomerycountymd.gov>
Subject: Density Zones

Jim and Sarah

Can we change now to reflect to the two CFAI density zones?

Urban and Rural

Can we change the reports to get the past archive data to show in only 2 density zones?

Scott E. Goldstein
Fire Chief
Montgomery County Fire & Rescue Service
100 Edison Park Drive, 2nd Floor
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Office 240-777-2464
Fax 240-777-2415
Cell - 240-832-2598
scott.goldstein@montgomerycountymd.gov

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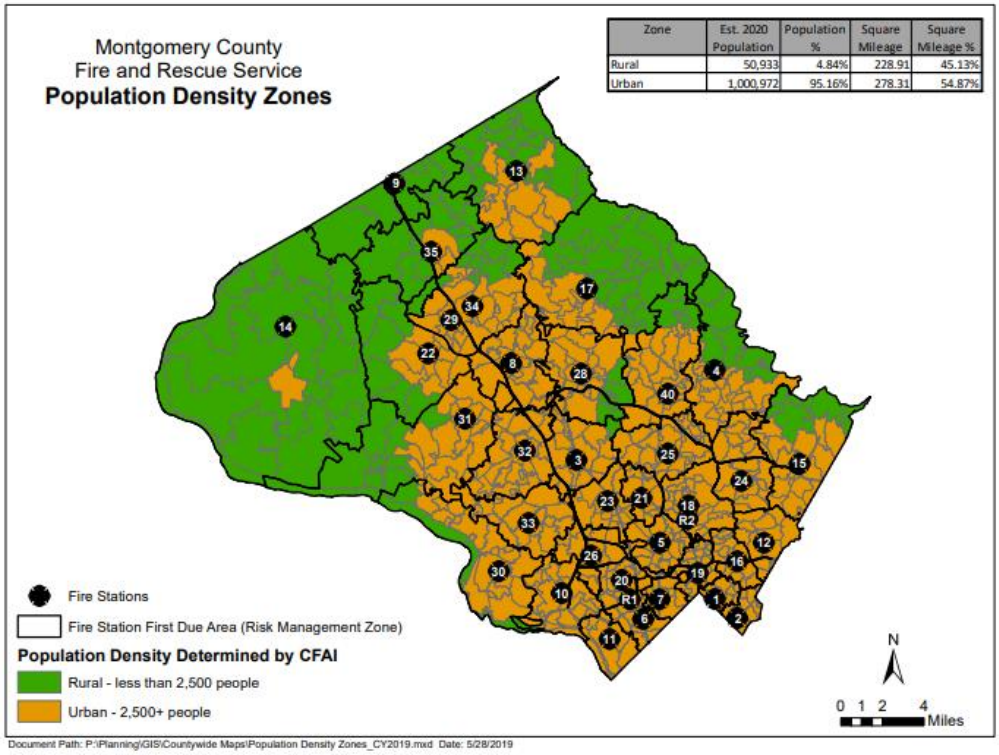
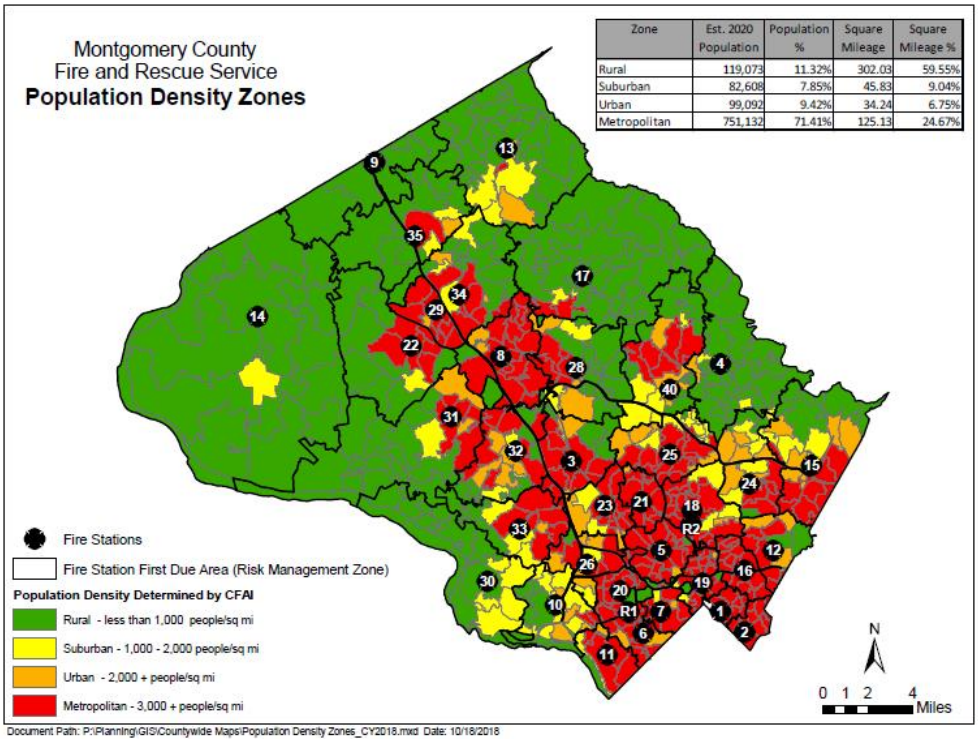
MCFRS' Adopted Two-Density Zone map (adopted in 2019):



Zone	Est. 2020 Population	Population %	Square Mileage	Square Mileage %
Rural	50,933	4.84%	228.91	45.13%
Urban	1,000,972	95.16%	278.31	54.87%

Document Path: P:\Planning\GIS\Countywide Maps\Population Density Zones_CY2019.mxd Date: 5/28/2019

Older Population Four-Density Zone Map:



Zone	Est. 2020 Population	Population %	Square Mileage	Square Mileage %
Rural	119,073	11.32%	302.03	59.55%
Suburban	82,608	7.85%	45.83	9.04%
Urban	99,092	9.42%	34.24	6.75%
Metropolitan	751,132	71.41%	125.13	24.67%

Document Path: P:\Planning\GIS\Countywide Maps\Population Density Zones_CY2018.mxd Date: 10/18/2018

The second methodology is more complex, consisting of the following elements: risk assessment (focusing on the components and results of the risk assessment versus the process for updating it as described above), needs assessment, financial analysis, and planning and implementation. Each element is comprised of several sub-elements which are addressed by the combined efforts of the Office of the Fire Chief (i.e., Planning and Accreditation Section), Operations Division (i.e., EMS Section, Special Operations Section, Field Operations, and Communications Section), Support Services Division (i.e., IT Section, Facilities Section) and the Fiscal Management Division. Online viewers of this Community Risk Assessment: Standards of Cover manual are encouraged to click on the hyperlink to be directed to a document listing the MCFRS Methodology for the Provision of Service Levels.

The following email from the Operations Division Chief provides an example of the aforementioned MCFRS "second methodology" of assuring this agency "continually verifies and validates that the available resources are optimally deployed to mitigate identified emergencies". The sentence in quotations is extracted from the Core Competency 2C.1 section of the CPSE 6th Edition Community Risk Assessment: Standards of Cover manual, page 31.

From: Kinsley, John
Sent: Monday, June 19, 2017 11:21 AM
To: #FRS.ASSISTANT CHIEFS <#FRS.ASSISTANTCHIEFS@montgomerycountymd.gov>; #FRS.Battalion Chiefs <#FRS.BATTALIONCHIEFS@montgomerycountymd.gov>; #FRS.Volunteer Chiefs <#FRS.VolunteerChiefs@montgomerycountymd.gov>
Cc: Vlassopoulos, Demetrios (Jim) <Demetrios.Vlassopoulos@montgomerycountymd.gov>
Subject: CAD Changes - Light Smoke on High Rise and High Life Hazard Occupancies

After discussion with the Fire Chief, consideration of opinions on both sides of this issue and review of the data over the past 18 months, we are going to eliminate the "light smoke" adaptive response plans for high rise buildings and high life hazard occupancies. Any smoke conditions in these buildings will be dispatched as full assignments, *effective June 19, 2017*.

Data shows a very low error rate for the "light smoke" adaptive dispatch assignments for most occupancy types; less than 1% of these incidents are upgraded to a full assignment and less than 0.5% were actual working fires.

However, the error rate for high rise and high life hazard occupancies is 6 times that of other occupancy types.

Please be aware that the determination of what is a "high rise building" and "high life hazard occupancy" is driven by EFD questions of the caller:

2. What type of building is involved?
3. How many floors or stories are there?

High Rise = 5 or more stories
High Life Hazard = churches, hospitals, large apartment complexes, lodging locations, nursing homes, & schools

We will continue to monitor the effectiveness of this change over the next 12 months and make any other changes necessary to improve our accuracy and ability to assemble an effective response force in a timely manner at all working fires.

Division Chief John Kinsley, MS, EFO
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Division of Operations
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The following chart depicts the dispatched incident call load for MCFRS across three calendar years. The highlighted row is provided to display the significant reduction of the robust High-Risk Fire Full Assignment dispatches from CY15 through CY17. The methodology employed to reduce these was changing "light smoke conditions" from a FFA to an Adaptive 2-3 response and confirms compliance to this core competency PI.

CY 2015		**CY 2016**		**CY 2017**	
Call Type Group 3		Call Type Group 3		Call Type Group 3	
Program	Incident Count	Program	Incident Count	Program	Incident Count
Adaptive A1F	1,676	Adaptive A1F	1,793	Adaptive A1F	1,685
Adaptive A1N	11,289	Adaptive A1N	11,667	Adaptive A1N	11,335
Adaptive A2-3	1,949	Adaptive A2-3	2,587	Adaptive A2-3	2,493
ALS1	32,187	ALS1	33,753	ALS1	36,370
ALS2	5,789	ALS2	5,603	ALS2	4,719
AFR-HR	0	AFR-HR	0	AFR-HR	0
ARF-SR	2	ARF-SR	1	ARF-SR	0
BLS	49,516	BLS	51,996	BLS	51,946
Bomb Squad	492	Bomb Squad	585	Bomb Squad	269
FFA SRHR	56	FFA SRHR	52	FFA SRHR	50
Full Assignment	**962**	Full Assignment	**569**	Full Assignment	**579**
Hazmat-LR	11	Hazmat-LR	11	Hazmat-LR	8
Hazmat-MR	92	Hazmat-MR	86	Hazmat-MR	86
Hazmat-HR	47	Hazmat-HR	20	Hazmat-HR	13
Hazmat-SR	38	Hazmat-SR	39	Hazmat-SR	40
Service Call	8,614	Service Call	7,449	Service Call	7,749
System	111	System	74	System	54
Tech. Rescue	14	Tech. Rescue	9	Tech. Rescue	15
Water-Ice MR	17	Water-Ice MR	31	Water-Ice MR	14
Water-Ice HR	4	Water-Ice HR	4	Water-Ice HR	6
Water-Ice SR	49	Water-Ice SR	45	Water-Ice SR	52
In-County Total	**112,915**	**In-County Total**	**116,374**	**In-County Total**	**117,483**
Out of County & Federal FD Mutual/Auto Aid	3510	Out of County & Federal FD Mutual/Auto Aid	3999	Out of County & Federal FD Mutual/Auto Aid	3450
Total	**116,425**		**120,373**		**120,933**

Methodology for Monitoring Quality of Emergency Response Performance [CC 2C.2]

MCFRS employs several methods for monitoring the quality of its emergency response performance, including tracking of "headline" and "supporting" performance measures (reported quarterly and annually to CountyStat) and tracking of performance within divisions/sections via dashboards (reported to MCFRS managers during quarterly briefings). Other methods include monitoring of daily response time reports for fire-full assignment and ALS2 events, regular monitoring of 90th percentile response times by emergency program in comparison to baselines and benchmarks, regular monitoring of unit availability/reliability, and periodic monitoring of customer feedback from surveys. Due to the large number of planning areas (i.e., 850 risk management zones) in the County, the department does not monitor the quality of emergency response performance for each program area by RMZ as that would be approximately 18,000 separate data elements to monitor (21 programs X 850 RMZs). Regular monitoring of the quality of response performance of 21 emergency programs in terms of the four-defined population density zones, and periodic monitoring by fire station first-due areas, is more manageable and of greater usefulness to the department.

The following examples are provided to offer the reader an understanding of some of the systems used and the routine programmatic emergency response service delivery performance analysis which routinely transpires to monitor performance.

Each morning, a daily report is emailed to select managers pertaining to high- and special-risk reported structure fire events from the previous 24-hours. The report provides granular unit response timestamps for each incident occurring. The report, in PDF format, is automatically emailed to appropriate stakeholders. Through this methodology, the Accreditation Manager (AM) visually reviews phone-to-dispatch and travel timestamps. If any travel time is significantly outside of normal limits, the AM documents on a tracking sheet and notifies the appropriate Duty Operations Chief (an Assistant Chief) for further investigation. If a unit's arrival on-scene (AOS) timestamp is incorrect (e.g., MDC not working, dispatcher didn't place the unit on-scene when they arrived, etc.) and

the officer in-charge (OIC) of the unit confirms this, the OIC is authorized to correct the time in the RMS. If the unit actually had a long response time, the data is left as is. Correcting erroneous AOS timestamps, especially for smaller datasets such as structure fire incidents, helps validate an accurate performance assessment at the 90th percentile fractal.

-----Original Message-----
From: FRS-NoReply@App.MontgomeryCountyMD.gov [mailto:FRS-NoReply@App.MontgomeryCountyMD.gov]
Sent: Sunday, December 31, 2017 10:00 AM
Subject: MCFRS Fire Response Time Detail Report

12/31/2017 10:00:26

MCFRS Fire Response Time Detail Report
FFA SRHR
Shift Date: 12/30/ 2017
Shift: C

17-0062063 12/30/2017 09:41:21 Box Area: 08-13 417 RUSSELL AVE
Call Type: HIGH RISE STRUCTURE FIRE *Initial Call Type: STRUCTURE FIRE*
*Phone To Pending: **1:04*** *Incident Type (Cleared as): 113 Cooking fire, confined to container*

Unit	Phone To Dispatch Meet (2:00)	Turnout Meet (1:30)		Travel	** Phone To Onscene Meet (6:20 / 10:20) (7:30 / 11:30)		Cancelled?
* A708	2:12	0:10	Y	2:40	5:02	Y	
AT703	2:12	0:12	Y	9:05	11:29		
BC704	2:12	0:29	Y				*Cancelled*
BC705	2:12	0:28	Y	6:37	9:17	Y	
E703B	2:12	1:13	Y	6:40	10:05	Y	
E722	2:12	1:25	Y				*Cancelled*
E729	2:12	0:54	Y	7:37	10:43		
E753	2:12	0:20	Y	6:24	8:56		
PE728	2:12	0:33	Y	8:05	10:50		
PRS703	2:12	0:09	Y	8:18	10:39		
T731	2:12	1:18	Y	8:23	11:53		
T734	2:12	0:24	Y	6:48	9:24	Y	
I724	26:34	0:05	Y	98:13	124:52		
EMS704	3:27	0:00	Y	7:20	10:47		
E734	5:13	0:04	Y	4:39	9:56	Y	
BC703	6:37	0:00	Y	1:59	8:36	Y	
C703	8:49	0:00	Y				

First Arriving Engine Response Time: 8:56 NFPA1710 Staffing: N

12/31/2017 10:00:26

MCFRS Fire Response Time Detail Report
FULL ASSIGNMENT
Shift Date: 12/30/ 2017
Shift: C

17-0062078 12/30/2017 16:33:38 Box Area: 08-08 8966 CENTERWAY RD
Call Type: BUILDING FIRE *Initial Call Type: BUILDING FIRE*
Phone To Pending: ***1:15*** *Incident Type (Cleared as): TBD TBD*

Unit	Phone To Dispatch Meet (2:00)	Turnout Meet (1:30)	Travel	** Phone To Onscene Meet (6:20 / 10:20) (7:30 / 11:30)	Cancelled?
CT708	14:12	4:20			
A734	2:24	0:09 Y	7:23	9:56 Y	
AT740	2:24	1:30 Y	16:32	20:26	
BC702	2:24	1:58			
BC704	2:24	0:20 Y			*Cancelled*
E729	2:24	0:47 Y	9:51	13:02	
PE717	2:24	0:27 Y	12:01	14:52	
PE734	2:24	0:15 Y	7:16	9:55	
PE735	2:24	1:18 Y	14:52	18:34	
PE740	2:24	0:20 Y	14:30	17:14	
RS717	2:24	3:37	3:15	9:16 Y	
* T734	2:24	0:09 Y	3:15	5:48 Y	
EMS704	3:53	0:00 Y	15:30	19:23	
FM732	41:43	0:13 Y	10:33	52:29	
PE728	44:18	0:00 Y	0:00	44:18	
C708	5:00	0:00 Y	10:14	15:14	
BC705	6:02	0:00 Y	13:26	19:28	
M729	6:23	0:34 Y	10:39	17:36	
RS729	6:23	0:08 Y	6:26	12:57	
T725	6:23	1:05 Y	13:18	20:46	
DC700	7:09	0:00 Y	7:42	14:51	

The following graphic is an example of the actual online tracking sheet used to document long travel times (related to a unit's arrival on-scene timestamp) and whether the outlier data was deemed incorrect and was corrected.

MCFRS Extended Travel Time Confirmation Worksheet

File Edit View Insert Format Data Tools Add-ons Help All changes saved in Drive

Didn't notify A/C Baily. Could use an AOS for BFC3. ERF is 25:55

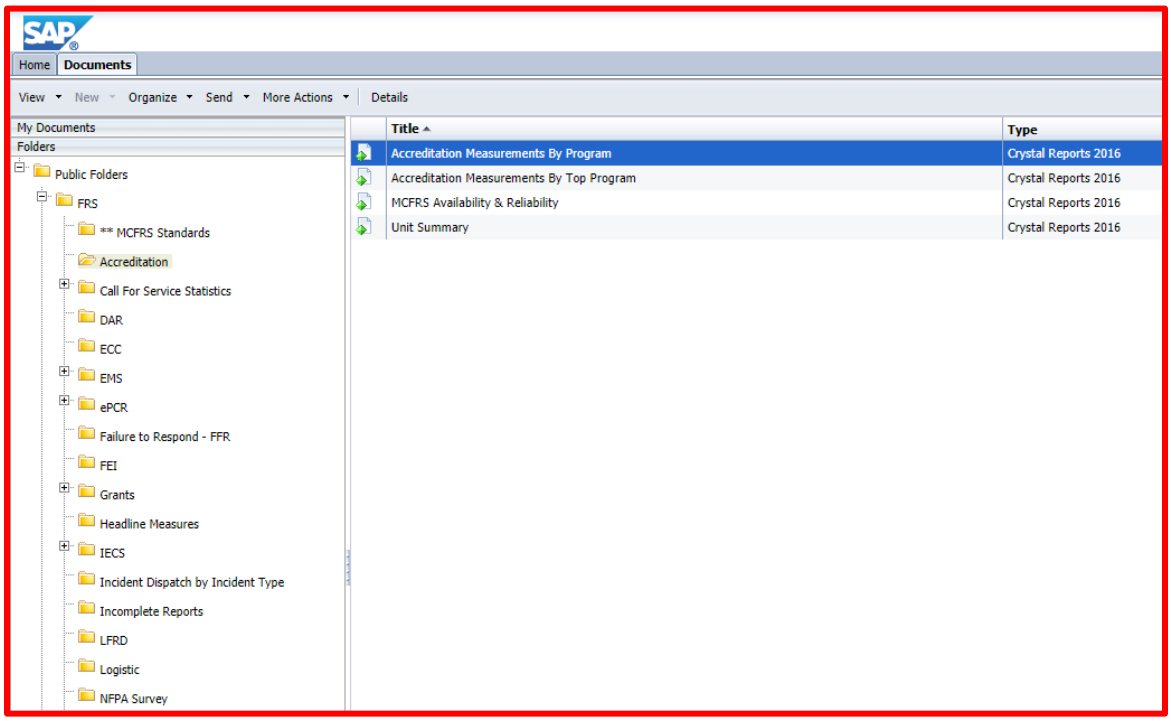
Date	Time	FY	Shift	Incident #	Box Area	Address	Initial Call Type	Call Type	Unit	Unit Travel (mins)	RID +	Updated FireApp	Comments
6/14/2017	19:13:50	17	B	17-0053214	33-01	10 Lamp Post Ct.	House Fire	House Fire	PE726	1:21:33	x	OIC	Notified A/C Bailey on 6/21; fixed on 6/23
7/5/2017	1:04:20	18	A	17-0054088	21-04	4603 Tallahassee Ave.	House Fire	House Fire	AT723	0:20:11	x		Notified A/C Van Gieson on 7/17; followed up on 10/4/17
7/5/2017	1:04:20	18	A	17-0054088	21-04	4603 Tallahassee Ave.	House Fire	House Fire	PE723	0:21:25	x		Notified A/C Van Gieson on 7/17; followed up on 10/4/17
7/5/2017	1:04:20	18	A	17-0054088	21-04	4603 Tallahassee Ave.	House Fire	House Fire	RS703	0:20:55	x		Notified A/C Van Gieson on 7/17; followed up on 10/4/17
7/5/2017	1:04:20	18	A	17-0054088	21-04	4603 Tallahassee Ave.	House Fire	House Fire	BC703	0:25:57	x		Notified A/C Van Gieson on 7/17; followed up on 10/4/17
7/15/2017		18	C	17-0054549	31-08	15608 Copperfield Ln.	House Fire	House Fire	W730*RS729		x	OIC	Needed AOS times: FFA-NH
12/8/2016	18:28:37	17	C	16-0152736	14-08	21204 Martinsburg Road	Structure Fire	Structure Fire	W714	1:28:15	x	OIC	Notified A/C Nelson on 7/31/17; Fixed 8/14/17
7/30/2017	7:44:35	18	C	17-0055219	06-03	4701 Willard Ave.	High Rise Building Fire	High Rise Building Fire	PE707	0:30:56		OIC	Notified A/C Nelson on 8/1/17; fixed on 8/4
8/21/2017	14:37:10	18	A	17-0056222	15-27	12309 La Plata Street	House Fire	House Fire	E715	0:16:53			This is for 1st due engine performnace. Notified A/C Van Gieson on 8/23/17
8/18/2017	10:56:07	18	A	17-0056094	25-08	14104 Whispering Pines Ct.	Building Fire	Building Fire	M725	0:26:34			Notified A/C Van Gieson on 8/23/17; followed up on 10/4/17
9/10/2017	16:23:48	18	C	17-0057092	20-23	5212 Danbury Rd.	House Fire	House Fire	Many				E720; AT751, E750B; PE705; PE707; RS741 all with >18 Travel Times /// Notified A/C Nelson on 9/13/17
10/2/2017	9:31:52	18	A	17-0058053	31-32	11800 Fernshire Road	House Fire	House Fire	BC703	0:24:03	x	BC703	Notified A/C Van Geison on 10/4/17 about B/C Hopkins' AOS
10/6/2017	20:52:15	18	B	17-0058265	31-13	14420 Pebble Hill Lane	House Fire	House Fire	PE708	1:12:59	x	Lucy	Notified A/C Bailey on 10/9/17. Per A/C Bailey PE708 arrived with PAT708 and Ms. Song was asked to correct time.
10/17/2017	20:52:52	18	A	17-0058735	01-04	102 Schuyler Road	Structure Fire	Structure Fire	AT719	1:55:26		OIC	Notified A/C Van Gieson and B/C Davis on 10/20/17
10/17/2017	20:52:52	18	A	17-0058735	01-04	102 Schuyler Road	Structure Fire	Structure Fire	T716	1:55:44		OIC	Notified A/C Van Gieson and B/C Davis on 10/20/17
10/17/2017	20:52:52	18	A	17-0058735	01-04	102 Schuyler Road	Structure Fire	Structure Fire	M701	1:51:52		OIC	Notified A/C Van Gieson and B/C Davis on 10/20/17
10/17/2017	20:52:52	18	A	17-0058735	01-04	102 Schuyler Road	Structure Fire	Structure Fire	A716	0:00:00		OIC	Notified A/C Van Gieson and B/C Davis on 10/20/17
10/25/2017	4:20:48	18	B	17-0059053	22-02	14011 Gallop Ter.	High Rise Building Fire	High Rise Building Fire	RS729	0:00:00		OIC	Need for ERF. not. A/C Bailey on 10/25/17; 3rd truck not dispatched?
7/14/2016	2:50:52	18	A	17-0054484	13-02	26610 Haney Avenue	69D6	69D6	E925	0:51:27		Lucy	FY18 Rural Zone ERF 58:32 because of this; Not. B/C Pazos & Van G on 11/7/17
11/19/2017	18:37:09	18	A	17-0060219[4]	19-08	1718 Republic Road	House Fire	House Fire	E705	0:27:41			Notified A/C Van G on 12/12/17
11/19/2017	18:37:09	18	A	17-0060219[4]	19-08	1718 Republic Road	House Fire	House Fire	PE718	0:27:23			Notified A/C Van G on 12/12/17
11/16/2017	11:08:06	18	A	17-0060073[6]	12-04	12081 Tech Road	Building Fire w/Hazmat	Building Fire w/Hazmat	RS742	0:24:57			Notified A/C Van G on 12/12/17
11/13/2017	15:41:22	18	A	17-0059934[4]	20-19	5222 Pooks Hill Road	House Fire	House Fire	PE705	0:21:38			Notified A/C Van G on 12/12/17
12/10/2017	14:13:58	18	A	17-00611411	33-12	8517 Victory lane	House Fire	House Fire	AT703	0:30:01			Notified A/C Van G on 12/18/17
12/10/2017	14:13:58	18	A	17-00611411	33-12	8517 Victory lane	House Fire	House Fire	AT723	0:29:54			Notified A/C Van G on 12/18/17
10/18/2017	10:29:38	18	B	17-00587597	15-01	4515 Sandy Spring Lane	Structure Fire	Structure Fire					Numerous units causing a 31:05 ERF in Urban Zone. Not. A/C Bailey on 12/19
12/15/2017	18:21:56	18	C	17-00613976	23-01	12300 Twinbrook Pkwy	High Rise Struct Fire	High Rise Struct Fire	PE703B	0:00:00			need AOS for ERF. Not. A/C Nelson on 12/19/17

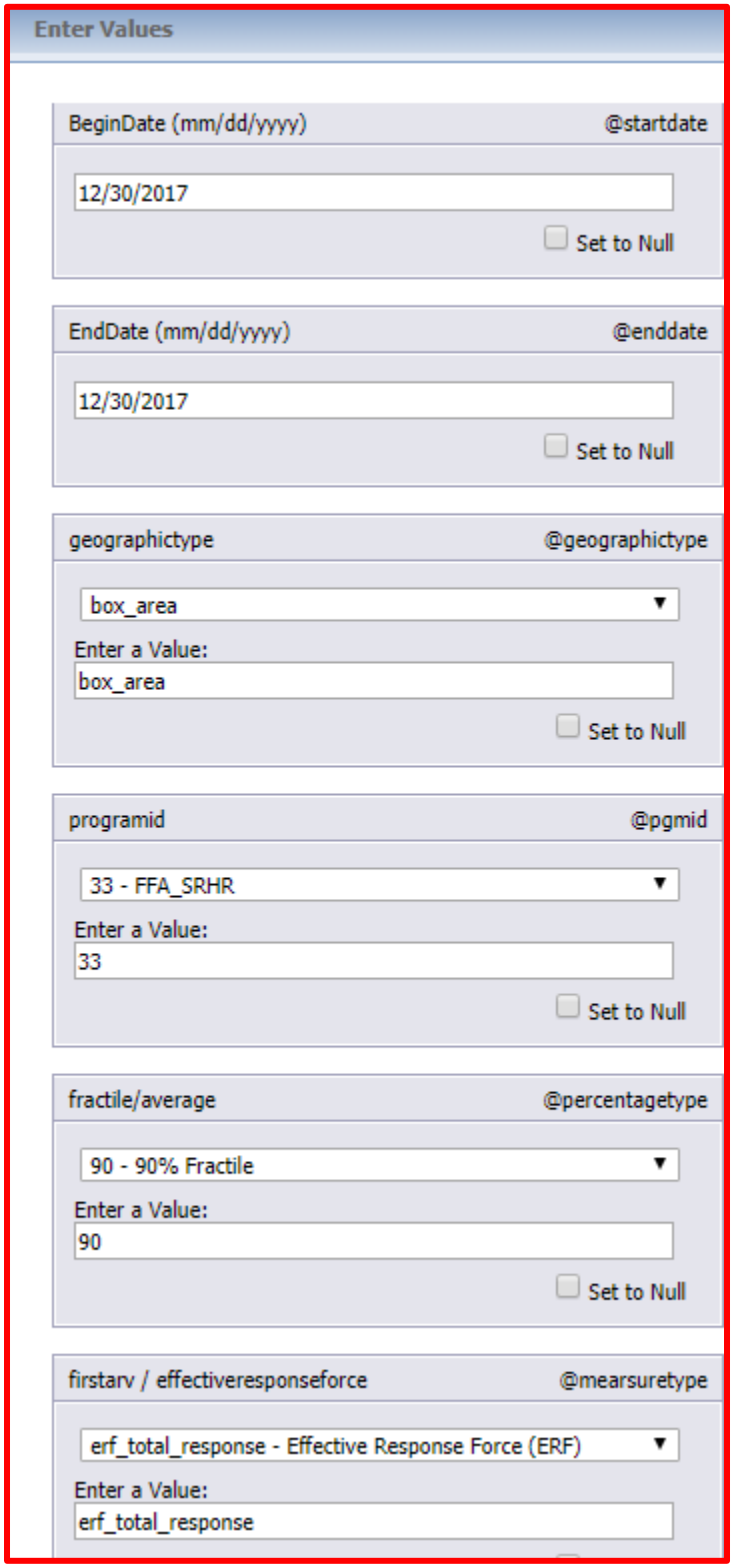
The green-shaded rows indicate confirmed erroneous outlier AOS times which had been corrected by the appropriate OIC or, with approval, the data analyst.

The Accreditation Manager also routinely uses sophisticated Crystal Reports designed by the MCFRS IT/data team to validate performance and/or define outlier response time performance needing further scrutiny.

The following screenshots depict the Crystal Reports interface, the inputs for measuring the effective response force (ERF) of the MCFRS program Fire Full Assignment, Special Risk High-Rise (FFA-SRHR) on December 30, 2017, and the ERF performance. This incident is also seen in the daily emailed PDF example on a previous page.

For MCFRS, the ERF for these types of reported incidents is the timestamp of the last unit to arrive on-scene of 5-engines, 3-aerials, 1-heavy rescue squad, 2-chief officers, and 1-EMS transport unit.




Enter Values
BeginDate (mm/dd/yyyy)
@startdate
12/30/2017
Set to Null
EndDate (mm/dd/yyyy)
@enddate
12/30/2017
Set to Null
geographictype
@geographictype
box_area
Enter a Value:
box_area
Set to Null
programid
@pgmid
33 - FFA_SRHR
Enter a Value:
33
Set to Null
fractile/average
@percentagetype
90 - 90% Fractile
Enter a Value:
90
Set to Null
firstarv / effectiveresponseforce
@mearsuretype
erf_total_response - Effective Response Force (ERF)
Enter a Value:
erf_total_response

This is the output for the ERF report ran for 12/30/17 for Fire Full Assignment, Special Risk High-Rise. The ERF was 11:53 total response time of the last unit to arrive of 5-engines, 3-aerials, 1-heavy rescue squad, 2-chief officers, and 1-EMS transport unit:

Accreditation ERF Total Response

Incident Date: 12/30/2017 To 12/30/2017
Program: ERF_TOTAL_RESPONSE

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time
0813	1	FFA_SRHR	90	00:11:53

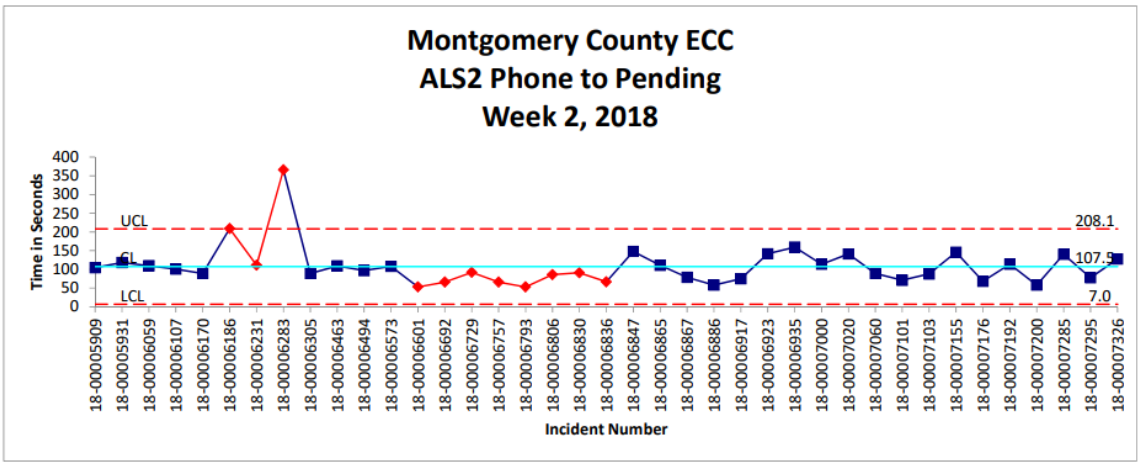
The following is another example of routine performance monitoring. In this case the Calendar Year 2017 first-arriving engine 90th percentile total response time to reported special risk high-rise incidents by station Risk Management Zone response areas are depicted:

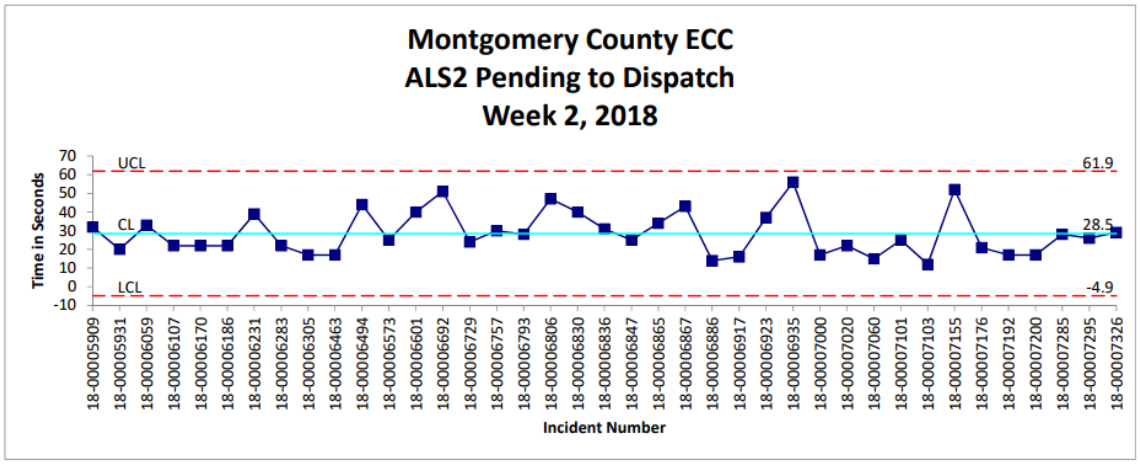
Accreditation First Arriving Total Response

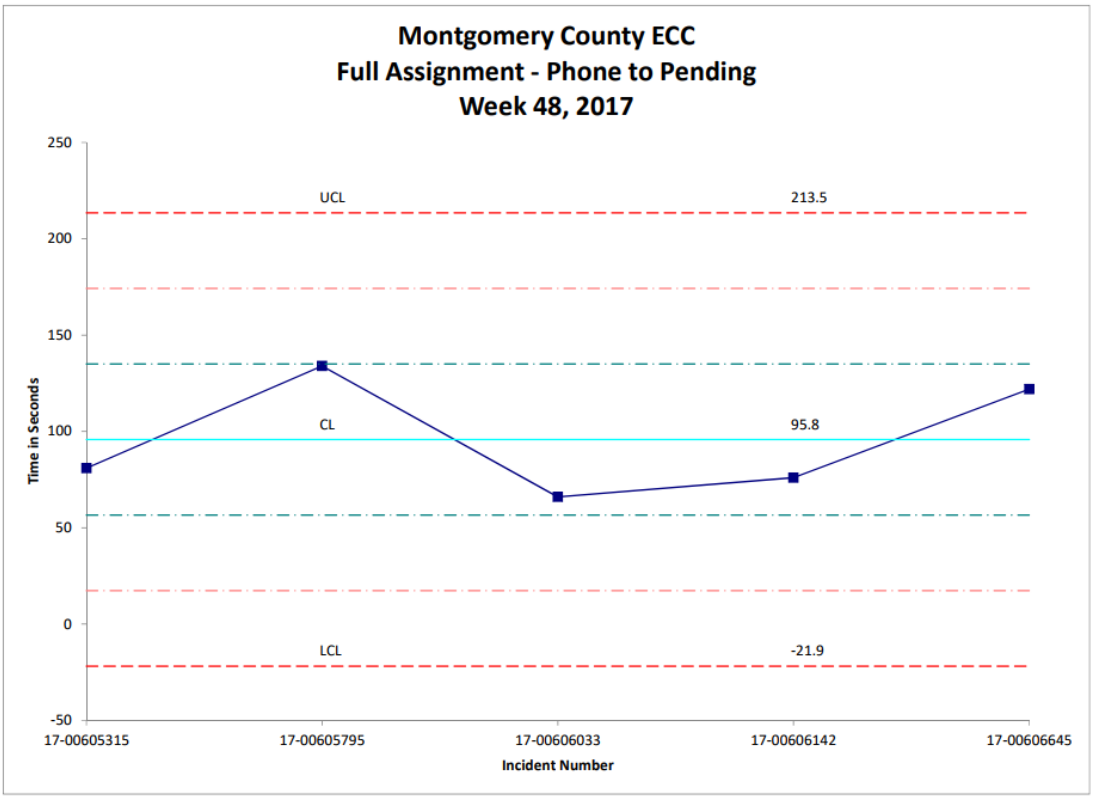
Incident Date: 01/01/2017 To 12/31/2017
Program: TOTAL_RESPONSE

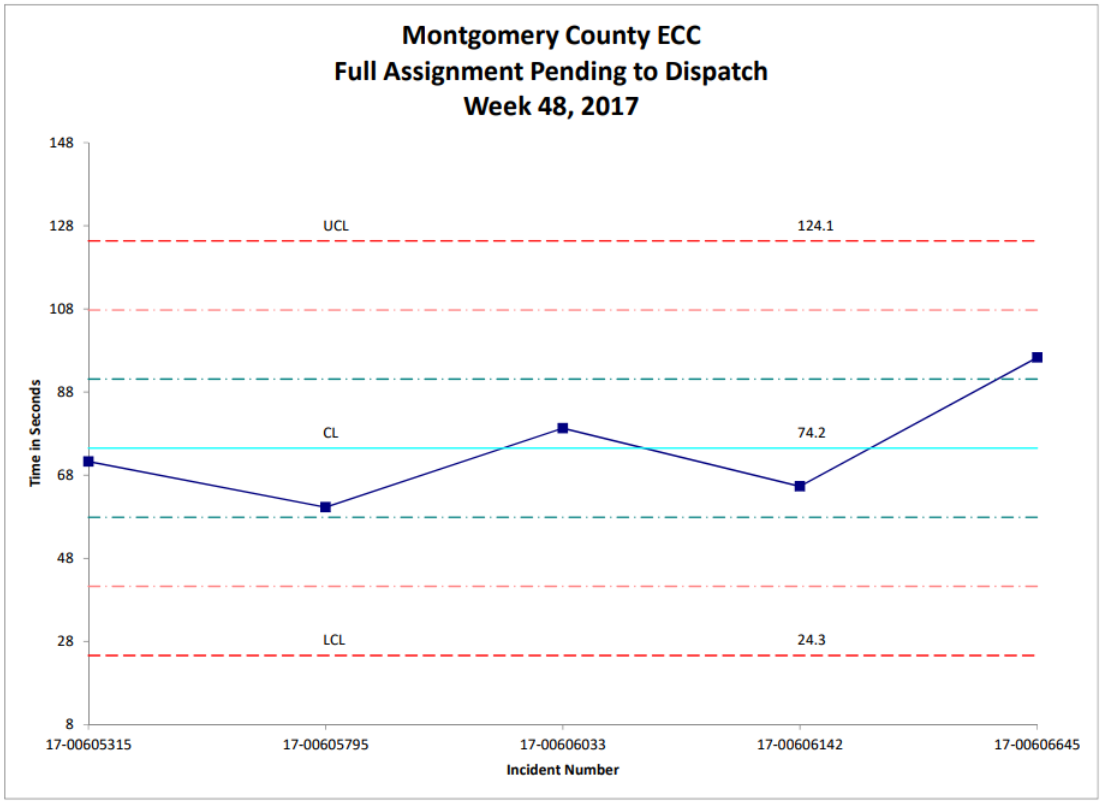
Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time
01	10	FFA_SRHR	90	00:08:13
02	1	FFA_SRHR	90	00:03:50
06	3	FFA_SRHR	90	00:08:20
08	1	FFA_SRHR	90	00:08:56
12	5	FFA_SRHR	90	00:09:19
15	1	FFA_SRHR	90	00:05:54
16	4	FFA_SRHR	90	00:08:08
18	2	FFA_SRHR	90	00:06:46
19	2	FFA_SRHR	90	00:07:32
20	2	FFA_SRHR	90	00:07:38
22	1	FFA_SRHR	90	00:09:37
23	4	FFA_SRHR	90	00:07:34
25	3	FFA_SRHR	90	00:08:05
29	3	FFA_SRHR	90	00:08:34
32	3	FFA_SRHR	90	00:08:43
33	1	FFA_SRHR	90	00:10:05
34	1	FFA_SRHR	90	00:07:46

Here is another example of MCFRS' adopted methodologies for monitoring emergency service delivery response performance. These examples are applicable to the 911 call-processing component of the total response time continuum and are employed by the Emergency Communication Center (ECC) Professional Standards Unit. It involves weekly performance charting of high risk ALS and structure fire call-processing times. When thresholds are exceeded, an in-depth review of those incident(s) transpires with the intent of learning causes and improving processes, training, and/or employee behavior.



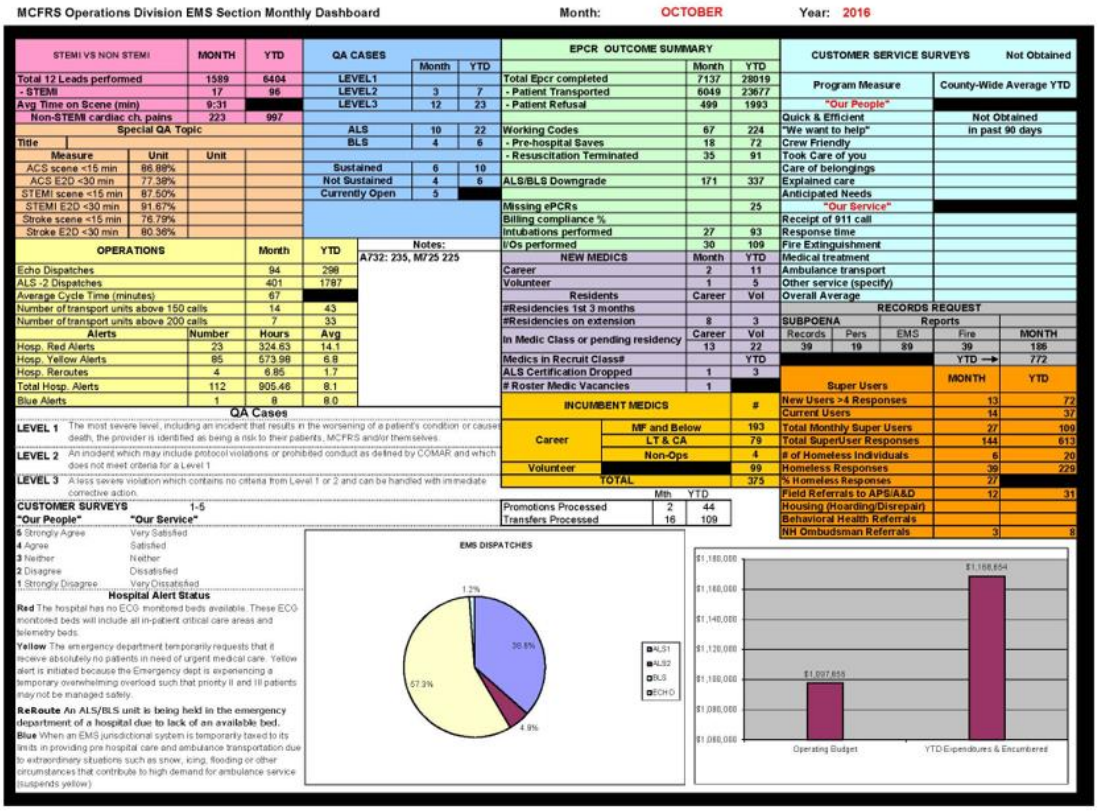



Montgomery County ECC
Full Assignment - Phone to Pending
Week 48, 2017
250
200
150
100
50
0
-50
Time in Seconds
UCL
213.5
CL
95.8
LCL
-21.9
17-00605315
17-00605795
17-00606033
17-00606142
17-00606645
Incident Number


Montgomery County ECC
Full Assignment Pending to Dispatch
Week 48, 2017
148
128
108
88
68
48
28
8
Time in Seconds
UCL
124.1
CL
74.2
LCL
24.3
17-00605315
17-00605795
17-00606033
17-00606142
17-00606645
Incident Number

Other examples of these effective methodologies include:

Quarterly Leadership Briefing dashboards (this example is the EMS Section)



MCFRS Operations Division EMS Section Monthly Dashboard — Month: OCTOBER — Year: 2016

STEMI VS NON STEMI	MONTH	YTD
Total 12 Leads performed	1589	6404
- STEMI	17	96
Avg Time on Scene (min)	9:31	
Non-STEMI cardiac ch. pains	223	997

Special QA Topic		
Title		
Measure	Unit	Unit
ACS scene <15 min	86.89%	
ACS E2D <30 min	77.38%	
STEMI scene <15 min	87.50%	
STEMI E2D <30 min	91.67%	
Stroke scene <15 min	76.79%	
Stroke E2D <30 min	80.36%	

QA CASES	Month	YTD
LEVEL1		
LEVEL2	3	7
LEVEL3	12	23
ALS	10	22
BLS	4	6
Sustained	6	10
Not Sustained	4	6
Currently Open	5	

OPERATIONS	Month	YTD
Echo Dispatches	94	298
ALS -2 Dispatches	401	1787
Average Cycle Time (minutes)	67	
Number of transport units above 150 calls	14	43
Number of transport units above 200 calls	7	33
Alerts	Number	Hours	Avg
Hosp. Red Alerts	23	324.63	14.1
Hosp. Yellow Alerts	85	573.98	6.8
Hosp. Reroutes	4	6.85	1.7
Total Hosp. Alerts	112	905.46	8.1
Blue Alerts	1	8	8.0

Notes: A732: 235, M725 225

QA Cases

LEVEL 1 The most severe level, including an incident that results in the worsening of a patient's condition or causes death, the provider is identified as being a risk to their patients, MCFRS and/or themselves.

LEVEL 2 An incident which may include protocol violations or prohibited conduct as defined by COMAR and which does not meet criteria for a Level 1

LEVEL 3 A less severe violation which contains no criteria from Level 1 or 2 and can be handled with immediate corrective action.

CUSTOMER SURVEYS 1-5

"Our People"	"Our Service"
5 Strongly Agree	Very Satisfied
4 Agree	Satisfied
3 Neither	Neither
2 Disagree	Dissatisfied
1 Strongly Disagree	Very Dissatisfied

Hospital Alert Status

Red The hospital has no ECO monitored beds available. These ECO monitored beds will include all in-patient critical care areas and telemetry beds.

Yellow The emergency department temporarily requests that it receive absolutely no patients in need of urgent medical care. Yellow alert is initiated because the Emergency dept is experiencing a temporary overwhelming overload such that priority II and III patients may not be managed safely.

ReRoute An ALS/BLS unit is being held in the emergency department of a hospital due to lack of an available bed.

Blue When an EMS jurisdictional system is temporarily taxed to its limits in providing pre hospital care and ambulance transportation due to extraordinary situations such as snow, icing, flooding or other circumstances that contribute to high demand for ambulance service (suspends yellow).

EPCR OUTCOME SUMMARY	Month	YTD
Total Epcr completed	7137	28019
- Patient Transported	6049	23677
- Patient Refusal	499	1993
Working Codes	67	224
- Pre-hospital Saves	18	72
- Resuscitation Terminated	35	91
ALS/BLS Downgrade	171	337
Missing ePCRs		25
Billing compliance %		
Intubations performed	27	93
I/Os performed	30	109
NEW MEDICS	Month	YTD
Career	2	11
Volunteer	1	5
Residents	Career	Vol
#Residencies 1st 3 months		
#Residencies on extension	8	3
In Medic Class or pending residency	Career 13	Vol 22
Medics in Recruit Class#		YTD
ALS Certification Dropped	1	3
# Roster Medic Vacancies	1	

INCUMBENT MEDICS		#
Career	MF and Below	193
	LT & CA	79
	Non-Ops	4
Volunteer		99
TOTAL		375

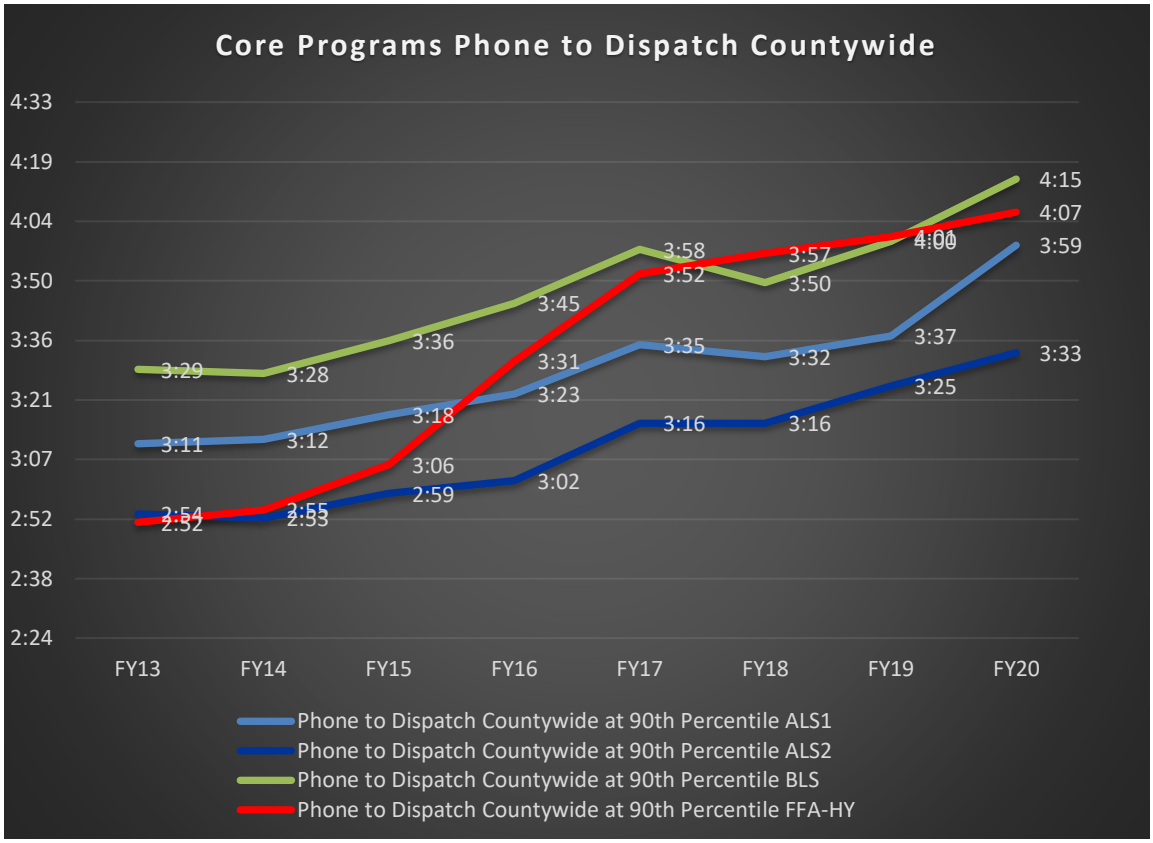
	Mth	YTD
Promotions Processed	2	44
Transfers Processed	16	109

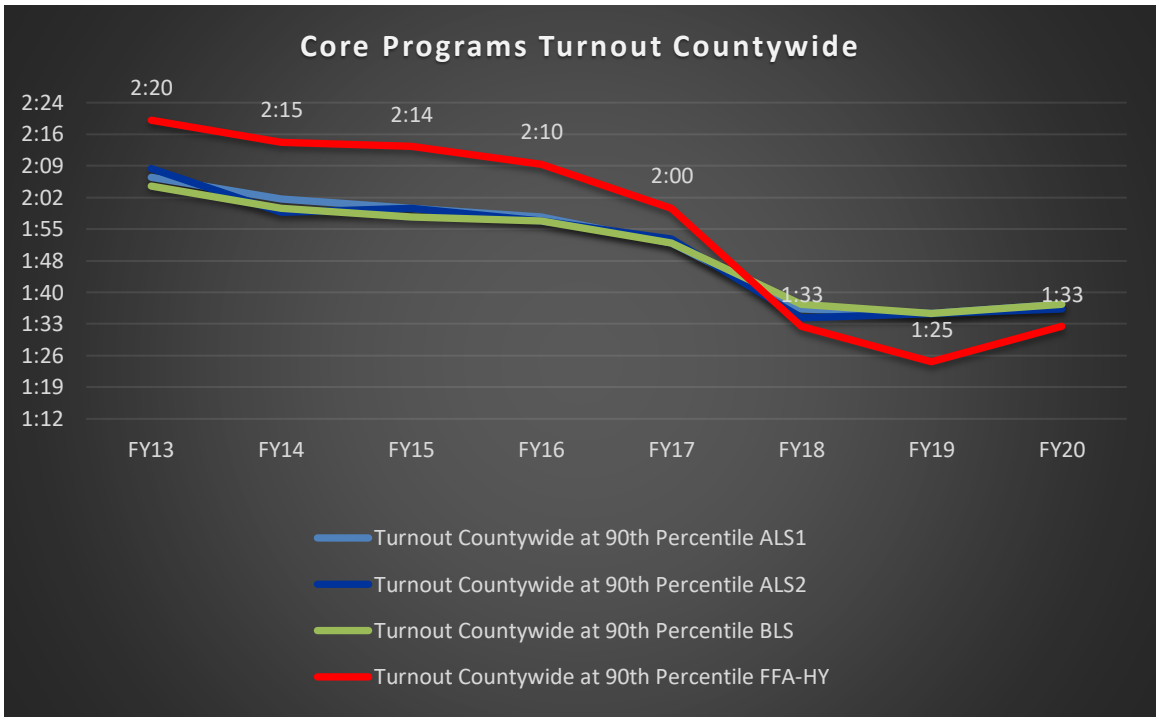
CUSTOMER SURVEYS	Not Obtained
Program Measure	County-Wide Average YTD
"Our People"	
Quick & Efficient	Not Obtained
"We want to help"	in past 90 days
Crew Friendly	
Took Care of you	
Care of belongings	
Explained care	
Anticipated Needs	
"Our Service"	
Receipt of 911 call	
Response time	
Fire Extinguishment	
Medical treatment	
Ambulance transport	
Other service (specify)	
Overall Average	

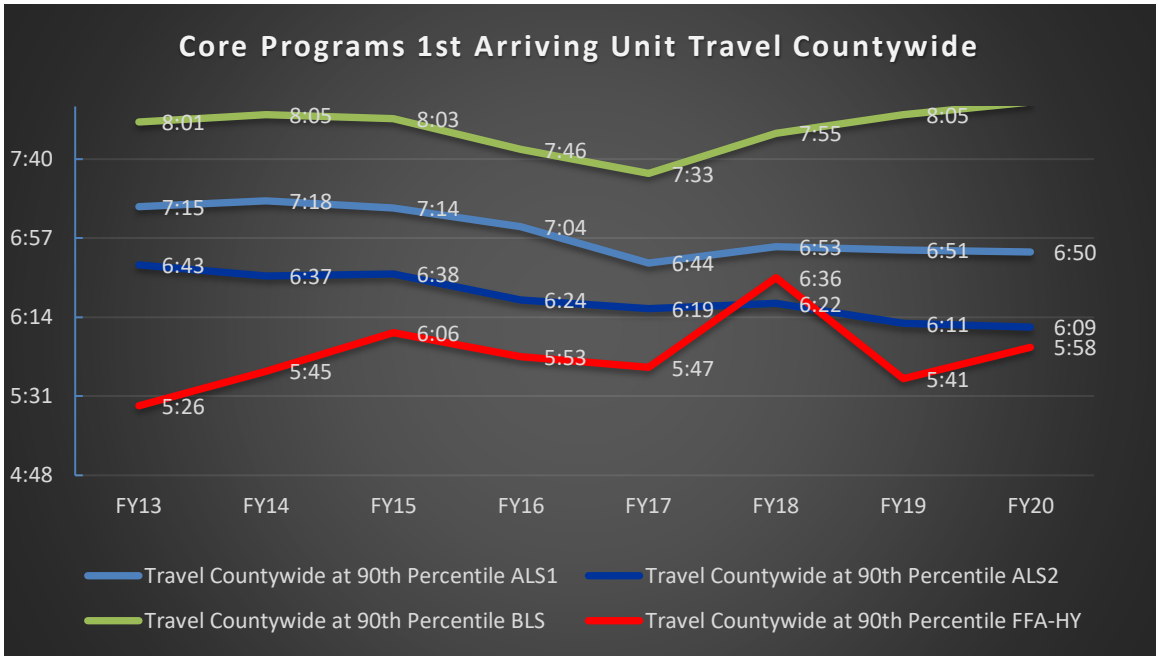
RECORDS REQUEST					
SUBPOENA			Reports		
Records	Pers	EMS	Fire	MONTH	
39	19	89	39	186	
			YTD →	772	

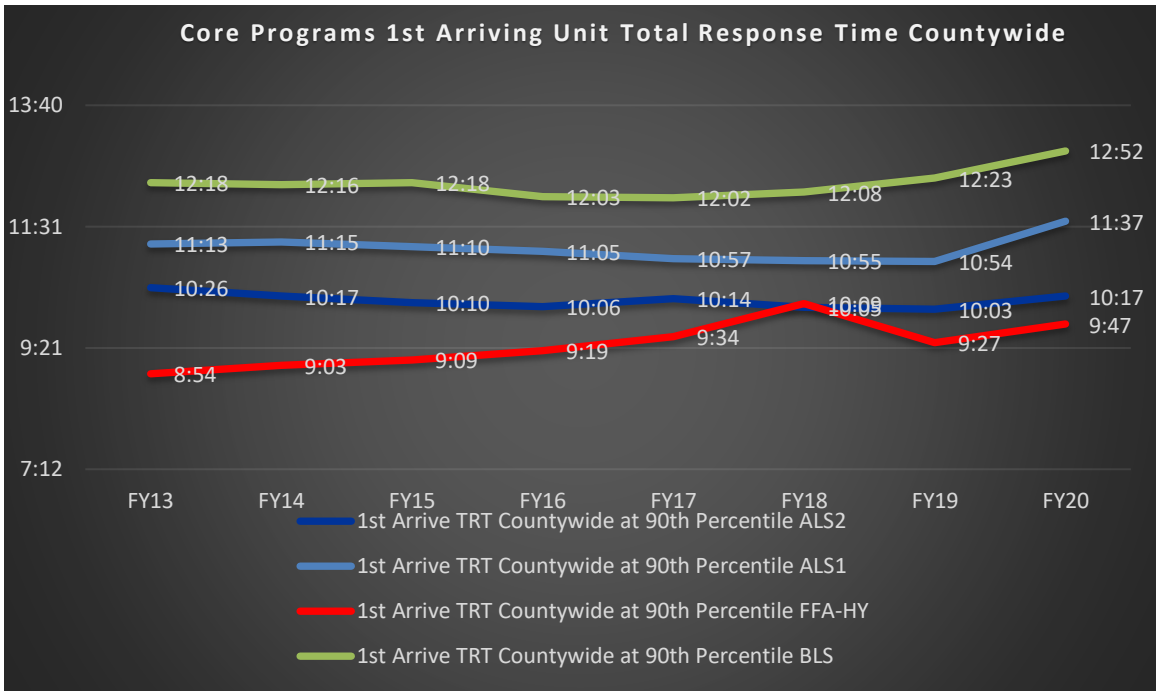
Super Users	MONTH	YTD
New Users >4 Responses	13	72
Current Users	14	37
Total Monthly Super Users	27	109
Total SuperUser Responses	144	613
# of Homeless Individuals	6	20
Homeless Responses	39	229
% Homeless Responses	27	
Field Referrals to APS/A&D	12	31
Housing (Hoarding/Disrepair)		
Behavioral Health Referrals		
NH Ombudsman Referrals	3	8

Accreditation Manager analysis for Operational Leadership:

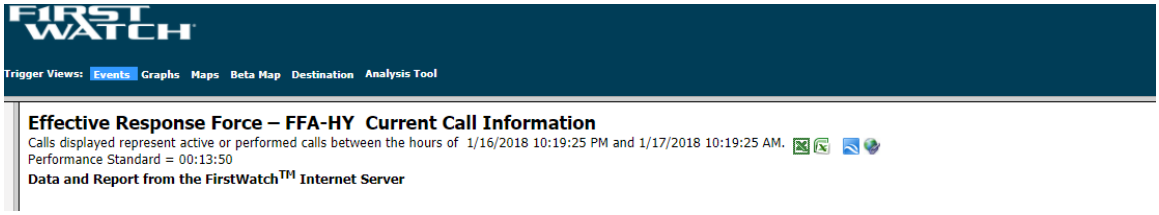


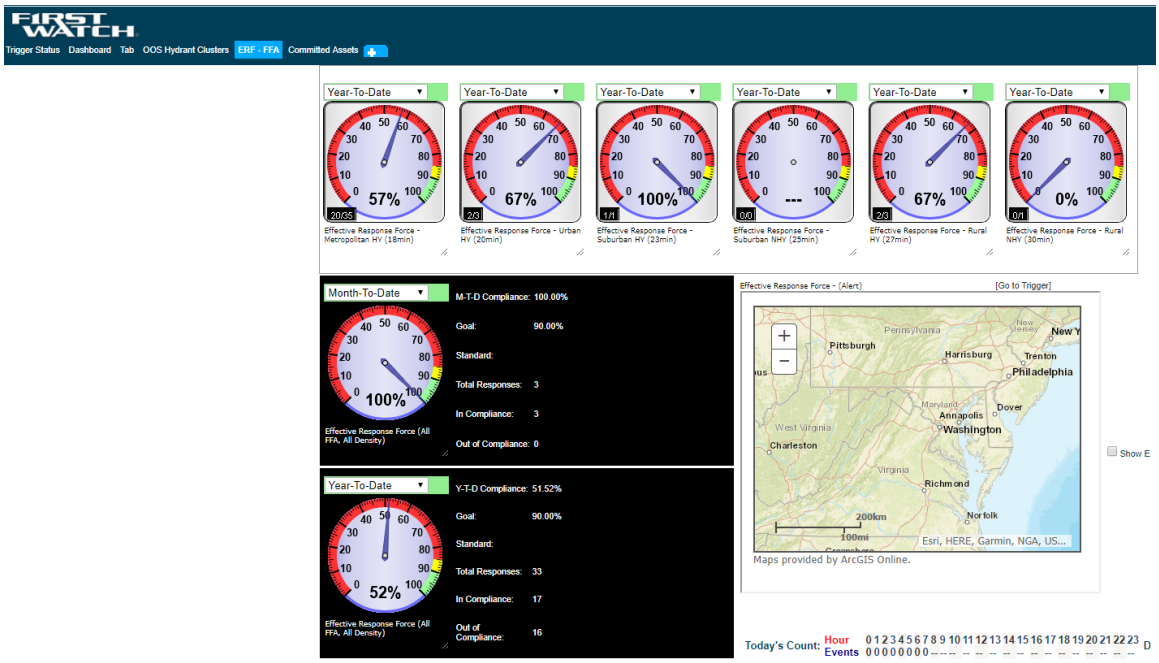



Core Programs 1st Arriving Unit Travel Countywide
7:40
6:57
6:14
5:31
4:48
8:01
8:05
8:03
7:46
7:33
7:55
8:05
7:15
7:18
7:14
7:04
6:44
6:53
6:51
6:50
6:43
6:37
6:38
6:24
6:19
6:22
6:11
6:09
5:26
5:45
6:06
5:53
5:47
6:36
5:41
5:58
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Travel Countywide at 90th Percentile ALS1
Travel Countywide at 90th Percentile ALS2
Travel Countywide at 90th Percentile BLS
Travel Countywide at 90th Percentile FFA-HY

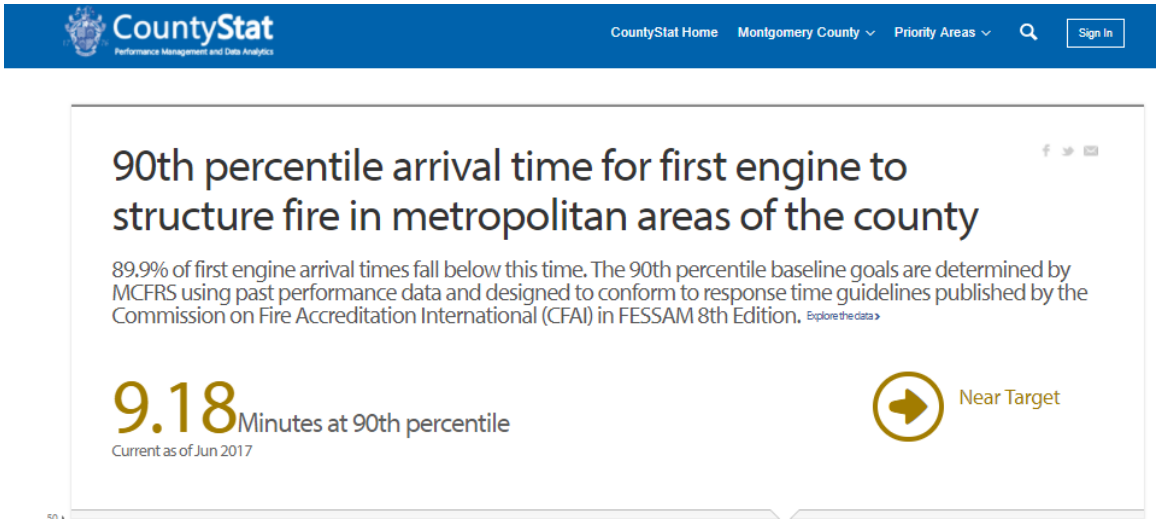

Core Programs 1st Arriving Unit Total Response Time Countywide
13:40
11:31
9:21
7:12
12:18
12:16
12:18
12:03
12:02
12:08
12:23
12:52
11:13
11:15
11:10
11:05
10:57
10:55
10:54
11:37
10:26
10:17
10:10
10:06
10:14
10:09
10:03
10:17
8:54
9:03
9:09
9:19
9:34
9:27
9:47
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
1st Arrive TRT Countywide at 90th Percentile ALS2
1st Arrive TRT Countywide at 90th Percentile ALS1
1st Arrive TRT Countywide at 90th Percentile FFA-HY
1st Arrive TRT Countywide at 90th Percentile BLS

Deploying and refining FirstWatch® to help automate monitoring processes:





Planning and Accreditation Section analysis and data submission to [CountyStat](#):



EMS Office of Quality Assurance:

MCFRS EMS OPS BLOG

Actionable news and information for the providers of the EMS Operational Program of the MCFRS

Search

Home | EVD Information | Measles Information | Nursing Home Issues Form

Monday, January 8, 2018

EMS Matters January 8, 2018

Pasted below are the documented key performance indices for last month. Again please remember we're striving to achieve at least 90% in each category, and I know that the consult percentage should be higher because I hear you consulting but you haven't documented it on your report. Please document it in the Procedures & Treatment section of the e-PCR.

Looking at the data from coded patients we've worked notice we finished the year with a ROSC of slightly over 34% which is about 3.4% better than last year. For the last 4 years our percentage of ROSC with cardiac arrest patients has continued to increase every year. Please keep up the excellent work!

	Scene <15 min	Average scene time	E2D <30 min	Average E2D time	Acquire 12-lead	Transmit 12-lead	Consult		ASA
STEMI	85%	11:14	85%	21:11	92%	73%	85%	[redacted]	100%

Links

- MCFRS Controlled Medication Log
- Region V CHATS
- eMEDS on line
- EMS for Children Resource Page
- MIEMSS

Blog Archive

- 2018 (2)
  - January (2)
    - EMS Matters January 8, 2018
    - LP15 shutoff issue
- 2017 (69)
- 2016 (79)
- 2015 (137)
- 2014 (98)
- 2013 (5)

Operations Division monitoring of critical resource Availability and Reliability (the example provided below is a portion of CY2017 for first-due engine to reported structure fires within their upper tier Risk Management Zone – Station Response Area):

MCFR Availability - Reliability

Start Date: 01/01/2017
End Date: 12/31/2017
Availability Program: FFA-Engine

Availability				Reliability						
Georgraphic Type	Total Incidents	Count by 1st Due Unit	% Avail	Historic Baseline Performance	Reliability Count	Baseline Met Count	% Baseline	Benchmark Goal	Benchmark Met Count	% Benchmark
01	21	19	90.5%	9:05	19	16	84.2%	7:15	12	63.2%
02	28	28	100.0%	9:16	27	18	66.7%	7:15	16	59.3%
03	17	17	100.0%	10:53	15	11	73.3%	7:15	7	46.7%
04	10	10	100.0%	17:11	9	9	100.0%	9:45	6	66.7%
05	21	18	85.7%	9:41	18	16	88.9%	7:15	10	55.6%
06	21	21	100.0%	10:41	21	19	90.5%	7:15	12	57.1%
07	7	7	100.0%	9:13	7	5	71.4%	7:15	2	28.6%
08	56	48	85.7%	10:06	48	40	83.3%	7:15	18	37.5%
09	2	2	100.0%	19:57	2	2	100.0%	9:45	1	50.0%
10	8	6	75.0%	14:36	6	6	100.0%	8:30	4	66.7%
11	7	6	85.7%	9:03	6	5	83.3%	7:15	3	50.0%
12	36	31	86.1%	10:49	31	29	93.5%	7:15	18	58.1%
13	16	16	100.0%	17:11	16	15	93.8%	9:45	8	50.0%
14	5	5	100.0%	18:19	4	3	75.0%	9:45	1	25.0%
15	26	24	92.3%	10:21	23	17	73.9%	7:45	11	47.8%
16	11	11	100.0%	8:45	10	8	80.0%	7:15	5	50.0%
17	9	9	100.0%	12:51	9	8	88.9%	9:45	5	55.6%

Fire Protection/Detection Systems Considered Within Response Strategies [2C.3]

Montgomery County maintains stringent fire protection legislation that requires automatic fire protection sprinkler systems, not only in commercial, educational, high-rise, and manufacturing occupancies, but in all residential townhouses and low-rise apartments built after 1988 and all single-family detached dwellings built after 2004. The State of Maryland also enacted statewide smoke alarm legislation effective January 1st of 2018 requiring all residential occupancies to:

1. Replace battery-only operated smoke alarms with units powered by sealed-in, ten-year/long-life batteries with a "silence/hush" feature.

2. Upgrade smoke alarm placement in existing residential occupancies to comply with minimum specified standards. These standards vary according to when the building was constructed. The deadline for compliance with the new law was January 1, 2018.

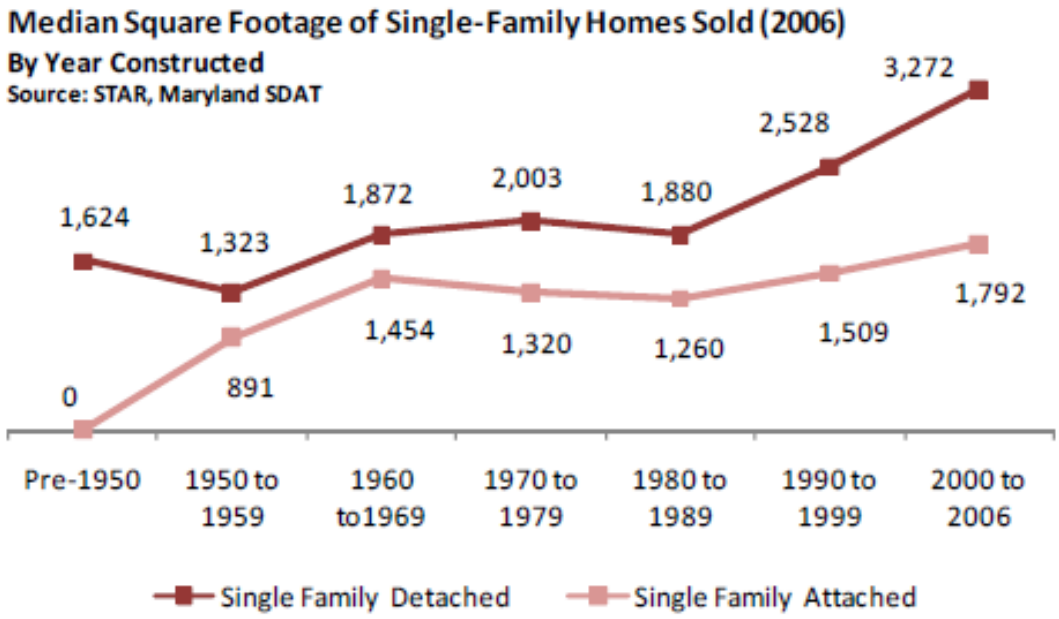
MCFRS acknowledges that single-family homes have gotten larger and this trend has led to the "mansionization" of some new home developments. The average size of a single-family detached home built in the 1950s was 1,300 square feet (SF) compared to 3,200 SF for a detached home built in the 2000s. This trend has not only affected detached housing but also is occurring with the single-family attached products.

This data is of interest to MCFRS, particularly the fact that homes built in Montgomery County in the 2000's are at least 2.5 times larger than in prior years. Underwriters Laboratories (UL) scientists, engineers, and researchers, along with fire service professionals, have recently (2013-2014) conducted extensive testing and analysis of modern fire dynamics within residential structures.

The results of these tests are astounding and confirm that the modern home fire is a "perfect storm" of conditions and outcomes: larger homes + open house geometries + increased fuel loads + new construction materials = faster fire propagation, shorter time to flashover, rapid changes in fire dynamics, shorter escape times for occupants, and shorter structural collapse times.

MCFRS also acknowledges that while automatic fire protection systems, such as sprinkler systems, have many times extinguished fires while in the incipient stage or while still very small, numerous significant residential fires have begun on the exterior where there is no sprinkler system. MCFRS has a history of fighting significant and life-threatening residential fires in sprinklered occupancies where, for example, the fire begins on an exterior wooden deck, rapidly extends via the home's vinyl siding, through the soffits and into the attic.

To this end, MCFRS understands the importance of initially deploying an Effective Response Force (ERF) to a report of a structure fire in order to enhance life safety and property conservation, regardless whether the occupancy has an automatic suppression system. The UL studies authenticate MCFRS' categorization of these types of incidents as high- and special-risk. The MCFRS resource deployment model for these types of events are based on a sound critical task analysis and community risk assessment.



On the other hand, MCFRS, through its continuous response and resources deployment analysis, does acknowledge an automatic fire alarm or sprinkler system activation without a secondary report of smoke or fire as a low-risk event. For a residential automatic fire alarm (AFA), MCFRS deploys only one

engine company. For an AFA in a high-risk occupancy, such as a hospital or even occupied school, MCFRS only deploys one engine company and one special service company; thus, MCFRS does consider these situations its response strategies.

Finally, the following is a recent example of an occupied sprinklered garden apartment where MCFRS correctly initially deployed a Fire Full Assignment regardless of the occupancy maintaining a fire protection system:

MONTGOMERY COUNTY FIRE & EXPLOSIVES INVESTIGATION LOG

BASIC EVENT INFORMATION

OK for Public Release?	Yes
Fire Inc. #	1700619864
Inc. Date	12/28/2017
Inc. Type:	Multi-family Dwelling Fire
Address:	14327 Georgia Avenue

Event Summary:

On 12/28/17 at approximately 2115 hours, MCFRS units were dispatched to a building fire at the aforementioned address. Crews spent a considerable time searching for fire running the walls of a 4 story garden apartment resulting in a need for a 2nd alarm.

FEI requested to the scene to conduct an O and C and investigation. Investigation revealed the area of origin to be in a utlility closet, which housed a furnance, outside of apartment T1. Burn patterns indicated the fire originated somewhere in, on, or around the furnace which extended vertically and horizontally with the duct work.

A un-activated sprinkler head was located in the closet approximately 1-2 feet below the charred ceiling level.

Crews remained on the scene actively chasing smoke throughout the building at the conclusion of the investigation.

Estimated 60 plus residence displaced.

Fire is classified as ACCIDENTAL.

Number of Displaced Victims

Adults:	30
Children:	30
K9 utilized:	None

FIRE INVESTIGATION INFORMATION

Alarm Level:	Second or greater
Fire Cause:	Accidental

Fire Loss Dollar Amounts

Structure:	
Contents:	
Other:	

Smoke Detector Information

Present:	N/A
Activated:	N/A
Alerted Occupants:	N/A

Sprinkler Information

Present:	Yes
Activated:	No

Programmatic Critical Task Analysis by Risk Class for 1st Due & ERF [CC 2C.4]

As stated on page 49 of the April 2010 *National Institute of Standards and Testing (NIST) Report on Residential Fireground Field Experiments* report, "Stopping the escalation of the event involves firefighter intervention via critical tasks performed on the fireground."

The term fireground shall be used synonymously with MCFRS personnel and equipment operating at the scene of any incident involving any risk category or risk class.

In addition, and as stated on page 10 of the September 2010 *Firefighter Safety and Deployment Study Report on EMS Field Experiments*:

"In order to address the primary research questions using realistic scenarios, the research was divided into three distinct, yet interconnected parts. Part 1—Time- to-task experiments related to gaining access to a patient and removing the patient from the incident scene. Part 2—Time-to-task experiments to the care of a victim with multi-system trauma. Part 3—Time-to-task experiments related to the care of a victim with chest pain and witnessed cardiac arrest. These parts included the most basic elements of an overall EMS response, which are—access the patient, conduct patient assessment, deliver on scene patient care, package the patient, and remove the patient to a transport-capable vehicle."

MCFRS has conducted an all-hazard community risk assessment and determined its emergency and non-emergency response strategies to best support its mission, vision, guiding principles/values, and goals and objectives. Based on this assessment, its agency responsibilities, and community expectations and needs, MCFRS has developed appropriate initial response deployment packages based on each of the defined risk categories and classes.

Each of the following MCFRS first-due unit and effective response force (ERF) packages have been designed to provide an appropriate capability and capacity within the initial deployment of fire-rescue resources to provide maximum protection of lives, property, and the environment based on the initially-

reported risk category and class. These packages have been engineered and reengineered over time through rigorous validation process of internal programmatic appraisal and review of data, outcome performance monitoring, national standards, best practices and studies, and after-action reporting/post-incident analysis recommendations.

Subsequently, through the aforementioned review and validation processes, a critical task analysis has been completed for each of the MCFRS risk categories/emergency response programs and their corresponding risk classes. These have been designed to provide a high-level expectation of the critical tasks needed to be performed by the personnel assigned to specific apparatus and unit types to safely and effectively mitigate emergency events.

Finally, as one reviews the following list of MCFRS first-due and ERF response packages and each of the critical task analysis documents for each risk category /emergency response program, it is important to maintain an understanding of a component of the MCFRS Incident Response Policy's Operational Doctrine Statement. Specifically, under Operational Principles on page 3 regarding Scaled Response as quoted:

> "MCFRS incident response operations begin with the report of an incident. For this initial report one of a number of predetermined assortments of personnel and capabilities is dispatched."
>
> "Beginning at the time of dispatch the organization then relies on personnel to conduct assessments and make judgements. One of the core judgements is whether or not the response package is appropriate. Based on situation assessments, the appropriate personnel determine whether to deescalate the incident, maintain the incident, or escalate the incident."
>
> "The principle of scaled response contains within it the corollary of *defense in depth*.

Defense in depth means that as the risk or complexity of an incident increases, the allocation of resources, the number of contingency plans, and the configuration of rapid intervention teams must also grow proportionately, scaling up or down to meet the needs of the incident."

The following table represents the MCFRS initial deployment packages/risk categories and risk levels. The ERF for each package is included on each of the critical task analysis sheets as well as hyperlinked within the table below. Certain low-risk programs do not include an ERF.

Risk Category/Emergency Response Program	Risk Level	Program Acronym	MCFRS Grp.1	MCFRS Grp.2	1st Arriving Unit Qualifier
Fire Full Assignment - Hydranted Areas	High	FFA-HY	Fire	FFA	Engine
Fire Full Assignment - Non-Hydranted Areas	Special	FFA-NH	Fire	FFA	Engine
Fire Full Assignment - High-Rise	Special	FFA-SRHR	Fire	FFA	Engine
Adaptive 2-3	Moderate	A2-3	Fire	Adaptive	Any unit due
Adaptive 1F	Low	A1F	Fire	Adaptive	Engine
Adaptive 1N	Low	A1N	Fire	Adaptive	Any unit due
Advanced Life Support - 2	High	ALS2	EMS	ALS	Paramedic
Advanced Life Support - 1	Moderate	ALS1	EMS	ALS	Paramedic
Basic Life Support	Low	BLS	EMS	BLS	Any unit
Hazmat Moderate Risk	Moderate	HM-MR	Special Operations	HazMat	Any unit due
Hazmat High Risk	High	HM-HR	Special Operations	HazMat	Any unit due
Hazmat Special Risk	Special	HM-SR	Special Operations	HazMat	Any unit due
Technical Rescue	Special	TR-SR	Special Operations	TechRes	Any unit due
Water/Ice Rescue Moderate Risk	Moderate	WIR-MR	Special Operations	Water-Ice	Any unit due
Water/Ice Rescue High Risk	High	WIR-HR	Special Operations	Water-Ice	Any unit due
Water/Ice Rescue Special Risk	Special	WIR-SR	Special Operations	Water-Ice	Any unit due
Aircraft Rescue FF High Risk	High	ARF-HR	Special Operations	ARFF	Any unit due
Aircraft Rescue FF Special Risk	Special	ARF-SR	Special Operations	ARFF	Any unit due
Bomb Squad Moderate Risk	Moderate	BS-MR	Special Operations	Bomb Squad	FM/BU700
Bomb Squad High Risk	High	BS-HR	Special Operations	Bomb Squad	Any unit due
Bomb Squad Special Risk	Special	BS-SR	Special Operations	Bomb Squad	Any unit due

MCFRS Risk Categories Table

Special Risk (SR)	High Risk (HR)
• Report of a large airplane (5 or > soles) on fire or crashed anywhere (ARFF) • Bomb Squad special risk responses including confirmed explosive device incidents • Smoke in a house, building, school, apartment, garage, barn, etc. in a non-hydranted box area • Reported fire in a house, building, school, apartment, garage, barn, etc. in a non-hydranted box area • Reported smoke or fire in a high-rise building, apartment, office, etc. • Hazmat box alarms for a report of a building fire involving hazmat or a 2-inch or > high pressure natural gas line break; outside or inside • All technical rescue responses • Swiftwater Potomac River emergencies	• Smoke in a house, building, school, non-high-rise apartment, garage, barn, etc. • Reported fire in a house, building, school, non-high-rise apartment, garage, barn, etc. • Report of a small airplane (4 or < soles) on fire or crashed anywhere (ARFF) • ALS2 EMS incidents including ALS2 MV Crash with or without reported entrapment • Bomb Squad high risk responses including creditable suspicious and unattended packages/devices • Reported train/metrorail crash/derailment/fire • Hazmat inhalation emergencies including CO alarms with symptomatic patients • Stillwater Potomac River emergencies or incidents involving White's Ferry
Moderate Risk (MR)	**Low Risk (LR)**

• Inside contained appliance fire (dryer, oven, etc.)
• Report of light smoke in a building
• Inside odor of smoke
• Inside natural gas leak
• Inside electrical short circuit
• Detached shed fire
• Large vehicle fire
• Malfunctioning furnace
• ALS1 EMS incidents including ALS1 MV Crash with or without reported entrapment
• Bomb Squad moderate risk responses including suspicious and unattended packages
• Hazmat releases not involving fire; including white powder responses
• Inland water/ice emergency; not including swimming pool, bathtub, etc.
	• Automobile fires
	• Brush, grass, leaf, field fire
	• Outside trash, dumpster fires
	• Outside transformer fire
	• Home automatic or commercial fire alarms, local alarm bells
	• Outside natural gas leaks & small fuel spills
	• Outside electrical short circuit
	• Citizen lock-out with hazard (food on stove, baby locked inside, etc.)
	• Outside smoke or odor investigation
	• Stalled elevator with people on board
	• BLS EMS responses including BLS motor vehicle crash
	• Metrorail arcing insulator issue
	• Public service call (performance not measured) Examples:
	  ○ Assist citizen off the floor
	  ○ Water leaking from an above apartment
	  ○ Citizen lock-in
	  ○ Tree down blocking the roadway
	  ○ CO alarm with asymptomatic patients

MCFRS Critical Task Analysis Worksheets

Risk Class: High	Program: Fire Full Assignment Structure Fire - Hydranted Areas (page 1 of 2)	Risk Category: FFA-HY
Critical Tasks		**Minimum Personnel**
1st and 2nd Due Chiefs: Incident Command		2
1st Due Engine: *Establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator and position on the Alpha-side of the structure, *Conduct a 360 degree size-up & announce report, *Provide Situation Update Reports, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Locate, confine, extinguish fire, *Announce when line is operating on fire or if fire's location cannot be quickly determined, *Announce unexpected hazards		3 (4)
2nd Due Engine: *Complete water supply (split lay/pick up hydrant, etc.) for the 1st due engine and/or augment/correct 1st due Engine water supply issues, *Support initial attack line and provide a backup line, maintained by an operator, with a minimum flow rate of 150 GPM and operated by a minimum of two members		3 (4)
3rd Due Engine: *Establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator and position on the opposite (most likely Charlie) side of the structure, *Conduct a Charlie-side size-up & announce report, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Check the lowest level of the structure and report conditions found, *Be prepared, with IC authorization, to attack any fire in the lowest level, *Provide Situation Update Reports, *Be prepared to stretch hose line to floor above or most threatened exposure		3 (4)
4th Due Engine: *Complete water supply (split lay/pick up hydrant, etc.) for the 3rd due engine and/or augment/correct 3rd due Engine water supply issues, *Provide support for 3rd due engine attack line, if needed, *Be prepared to provide an attack line with a minimum flow rate of 150 GPM and operated by a minimum of two members if directed by the IC		3 (4)
5th Due Engine: *Ensure all existing water supply operations are functional and with IC permission, correct any water supply issues, *Assume duties of the Rapid Intervention Company (RIC) & announce when in place and the location, *Be capable of deploying an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Assure hose line(s) are maintained by an operator		3 (4)

Program: Fire Full Assignment Structure Fire - Hydranted Areas (page 2 of 2)		
1st Due Truck: Position on the Alpha-side or as necessary to make immediate rescues, *Coordinate ventilation with initial interior attack line, *Initiate obvious rescues for people in immediate danger and visible from the exterior of a structure, *Assist with forcible entry, *Ensure ladders are placed for egress and/or rescues, *Remove security bars and other impediments, *Conduct interior searches, *Check and report on fire extension, *Conduct salvage and overhaul		3
2nd Due Truck: Position on the opposite (most likely Charlie) side of the structure from the 1st due truck, *Coordinate ventilation with initial interior attack line, *Initiate obvious rescues for people in immediate danger and visible from the exterior of a structure, *Assist with forcible entry for the 3rd due engine as needed, *Ensure ladders are placed for egress and/or rescues, *Remove security bars and other impediments, *Conduct interior searches, *Check and report on fire extension, *Conduct salvage and overhaul		3
Rescue Squad: Position apparatus without hindering placement of other apparatus, *Ensure systematic completion of searches in unsearched areas, *Once primary searches complete, report to IC for reassignment, Control utilities		3
EMS Transport Unit: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for occupants, *If used as the standby team, transition to established duties immediately upon the establishment of the RIC, * Establish aid station near primary entry point and announce location		2
Minimum Total	Number in parenthesis is based on engines staffed with 4	28 (33)

First arriving unit qualifier: Primary Unit Type: Engine

ERF unit qualifier (last unit to arrive of the following package):
- 5 Primary Unit Type Engine
- 2 Primary Unit Type Aerial
- 1 Primary Unit Type Rescue Squad
- 2 Primary Unit Type Chief
- 1 Primary Unit Type Ambulance or 1 Secondary Unit Type Medic

Program: Fire Full Assignment: Hydranted areas

MCFRS response program call type groupings:		NFPA 1710 (2016) linkage: 5.2.4: Service Delivery Capability / 5.2.4.1.1: Two-story single-family dwelling / 5.2.4.2.1: Typical open-air strip shopping center / 5.2.4.3.1: Typical apartment within a three-story garden apartment building
Group 1	Fire	
Group 2	Fire Full Assignment	
Group 3	FFA-HY	
Group 4	Structure Fire, Structure Fire Hazmat	

Risk Class: Special	Program: Fire Full Assignment Structure Fire - Non-Hydranted Areas (page 1 of 3)	Risk Category: FFA-NH
Critical Tasks		**Minimum Personnel**
1st and 2nd Due Chiefs: Incident Command		2
1st Due Engine: *Establish the process to achieve an uninterrupted water supply of a minimum of 400 GPM for 30 minutes by initiating attack tanker ops, announcing fill site location, and laying a supply line with clappered siamese, maintained by an operator, and position on the Alpha-side of the structure, *Conduct a 360 degree size-up & announce report, *Provide Situation Update Reports, *Coordinate/co-locate with 2nd due engine and first due (attack) tanker, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Locate, confine, extinguish fire, *Announce when line is operating on fire or if fire's location cannot be quickly determined, *Announce unexpected hazards		3 (4)
2nd Due Engine: *Be prepared to lay into scene if 1st due engine does not, *Co-locate with with 1st due engine and 1st due (attack) tanker, *Pump tank water (maintained by an operator) to the attack tanker, *Support initial attack line and provide a backup line, maintained by an operator, with a minimum flow rate of 150 GPM and operated by a minimum of two members		3 (4)
3rd Due Engine: *Position engine and while maintaining an operator, pump tank water to the 1st due engine's clappered siamese, *Conduct a Charlie-side size-up & announce report, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Check the lowest level of the structure and report conditions found, *Be prepared, with IC authorization, to attack any fire in the lowest level, *Provide Situation Update Reports, *Be prepared to stretch hose line to floor above or most threatened exposure		3 (4)
4th Due Engine: *Position engine and while maintaining an operator, pump tank water to the 1st due engine's clappered siamese, *Provide support for 3rd due engine attack line, if needed, *Be prepared to provide an attack line with a minimum flow rate of 150 GPM and operated by a minimum of two members if directed by the IC		3 (4)

Program: Fire Full Assignment Structure Fire - Non-Hydranted Areas (page 2 of 3)	
5th Due Engine: *Position engine and while maintaining an operator, pump tank water to the 1st due engine's clappered siamese, *Assume duties of the Rapid Intervention Company (RIC) & announce when in place and the location, *Be capable of deploying an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Assure hose line(s) are maintained by an operator	3 (4)
6th Due Engine: Fill tankers and engines at designated fill site by utilizing an operator, *Be prepared to work within the ICS to assume water supply officer (WSO) position or assist the WSO with strategies such as dump site/relay pumping operations	3 (4)
1st Due Truck: Position on the Alpha-side or as necessary to make immediate rescues, *Coordinate ventilation with initial interior attack line, *Initiate obvious rescues for people in immediate danger and visible from the exterior of a structure, *Assist with forcible entry, *Ensure ladders are placed for egress and/or rescues, *Remove security bars and other impediments, *Conduct interior searches, *Check and report on fire extension, *Conduct salvage and overhaul	3
2nd Due Truck: Position on the opposite (most likely Charlie) side of the structure from the 1st due truck, *Coordinate ventilation with initial interior attack line, *Initiate obvious rescues for people in immediate danger and visible from the exterior of a structure, *Assist with forcible entry for the 3rd due engine as needed, *Ensure ladders are placed for egress and/or rescues, *Remove security bars and other impediments, *Conduct interior searches, *Check and report on fire extension, *Conduct salvage and overhaul	3
Rescue Squad: Position apparatus without hindering placement of other apparatus, *Ensure systematic completion of searches in unsearched areas, *Once primary searches complete, report to IC for reassignment, Control utilities	3
EMS Transport Unit: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for occupants, *If used as the standby team, transition to established duties immediately upon the establishment of the RIC, * Establish aid station near primary entry point and announce location	2
1st Tanker: Co-locate with 1st and 2nd due engine, *Supply 1st due engine, *Receive water from the 2nd due engine, *Maintain functions with an operator	1
2nd Tanker: Supply incident via clappered siamese with an operator	1
3rd Tanker: Supply incident via clappered siamese with an operator	1

Program: Fire Full Assignment Structure Fire - Non-Hydranted Areas (page 3 of 3)		
Minimum Total	Number in parenthesis is based on engines staffed with 4	34 (40)
First arriving unit qualifier: Primary Unit Type: Engine		
ERF unit qualifier (last unit to arrive of the following package): • 6 Primary Unit Type Engine • 2 Primary Unit Type Aerial • 1 Primary Unit Type Rescue Squad • 2 Primary Unit Type Chief • 3 Primary Unit Type Tanker and/or combo or Engine Tankers • 1 Primary Unit Type Ambulance or 1 Secondary Unit Type Medic		
Program: Fire Full Assignment: Non-Hydranted areas		
MCFRS response program call type groupings:		NFPA 1710 (2016) linkage: 5.2.4: Service Delivery Capability / 5.2.4.1.1: Two-story single-family dwelling / 5.2.4.2.1: Typical open-air strip shopping center / 5.2.4.3.1: Typical apartment within a three-story garden apartment building
Group 1	Fire	
Group 2	Fire Full Assignment	
Group 3	FFA-NH	
Group 4	Structure Fire, Structure Fire Hazmat	

Program: Fire Full Assignment Structure Fire – Special Risk High-Rise Page 1 of 3

Risk Class: Special	Program: Fire Full Assignment Structure Fire – Special Risk High-Rise	Risk Category: FFA-SRHR
Critical Tasks		**Minimum Personnel**
1st and 2nd Due Chiefs: Incident Command / Lobby Control / 3rd & 4th Chiefs if on the box: Division/Group/Branch Supervision		2 (4)
1st Due Engine: *Establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator and position on the Alpha-side of the structure, *Conduct a 360 degree size-up if possible & announce report, *Charge standpipes and sprinkler systems per IRP, *Provide Situation Update Reports, *Advance charged attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members from the stairwell if any smoke or fire is present from the floor, *Locate, confine, extinguish fire, *Announce when line is operating on fire or if fire's location cannot be quickly determined, *Announce unexpected hazards, *Bring at least 200 feet of hose to fire floor		3 (4)
2nd Due Engine: *Complete water supply (split lay/pick up hydrant, etc.) for the 1st due engine and/or augment/correct 1st due Engine water supply issues, *Support initial attack line by assisting 1st due engine advance their line, and provide a backup line, maintained by an operator, with a minimum flow rate of 150 GPM and operated by a minimum of two members		3 (4)
3rd Due Engine: *Establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator and position on the opposite (most likely Charlie) side of the structure, *Conduct a Charlie-side size-up & announce report, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Check the lowest level of the structure and report conditions found, *Be prepared, with IC authorization, to attack any fire in the lowest level, *Provide Situation Update Reports, *Be prepared to stretch hose line to floor above after providing report to immediate supervisor		3 (4)
4th Due Engine: *Complete water supply (split lay/pick up hydrant, etc.) for the 3rd due engine and/or augment/correct 3rd due Engine water supply issues, *Provide support for 3rd due engine attack line, if needed, *Be prepared to provide an attack line with a minimum flow rate of 150 GPM and operated by a minimum of two members if directed by the IC		3 (4)

Program: Fire Full Assignment Structure Fire – Special Risk High-Rise Page 2 of 3

5th Due Engine: *Ensure all existing water supply operations are functional and with IC permission, correct any water supply issues, *Assume duties of the Rapid Intervention Company (RIC) & announce when in place and the location, *Be capable of deploying an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Assure hose line(s) are maintained by an operator		3 (4)
1st Due Truck: Position on the Alpha-side or as necessary to make immediate rescues, *Coordinate ventilation with initial interior attack line, *Initiate obvious rescues for people in immediate danger and visible from the exterior of a structure, *Assist with forcible entry, *Ensure ladders are placed for egress and/or rescues, *Remove security bars and other impediments, *Conduct interior searches, *Check and report on fire extension, *Conduct salvage and overhaul		3
2nd Due Truck: Position on the opposite (most likely Charlie) side of the structure from the 1st due truck, *Coordinate ventilation with initial interior attack line, *Initiate obvious rescues for people in immediate danger and visible from the exterior of a structure, *Assist with forcible entry for the 3rd due engine as needed, *Ensure ladders are placed for egress and/or rescues, *Remove security bars and other impediments, *Conduct interior searches, *Check and report on fire extension, *Conduct salvage and overhaul		3
3rd Due Truck: Ensure all stairwells and pressurized, *Designate a ventilation stairwell, *Manage all additional smoke control & ventilation		3
Rescue Squad: Position apparatus without hindering placement of other apparatus, *Ensure systematic completion of searches in unsearched areas, *Once primary searches complete, report to IC for reassignment, Control utilities		3
EMS Transport Unit: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for occupants, *If used as the standby team, transition to established duties immediately upon the establishment of the RIC, * Establish aid station near primary entry point and announce location		2
Minimum Total	31-engines w/3; 36-engines w/4; 38-two add'l volunteer chiefs	31 / 36/ 38
First arriving unit qualifier: Primary Unit Type: Engine		
ERF unit qualifier (last unit to arrive of the following package): • 5 Primary Unit Type Engine • 3 Primary Unit Type Aerial • 1 Primary Unit Type Rescue Squad • 2 Primary Unit Type Chief • 1 Primary Unit Type Ambulance or 1 Secondary Unit Type Medic		

Program: Fire Full Assignment Structure Fire – Special Risk High-Rise Page 3 of 3

Program: Fire Full Assignment: High-Rise		
MCFRS response program call type groupings:		NFPA 1710 (2016) linkage: 5.2.4: Service Delivery Capability / 5.2.4.4: High-Rise Initial Full Alarm Assignment Capability / 5.2.4.4.1: Initial full alarm assignment to a fire in a building with the highest floor greater than 75' above lowest level FD vehicle access
Group 1	Fire	
Group 2	Fire Full Assignment	
Group 3	FFA-SRHR	
Group 4	Structure Fire, Structure Fire Hazmat	

Risk Class: Moderate	Program: Adaptive 2-3 (two engines and a special service for a total of three units)	Risk Category: A2-3
Critical Tasks		**Minimum Personnel**
1st Due Engine: *Establish Command (if first arriving), *Establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator and position on the Alpha-side of the structure, *Conduct a 360 degree size-up & announce report, *Call for additional resources if needed, *Provide Situation Update Reports, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Locate, confine, extinguish fire, *Announce when line is operating on fire or if fire's location cannot be quickly determined, *Announce unexpected hazards		3 (4)
2nd Due Engine: *Complete water supply (split lay/pick up hydrant, etc.) for the 1st due engine and/or augment/correct 1st due Engine water supply issues, *Support initial attack line and provide a backup line, maintained by an operator, with a minimum flow rate of 150 GPM and operated by a minimum of two members		3 (4)
1st Due Truck or Rescue Squad (a.k.a. Special Service): *Establish Command (if first arriving), *Call for additional resources if needed, *Position on the Alpha-side or as necessary to make immediate rescues, *Coordinate ventilation with initial interior attack line, *Initiate obvious rescues for people in immediate danger and visible from the exterior of a structure, *Assist with forcible entry, *Ensure ladders are placed for egress and/or rescues, *Remove security bars and other impediments, *Conduct interior searches, *Check and report on fire extension, *Conduct salvage and overhaul		3
Minimum Total	Number in parenthesis is based on engines staffed with 4	9 (11)
First arriving unit qualifier: Primary Unit Type: Engine or Special Service		
ERF unit qualifier (last unit to arrive of the following package):		
• 2 Primary Unit Type Engine • 1 Primary Unit Type Aerial or • 1 Primary Unit Type Rescue Squad		

Program: Adaptive 2-3				
Group1	Fire			
Group2	Adaptive			
Group3	Adaptive2-3			
Group4	Structure Fire, Structure Fire Hazmat; A2-3, A2-3 Gas-Fuel			

Risk Class: Low	**Program: Adaptive 1F (one engine for low-risk fire incidents)**	**Risk Category: A1F**
Critical Tasks		**Minimum Personnel**
1st Due Engine: *Establish Command, *Conduct an effective situation size-up, *Call for additional resources if needed, *If needed establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, *Provide Situation Update Reports, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Locate, confine, extinguish fire, *Announce unexpected hazards		3 (4)
Minimum Total	Number in parenthesis is based on engines staffed with 4	3 (4)
First arriving unit qualifier: Primary Unit Type: Engine		
ERF unit qualifier (last unit to arrive of the following package):		
• NONE		
Program: Adaptive 1F		

MCFRS response program call type groupings:			
Group 1	Fire		
Group 2	Adaptive		
Group 3	Adaptive_1F		
Group 4	A1F		

Risk Class: Low	**Program: Adaptive 1N (one unit for low-risk incidents)**	**Risk Category: A1N**
Critical Tasks		**Minimum Personnel**
1st Due Unit: *Establish Command, *Conduct an effective situation size-up, *Call for additional resources if needed, *If needed establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, *Provide Situation Update Reports, *Advance attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members, *Locate, confine, extinguish fire, *Announce unexpected hazards		3 (4)
Minimum Total	Number in parenthesis is based on engines staffed with 4	3 (4)
First arriving unit qualifier: Primary Unit Type: Engine, Brush, Tanker, Aerial, Rescue Squad, Hazmat, Utility		
ERF unit qualifier (last unit to arrive of the following package):		
• NONE		
Program: Adaptive 1N		

MCFRS response program call type groupings:				Standard(s) linkage:
Group 1	Fire			
Group 2	Adaptive			
Group 3	Adaptive_1N			
Group 4	A1N, A1N Gas-Fuel			

Risk Class: High	Program: EMS	Risk Category: ALS2
Critical Tasks		Minimum Personnel
Size-up; IC; Scene safety; Additional resources if needed, family liaison, manage span-of-control		1
Assist with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support, patient transport		1
Assist with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support, patient transport		1
ALS Provider #1: Same as above and ALS interventions: EKG monitoring/reading, drug therapy/administration, medical control, intubation, etc.		1
ALS Provider #2: Assist ALS Provider #1 with ALS interventions: EKG monitoring/reading, drug therapy/administration, medical control, intubation, etc.		1
Minimum Total		5

First arriving unit qualifier: AFRA, Medic Unit, Paramedic Chase Unit/Car, EMS Supervisor

ERF unit qualifier (last unit to arrive of any of the following packages):
- 1 Secondary Unit Type Medic and 1 AFRA OR
- 2 AFRAs and 1 Primary Unit Type Ambulance OR
- 2 Secondary Unit Type Medic and 1 Primary Unit Type Ambulance OR
- 2 Secondary Unit Type Medic and 1 Manpower Unit OR
- 1 Secondary Unit Type Medic and 1 EMS Supervisor and 1 Manpower Unit OR
- 1 Secondary Unit Type Medic and 1 EMS Supervisor and 1 Primary Unit Type Ambulance OR
- 1 AFRA and 1 EMS Supervisor and 1 Primary Unit Type Ambulance OR
- 1 AFRA and 1 Paramedic Chase Unit and 1 Primary Unit Type Ambulance OR
- 1 Paramedic Chase Unit and 1 EMS Supervisor and 1 Primary Unit Type Ambulance and 1 Manpower Unit OR
- 1 Paramedic Chase Unit and 1 Secondary Unit Type Medic and 1 Manpower Unit

Manpower Unit = Primary Unit Type Engine or Aerial or Rescue Squad

AFRA = Secondary Unit Type Paramedic Engine OR Paramedic Brush Engine OR Paramedic Engine Tanker OR Paramedic Truck OR Paramedic Aerial Tower OR Paramedic Quint OR Paramedic Rescue Squad

Program: Advanced Life Support 2 MCFRS response program call type groupings: Group 1 EMS Group 2 ALS Group 3 ALS2 Group4 ALS2	NFPA 1710 (2016) linkage: 5.3.3.3: Service Delivery Deployment / 5.3.3.3.2: Personnel deployed to ALS emergency responses shall include a minimum of two members trained at the emergency medical technician-paramedic level and two members trained at the [EMT-B] level arriving on scene within the established travel time.

Risk Class: Moderate	Program: EMS	Risk Category: ALS1
Critical Tasks		**Minimum Personnel**
Size-up; IC; Scene safety; Additional resources if needed, Assist with equipment transport (O2, medical bag, AED, etc.), Patient care (assessment, treatment, comfort), family liaison		1
Assist with equipment transport (O2, medical bag, AED, etc.), Patient care (assessment, treatment, comfort), Patient care reporting, Assist paramedic		1
Same as above and ALS interventions: EKG monitoring/reading, drug therapy, medical control, patient transport, etc.		1
Minimum Total		3

First arriving unit qualifier: AFRA, Medic Unit, Paramedic Chase Unit/Car, EMS Supervisor

ERF unit qualifier (last unit to arrive of any of the following packages):

- 1 Secondary Unit Type Medic and 1 Manpower Unit OR
- 1 AFRA and 1 Primary Unit Type Ambulance OR
- 1 AFRA and 1 Secondary Unit Type Medic OR
- 1 Primary Unit Type EMS Supervisor and 1 Secondary Unit Type Ambulance OR
- 1 Primary Unit Type Ambulance or 1 Secondary Unit Type Medic
- 1 Secondary Unit Type Paramedic Chase Unit and 1 Primary Unit Type Ambulance OR
- 1 Secondary Unit Type Paramedic Chase Unit and 1 Primary Unit Type Medic

AFRA = Secondary Unit Type Paramedic Engine OR Paramedic Brush Engine OR Paramedic Engine Tanker OR Paramedic Truck OR Paramedic Aerial Tower OR Paramedic Quint OR Paramedic Rescue Squad

Program: Advanced Life Support 1

MCFRS response program call type groupings:

Group 1	EMS
Group 2	ALS
Group 3	ALS1
Group4	ALS1

Protocol/Standards linkage: Protocol/Standards linkage: NFPA 1710 (2016) linkage: 5.3.3.3: Service Delivery Deployment / 5.3.3.3.2: Personnel deployed to ALS emergency responses shall include a minimum of two members trained at the emergency medical technician-paramedic level and two members trained at the [EMT-B] level arriving on scene within the established travel time. MCFRS uses EMD to subdivide ALS dispatches; generally EMD C & D call types are classified as ALS1 and require less resources than an ALS2 event.

Risk Class: Low	Program: EMS	Risk Category: BLS
Critical Tasks		Minimum Personnel
Size-up; IC; Scene safety; Additional resources if needed, Assist with equipment transport (O2, medical bag, AED, cot, stair chair, etc.), Patient care (assessment, treatment, comfort), family liaison, patient transport		1
Assist with equipment transport (O2, medical bag, AED, cot, stair chair, etc.), Patient care (assessment, treatment, comfort), Patient transport, Medical control notifiecation(s), Patient care reporting		1
Minimum Total		2
First arriving unit qualifier: Any Unit		
ERF unit qualifier: Ambulance or Medic Unit		
Program: Basic Life Support MCFRS response program call type groupings: Group 1 EMS Group 2 BLS Group 3 BLS Group4 BLS	Protocol/Standards linkage: Protocol/Standards linkage: Maryland COMAR Title 30 requires ambulance staffing by at least one MD certified EMT; MCFRS Policy 25-08AMII requires minimum staffing of BLS ambulances to be two MD certified EMTs.	

Risk Class: Moderate	Program: Hazardous Materials	Risk Category: HM-MR
Critical Tasks		**Minimum Personnel**
Chief Officer: * Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
Engine: * Provide Initial On Scene Report (IOSR), , * If applicable establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Stage 500' away ensuring the last water supply is not passed, * Secure perimeter and deny entry, * Locate supervisor, calling party, or competent person, * Prepare to establish emergency gross decon, *Provide Situation Update Reports		3 (4)
Truck or Rescue Squad: * Stage 500' away, * Secure perimeter and deny entry, * Prepare to establish emergency gross decon, *Provide Situation Update Reports		3
Ambulance: * Establish an aid station and rehab in the cold zone as identified by command, * Prepare to provide first aid to decontaminated victims, * Prepare to provide rehab services to decontaminated hazmat personnel		2
Medic Unit: *Report to aid station in the cold zone as identified by command, * Prepare to provide advanced life support to decontaminated victims, * Prepare to provide rehab services to decontaminated hazmat personnel		2
Haz-Mat Unit: * Interview witness, calling party, or competant person to identify nature of event, * Ensure proper level of PPE, isolation distance, and deon procedures are identified and communicated to everyone on the event, *Ensure emergency gross decon is established prior to going downrange, * Ensure full decon is established, * monitor, test, and identify hazardous products, * Mitigate hazardous event, * Provide Situation Update Reports		3 (4)
Minimum Total	Number in parenthesis is based on engine staffed with 4	14 (16)

First arriving unit qualifier: Any of the following

ERF unit qualifier (last unit to arrive of the following package):
- 1 Primary Unit Type Engine AND
- 1 Primary Unit Type Aerial OR
- 1 Primary Unit Type Rescue Squad AND
- 1 Primary Unit Type Ambulance AND
- 1 Secondary Unit Type Medic Unit AND
- 1 Primary Unit Type Chief AND
- 1 Primary Unit Type Hazmat

Program: Hazardous Materials Moderate Risk (CAD Plan HM1 & HM1P)

MCFRS response program call type groupings:	
Group 1 Special Ops	
Group 2 Hazmat	
Group 3 HM-MR	
Group 4 HM-MR	

Risk Class: High	Program: Hazardous Materials (page 1 of 2)	Risk Category: HM-HR
Critical Tasks		Minimum Personnel
Chief Officer: * Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
1st Due Engine: * Provide Initial On Scene Report (IOSR), , * If applicable establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Stage 500' away ensuring the last water supply is not passed, * Secure perimeter and deny entry, * Locate supervisor, calling party, or competent person, * Prepare to establish emergency gross decon, *Provide Situation Update Reports,		3 (4)
2nd Due Engine: * If applicable ensure and expand water supply for first due engine, * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, *Provide Situation Update Reports,		3 (4)
3rd Due Engine * If applicable establish uninterrupted secondary water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, *Provide Situation Update Reports,		3 (4)
Truck: * Stage 500' away, * Secure perimeter and deny entry, * Prepare to establish emergency gross decon, *Provide Situation Update Reports		3
Rescue Squad: * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, * Prepare to assist in evacuation, rearch, rescue, and triage of deconaminated victims, *Provide Situation Update Reports		3
1st Ambulance or Medic Unit * Establish an aid station and rehab in the cold zone as identified by command, * Prepare to provide first aid to decontaminated victims, * Prepare to provide rehab services to decontaminated hazmat personnel		2
2nd Ambulance or Medic Unit *Report to aid station in the cold zone as identified by command, * Prepare to provide advanced life support to decontaminated victims, * Prepare to provide rehab services to decontaminated hazmat personnel		2
Haz-Mat Unit: * Interview witness, calling party, or competant person to identify nature of event, * Ensure proper level of PPE, isolation distance, and deon procedures are identified and communicated to everyone on the event, *Ensure emergency gross decon is established prior to going downrange, * Ensure full decon is established, * monitor, test, and identify hazardous products, * Mitigate hazardous event, * Provide Situation Update Reports		13
Minimum Total	Number in parenthesis is based on engines staffed with 4	23 (27)

First arriving unit qualifier: Any of the following	
ERF unit qualifier (last unit to arrive of the following package): • 3 Primary Unit Type Engine AND • 1 Primary Unit Type Aerial AND • 1 Primary Unit Type Rescue Squad AND • 2 Primary Unit Type Ambulance OR • 2 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 1 Primary Unit Type Hazmat	
Program: Hazardous Materials High Risk (CAD Plan HM2)	
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Hazmat Group 3 HM-HR Group 4 HM-HR	

Risk Class: Special	Program: Hazardous Materials (page 1 of 2)	Risk Category: HM-SR
Critical Tasks		Minimum Personnel
1st and 2nd Due Chiefs: * Incident Command (Life Safety, Incident Stabilization, Property Conservation)		2
1st Due Engine: * Provide Initial On Scene Report (IOSR), , * If applicable establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Stage 500' away ensuring the last water supply is not passed, * Secure perimeter and deny entry, * Locate supervisor, calling party, or competent person, * Prepare to establish emergency gross decon, *Provide Situation Update Reports		3 (4)
2nd Due Engine: * If applicable ensure and expand water supply for first due engine, * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, *Provide Situation Update Reports		3 (4)
3rd Due Engine: * If applicable establish uninterrupted secondary water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, *Provide Situation Update Reports		3 (4)
4th Due Engine: * If applicable ensure and expand water supply for third due engine, * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, *Provide Situation Update Reports		3 (4)
5th Due Engine: * If applicable establish uninterrupted secondary water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Stage 500' away, * Secure perimeter and deny entry, * Establish RIC at the edge of the cold zone, *Provide Situation Update Reports		3 (4)
1st Due Truck: * Stage 500' away, * Secure perimeter and deny entry, * Prepare to establish emergency gross decon, *Provide Situation Update Reports		3
2nd Due Truck: * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, *Provide Situation Update Reports		3
Rescue Squad: * Stage 500' away, * Secure perimeter and deny entry, * Prepare to assist with emergency gross decon, * Prepare to assist in evacuation, rearch, rescue, and triage of deconaminated victims, *Provide Situation Update Reports		3
Haz-Mat Unit: * Interview witness, calling party, or competant person to identify nature of event, * Ensure proper level of PPE, isolation distance, and deon procedures are identified and communicated to everyone on the event, *Ensure emergency gross decon is established prior to going downrange, * Ensure full decon is established, * monitor, test, and identify hazardous products, * Mitigate hazardous event, * Provide Situation Update Reports		3 (4)
Ambulance or Medic Unit: * Establish an aid station and rehab in the cold zone as identified by command, * Prepare to provide first aid to decontaminated victims, * Prepare to provide rehab services to decontaminated hazmat personnel		2
Minimum Total	Number in parenthesis is based on engines staffed with 4	31 (37)

Page 2 of 2	
First arriving unit qualifier: Primary Unit Type: Any of the following	
ERF unit qualifier (last unit to arrive of the following package):	
ERF unit qualifier (last unit to arrive of the following package): • 5 Primary Unit Type Engine AND • 2 Primary Unit Type Aerial AND • 1 Primary Unit Type Rescue Squad AND • 1 Primary Unit Type Ambulance OR • 1 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 1 Primary Unit Type Hazmat	
Program: Hazardous Materials Special Risk (CAD Plan HM3 & HM3G)	
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Hazmat Group 3 HM-SR Group 4 HM-SR	

Risk Class: Special	Program: Technical Rescue (Rope Rescue) (Page 1 of 2)	Risk Category: TR-SR
Critical Tasks		Minimum Personnel
Chief Officer: Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
Engine: * Provide Initial On Scene Report (IOSR) if first arriving unit, * Secure perimeter and deny entry, * Locate supervisor, calling party, or competent person, *Provide Situation Update Reports.		3 (4)
Truck: * Provide Initial On Scene Report (IOSR) if first arriving unit, * Position to utilize aerial device if applicable, * Initiate lock out/tag out procedures if required, * Begin development of rescue plan, * Assist Technical Rescue Unit with manpower as needed, * Provide Situation Update Reports		3
Rescue Squad: * Identify number of victims and locations, * Assist in development of rescue plan, * Assist Technical Rescue Unit with manpower as needed, *Provide Situation Update Reports.		3
Ambulance: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for victims, * Establish aid station and announce location.		2
Medic Unit: Park to allow for rapid egress and do not impede access to the scene, * Proceed to aid station with ALS equipment to provide ALS first response capability.		2
Technical Rescue Unit: * Advise command of arrival, * Work with Incident Command to establish tactical objectives, * Conduct a risk/benefit annalysis, * Ensure atmospheric monitoring and lock out/tag out is in place if required, * Confirm number of victims and locations, * Confirm untilities are controled if required, * Ensure no one is within 10' of an exposed edge without travel restriction, * Ensure two points of contact and three sets of eyes for anyone going over the edge, * Make contact with the victim, * Provide initial patient protection as soon as possible, * Remove victim from harm, * Secure scene prior to leaving.		8
Minimum Total	Number in parenthesis is based on engines staffed with 4	22 (23)

Page 2 of 2	
First arriving unit qualifier: Any of the following	
ERF unit qualifier (last unit to arrive of the following package): • 1 Primary Unit Type Engine AND • 1 Primary Unit Type Aerial AND • 1 Primary Unit Type Rescue Squad AND • 1 Primary Unit Type Ambulance AND • 1 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 1 Specific Unit "TR700" or "TR700B"	
Program: Technical Rescue Special Risk (Rope Rescue)	
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Technical Rescue Group 3 TR-SR Group 4 TR-SR	

Risk Class: Special	Program: Technical Rescue (Structural Collapse Rescue) (Page 1 of 2)	Risk Category: TR-SR
Critical Tasks		Minimum Personnel
Chief Officer: Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
Engine: * Provide Initial On Scene Report (IOSR), , * Establish uninterrupted water supply with supply line(s) maintained by an operator, * Position at least 250' away from structure, * Eliminate sources of vibration, * Provide fire suppression capabilities if required, * Secure perimeter and deny entry, * Locate supervisor, calling party, or competent person, * Provide gross decontamination resources for victims and rescuers, *Provide Situation Update Reports,		3 (4)
Truck: * Position at least 250' away, * Initiate utility control and lock out/tag out, * Begin development of rescue plan focusing on removal of surface victims, * Assist Technical Rescue Unit with manpower as needed, *Provide Situation Update Reports,		3
Rescue Squad: * Identify number of victims and locations, * Assist in development of rescue plan focusing on removal of surface victims, * Assist Technical Rescue Unit with manpower as needed, *Provide Situation Update Reports.		3
Ambulance: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for victims, * Establish aid station and announce location.		2
Medic Unit: Park to allow for rapid egress and do not impede access to the scene, * Proceed to aid station with ALS equipment to provide ALS first response capability.		2
Technical Rescue Unit: * Advise command of arrival, * Work with Incident Command to establish tactical objectives, * Conduct a risk/benefit annalysis, * Ensure atmospheric monitoring and lock out/tag out is in place, * Confirm number of victims and locations, * Confirm untilities are controled if required, * Initiate hasty search to include canine and technical search capabilities to locate entombed victims, * Shore/stabilize any portion of the structure required to provide a safe working environment for rescue operations, * Breach/break/cut/burn as required to extricate victims in a safe manor, * Make contact with the victim, * Provide initial patient protection as soon as possible, * Remove victim from harm, * Secure scene prior to leaving.		8
Minimum Total	Number in parenthesis is based on engines staffed with 4	22 (23)

Page 2 of 2	
First arriving unit qualifier: Any of the following	
ERF unit qualifier (last unit to arrive of the following package): • 1 Primary Unit Type Engine AND • 1 Primary Unit Type Aerial AND • 1 Primary Unit Type Rescue Squad AND • 1 Primary Unit Type Ambulance AND • 1 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 1 Specific Unit "TR700" or "TR700B"	
Program: Technical Rescue Special Risk (Structural Collapse Rescue)	
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Technical Rescue Group 3 TR-SR Group 4 TR-SR	

Risk Class: Special	Program: Technical Rescue (Trench Rescue) (Page 1 of 2)	Risk Category: TR-SR
Critical Tasks		Minimum Personnel
Chief Officer: Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
Engine: * Provide Initial On Scene Report (IOSR), , * Position at least 250' away, * Eliminate any source of vibration, * Secure perimeter and deny entry, * Locate supervisor, calling party, or competent person, *Provide Situation Update Reports,		3 (4)
Truck: * Position at least 250' away, * Initiate utility control and lock out/tag out, * Begin development of rescue plan, * Assist Technical Rescue Unit with manpower as needed, *Provide Situation Update Reports,		3
Rescue Squad: * Initiate atmospheric monitoring, * Identify number of victims and locations, * Assist in development of rescue plan, * Assist Technical Rescue Unit with manpower as needed, *Provide Situation Update Reports.		3
Ambulance: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for victims, * Establish aid station and announce location.		2
Medic Unit: Park to allow for rapid egress and do not impede access to the scene, * Proceed to aid station with ALS equipment to provide ALS first response capability.		2
Technical Rescue Unit: * Advise command of arrival, * Work with Incident Command to establish tactical objectives, * Conduct a risk/benefit annalysis, * Ensure atmospheric monitoring and lock out/tag out is in place if required, * Confirm number of victims and locations, * Confirm untilities are controled if required, * Ensure no one is within 10' of an exposed edge without travel restriction, * Ensure ground pads are in place prior to accessing trench lip, * Make contact with the victim, * Provide initial patient protection as soon as possible, * Remove victim from harm, * Secure scene prior to leaving.		8
Minimum Total	Number in parenthesis is based on engines staffed with 4	22 (23)

Page 2 of 2	
First arriving unit qualifier: Any of the following	
ERF unit qualifier (last unit to arrive of the following package): • 1 Primary Unit Type Engine AND • 1 Primary Unit Type Aerial AND • 1 Primary Unit Type Rescue Squad AND • 1 Primary Unit Type Ambulance AND • 1 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 1 Specific Unit "TR700" or "TR700B"	
Program: Technical Rescue Special Risk (Trench Rescue)	
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Technical Rescue Group 3 TR-SR Group 4 TR-SR	

Risk Class: Moderate	Program: Water-Ice Rescue	Risk Category: WIR-MR
Critical Tasks		**Minimum Personnel**
Chief Officer: Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
Engine or Truck or Rescue Squad: * Provide Initial On Scene Report (IOSR), * Identify and separate witnesses, * Ensure no one is allowed within 10' of waters edge without a PFD, * Attempt to identify Point Last Seen (PLS) and Point of Entry (POE), * Mark water line if incident involves moving water, * Provide Situation Update Reports, * Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water)		3 (4)
Ambulance or Medic Unit: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for victims, * Establish aid station near primary launch site and announce location.		2
Boat: * Coordinate with command to confirm incident objectives, * Recommend additional resources if needed, * Interview witnesses, * Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water), * Ensure proper rescue sequence is followed (Reach, Throw, Row, Go, Helo), * Provide floatation to victims, * Remove victims from harm		2
Minimum Total	Number in parenthesis is based on engine staffed with 4	8 (9)

First arriving unit qualifier: Any of the following

ERF unit qualifier (last unit to arrive of the following package):

- 1 Primary Unit Type Engine OR
- 1 Primary Unit Type Aerial OR
- 1 Primary Unit Type Rescue Squad AND
- 1 Primary Unit Type Ambulance OR
- 1 Secondary Unit Type Medic Unit AND
- 1 Primary Unit Type Chief AND
- 1 Primary Unit Type Boat

Program: Water and Ice Rescue Moderate Risk

MCFRS response program call type groupings:

Group 1	Special Ops
Group 2	Water Ice Rescue
Group 3	WIR-MR
Group 4	WIR-MR

Risk Class: High	Program: Water-Ice Rescue	Risk Category: WIR-HR
Critical Tasks		**Minimum Personnel**
Chief Officer: Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
Engine or Truck or Rescue Squad: * Provide Initial On Scene Report (IOSR), * Identify and separate witnesses, * Ensure no one is allowed within 10' of waters edge without a PFD, * Attempt to identify Point Last Seen (PLS) and Point of Entry (POE), * Mark water line if incident involves moving water, * Provide Situation Update Reports, * Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water)		3 (4)
Ambulance or Medic Unit: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for victims, * Establish aid station near primary launch site and announce location.		2
Boat-1: * Coordinate with command to confirm incident objectives, * Recommend additional resources if needed, * Interview witnesses, * Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water), * Ensure proper rescue sequence is followed (Reach, Throw, Row, Go, Helo), * Provide floatation to victims, * Remove victims from harm		2
Boat-2: * If possible approach from opposite side of the incident, * Coordinate with command and first boat to confirm incident objectives, * Act as primary safety while personnel are working in the hot zone (Water).		2
Minimum Total	Number in parenthesis is based on engine staffed with 4	10 (11)

First arriving unit qualifier: Any of the following

ERF unit qualifier (last unit to arrive of the following package):
- 1 Primary Unit Type Engine OR
- 1 Primary Unit Type Aerial OR
- 1 Primary Unit Type Rescue Squad AND
- 1 Primary Unit Type Ambulance OR
- 1 Secondary Unit Type Medic Unit AND
- 1 Primary Unit Type Chief AND
- 2 Primary Unit Type Boat

Program: Water and Ice Rescue High Risk

MCFRS response program call type groupings:

Group 1	Special Ops
Group 2	Water Ice Rescue
Group 3	WIR-HR
Group 4	WIR-HR

Risk Class: Special	Program: Water-Ice Rescue (Page 1 of 2)	Risk Category: WIR-SR
Critical Tasks		Minimum Personnel
Chief Officer: Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
Engine or Truck or Rescue Squad: Proceed to closest access to dispatch location, * Do not impede access to the scene, * Ensure no one is allowed within 10' of waters edge without a PFD, * Identify, separate and interview witnesses, * Provide land based search activies in area closest to dispatched loaction, * Provide Situation Update Reports, * Provide manpower if victim removal by land is determined.		3 (4)
Ambulance: Park to allow for rapid egress and do not impede access to the scene, *Immediately locate, assess, and care for victims, * Establish aid station near primary launch site and announce location.		2
Medic Unit: Park to allow for rapid egress and do not impede access to the scene, * Proceed to aid station with ALS equipment to provide ALS first response capability.		2
Swift Water Boat-1: * Respond to closest launch site, * Provide an Initial On Scene Report (IOSR), * Advise command once launched and PAR level, * Proceed to dispatched location, * Identify, separate and interview witnesses, * Begin search activities at dispatched loaction, * Provide Situation Update Reports, * Ensure proper rescue sequence is followed (Reach, Throw, Row, Go, Helo), * Provide floatation to victims, * Remove victims from harm		2
Swift Water Boat-2: * Respond to closest launch site, * Advise command once launched and PAR level, * Proceed to dispatched location, * Act as primary safety for Swift Water Boat 1 while personnel are working in the hot zone (Water).		2
Swift Water Boat-3: * Respond to closest launch site or secondary site if advised by Swift Water Boat 1 or Incident Command, * Advise command once launched and PAR level, * Proceed to area downstream of dispatched location, * Identify, separate and interview any additional witnesses, * Begin search activities in area downstream of dispatched loaction, * Provide Situation Update Reports, * Ensure proper rescue sequence is followed (Reach, Throw, Row, Go, Helo), * Provide floatation to victims, * Remove victims from harm		2
Swift Water Boat-4: Respond to closest launch site or secondary site if advised by Swift Water Boat 1 or Incident Command, * Advise command once launched and PAR level, * Proceed to area downstream of dispatched location, * Act as primary safety for Swift Water Boat 3 while personnel are working in the hot zone (Water).		2
Minimum Total	Number in parenthesis is based on engine staffed with 4	16 (17)

Page 2 of 2	
First arriving unit qualifier: Any of the following	
ERF unit qualifier (last unit to arrive of the following package): • 1 Primary Unit Type Engine OR • 1 Primary Unit Type Aerial OR • 1 Primary Unit Type Rescue Squad AND • 1 Primary Unit Type Ambulance AND • 1 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 4 Secondary Unit Type Swift Water Boat	
Program: Water and Ice Rescue Special Risk	
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Water Ice Rescue Group 3 WIR-SR Group 4 WIR-SR	

Risk Class: High	Program: Aircraft Rescue Firefighting (page 1 of 2)	Risk Category: ARF-HR
Critical Tasks		Minimum Personnel
Chief Officer: * Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		1
1st Due Engine: * Provide Initial On Scene Report (IOSR), , *Confirm incident location. * If applicable establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Establish command and assign units/groups/division as as needed. * Consider need for Mass Casualty response * Locate airport or airpark manager if applicable, * Position to allow approach from uphill and upwind in line with front of aircraft, * If personnel must enter the runway require the Airport/Airpark manager, TRACON, and ECC to verbally announce that "The runway is unsafe", * Ensure verbal announcement of runway being unsafe is repeated on UNICOM channel, * Ensure personnel do not approach aircraft until engines are shut down and rotors/propellers have stopped turning, *Provide Situation Update Reports		3 (4)
2nd Due Engine: * If applicable ensure and expand water supply for first due engine, * If directed to stage act as Staging Officer, * Ensure and expand upon water supply for First Due Engine, * Provide Situation Update Reports		3 (4)
3rd Due Engine * If applicable establish uninterrupted secondary water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Position to allow approach from uphill and upwind in line with front of aircraft, *Provide Situation Update Reports		3 (4)
Truck: * Position to allow approach from uphill and upwind in line with front of aircraft, * Prepare to assist in forcable entry, evacuation, rearch, rescue, and triage of victims, * Prepare for large volume elevated master stream if needed, *Provide Situation Update Reports		3
Rescue Squad: * Position to best utilize equipment preferably uphill and upwind, * Prepare to assist in evacuation, rearch, rescue, and triage of victims, *Provide Situation Update Reports		3
1st Ambulance or Medic Unit * Establish an aid station and rehab in the cold zone as identified by command, * Prepare to provide first aid to victims, * Prepare to provide rehab services to fire/rescue personnel		2
2nd Ambulance or Medic Unit *Report to aid station in the cold zone as identified by command, * Prepare to provide advanced life support to victims, * Prepare to provide rehab services to fire/rescue personnel		2
Haz-Mat Unit: * Ensure proper level of PPE, isolation distance, and decon procedures are identified and communicated to everyone on the event, * Assist in establishing cold, warm, and hot zones, *Ensure emergency gross decon is established for victims and responders if needed, * Ensure full decon is established if required, * Monitor, test, and identify hazardous products if needed, * Provide Situation Update Reports		3 (4)
Minimum Total	Number in parenthesis is based on engines staffed with 4	23 (27)

First arriving unit qualifier: Any of the following	
ERF unit qualifier (last unit to arrive of the following package): • 3 Primary Unit Type Engine AND • 1 Primary Unit Type Aerial AND • 1 Primary Unit Type Rescue Squad AND • 2 Primary Unit Type Ambulance OR • 2 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 1 Primary Unit Type Hazmat	
Program: Aircraft Rescue Firefighting High Risk (CAD Plan HM2)	
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Aircraft Rescue Firefighting Group 3 ARF-HR Group 4 ARF-HR	

Risk Class: Special	Program: Aircraft Rescue Firefighting (page 1 of 2)	Risk Category: ARF-SR
Critical Tasks		Minimum Personnel
1st and 2nd Due Chiefs: * Incident Command (Life Safety, Incident Stabilization, Property Conservation.)		2
1st Due Engine: * Provide Initial On Scene Report (IOSR), , *Confirm incident location. * If applicable establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Establish command and assign units/groups/division as as needed. * Consider need for Mass Casualty response * Locate airport or airpark manager if applicable, * Position to allow approach from uphill and upwind in line with front of aircraft, * If personnel must enter the runway require the Airport/Airpark manager, TRACON, and ECC to verbally announce that "The runway is unsafe", * Ensure verbal announcement of runway being unsafe is repeated on UNICOM channel, * Ensure personnel do not approach aircraft until engines are shut down and rotors/propellers have stopped turning, *Provide Situation Update Reports		3 (4)
2nd Due Engine: * If applicable ensure and expand water supply for first due engine, * If directed to stage act as Staging Officer, * Ensure and expand upon water supply for First Due Engine, * Provide Situation Update Reports		3 (4)
3rd Due Engine: * If applicable establish uninterrupted secondary water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Position to allow approach from uphill and upwind in line with front of aircraft, *Provide Situation Update Reports		3 (4)
4th Due Engine: * If applicable ensure and expand water supply for third due engine, * Prepare to assist with fire extinguishment, search, rescue, and triage if needed, *Provide Situation Update Reports		3 (4)
5th Due Engine: * If applicable establish uninterrupted secondary water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator, * Establish RIC at the edge of the cold zone, *Provide Situation Update Reports		3 (4)
1st Due Truck: * Position to allow approach from uphill and upwind in line with front of aircraft, * Prepare to assist in forcable entry, evacuation, rearch, rescue, and triage of victims, * Prepare for large volume elevated master stream if needed, *Provide Situation Update Reports		3
2nd Due Truck: * Position to allow approach from uphill and upwind in line with front of aircraft, * Prepare to assist in forcable entry, evacuation, rearch, rescue, and triage of victims, * Prepare for large volume elevated master stream if needed, *Provide Situation Update Reports		3
Rescue Squad: * Position to best utilize equipment preferably uphill and upwind, * Prepare to assist in evacuation, rearch, rescue, and triage of victims, *Provide Situation Update Reports		3

Page 2 of 2		
Haz-Mat Unit: * Ensure proper level of PPE, isolation distance, and decon procedures are identified and communicated to everyone on the event, * Assist in establishing cold, warm, and hot zones, *Ensure emergency gross decon is established for victims and responders if needed, * Ensure full decon is established if required, * Monitor, test, and identify hazardous products if needed, * Provide Situation Update Reports		3 (4)
Ambulance or Medic Unit: * Establish an aid station and rehab in the cold zone as identified by command, * Prepare to provide first aid to victims, * Prepare to provide rehab services to fire/rescue personnel		2
Minimum Total	Number in parenthesis is based on engines staffed with 4	31 (37)
First arriving unit qualifier: Primary Unit Type: Any of the following		
ERF unit qualifier (last unit to arrive of the following package):		
ERF unit qualifier (last unit to arrive of the following package): • 5 Primary Unit Type Engine AND • 2 Primary Unit Type Aerial AND • 1 Primary Unit Type Rescue Squad AND • 1 Primary Unit Type Ambulance OR • 1 Secondary Unit Type Medic Unit AND • 1 Primary Unit Type Chief AND • 1 Primary Unit Type Hazmat **Program: Aircraft Rescue Firefighting Special Risk (CAD Plan HM3 & HM3G)**		
MCFRS response program call type groupings: Group 1 Special Ops Group 2 Aircraft Rescue Firefighting Group 3 ARF-SR Group 4 ARF-SR		

Risk Class: Moderate	**Program: Bomb Squad**	**Risk Category: BS-MR**
Critical Tasks		**Minimum Personnel**
Hazardous Devices Technician(s): *Confirm evacuation perimeter, *Gather information and evaluate the situation including an appropriate risk analysis, * Determine additional resources needed, *Evaluate bomb squad staging area for security and safety, *Based on situation analysis, determine initial course of action		1 (2)
Bomb Unit 700: *Report to established safe staging area, or set one up, *Based on initial situation analysis, set up appropriate tools/equipment, *Maintain/ensure staging area security, *Support HDT operations		1
Minimum Total	Number in parenthesis means 2 HDTs w/o BU700	2 (2)
First arriving unit qualifier: Hazardous Devices Technician or BU700		
ERF unit qualifier (last unit to arrive of the following package):		
• 2 Primary Unit Hazardous Devices Technician OR		
• 1 Primary Unit Type Hazardous Devices Technician AND		
• 1 Secondary Unit Type Bomb		
Program: Bomb Squad Moderate Risk (CAD Plan EX)		

MCFRS response program call type groupings:				National Standards linkage: DOJ-FBI National Guidelines for Bomb Technicians (4/2016)		
Group 1	Special Ops					
Group 2	Bomb Squad					
Group 3	BS-MR					
Group 4	BS-MR					

Risk Class: High	Program: Bomb Squad	Risk Category: BS-HR
Critical Tasks		**Minimum Personnel**
Hazardous Devices Technician(s): *Confirm evacuation perimeter, *Gather information and evaluate the situation including an appropriate risk analysis, * Determine additional resources needed, *Evaluate bomb squad staging area for security and safety, *Based on situation analysis, determine initial course of action		1 (2)
Bomb Unit 700: *Report to established safe staging area, or set one up, *Based on initial situation analysis, set up appropriate tools/equipment, *Maintain/ensure staging area security, *Support HDT operations		1
Engine or Truck or Rescue Squad or Ambulance or Medic Unit: *Position and operate as ordered by the IC, *Remain cautious and vigilant of scene safety/security, *Remain prepared for response to injured HDT/personnel or unintended device functioning		2 or 3 (4)
Minimum Total	Number in parenthesis means 2 HDT's w/o BU700 & engine /4	4 or 5 (6)
First arriving unit qualifier: Fire Marshal or BU700		
ERF unit qualifier (last unit to arrive of the following package):		
• 2 Primary Unit Hazardous Devices Technician AND		
• 1 Secondary Unit Type Bomb AND		
• 1 Primary Unit Type Engine OR Aerial OR Rescue Squad OR Ambulance OR Medic Unit		
Program: Bomb Squad High Risk (CAD Plan EX)		

MCFRS response program call type groupings:				National Standards linkage: DOJ-FBI National Guidelines for Bomb Technicians (4/2016)
Group 1	Special Ops			
Group 2	Bomb Squad			
Group 3	BS-HR			
Group 4	BS-HR			

Risk Class: Special	Program: Bomb Squad (page 1 of 2)	Risk Category: BS-SR
Critical Tasks		**Minimum Personnel**
Hazardous Devices Technician(s): *Confirm evacuation perimeter, *Gather information and evaluate the situation including an appropriate risk analysis, * Determine additional resources needed, *Evaluate bomb squad staging area for security and safety, *Based on situation analysis, determine initial course of action		1 (2)
Bomb Unit 700: *Report to established safe staging area, or set one up, *Based on initial situation analysis, set up appropriate tools/equipment, *Maintain/ensure staging area security, *Support HDT operations		1 (0)
Haz-Mat Unit: *Position and operate as ordered by the IC, *Remain cautious and vigilant of scene safety/security, *Support operation as required		3 (4)
Minimum Total	Number in parenthesis means 2 HDT's with no BU as well as engine staffed with 4	5 (6)
OR:		
Hazardous Devices Technician(s): *Confirm evacuation perimeter, *Gather information and evaluate the situation including an appropriate risk analysis, * Determine additional resources needed, *Evaluate bomb squad staging area for security and safety, *Based on situation analysis, determine initial course of action		1
Bomb Unit 700: *Report to established safe staging area, or set one up, *Based on initial situation analysis, set up appropriate tools/equipment, *Maintain/ensure staging area security, *Support HDT operations		1
Engine or Truck or Rescue Squad: *Position and operate as ordered by the IC, *Remain cautious and vigilant of scene safety/security, *Remain prepared for response to injured HDT/personnel or unintended device functioning		3 (4)
Ambulance or Medic Unit: *Position and operate as ordered by the IC, *Remain cautious and vigilant of scene safety/security, *Remain prepared for response to injured HDT/personnel or unintended device functioning		2
Chief: *Position and operate as ordered by the IC, *Remain cautious and vigilant of scene safety/security, *Support operation as required		1
Minimum Total	Number in parenthesis means 2 HDT's w/o BU700 & engine /4	8 (9)

Page 2 of 2	
First arriving unit qualifier: Any of the following:	
ERF unit qualifier (last unit to arrive of the following packages):	
• 2 Primary Unit Type Hazardous Devices Technician AND	
• 1 Secondary Unit Type Bomb AND	
• 1 Primary Unit Type Hazmat	
OR	
• 2 Primary Unit Type Hazardous Devices Technician AND	
• 1 Secondary Unit Type Bomb AND	
• 1 Primary Unit Type Engine OR Aerial OR Rescue Squad AND	
• 1 Primary Unit Type Ambulance or Secondary Unit Type Medic AND	
• 1 Primary Unit Type Chief	

Program: Bomb Squad Special Risk (CAD Plan EX)

MCFRS response program call type groupings:				National Standards linkage: DOJ-FBI National Guidelines for Bomb Technicians (4/2016)
Group 1	Special Ops			
Group 2	Bomb Squad			
Group 3	BS-SR			
Group 4	BS-SR			

Service Delivery Total Response Time Continuum and Related Components [CC 2C.5]

MCFRS identifies total response time (TRT) for delivery of services as the summation of three component times: call processing time, turnout time and travel time. Each component time, as well as TRT, is documented and analyzed at the 90th percentile for each of the department's 21 emergency service programs, broken down by the four population density zones established by MCFRS (i.e., Metropolitan, Urban, Suburban, Rural), as shown in the references below. Call processing time, turnout time, travel time and TRT are documented for first-arriving unit and for the effective response force (ERF) as shown in the tables referenced below. The department regularly mines and analyzes 90th percentile response time data to determine whether services associated with each emergency program are consistent and reliable across the entire response area (i.e., the County), with greatest attention given to core programs - ALS and Fire-Full Assignment - due to the corresponding high level of risk to life and property.

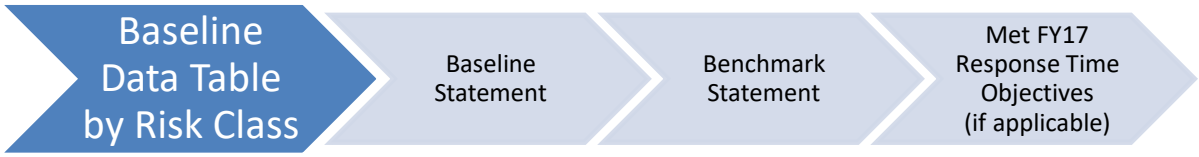
The department's baseline statements reflect actual performance from FY2013 to FY2017. The department does integrate response time data from automatic and, when applicable, mutual aid neighboring resources, including in-county federal fire departments, to provide its first-arriving and effective response force 90th percentile response times. MCFRS also acknowledges the 90th percentile response times are sometimes skewed with smaller datasets, especially when erroneous outlier unit arrival times occur and cannot be validated.

In an effort to reduce redundancy within each of the following baseline and benchmark written statements, minimum and actual staffing apparatus levels are provided below. However, for a more granular understanding of MCFRS daily staffing, the reader is encouraged to review the *Description of MCFRS Programs and Services* and more specifically the *Emergency Response and Public Assistance Services* section of this manual. In addition, MCFRS/AHJ ERF staffing levels are included within each of the Critical Task Analysis worksheets in the preceding section of this CRA/SOC document, *Programmatic Critical Task Analysis by Risk Class for 1st Due & ERF [CC 2C.4]*.

Overview of MCFRS Daily Minimum and Actual Staffing Levels

- Minimum daily staffing levels for engine companies: 3 personnel
- Actual daily staffing for 33 out of 35 engine companies: 4 personnel
- Minimum and actual daily staffing for truck companies (aerial) and heavy rescue squad companies: 3 personnel
- Minimum and actual staffing for medic units and ambulances: 2 personnel
- Minimum & actual staffing for certified chief officers/battalion chiefs: 1
- Minimum & actual staffing level for the safety officer: 1
- Minimum & actual staffing level for EMS supervisors: 1
- Minimum & actual staffing level for ALS chase car/unit: 1 or 2

The flow of information on the following pages for the each of the MCFRS 21 service delivery programs will follow a pattern that groups risk categories (i.e., suppression, EMS, hazmat, water-ice rescue, technical rescue, bomb squad responses) and begins with the lowest risk class (if applicable).



CFAI Data Charts and Baseline and Benchmark Statements for all Programs

Risk Category: Fire Suppression / Risk Classification: Low

(Low Risk) Fire Suppression (Single Engine) – A1F - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:04:16		0:04:20	0:04:20	4:16	4:11
		Rural	0:04:30		0:04:02	0:04:43	4:30	4:28
		Countywide	0:04:16		0:04:20	0:04:20	4:20	4:14
Turnout Time Turnout Time 1st Unit		Urban	0:01:35		0:01:34	0:01:36	1:34	1:37
		Rural	0:02:05		0:01:36	0:02:05	1:53	2:25
		Countywide	0:01:37		0:01:34	0:01:38	1:36	1:39
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:07:56		0:07:28	0:07:55	7:53	8:01
		Rural	0:13:06		0:14:04	0:15:23	14:04	11:00
		Countywide	0:08:31		0:07:52	0:08:32	8:39	8:26
	Travel Time ERF **Concentration**	Urban	N/A	N/A	N/A	N/A	N/A	N/A
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
		Countywide	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:12:25		0:12:09	0:12:22	12:08	12:47
			n=4261		n=328	N=1234	N=1203	n=1482
		Rural	0:19:01		0:17:34	0:20:16	18:55	16:21
			n=337		n=21	N=94	N=110	n=111
		Countywide	0:13:13		0:13:16	0:13:07	13:04	13:15
			n=4598		n=349	N=1328	N=1313	N=1593
	Total Response Time ERF **Concentration**	Urban	N/A	N/A	N/A	N/A	N/A	N/A
			N/A	N/A	N/A	N/A	N/A	N/A
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
			N/A	N/A	N/A	N/A	N/A	N/A
		Countywide	N/A	N/A	N/A	N/A	N/A	N/A
			N/A	N/A	N/A	N/A	N/A	N/A

Risk Category: Fire Suppression / Risk Classification: Low

BASELINE (ACTUAL) PERFORMANCE STATEMENT
LOW RISK FIRE-ADAPTIVE – SINGLE ENGINE (A1F)

For low-risk adaptive A1F incidents, the baseline total response time (TRT) at the 90th percentile for arrival of the engine company is as follows in each of the density zones:

Urban:	**0:12:25**	**Rural:**	**0:19:01**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:04:16**

For turnout time at the 90th percentile and Countywide: **0:01:37**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban:	**0:07:56**	**Rural:**	**0:13:06**

Note: The ERF is the same as the first unit as this low-risk classification is only measuring one unit.

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Risk Category: Fire Suppression – Other Hazard / Risk Classification: Low

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

LOW RISK FIRE-ADAPTIVE – SINGLE ENGINE (A1F)

For low-risk adaptive A1F incidents, the benchmark target goal for total response time (TRT) at the 90th percentile for arrival of the appropriate unit is as follows in each of the density zones:

Urban: 12:15 **Rural: 18:15**

For phone to dispatch (PtoD) call-processing at the 90th percentile all zones: **04:00**
For turnout time at the 90th percentile all zones: **01:20**

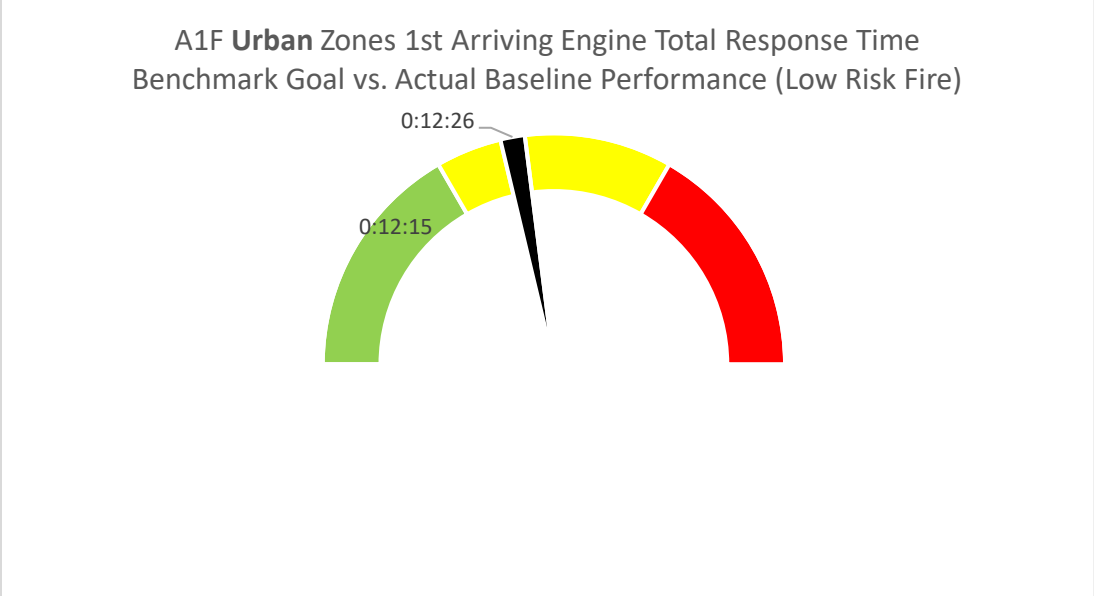
The travel time for the arrival of the engine company is as follows in each of the density zones:

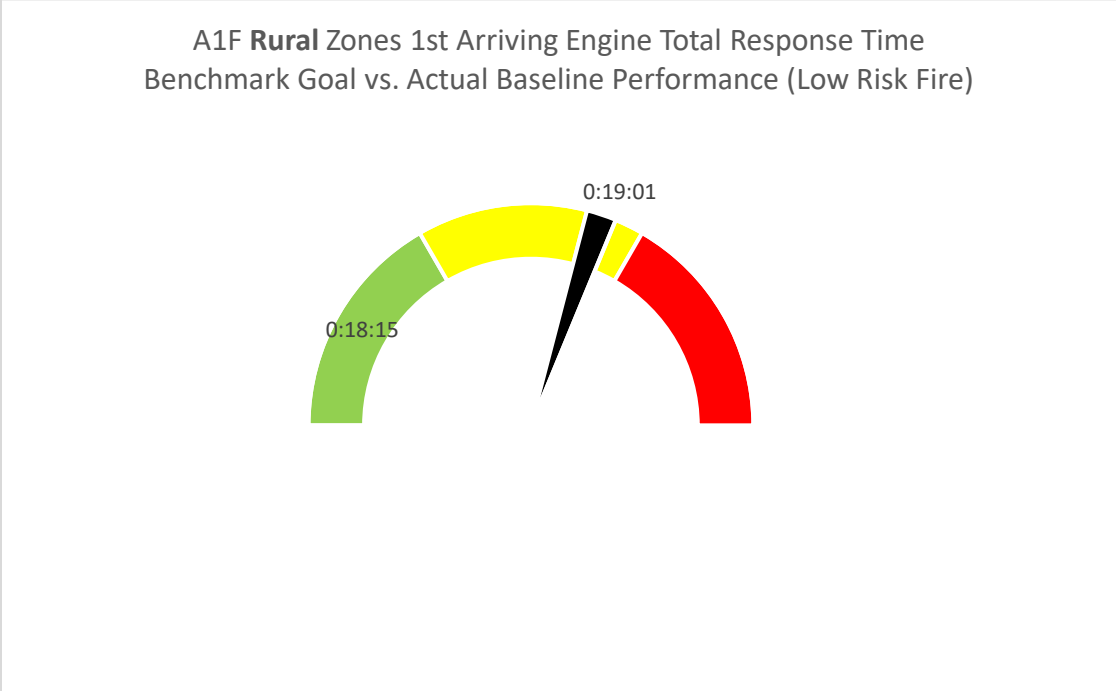
Urban: 7:30 **Rural: 12:45**

Note: The ERF is the same as the first unit as this low-risk classification is only measuring one unit.

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

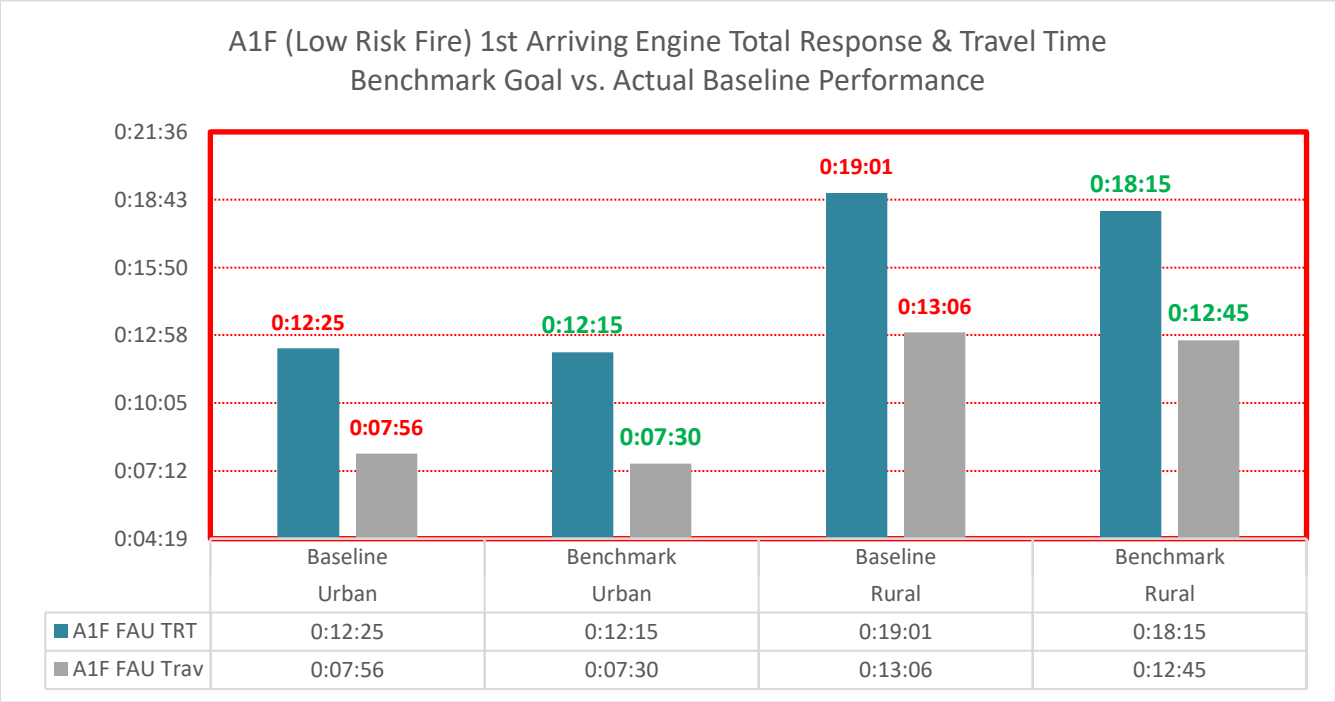
CPSE calls *Reporting The GAP* an integral part of the CRA/SOC document. It is the ongoing assessment of the agency's performance, especially its ability to reach the approved benchmark (target) measures. The difference between current (baseline) and desired (benchmark performance) is the gap. The following charts will compare MCFRS' baseline actual First Arriving Unit (FAU) total response time (TRT), and TRT Effective Response Force (ERF) times versus approved benchmark response time goals.





Reporting the Gap: A1F Low Risk Fire

Program	Urban	Urban	Urban	Rural	Rural	Rural
	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
A1F FAU TRT	0:12:25	0:12:15	-1.34%	0:19:01	0:18:15	-4.03%
A1F FAU Trav	0:07:56	0:07:30	-5.46%	0:13:06	0:12:45	-2.67%
ERF TRT	N/A	N/A	N/A	N/A	N/A	N/A



Risk Category: Fire Suppression – Other Hazard / Risk Classification: Low

(Low Risk) Other Hazard (Single Unit) – A1N - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:03:20		0:03:20	0:03:21	3:20	3:17
		Rural	0:03:43		0:03:21	0:03:21	3:45	3:53
		Countywide	0:03:21		0:03:20	0:03:21	3:20	3:19
Turnout Time Turnout Time 1st Unit		Urban	0:01:42		0:01:43	0:01:43	1:41	1:43
		Rural	0:01:53		0:01:54	0:01:44	1:50	2:02
		Countywide	0:01:42		0:01:44	0:01:43	1:41	1:43
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:06:40		0:06:38	0:06:35	6:43	6:42
		Rural	0:12:21		0:11:42	0:12:43	12:15	12:24
		Countywide	0:06:56		0:06:50	0:06:49	6:57	7:00
	Travel Time ERF **Concentration**	Urban	N/A	N/A	N/A	N/A	N/A	N/A
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
		Countywide	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:10:31		0:10:46	0:10:28	10:27	10:37
			N=31561		n=2853	N=9711	N=10661	n=11085
		Rural	0:17:17		0:16:43	0:16:21	16:25	17:39
			N=1059		n=86	N=347	N=364	n=346
		Countywide	0:10:50		0:10:57	0:10:47	10:41	10:57
			n=32620		n=2939	N=10058	N=11025	N=11431
	Total Response Time ERF **Concentration**	Urban	N/A	N/A	N/A	N/A	N/A	N/A
			N/A	N/A	N/A	N/A	N/A	N/A
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
			N/A	N/A	N/A	N/A	N/A	N/A
		Countywide	N/A	N/A	N/A	N/A	N/A	N/A
			N/A	N/A	N/A	N/A	N/A	N/A

Risk Category: Fire Suppression – Other Hazard / Risk Classification: Low

BASELINE (ACTUAL) PERFORMANCE STATEMENT
LOW RISK NON-FIRE / OTHER HAZARD ADAPTIVE – SINGLE UNIT (A1N)

For low-risk adaptive A1N incidents, the baseline total response time (TRT) at the 90th percentile for arrival of the engine company is as follows in each of the density zones:

Urban:	**0:10:31**	**Rural:**	**0:17:17**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:03:21**

For turnout time at the 90th percentile and Countywide: **0:01:42**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban:	**0:06:40**	**Rural:**	**0:12:21**

Note: The ERF is the same as the first unit as this low-risk classification is only measuring one unit.

The first-arriving unit for all other-hazard low risk incidents shall be capable of: Conducting an effective Initial On-Scene Report and verbalizing it via radio; Determining incident objectives and deploying appropriate strategy to mitigate incident; Managing any other resources assigned; Requesting additional resources if needed; Providing Situation Update Reports; Announcing unexpected hazards.

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

LOW RISK NON-FIRE / OTHER HAZARD ADAPTIVE – SINGLE UNIT (A1N)

For low-risk adaptive A1N incidents, the benchmark target goal for total response time (TRT) at the 90th percentile for arrival of the appropriate unit is as follows in each of the density zones:

Urban: 10:00 **Rural: 16:15**

For phone to dispatch (PtoD) call-processing at the 90th percentile all zones: **03:00**
For turnout time at the 90th percentile all zones: **01:20**

The travel time for the arrival of the engine company is as follows in each of the density zones:

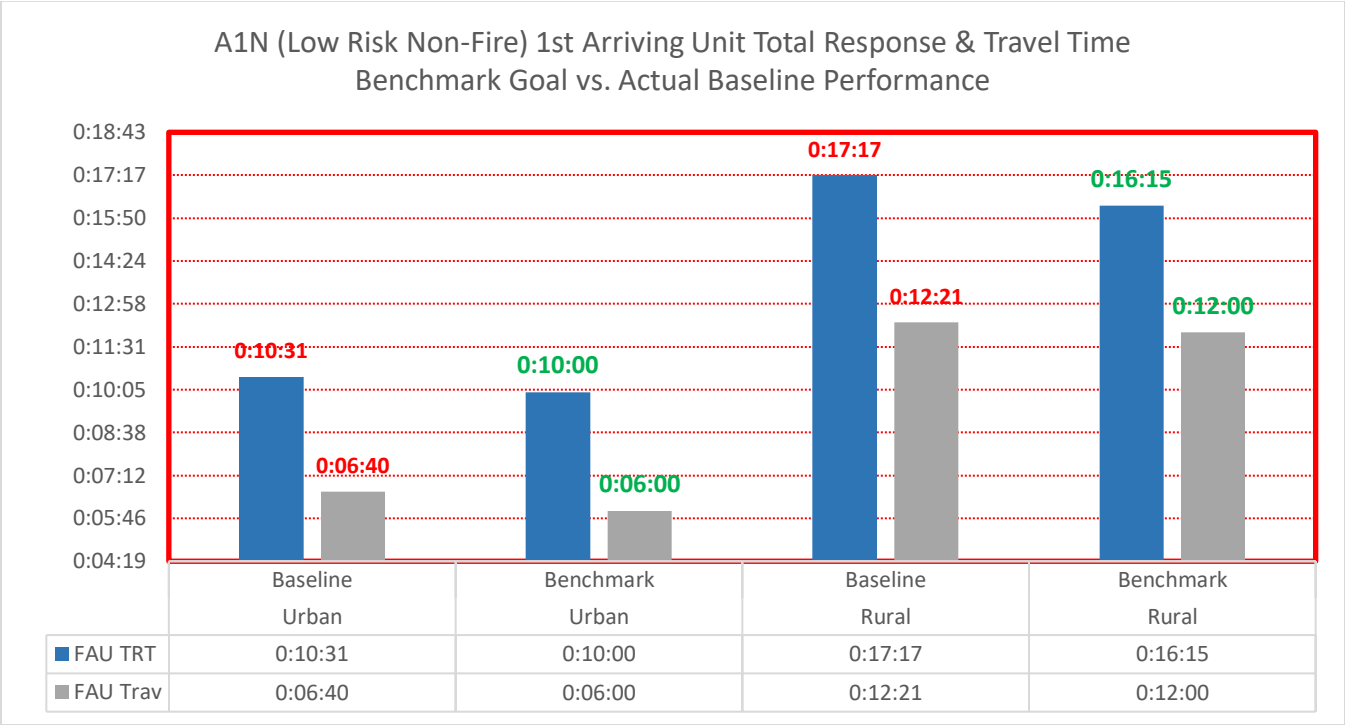
Urban: 6:00 **Rural: 12:00**

Note: The ERF is the same as the first unit as this low-risk classification is only measuring one unit.

The first-arriving unit for all other-hazard low risk incidents shall be capable of: Conducting an effective Initial On-Scene Report and verbalizing it via radio; Determining incident objectives and deploying appropriate strategy to mitigate incident; Managing any other resources assigned; Requesting additional resources if needed; Providing Situation Update Reports; Announcing unexpected hazards.

Reporting the Gap: A1N Low Risk Non-Fire

Program	Urban	Urban	Urban	Rural	Rural	Rural
A1N	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:10:31	0:10:00	-4.91%	0:17:17	0:16:15	-5.98%
FAU Trav	0:06:40	0:06:00	-10.00%	0:12:21	0:12:00	-2.83%
ERF TRT	N/A	N/A	N/A	N/A	N/A	N/A



Risk Category: Fire Suppression / Risk Classification: Moderate

(Moderate Risk) Fire Suppression (2 and 1) – A2-3 - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:03:39		0:04:06	0:03:50	3:35	3:35
		Rural	0:03:35		0:03:28	0:03:29	3:34	3:42
		Countywide	0:03:39		0:04:02	0:03:49	3:35	3:35
Turnout Time Turnout Time 1st Unit		Urban	0:01:41		0:01:43	0:01:44	1:40	1:40
		Rural	0:02:12		0:02:14	0:01:58	2:17	2:25
		Countywide	0:01:42		0:01:43	0:01:44	1:41	1:41
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:05:38		0:05:07	0:05:32	5:44	5:38
		Rural	0:09:54		0:09:33	0:09:05	10:45	11:47
		Countywide	0:05:44		0:05:30	0:05:35	5:51	5:44
	Travel Time ERF **Concentration**	Urban	0:09:18		0:09:13	0:09:07	9:22	9:25
		Rural	0:12:56		0:15:13	0:12:48	14:50	12:16
		Countywide	0:09:27		0:09:24	0:09:13	9:31	9:28
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:09:32		0:09:46	0:09:37	9:32	9:24
			n=6774		N=503	N=2044	N=2258	n=2449
		Rural	0:14:08		0:18:17	0:12:40	14:19	16:22
			n=195		N=13	N=72	N=68	n=55
		Countywide	0:09:39		0:10:06	0:09:44	9:42	9:28
			n=6969		N=516	N=2116	N=2326	n=2504
	Total Response Time ERF **Concentration**	Urban	0:13:27		0:14:07	0:13:19	13:38	13:29
			n=4837		N=382	N=1372	N=1622	n=1828
		Rural	0:16:50		0:21:56	0:16:14	19:19	16:04
			n=114		N=7	N=45	N=40	n=29
		Countywide	0:13:38		0:14:15	0:13:27	13:54	13:36
			n=4951		N=389	N=1417	N=1662	n=1857

Risk Category: Fire Suppression – Other Hazard / Risk Classification: Moderate

BASELINE (ACTUAL) PERFORMANCE STATEMENT
MODERATE RISK FIRE - ADAPTIVE (A2-3)

For moderate-risk adaptive A2-3 incidents, the baseline total response time (TRT) at the 90th percentile for arrival of the first unit is as follows in each of the density zones:

Urban:	**0:09:32**	**Rural:**	**0:14:08**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:03:39**

For turnout time at the 90th percentile and Countywide: **0:01:42**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban:	**0:05:38**	**Rural:**	**0:09:54**

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban:	**0:13:27**	**Rural:**	**0:16:50**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up & announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Risk Category: Fire Suppression / Risk Classification: Moderate

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

MODERATE RISK FIRE-ADAPTIVE (A2-3)

For moderate-risk adaptive A2-3 incidents, the benchmark target goal for total response time (TRT) at the 90th percentile for arrival of the first unit is as follows in each of the density zones:

Urban: 09:30 **Rural: 14:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile all zones: **03:00**
For turnout time at the 90th percentile all zones: **01:20**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban: 5:00 **Rural: 09:30**

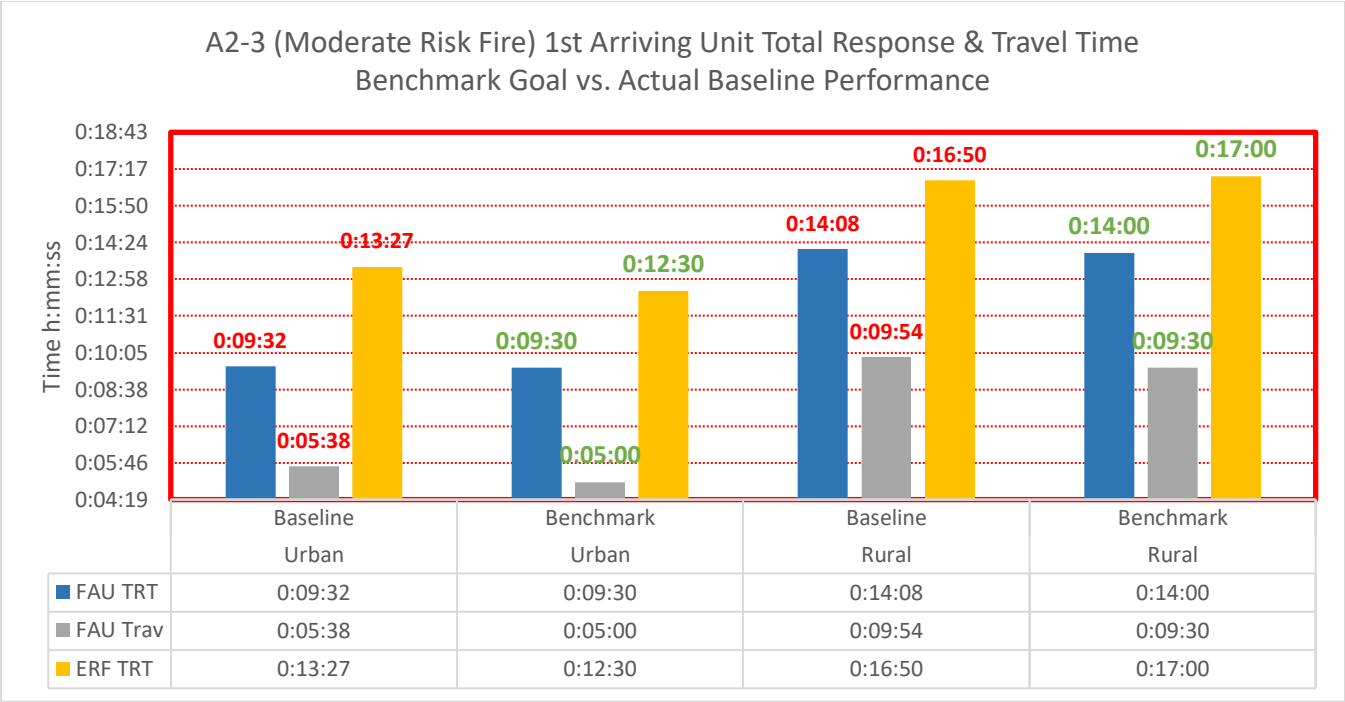
The effective response force (ERF) benchmark target goal TRT at the 90th percentile is as follows in each of the following density zones:

Urban: 12:30 **Rural: 17:00**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Reporting the Gap: A2-3 (2 Engines & 1 Special Service) Moderate Risk Fire

Program A2-3	Urban Baseline	Urban Benchmark	Urban Gap %	Rural Baseline	Rural Benchmark	Rural Gap %
FAU TRT	0:09:32	0:09:30	-0.35%	0:14:08	0:14:00	-0.94%
FAU Trav	0:05:38	0:05:00	-11.24%	0:09:54	0:09:30	-4.04%
ERF TRT	0:13:27	0:12:30	-7.06%	0:16:50	0:17:00	0.99%



Risk Category: Fire Suppression / Risk Classification: High

(High Risk) Fire Suppression – FFA-HY (Hydranted Areas) - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:04:01		0:04:17	0:04:07	4:04	3:57
		Rural	0:04:04		0:03:17	0:06:48	4:01	3:38
		Countywide	0:04:01		0:04:17	0:04:07	4:01	3:57
Turnout Time Turnout Time 1st Unit		Urban	0:01:31		0:01:29	0:01:33	1:25	1:34
		Rural	0:01:33		0:01:36	0:01:57	1:50	1:25
		Countywide	0:01:31		0:01:30	0:01:33	1:25	1:34
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:05:58		0:05:31	0:05:58	5:40	6:17
		Rural	0:08:05		0:06:00	0:08:05	7:26	17:21
		Countywide	0:06:00		0:05:32	0:05:58	5:41	6:24
	Travel Time ERF **Concentration**	Urban	0:17:15		0:16:48	0:16:39	16:31	18:38
		Rural	0:16:13		N/A	0:16:13	12:52	15:24
		Countywide	0:17:13		0:16:48	0:16:39	16:31	18:38
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:09:42		0:09:03	0:09:47	9:27	10:04
			n=1966		N=144	N=707	N=654	N=598
		Rural	0:13:19		0:09:32	0:13:19	13:02	16:41
			n=25		N=6	N=6	N=9	N=10
		Countywide	0:09:42		0:09:08	0:09:47	9:27	10:07
			n=1991		N=150	N=713	N=663	N=608
	Total Response Time ERF **Concentration**	Urban	0:21:31		0:21:10	0:21:19	21:18	23:15
			n=631		N=45	N=213	N=208	N=210
		Rural	0:23:08		N/A	0:18:21	18:56	23:08
			n=9		N=0	N=2	N=3	N=4
		Countywide	0:23:31		0:21:10	0:21:19	21:17	23:15
			n=640		N=45	N=215	N=211	N=214

Risk Category: Fire Suppression / Risk Classification: High

BASELINE (ACTUAL) PERFORMANCE STATEMENT
HIGH RISK FIRE – FIRE FULL ASSIGNMENT IN HYDRANT AREAS FFA-HY

For high-risk fire full assignments in hydranted risk management zones (box areas), the baseline total response time (TRT) at the 90th percentile for arrival of the first engine is as follows in each of the density zones:

Urban:	**0:09:42**	**Rural:**	**0:13:19**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:04:01**

For turnout time at the 90th percentile and Countywide: **0:01:31**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban:	**0:05:58**	**Rural:**	**0:08:05**

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban:	**0:21:31**	**Rural:**	**0:23:08**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up & announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Risk Category: Fire Suppression / Risk Classification: High

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

HIGH RISK FIRE – FIRE FULL ASSIGNMENT IN HYDRANT AREAS FFA-HY

For high-risk fire full assignments in hydranted risk management zones (box areas), the benchmark target goal total response time (TRT) at the 90th percentile for arrival of the first engine is in as follows in each of the density zones:

Urban: 09:15 **Rural: 12:30**

For phone to dispatch (PtoD) call-processing at the 90th percentile all zones: **03:00**
For turnout time at the 90th percentile all zones: **01:20**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban: 5:30 **Rural: 07:30**

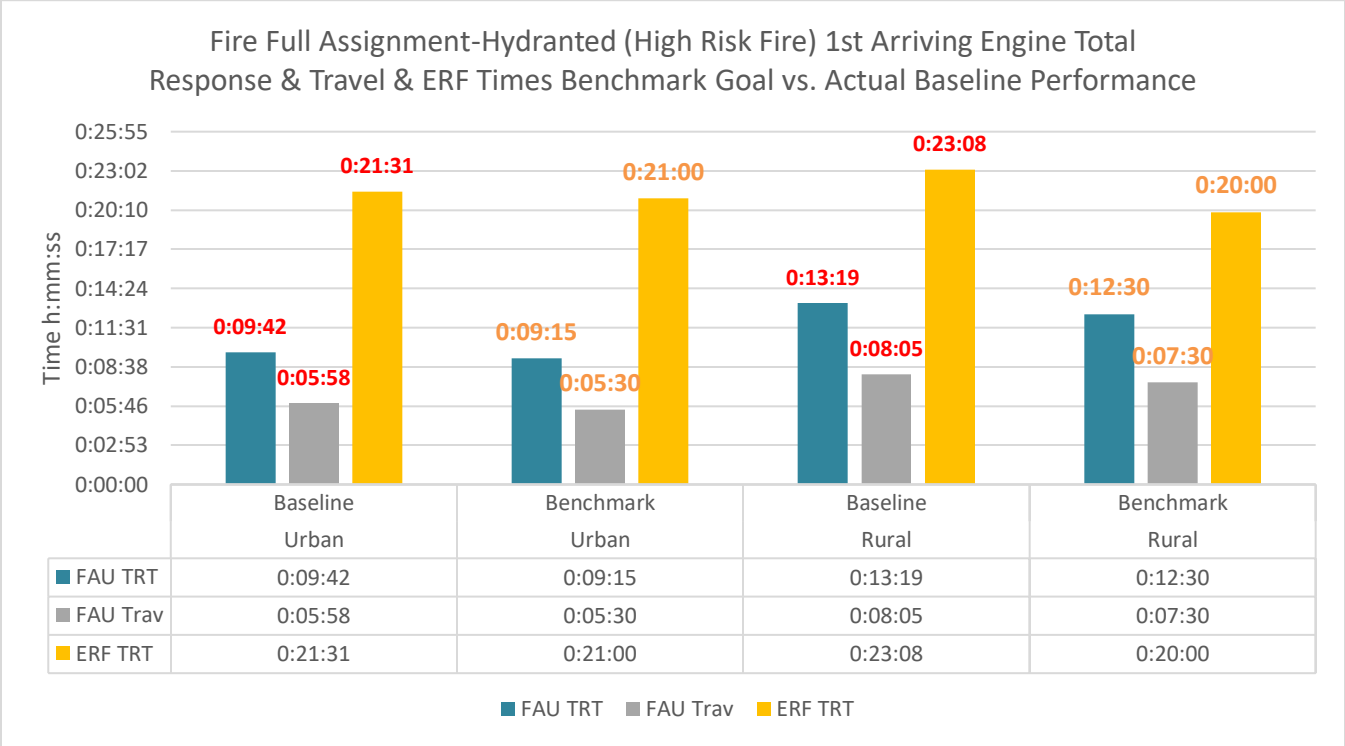
The effective response force (ERF) benchmark target goal TRT at the 90th percentile is as follows in each of the following density zones:

Urban: 21:00 **Rural: 20:00**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Reporting the Gap: FFA-HY (Fire Full Assignment Hydranted Areas) High Risk Fire

Program	Urban	Urban	Urban	Rural	Rural	Rural
FFA-HY	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:09:42	0:09:15	-4.64%	0:13:19	0:12:30	-6.13%
FAU Trav	0:05:58	0:05:30	-7.82%	0:08:05	0:07:30	-7.22%
ERF TRT	0:21:31	0:21:00	-2.40%	0:23:08	0:20:00	-13.54%



Risk Category: Fire Suppression / Risk Classification: Special

(Special Risk) Fire Suppression – FFA-NH (Non-Hydrant Areas) - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:03:49		0:02:56	0:03:04	4:11	2:53
		Rural	0:04:15		0:08:20	0:04:14	3:32	6:20
		Countywide	0:04:05		0:08:20	0:04:07	4:05	5:14
Turnout Time Turnout Time 1st Unit		Urban	0:02:41		0:02:29	0:02:30	2:29	3:01
		Rural	0:03:07		0:01:55	0:02:33	4:00	3:02
		Countywide	0:02:52		0:01:56	0:02:31	3:10	3:02
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:07:58		0:05:15	0:07:58	9:11	7:30
		Rural	0:11:37		0:05:14	0:08:24	11:45	11:40
		Countywide	0:09:42		0:05:14	0:08:24	10:54	10:51
	Travel Time ERF **Concentration**	Urban	0:25:27		N/A	0:25:27	22:50	0:34
		Rural	0:25:19		0:20:45	0:28:32	19:17	0:34
		Countywide	0:25:27		0:20:45	0:28:32	22:15	0:34
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:11:00		0:09:05	0:10:52	11:38	11:00
			n=45		N=1	N=17	N=18	N=10
		Rural	0:15:20		0:13:11	0:13:05	16:02	15:29
			n=54		N=3	N=22	N=18	N=14
		Countywide	0:13:58		0:13:11	0:12:48	15:00	13:58
			n=99		N=4	N=39	N=36	N=24
	Total Response Time ERF Concentration	Urban	0:32:34		N/A	0:32:34	0:27	0:42
			n=13		N=0	N=3	N=7	N=3
		Rural	0:44:01		0:23:33	0:44:01	0:40	0:44
			n=18		N=1	N=3	N=9	N=6
		Countywide	0:40:00		0:23:33	0:44:01	0:40	0:44
			n=31		N=1	N=6	N=16	N=9

Risk Category: Fire Suppression / Risk Classification: Special

BASELINE (ACTUAL) PERFORMANCE STATEMENT
SPECIAL RISK FIRE – FIRE FULL ASSIGNMENT IN NON-HYDRANT AREAS FFA-NH

For special-risk fire full assignments in non-hydranted risk management zones (box areas), the baseline total response time (TRT) at the 90th percentile for arrival of the first engine is as follows in each of the density zones:

Urban:	**0:11:00**	**Rural:**	**0:15:20**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:04:05**

For turnout time at the 90th percentile and Countywide: **0:02:52**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban:	**0:07:58**	**Rural:**	**0:11:37**

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban:	**0:32:34**	**Rural:**	**0:44:01**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Risk Category: Fire Suppression / Risk Classification: Special

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

SPECIAL RISK FIRE – FIRE FULL ASSIGNMENT IN NON-HYDRANT AREAS FFA-NH

For special-risk fire full assignments in non-hydranted risk management zones (box areas), the benchmark target goal total response time (TRT) at the 90th percentile for arrival of the first engine is as follows in each of the density zones:

Urban: 10:45 **Rural: 15:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile all zones: **03:00**
For turnout time at the 90th percentile all zones: **02:00**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban: 7:30 **Rural: 10:00**

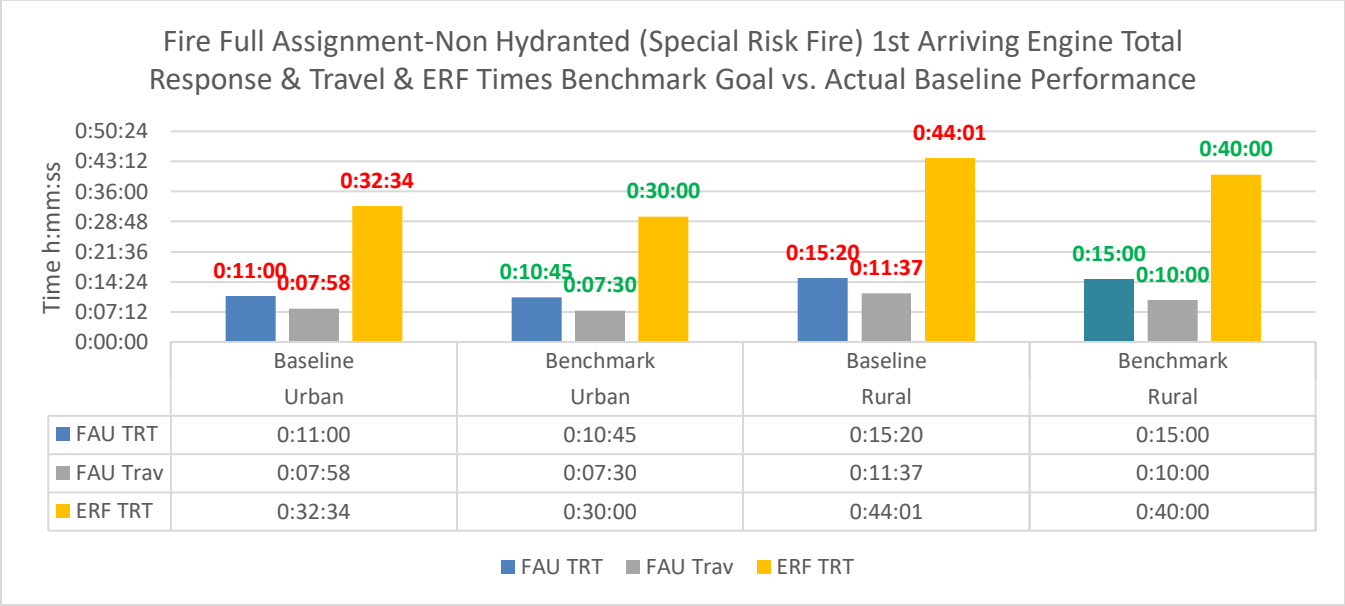
The effective response force (ERF) benchmark target goal TRT at the 90th percentile is as follows in each of the following density zones:

Urban: 30:00 **Rural: 40:00**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Reporting the Gap: FFA-NH (Fire Full Assignment Non-Hydranted Areas) Special Risk Fire

Program	Urban	Urban	Urban	Rural	Rural	Rural
FFA-NH	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:11:00	0:10:45	-2.27%	0:15:20	0:15:00	-2.17%
FAU Trav	0:07:58	0:07:30	-5.86%	0:11:37	0:10:00	-13.92%
ERF TRT	0:32:34	0:30:00	-7.88%	0:44:01	0:40:00	-9.13%



Risk Category: Fire Suppression / Risk Classification: Special

(Special Risk) Fire Suppression – FFA-SRHR (High-Rise) - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:04:13		0:04:20	0:04:23	4:13	4:07
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:04:13		0:04:20	0:04:23	4:13	4:07
Turnout Time Turnout Time 1st Unit		Urban	0:01:20		0:01:26	0:01:21	1:15	1:25
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:01:20		0:01:26	0:01:21	1:15	1:25
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:04:27		0:04:11	0:04:12	4:29	5:36
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:04:29		0:04:11	0:04:12	4:29	5:36
	Travel Time ERF **Concentration**	Urban	0:15:54		0:13:39	0:18:06	15:54	15:44
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:15:54		0:13:39	0:18:06	15:54	15:44
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:08:30		0:08:10	0:08:12	8:12	8:56
			n=249		N=28	N=114	N=88	N=46
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	n=0	n=0	n=0
		Countywide	0:08:30		0:08:10	0:08:12	8:12	8:56
			n=249		N=28	N=115	N=88	N=46
	Total Response Time ERF Concentration	Urban	0:20:23		0:16:08	0:23:40	20:08	19:30
			n=101		N=10	N=48	N=36	N=17
		Rural	N/A		N/A	N/A	N/A	N/A
			N/A		N=0	N=0	N=0	N=0
		Countywide	0:20:23		0:16:08	0:23:40	20:08	19:30
			n=101		N=10	N=48	N=36	N=17

Risk Category: Fire Suppression / Risk Classification: Special

BASELINE (ACTUAL) PERFORMANCE STATEMENT
SPECIAL RISK FIRE – FIRE FULL ASSIGNMENT HIGH-RISE INCIDENTS FFA-SRHR

For special-risk fire full assignment high-rise incidents the baseline total response time (TRT) at the 90th percentile for arrival of the first engine is as follows in each of the density zones:

Urban: **0:08:30** **Rural:** **N/A**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:04:13**

For turnout time at the 90th percentile and Countywide: **0:01:20**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban: **0:04:27** **Rural:** **N/A**

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: **0:20:23** **Rural:** **N/A**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Risk Category: Fire Suppression / Risk Classification: Special

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

SPECIAL RISK FIRE – FIRE FULL ASSIGNMENT HIGH-RISE INCIDENTS FFA-SRHR

For special-risk fire full assignment high-rise incidents, the benchmark target goal total response time (TRT) at the 90th percentile for arrival of the first engine is as follows in each of the density zones:

Urban: 08:15 **Rural: N/A**

For phone to dispatch (PtoD) call-processing at the 90th percentile all zones: **03:00**
For turnout time at the 90th percentile all zones: **01:10**

The travel time for the arrival of the engine company is as follows in each of the density zones:

Urban: 04:00 **Rural: N/A**

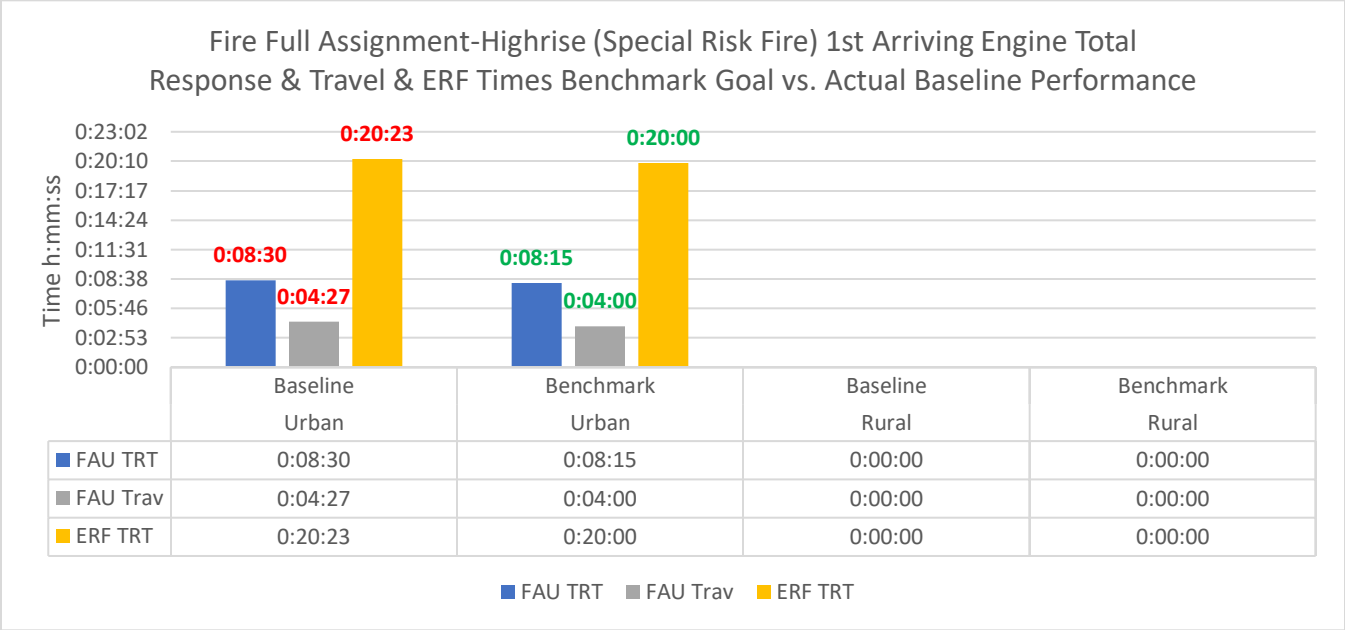
The effective response force (ERF) benchmark target goal TRT at the 90th percentile is as follows in each of the following density zones:

Urban: 20:00 **Rural: N/A**

The first-arriving engine for all fire-related risk levels shall be capable of: Establishing an uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Conducting a 360 degree size-up and announcing report; Providing Situation Update Reports; Advancing an attack line which has a minimum flow rate of 150 GPM and operated by a minimum of two members; Locating, confining, and extinguishing fire; Announcing when the line is operating on the fire or if fire's location cannot be quickly determined; Announcing unexpected hazards.

Reporting the Gap: FFA-SRHR (Fire Full Assignment High-Rise) Special Risk Fire

Program	Urban	Urban	Urban	Rural	Rural	Rural
FFA-SRHR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:08:30	0:08:15	-2.94%	N/A	N/A	#VALUE!
FAU Trav	0:04:27	0:04:00	-10.11%	N/A	N/A	#VALUE!
ERF TRT	0:20:23	0:20:00	-1.88%	N/A	N/A	#VALUE!



Risk Category: EMS / Risk Classification: Low

(Low Risk) EMS – BLS - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:04:01		0:04:19	0:04:15	3:59	3:50
		Rural	0:04:09		0:04:15	0:04:22	4:07	3:52
		Countywide	0:04:02		0:04:19	0:04:15	4:00	3:50
Turnout Time Turnout Time 1st Unit		Urban	0:01:37		0:01:38	0:01:38	1:36	1:37
		Rural	0:01:45		0:01:51	0:01:46	1:43	1:47
		Countywide	0:01:37		0:01:38	0:01:38	1:36	1:38
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:07:56		0:07:59	0:08:06	7:59	7:46
		Rural	0:11:10		0:11:23	0:11:20	10:47	11:15
		Countywide	0:08:02		0:08:07	0:08:12	8:05	7:52
	Travel Time ERF **Concentration**	Urban	0:08:34		0:08:26	0:08:36	8:35	8:31
		Rural	0:12:33		0:13:24	0:12:23	12:29	12:56
		Countywide	0:08:42		0:08:39	0:08:44	8:43	8:40
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:12:19		0:12:49	0:12:44	12:16	11:59
			131675		N=9222	n=38287	n=45794	n=47220
		Rural	0:15:35		0:16:10	0:15:47	15:10	15:41
			n=3361		N=277	N=994	N=1208	N=1151
		Countywide	0:12:26		0:12:56	0:12:52	12:23	12:06
			135036		N=9499	n=39281	47002	48371
	Total Response Time ERF Concentration	Urban	0:12:58		0:13:17	0:13:14	12:51	12:47
			n=128221		N=8995	n=37202	44622	46022
		Rural	0:17:19		0:18:09	0:17:00	17:16	17:32
			n=3194		N=267	N=946	N=1147	N=1093
		Countywide	0:13:07		0:13:26	0:13:24	13:01	12:57
			n=131415		N=9262	n=38148	45769	47115

Risk Category: EMS / Risk Classification: Low

BASELINE (ACTUAL) PERFORMANCE STATEMENT
LOW RISK EMS – BASIC LIFE SUPPORT - BLS

For low-risk basic life support (BLS) emergency medical services (EMS) incidents, the baseline total response time (TRT) at the 90th percentile for arrival of the first unit (i.e., any fire-rescue unit) is as follows in each of the density zones:

Urban: 0:12:19 Rural: 0:15:35

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:04:02**

For turnout time at the 90th percentile and Countywide: **0:01:37**

The travel time for the arrival of the first unit is as follows in each of the density zones:

Urban: 0:07:56 Rural: 0:11:10

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:12:58 Rural: 0:17:19

The first-arriving unit for all EMS-related risk levels shall be capable of: Size-up; IC; Scene safety; Additional resources if needed, family liaison, manage span-of-control; Assisting with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support.

Risk Category: EMS / Risk Classification: Low

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

LOW RISK EMS – BASIC LIFE SUPPORT – BLS

For low-risk basic life support (BLS) emergency medical services (EMS) incidents, the baseline total response time (TRT) at the 90th percentile for arrival of the first unit (i.e., any fire-rescue unit) is as follows in each of the density zones:

Urban: 12:00 **Rural: 15:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile all zones: **03:30**
For turnout time at the 90th percentile all zones: **01:20**

The travel time for the arrival of the first unit is as follows in each of the density zones:

Urban: 07:00 **Rural: 11:00**

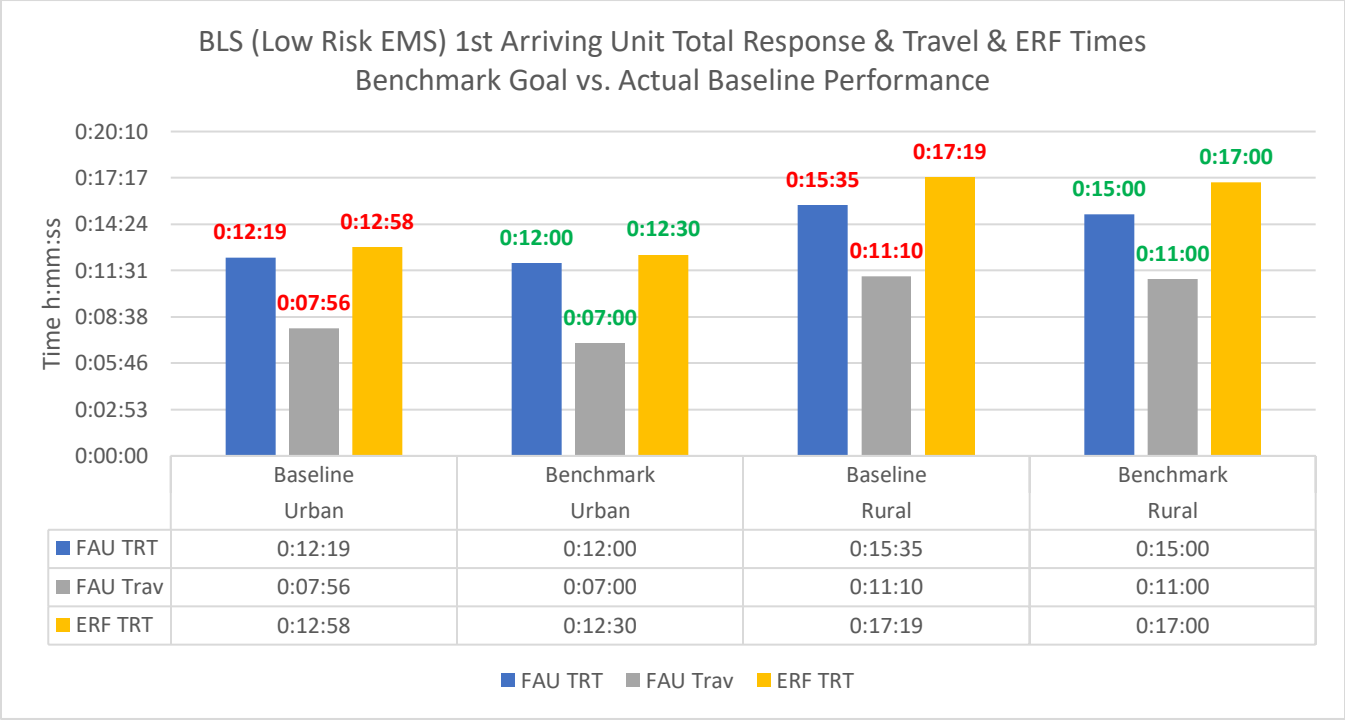
The effective response force (ERF) benchmark target goal TRT at the 90th percentile is as follows in each of the following density zones:

Urban: 12:30 **Rural: 17:00**

The first-arriving unit for all EMS-related risk levels shall be capable of: Size-up; IC; Scene safety; Additional resources if needed, family liaison, manage span-of-control; Assisting with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support.

Reporting the Gap: BLS (Basic Life Support) Low Risk EMS

Program	Urban	Urban	Urban	Rural	Rural	Rural
BLS	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:12:19	0:12:00	-2.57%	0:15:35	0:15:00	-3.74%
FAU Trav	0:07:56	0:07:00	-11.76%	0:11:10	0:11:00	-1.49%
ERF TRT	0:12:58	0:12:30	-3.60%	0:17:19	0:17:00	-1.83%



Risk Category: EMS / Risk Classification: Moderate

(Moderate Risk) EMS – ALS1 (One Paramedic) - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:03:43		0:04:02	0:03:59	3:37	3:32
		Rural	0:03:36		0:04:00	0:03:44	3:36	3:25
		Countywide	0:03:43		0:04:02	0:03:59	3:37	3:32
Turnout Time Turnout Time 1st Unit		Urban	0:01:37		0:01:38	0:01:38	1:36	1:37
		Rural	0:01:45		0:01:46	0:01:47	1:44	1:45
		Countywide	0:01:37		0:01:38	0:01:38	1:36	1:37
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:06:43		0:06:53	0:06:41	6:42	6:45
		Rural	0:10:27		0:09:37	0:10:25	10:43	10:15
		Countywide	0:06:51		0:07:04	0:06:50	6:51	6:53
	Travel Time ERF **Concentration**	Urban	0:08:05		0:08:10	0:08:11	8:05	8:01
		Rural	0:13:58		0:12:36	0:15:05	12:54	13:11
		Countywide	0:08:15		0:08:22	0:08:24	8:14	8:09
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:11:00		0:11:43	0:11:26	10:46	10:47
			n=102605		N=7383	n=33099	n=34733	n=34486
		Rural	0:14:31		0:14:38	0:14:54	14:28	14:12
			n=2872		N=283	N=932	N=1013	N=918
		Countywide	0:11:08		0:11:57	0:11:37	10:54	10:56
			n=105477		N=7666	34031	35746	35404
	Total Response Time ERF Concentration	Urban	0:12:28		0:13:04	0:12:50	12:16	12:14
			n=41332		N=2778	n=12757	n=14464	n=14002
		Rural	0:18:16		0:16:42	0:19:27	17:29	17:13
			n=921		N=80	N=271	N=334	N=311
		Countywide	0:12:39		0:13:15	0:13:01	12:27	12:28
			n=42253		N=2858	n=13028	n=14798	n=14313

Risk Category: EMS / Risk Classification: Moderate

BASELINE (ACTUAL) PERFORMANCE STATEMENT
MODERATE RISK EMS – ADVANCED LIFE SUPPORT-1 – ALS1

For moderate-risk Advanced Life Support-1 (ALS1) EMS incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of any paramedic unit is as follows in each of the density zones:

Urban: 0:11:00 Rural: 0:14:31

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:03:43**

For turnout time at the 90th percentile and Countywide: **0:01:37**

The travel time for the arrival of the first paramedic unit is as follows in each of the density zones:

Urban: 0:06:43 Rural: 0:10:27

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:12:28 Rural: 0:18:16

The first-arriving unit for all EMS-related risk levels shall be capable of Size-up; IC; Scene safety; Additional resources if needed, family liaison, manage span-of-control; Assisting with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support.

Risk Category: EMS / Risk Classification: Moderate

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

MODERATE RISK EMS – ADVANCED LIFE SUPPORT-1 – ALS1

For moderate-risk ALS1 EMS incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of any paramedic unit is as follows in each of the density zones:

Urban: 10:15 **Rural: 14:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **3:00**
For turnout time at the 90th percentile and Countywide: **01:20**

The travel time for the arrival of the first paramedic unit is as follows in each of the density zones:

Urban: 06:30 **Rural: 10:00**

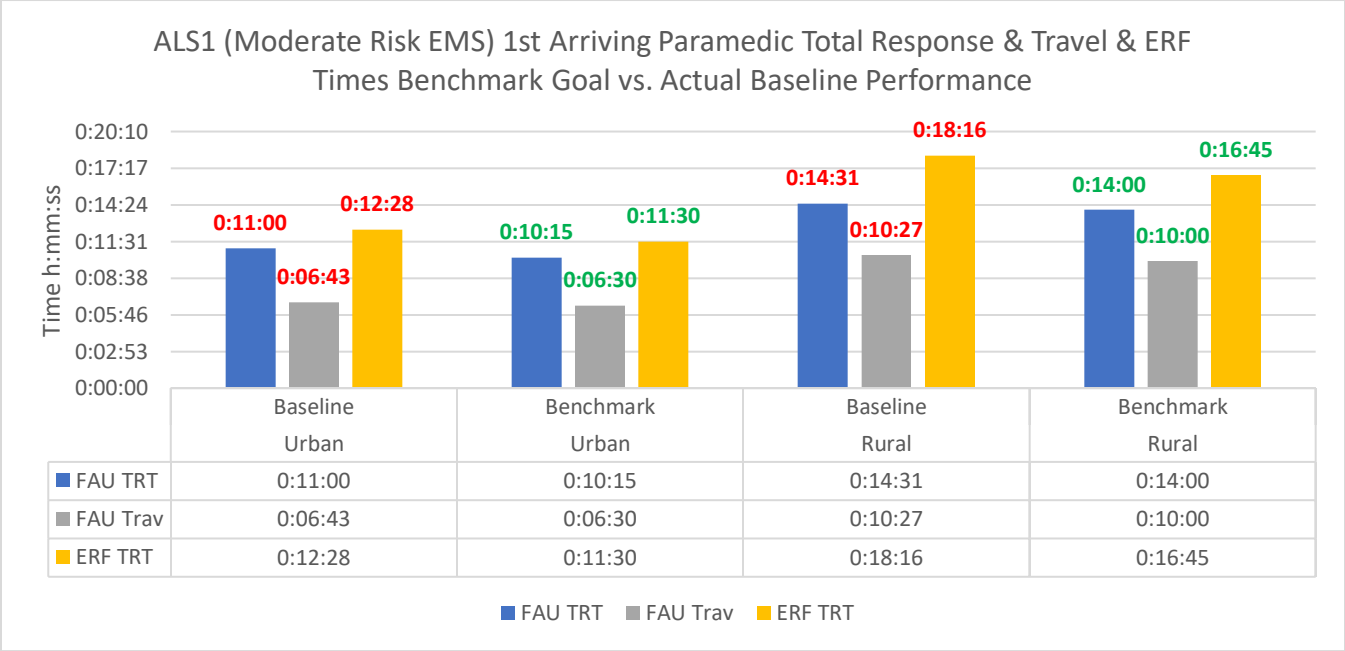
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 11:30 **Rural: 16:45**

The first-arriving unit for all EMS-related risk levels shall be capable of Size-up; IC; Scene safety; Additional resources if needed, family liaison, manage span-of-control; Assisting with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support.

Reporting the Gap: ALS1 (Advanced Life Support 1 Paramedic) Moderate Risk EMS

Program	Urban	Urban	Urban	Rural	Rural	Rural
ALS1	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:11:00	0:10:15	-6.82%	0:14:31	0:14:00	-3.56%
FAU Trav	0:06:43	0:06:30	-3.23%	0:10:27	0:10:00	-4.31%
ERF TRT	0:12:28	0:11:30	-7.75%	0:18:16	0:16:45	-8.30%



Risk Category: EMS / Risk Classification: High

(High Risk) EMS – ALS2 (Two Paramedics) - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:03:25		0:03:35	0:03:33	3:25	3:17
		Rural	0:03:18		0:02:34	0:03:34	3:23	2:55
		Countywide	0:03:25		0:03:33	0:03:33	3:25	3:16
Turnout Time Turnout Time 1st Unit		Urban	0:01:36		0:01:35	0:01:37	1:35	1:35
		Rural	0:01:45		0:01:41	0:01:54	1:43	1:39
		Countywide	0:01:36		0:01:35	0:01:37	1:36	1:35
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:06:05		0:06:04	0:05:59	6:04	6:12
		Rural	0:09:43		0:07:20	0:10:16	9:08	10:07
		Countywide	0:06:13		0:06:07	0:06:09	6:11	6:22
	Travel Time ERF **Concentration**	Urban	0:08:20		0:08:47	0:08:35	8:08	8:20
		Rural	0:13:33		0:14:53	0:15:47	12:08	14:03
		Countywide	0:08:38		0:09:12	0:08:52	8:22	8:40
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:09:59		0:10:16	0:10:06	9:53	9:58
			n=14224		N=924	N=4639	N=4946	N=4609
		Rural	0:13:44		0:11:09	0:14:14	12:34	13:28
			n=415		N=35	N=138	N=139	N=137
		Countywide	0:10:08		0:10:20	0:10:17	10:03	10:05
			n=14639		N=959	N=4777	N=5085	N=4746
	Total Response Time ERF Concentration	Urban	0:12:26		0:12:50	0:12:41	12:53	12:33
			n=9729		N=625	N=3116	N=3564	N=3336
		Rural	0:17:39		0:16:35	0:19:33	17:06	18:10
			n=267		N=23	N=85	N=91	N=95
		Countywide	0:12:38		0:13:14	0:12:59	13:04	12:49
			n=9996		N=648	N=3201	N=3655	N=3431

Risk Category: EMS / Risk Classification: High

BASELINE (ACTUAL) PERFORMANCE STATEMENT
HIGH RISK EMS – ADVANCED LIFE SUPPORT-2 – ALS2

For high-risk ALS2 EMS incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of any paramedic unit is as follows in each of the density zones:

Urban: 0:09:59 Rural: 0:13:44

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:03:25**

For turnout time at the 90th percentile and Countywide: **0:01:36**

The travel time for the arrival of the first paramedic unit is as follows in each of the density zones:

Urban: 0:06:05 Rural: 0:09:43

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:12:26 Rural: 0:17:39

The first-arriving unit for all EMS-related risk levels shall be capable of Size-up; IC; Scene safety; Additional resources if needed, family liaison, manage span-of-control; Assisting with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support.

Risk Category: EMS / Risk Classification: High

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

HIGH RISK EMS – ADVANCED LIFE SUPPORT-2 – ALS2

For high-risk ALS2 EMS incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of any paramedic unit is as follows in each of the density zones:

Urban: 09:45 **Rural: 13:30**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **3:00**
For turnout time at the 90th percentile and Countywide: **01:20**

The travel time for the arrival of the first paramedic unit is as follows in each of the density zones:

Urban: 05:45 **Rural: 09:30**

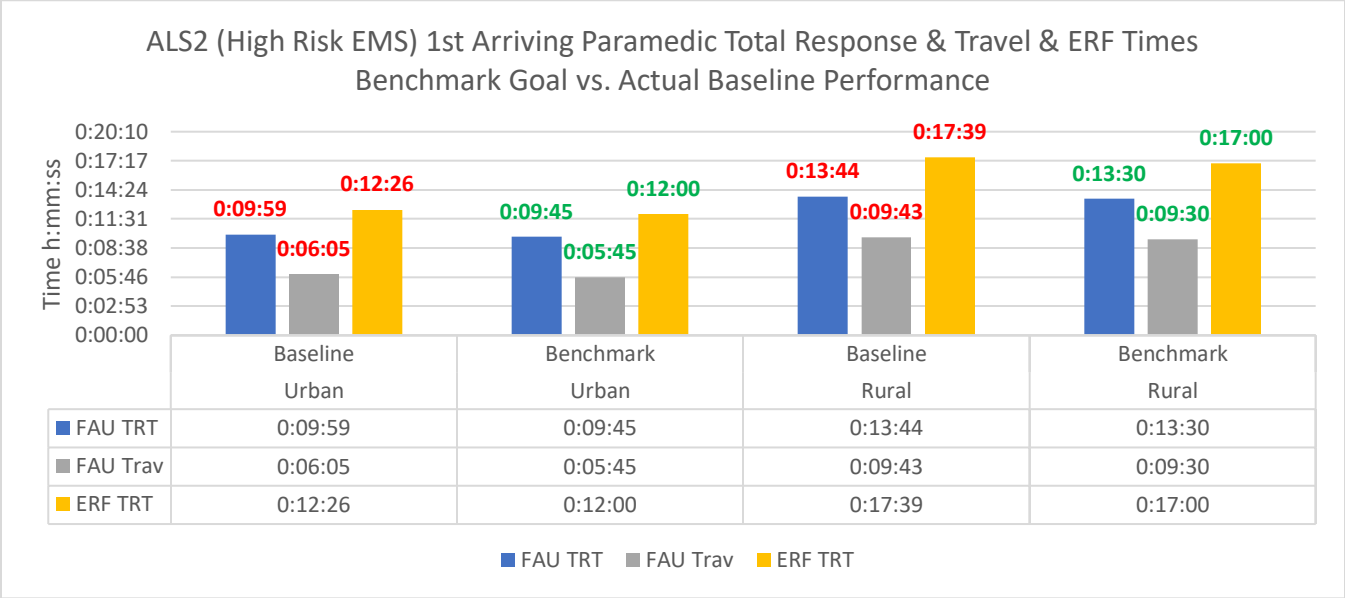
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 12:00 **Rural: 17:00**

The first-arriving unit for all EMS-related risk levels shall be capable of Size-up; IC; Scene safety; Additional resources if needed, family liaison, manage span-of-control; Assisting with equipment transport (O2, medical bag, AED, etc.), Patient care, ALS support.

Reporting the Gap: ALS2 (Advanced Life Support 2 Paramedics) High Risk EMS

Program	Urban	Urban	Urban	Rural	Rural	Rural
ALS2	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:09:59	0:09:45	-2.34%	0:13:44	0:13:30	-1.70%
FAU Trav	0:06:05	0:05:45	-5.48%	0:09:43	0:09:30	-2.23%
ERF TRT	0:12:26	0:12:00	-3.49%	0:17:39	0:17:00	-3.68%



Risk Category: Hazmat / Risk Classification: Moderate

(Moderate Risk) Hazmat – HM-MR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:05:47		0:05:46	0:05:50	5:32	5:54
		Rural	0:06:13		0:05:36	0:06:21	5:25	6:13
		Countywide	0:05:50		0:05:46	0:05:50	5:32	5:54
Turnout Time Turnout Time 1st Unit		Urban	0:02:14		0:02:16	0:02:19	2:07	2:18
		Rural	0:02:26		0:02:08	0:02:33	2:12	1:15
		Countywide	0:02:14		0:02:16	0:02:19	2:07	2:16
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:05:38		0:04:48	0:05:31	6:07	5:17
		Rural	0:08:34		0:04:02	0:06:11	3:31	8:34
		Countywide	0:05:44		0:04:48	0:05:31	6:07	5:17
	Travel Time ERF **Concentration**	Urban	0:17:38		0:17:14	0:17:38	26:03	16:04
		Rural	0:17:03		0:21:02	0:17:03	N/A	N/A
		Countywide	0:17:38		0:21:02	0:17:38	26:03	16:04
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:11:35		0:09:45	0:11:18	12:15	11:33
			n=267		N=14	N=55	N=124	N=88
		Rural	0:15:59		0:10:39	0:10:09	09:57	15:59
			n=8		N=14	N=4	N=2	N=2
		Countywide	0:11:35		0:10:39	0:11:18	12:15	11:33
			n=275		N=15	N=59	N=126	N=90
	Total Response Time ERF Concentration	Urban	0:24:26		0:31:39	0:24:02	31:22	22:14
			n=17		N=4	N=3	N=3	N=11
		Rural	0:25:31		0:33:22	0:25:31	N/A	N/A
			n=1		N=1	N=1	N=0	N=0
		Countywide	0:25:31		0:33:22	0:25:31	31:22	22:14
			n=18		N=5	N=4	N=3	N=11

Risk Category: Hazmat / Risk Classification: Moderate

BASELINE (ACTUAL) PERFORMANCE STATEMENT
MODERATE RISK HAZARDOUS MATERIALS– HM-MR

For moderate-risk hazmat incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:11:35 Rural: 0:15:59

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:05:50**

For turnout time at the 90th percentile and Countywide: **0:02:14**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:05:38 Rural: 0:08:34

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:24:26 Rural: 0:25:31

The first-arriving unit for all hazmat-related risk levels shall: Provide Initial On-Scene Report (IOSR); If an engine and applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Stage 500' away and, if an engine, ensure the last water supply is not passed; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; If an engine, prepare to establish emergency gross decon; Provide Situation Update Reports.

Risk Category: Hazmat / Risk Classification: Moderate

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

MODERATE RISK HAZARDOUS MATERIALS– HM-MR

For moderate-risk hazmat incidents the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 09:30 **Rural: 12:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **05:00**
For turnout time at the 90th percentile and Countywide: **02:00**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 05:00 **Rural: 07:00**

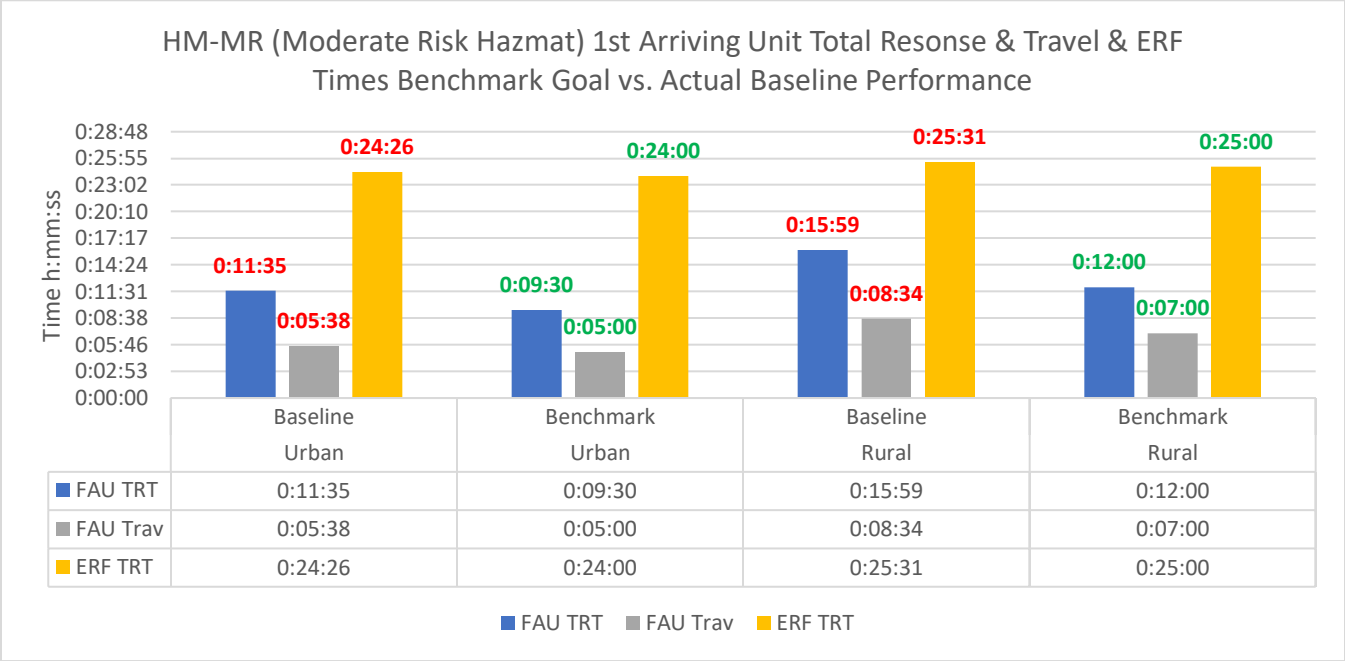
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 24:00 **Rural: 25:00**

The first-arriving unit for all hazmat-related risk levels shall: Provide Initial On-Scene Report (IOSR); If an engine and applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Stage 500' away and, if an engine, ensure the last water supply is not passed; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; If an engine, prepare to establish emergency gross decon; Provide Situation Update Reports.

Reporting the Gap: HM-MR (Hazardous Materials) Moderate Risk Hazmat

Program	Urban	Urban	Urban	Rural	Rural	Rural
HM-MR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:11:35	0:09:30	-17.99%	0:15:59	0:12:00	-24.92%
FAU Trav	0:05:38	0:05:00	-11.24%	0:08:34	0:07:00	-18.29%
ERF TRT	0:24:26	0:24:00	-1.77%	0:25:31	0:25:00	-2.02%



Risk Category: Hazmat / Risk Classification: High

(High Risk) Hazmat – HM-HR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:06:58		N/A	0:07:51	5:09	5:55
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:06:58		N/A	0:07:51	5:09	5:55
Turnout Time Turnout Time 1st Unit		Urban	0:02:07		N/A	0:02:28	2:06	2:03
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:02:07		N/A	0:02:28	2:06	2:03
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:06:03		N/A	0:05:31	6:09	4:19
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:06:03		N/A	0:05:31	6:09	4:19
	Travel Time ERF **Concentration**	Urban	0:26:06		N/A	N/A	N/A	2:06
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:26:06		N/A	N/A	N/A	2:06
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:11:15		N/A	0:13:17	10:19	10:27
			n=57		N=0	N=6	N=30	N=21
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	0:11:15		N/A	0:13:17	10:19	10:27
			n=57		N=0	N=6	N=30	N=21
	Total Response Time ERF Concentration	Urban	0:34:40		N/A	N/A	N/A	10:40
			n=11		N=0	N=0	N=0	N=11
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	0:34:40		N/A	N/A	N/A	10:40
			n=11		N=0	N=0	N=0	N=11

Risk Category: Hazmat / Risk Classification: High

BASELINE (ACTUAL) PERFORMANCE STATEMENT
HIGH RISK HAZARDOUS MATERIALS– HM-HR

For high-risk hazmat incidents the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:11:15 Rural: N/A

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:06:58**

For turnout time at the 90th percentile and Countywide: **0:02:07**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:06:03 Rural: N/A

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:34:40 Rural: N/A

The first-arriving unit for all hazmat-related risk levels shall: Provide Initial On-Scene Report (IOSR); If an engine and applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Stage 500' away and, if an engine, ensure the last water supply is not passed; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; If an engine, prepare to establish emergency gross decon; Provide Situation Update Reports.

Risk Category: Hazmat / Risk Classification: High

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

HIGH RISK HAZARDOUS MATERIALS– HM-HR

For high-risk hazmat incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 11:00 **Rural: 15:45**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **5:00**
For turnout time at the 90th percentile and Countywide: **02:00**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 05:00 **Rural: 07:00**

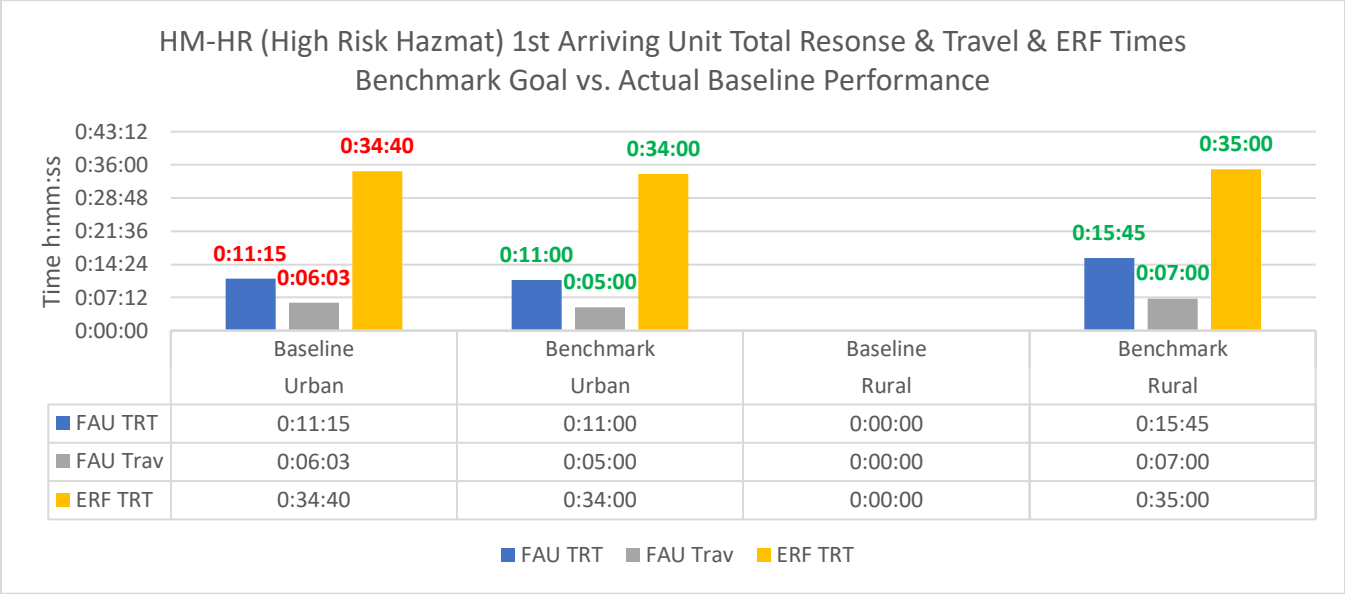
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the following density zones:

Urban: 34:00 **Rural: 35:00**

The first-arriving unit for all hazmat-related risk levels shall: Provide Initial On-Scene Report (IOSR); If an engine and applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Stage 500' away and, if an engine, ensure the last water supply is not passed; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; If an engine, prepare to establish emergency gross decon; Provide Situation Update Reports.

Reporting the Gap: HM-HR (Hazardous Materials) High Risk Hazmat

Program	Urban	Urban	Urban	Rural	Rural	Rural
HM-HR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:11:15	0:11:00	-2.22%	N/A	0:15:45	#VALUE!
FAU Trav	0:06:03	0:05:00	-17.36%	N/A	0:07:00	#VALUE!
ERF TRT	0:34:40	0:34:00	-1.92%	N/A	0:35:00	#VALUE!



Risk Category: Hazmat / Risk Classification: Special

(Special Risk) Hazmat – HM-SR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:04:03		0:03:20	0:03:33	4:15	4:03
		Rural	0:09:03		N/A	0:04:37	9:03	1:46
		Countywide	0:04:36		0:03:20	0:04:37	4:36	4:03
Turnout Time Turnout Time 1st Unit		Urban	0:02:15		0:02:06	0:02:20	2:15	2:14
		Rural	0:03:19		N/A	0:02:55	6:41	2:01
		Countywide	0:02:20		0:02:06	0:02:20	2:18	2:14
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:06:05		0:08:09	0:04:57	7:01	5:54
		Rural	0:10:41		N/A	0:09:35	10:41	2:31
		Countywide	0:06:49		0:08:09	0:05:29	7:01	5:54
	Travel Time ERF **Concentration**	Urban	0:22:22		0:22:14	0:20:05	22:22	0:27:04
		Rural	0:15:22		N/A	N/A	N/A	15:22
		Countywide	0:22:22		0:22:14	0:20:05	22:22	0:27:04
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:10:57		0:10:51	0:13:09	11:10	10:30
			n=91		N=6	N=22	N=29	N=40
		Rural	0:20:53		N/A	0:15:37	20:53	5:19
			n=4		N=0	N=1	N=2	N=1
		Countywide	0:11:42		0:10:51	0:15:37	11:48	10:30
			n=95		N=6	N=23	N=31	N=41
	Total Response Time ERF Concentration	Urban	0:35:19		0:19:23	0:37:03	0:30:23	23:56
			n=17		N=1	N=3	N=10	N=4
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	0:35:19		0:19:23	0:37:03	30:23:00	23:56
			n=17		N=1	N=3	N=10	N=4

Risk Category: Hazmat / Risk Classification: Special

BASELINE (ACTUAL) PERFORMANCE STATEMENT
SPECIAL RISK HAZARDOUS MATERIALS– HM-SR

For special-risk hazmat incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:10:57 Rural: 0:20:53

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:04:36**

For turnout time at the 90th percentile and Countywide: **0:02:20**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:06:05 Rural: 0:10:41

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:35:19 Rural: N/A

The first-arriving unit for all hazmat-related risk levels shall: Provide Initial On-Scene Report (IOSR); If an engine and applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Stage 500' away and, if an engine, ensure the last water supply is not passed; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; If an engine, prepare to establish emergency gross decon; Provide Situation Update Reports.

Risk Category: Hazmat / Risk Classification: Special

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

SPECIAL RISK HAZARDOUS MATERIALS– HM-SR

For special-risk hazmat incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 10:45 **Rural: 17:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **5:00**
For turnout time at the 90th percentile and Countywide: **02:00**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 05:00 **Rural: 07:00**

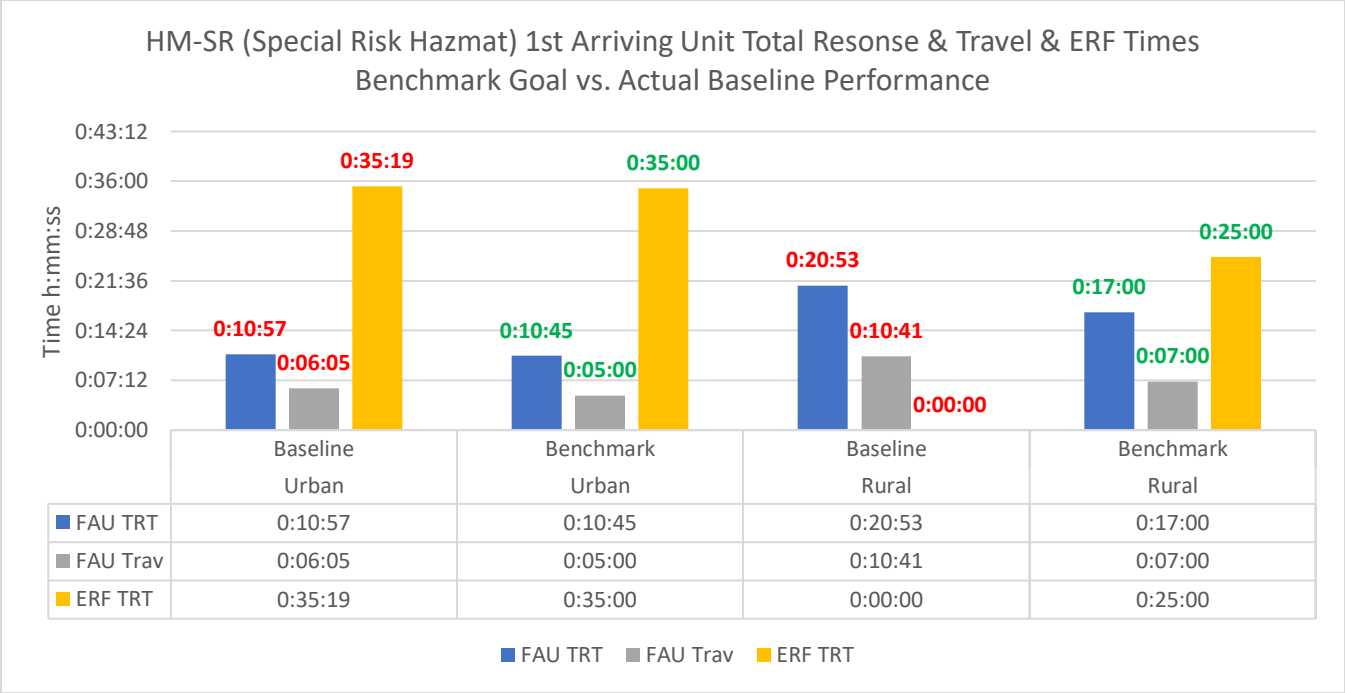
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 35:00 **Rural: 25:00**

The first-arriving unit for all hazmat-related risk levels shall: Provide Initial On-Scene Report (IOSR); If an engine and applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Stage 500' away and, if an engine, ensure the last water supply is not passed; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; If an engine, prepare to establish emergency gross decon; Provide Situation Update Reports.

Reporting the Gap: HM-SR (Hazardous Materials) Special Risk Hazmat

Program	Urban	Urban	Urban	Rural	Rural	Rural
HM-SR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:10:57	0:10:45	-1.83%	0:20:53	0:17:00	-18.60%
FAU Trav	0:06:05	0:05:00	-17.81%	0:10:41	0:07:00	-34.48%
ERF TRT	0:35:19	0:35:00	-0.90%	N/A	0:25:00	#VALUE!



Risk Category: Technical Rescue / Risk Classification: Special

(Special Risk) Technical Rescue – TR-SR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:05:18		0:07:49	0:05:00	5:52	5:18
		Rural	0:09:20		N/A	0:08:30	4:08	9:20
		Countywide	0:05:52		0:07:49	0:08:30	5:52	6:32
Turnout Time Turnout Time 1st Unit		Urban	0:03:36		0:04:23	0:03:52	3:59	3:01
		Rural	0:04:09		N/A	0:03:07	3:49	8:53
		Countywide	0:03:46		0:04:23	0:03:51	3:59	3:08
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:05:39		0:01:21	0:05:27	7:27	7:04
		Rural	0:09:02		N/A	0:07:43	8:44	9:02
		Countywide	0:07:27		0:01:21	0:06:49	8:22	7:23
	Travel Time ERF **Concentration**	Urban	0:22:39		N/A	0:12:28	22:39	10:08
		Rural	0:22:48		N/A	N/A	22:48	N/A
		Countywide	0:22:48		N/A	0:12:28	22:48	10:08
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:12:00		0:11:03	0:10:50	12:03	13:02
			n=43		N=1	N=14	N=13	N=16
		Rural	0:18:28		N/A	0:16:39	16:26	18:28
			n=7		N=0	N=2	N=4	N=1
		Countywide	0:13:58		0:11:03	0:11:28	16:01	13:58
			n=50		N=1	N=16	N=17	N=17
	Total Response Time ERF Concentration	Urban	0:38:50		N/A	0:22:22	0:32:23	0:38:50
			n=5		N=0	N=1	N=3	N=1
		Rural	1:52:39		N/A	N/A	1:52:39	N/A
			n=1		N=0	N=0	N=1	N=0
		Countywide	1:52:39		N/A	0:22:22	1:52:39	0:38:50
			n=6		N=0	N=1	N=4	N=1

Risk Category: Technical Rescue / Risk Classification: Special

BASELINE (ACTUAL) PERFORMANCE STATEMENT
SPECIAL RISK TECHNICAL RESCUE– TR-SR

For special-risk technical rescue incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:12:00 Rural: 0:18:28

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:05:52**

For turnout time at the 90th percentile and Countywide: **0:03:46**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:05:39 Rural: 0:09:02

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:38:50 Rural: 1:52:39

The first-arriving unit for all technical rescue-related risk shall: Provide Initial On-Scene Report (IOSR); if an engine, establish uninterrupted water supply with supply line(s) maintained by an operator; Position at least 250' away from area; Eliminate sources of vibration; Provide fire suppression capabilities if required; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; Provide Situation Update Reports.

Risk Category: Technical Rescue / Risk Classification: Special

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

SPECIAL RISK TECHNICAL RESCUE– TR-SR

For special-risk technical rescue incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 11:45 **Rural: 13:45**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **5:00**
For turnout time at the 90th percentile and Countywide: **03:00**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 05:30 **Rural: 08:00**

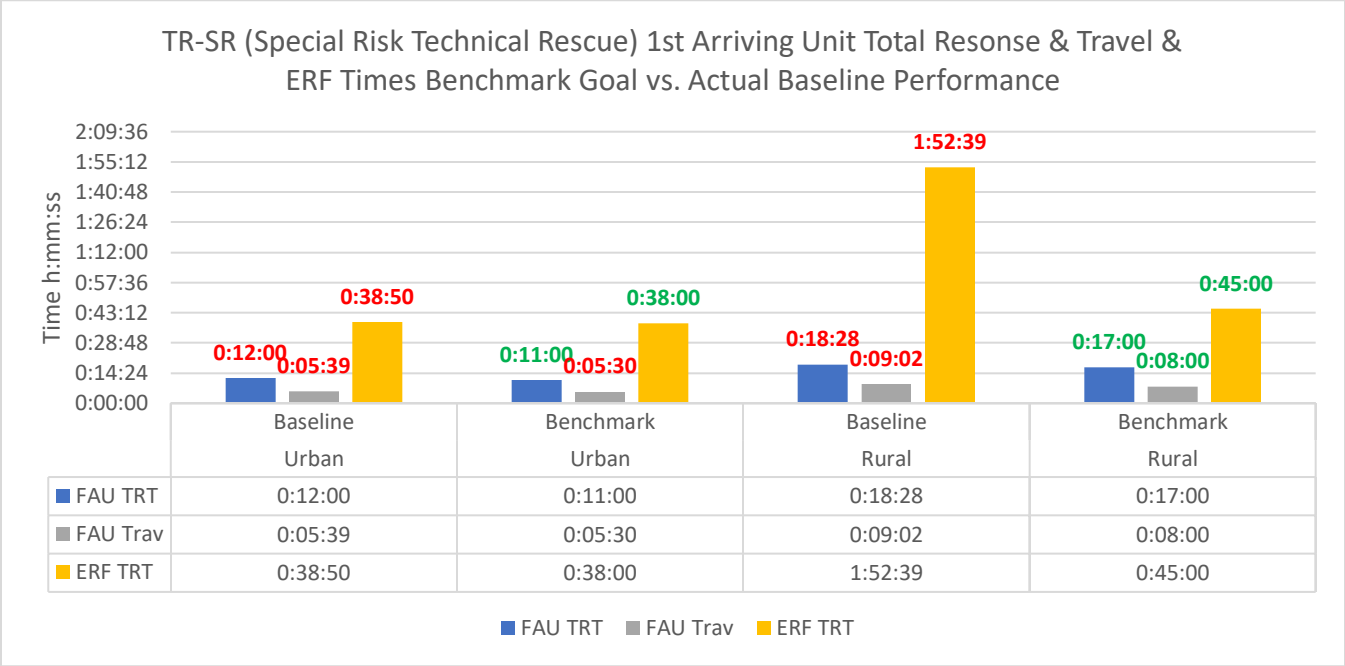
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 38:00 **Rural: 45:00**

The first-arriving unit for all technical rescue-related risk shall: Provide Initial On-Scene Report (IOSR); if an engine, establish uninterrupted water supply with supply line(s) maintained by an operator; Position at least 250' away from area; Eliminate sources of vibration; Provide fire suppression capabilities if required; Secure perimeter and deny entry; Locate supervisor, calling party, or competent person; Provide Situation Update Reports.

Reporting the Gap: TR-SR (Technical Rescue) Special Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
TR-SR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:12:00	0:11:00	-8.33%	0:18:28	0:17:00	-7.94%
FAU Trav	0:05:39	0:05:30	-2.65%	0:09:02	0:08:00	-11.44%
ERF TRT	0:38:50	0:38:00	-2.15%	1:52:39	0:45:00	-60.05%



Risk Category: Water-Ice Rescue / Risk Classification: Moderate

(Moderate Risk) Water/Ice Rescue – WIR-MR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:08:46		0:06:52	0:10:03	8:27	7:06
		Rural	0:08:17		0:06:11	0:10:53	5:33	3:26
		Countywide	0:08:46		0:06:50	0:10:03	8:17	6:46
Turnout Time Turnout Time 1st Unit		Urban	0:03:00		0:01:45	0:03:00	2:38	3:17
		Rural	0:03:44		0:03:22	0:03:14	3:42	4:11
		Countywide	0:03:13		0:02:08	0:03:08	3:11	3:46
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:10:22		0:07:59	0:15:18	8:57	7:55
		Rural	0:12:23		0:10:26	0:15:13	12:52	9:25
		Countywide	0:11:48		0:08:14	0:15:18	11:43	9:25
	Travel Time ERF **Concentration**	Urban	0:16:24		0:12:58	0:13:59	15:12	19:33
		Rural	0:22:23		0:18:20	0:25:44	22:23	18:44
		Countywide	0:19:33		0:18:20	0:22:09	20:45	19:33
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:20:26		0:14:37	0:26:09	16:10	15:34
			n=78		N=24	N=45	N=16	N=17
		Rural	0:18:42		0:17:55	0:20:25	18:42	13:54
			n=25		N=4	N=13	N=9	N=3
		Countywide	0:19:03		0:15:15	0:24:57	18:09	15:29
			n=103		N=28	N=56	N=25	N=20
	Total Response Time ERF Concentration	Urban	0:25:01		0:23:28	0:21:30	0:25:01	0:27:48
			n=26		N=4	N=12	N=8	N=6
		Rural	0:29:39		0:27:53	0:29:39	0:30:39	0:25:14
			n=17		N=4	N=7	N=7	N=2
		Countywide	0:27:19		0:27:53	0:29:20	0:25:22	0:27:48
			n=43		N=8	N=19	N=15	N=8

Risk Category: Water-Ice Rescue / Risk Classification: Moderate

BASELINE (ACTUAL) PERFORMANCE STATEMENT
MODERATE RISK WATER-ICE RESCUE– WIR-MR

For moderate-risk water-ice rescue incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:20:26 Rural: 0:18:42

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:08:46**

For turnout time at the 90th percentile and Countywide: **0:03:13**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:10:22 Rural: 0:22:23

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:25:01 Rural: 0:29:39

The first-arriving unit for all water-ice rescue-related risks shall: Provide Initial On-Scene Report (IOSR); Identify and separate witnesses; Ensure no one is allowed within 10' of water's edge without a PFD; Attempt to identify Point Last Seen (PLS) and Point of Entry (POE); Mark water line if incident involves moving water; Provide Situation Update Reports; Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water).

Risk Category: Water-Ice Rescue / Risk Classification: Moderate

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

MODERATE RISK WATER-ICE RESCUE– WIR-MR

For moderate-risk water-ice rescue incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 16:45 **Rural: 17:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **5:00**
For turnout time at the 90th percentile and Countywide: **02:30**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 09:00 **Rural: 11:00**

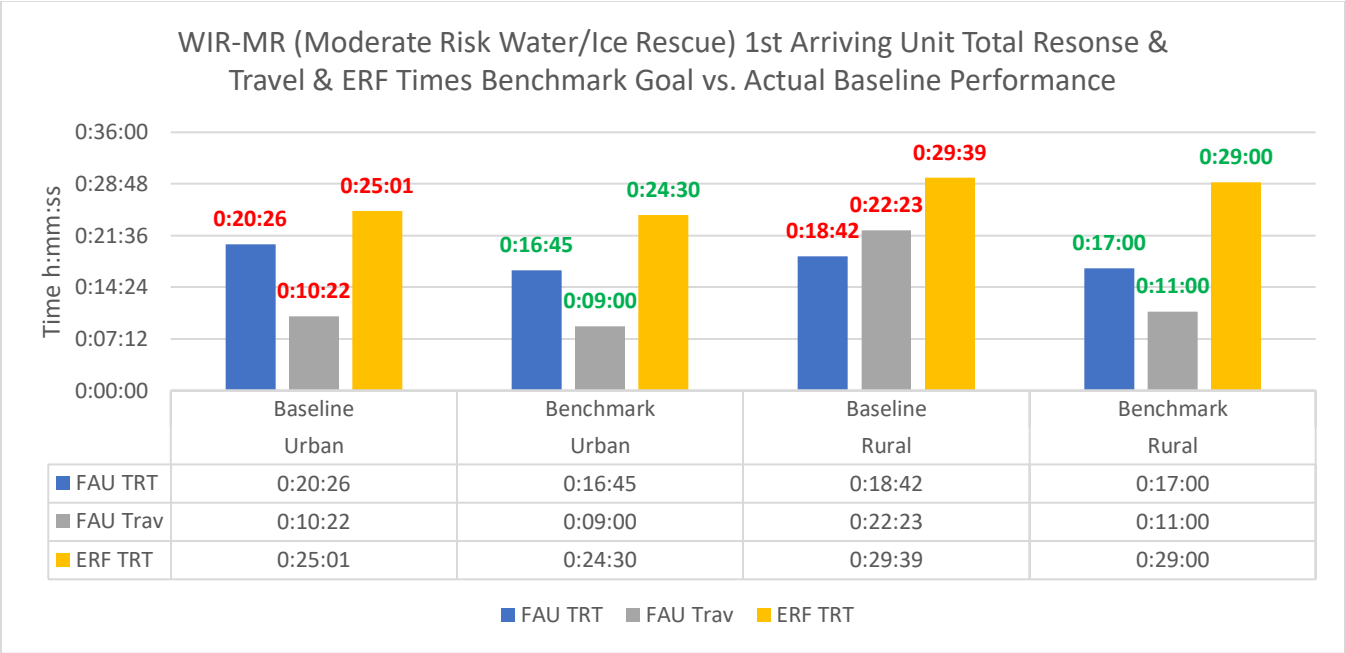
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 24:30 **Rural: 29:00**

The first-arriving unit for all water-ice rescue-related risks shall: Provide Initial On-Scene Report (IOSR); Identify and separate witnesses; Ensure no one is allowed within 10' of water's edge without a PFD; Attempt to identify Point Last Seen (PLS) and Point of Entry (POE); Mark water line if incident involves moving water; Provide Situation Update Reports; Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water).

Reporting the Gap: WIR-MR (Water/Ice Rescue) Moderate Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
WIR-MR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:20:26	0:16:45	-18.03%	0:18:42	0:17:00	-9.09%
FAU Trav	0:10:22	0:09:00	-13.18%	0:22:23	0:11:00	-50.86%
ERF TRT	0:25:01	0:24:30	-2.07%	0:29:39	0:29:00	-2.19%



Risk Category: Water-Ice Rescue / Risk Classification: High

(High Risk) Water/Ice Rescue – WIR-HR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	N/A		N/A	N/A	N/A	N/A
		Rural	0:07:13		0:04:53	0:09:53	3:00	7:13
		Countywide	0:07:13		0:04:53	0:09:53	3:00	7:13
Turnout Time Turnout Time 1st Unit		Urban	N/A		N/A	N/A	N/A	2:00
		Rural	0:04:28		0:04:11	0:04:21	4:30	3:36
		Countywide	0:04:28		0:04:11	0:04:21	4:30	3:36
Travel Time	Travel Time 1st Unit **Distribution**	Urban	N/A		N/A	N/A	N/A	N/A
		Rural	0:14:46		0:15:59	0:14:01	13:33	22:34
		Countywide	0:14:46		0:15:59	0:14:01	13:33	22:34
	Travel Time ERF **Concentration**	Urban	N/A		N/A	N/A	N/A	N/A
		Rural	0:30:04		0:30:49	0:24:24	N/A	0:30:04
		Countywide	0:30:04		0:30:49	0:24:24	N/A	0:30:04
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Rural	0:23:07		0:21:21	0:22:25	17:46	0:28:37
			n=10		N=2	N=6	N=1	N=3
		Countywide	0:23:07		0:21:21	0:22:25	17:46	0:28:37
			n=10		N=2	N=6	N=1	N=3
	Total Response Time ERF Concentration	Urban	N/A		N/A	N/A	N/A	N/A
			n=0		N/A	N=0	N=0	N=0
		Rural	0:39:34		0:35:40	0:33:36	N/A	0:39:34
			n=8		N=1	N=5	N=0	N=3
		Countywide	0:39:34		0:35:40	0:33:36	N/A	0:39:34
			n=8		N=1	N=5	N=0	N=3

Risk Category: Water-Ice Rescue / Risk Classification: High

BASELINE (ACTUAL) PERFORMANCE STATEMENT
HIGH RISK WATER-ICE RESCUE– WIR-HR

For high-risk water-ice rescue incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: N/A Rural: 0:23:07

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:07:13**

For turnout time at the 90th percentile and Countywide: **0:04:28**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: N/A Rural: 0:14:46

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: N/A Rural: 0:39:34

The first-arriving unit for all water-ice rescue-related risks shall: Provide Initial On-Scene Report (IOSR); Identify and separate witnesses; Ensure no one is allowed within 10' of water's edge without a PFD; Attempt to identify Point Last Seen (PLS) and Point of Entry (POE); Mark water line if incident involves moving water; Provide Situation Update Reports; Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water).

Risk Category: Water-Ice Rescue / Risk Classification: High

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

HIGH RISK WATER-ICE RESCUE– WIR-HR

For high-risk water-ice rescue incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 19:00 **Rural: 20:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **5:00**
For turnout time at the 90th percentile and Countywide: **02:30**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 11:00 **Rural: 14:00**

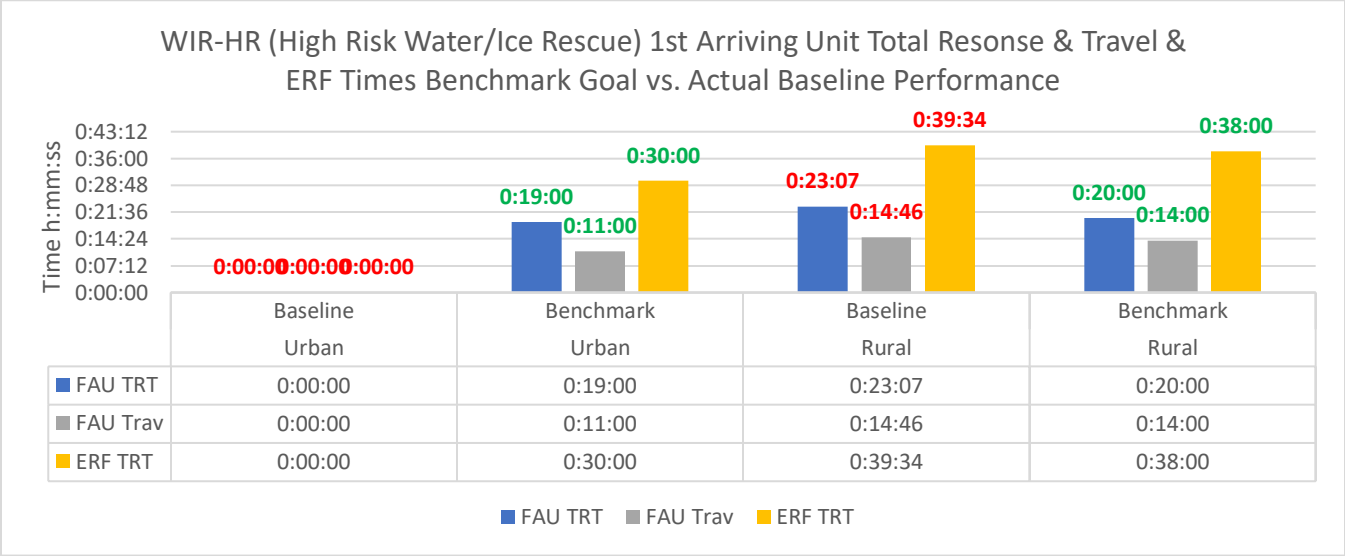
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 30:00 **Rural: 38:00**

The first-arriving unit for all water-ice rescue-related risks shall: Provide Initial On-Scene Report (IOSR); Identify and separate witnesses; Ensure no one is allowed within 10' of water's edge without a PFD; Attempt to identify Point Last Seen (PLS) and Point of Entry (POE); Mark water line if incident involves moving water; Provide Situation Update Reports; Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water).

Reporting the Gap: WIR-HR (Water/Ice Rescue) High Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
WIR-HR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	N/A	0:19:00	#VALUE!	0:23:07	0:20:00	-13.48%
FAU Trav	N/A	0:11:00	#VALUE!	0:14:46	0:14:00	-5.19%
ERF TRT	N/A	0:30:00	#VALUE!	0:39:34	0:38:00	-3.96%



Risk Category: Water-Ice Rescue / Risk Classification: Special

(Special Risk) Water/Ice Rescue – WIR-SR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:09:00		0:06:45	0:10:43	8:05	3:47
		Rural	0:07:45		0:04:31	0:05:49	6:00	3:51
		Countywide	0:08:57		0:04:07	0:09:57	8:05	3:47
Turnout Time Turnout Time 1st Unit		Urban	0:03:07		0:04:07	0:03:36	2:39	1:31
		Rural	0:03:28		0:03:46	0:04:33	3:24	1:47
		Countywide	0:03:19		0:04:07	0:03:53	2:54	1:33
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:09:19		0:08:51	0:09:44	8:49	10:50
		Rural	0:12:37		0:11:42	0:11:33	17:12	10:39
		Countywide	0:11:01		0:11:42	0:11:33	14:10	10:50
	Travel Time ERF **Concentration**	Urban	0:20:23		0:21:57	0:18:06	22:53	20:28
		Rural	0:22:15		0:30:10	0:20:36	18:40	0:30:24
		Countywide	0:22:03		0:21:57	0:20:23	22:03	0:30:24
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:17:05		0:16:54	0:17:53	14:57	17:47
			n=90		N=15	N=38	N=27	N=25
		Rural	0:20:57		0:16:52	0:19:43	23:15	19:18
			n=50		N=11	N=17	N=18	N=14
		Countywide	0:19:23		0:16:54	0:19:30	20:03	19:06
			n=140		N=26	N=37	N=45	N=39
	Total Response Time ERF Concentration	Urban	0:27:00		0:22:31	0:29:23	0:25:49	0:26:36
			n=80		N=11	N=32	N=26	N=22
		Rural	0:37:45		0:34:56	0:33:58	0:37:45	0:43:41
			n=40		N=8	N=13	N=15	N=11
		Countywide	0:30:15		0:27:47	0:30:15	0:25:49	0:38:44
			n=120		N=19	N=45	N=41	N=33

Risk Category: Water-Ice Rescue / Risk Classification: Special

BASELINE (ACTUAL) PERFORMANCE STATEMENT
SPECIAL RISK WATER-ICE RESCUE– WIR-SR

For special-risk water-ice rescue incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:17:05 Rural: 0:20:57

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:08:57**

For turnout time at the 90th percentile and Countywide: **0:03:19**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:09:19 Rural: 0:12:37

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:27:00 Rural: 0:37:45

The first-arriving unit for all water-ice rescue-related risks shall: Provide Initial On-Scene Report (IOSR); Identify and separate witnesses; Ensure no one is allowed within 10' of water's edge without a PFD; Attempt to identify Point Last Seen (PLS) and Point of Entry (POE); Mark water line if incident involves moving water; Provide Situation Update Reports; Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water).

Risk Category: Water-Ice Rescue / Risk Classification: Special

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

SPECIAL RISK WATER-ICE RESCUE– WIR-SR

For special-risk water-ice rescue incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 16:15 **Rural: 19:15**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **5:00**
For turnout time at the 90th percentile and Countywide: **02:30**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 09:00 **Rural: 11:00**

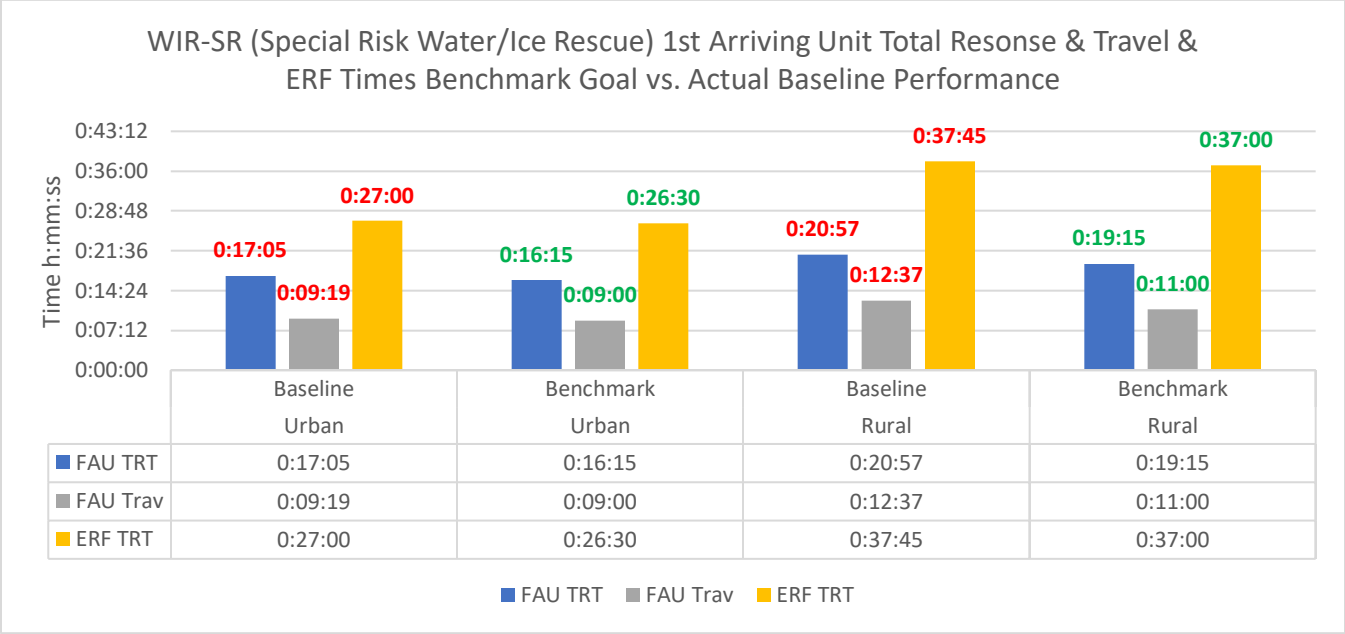
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 26:30 **Rural: 37:00**

The first-arriving unit for all water-ice rescue-related risks shall: Provide Initial On-Scene Report (IOSR); Identify and separate witnesses; Ensure no one is allowed within 10' of water's edge without a PFD; Attempt to identify Point Last Seen (PLS) and Point of Entry (POE); Mark water line if incident involves moving water; Provide Situation Update Reports; Ensure at least 2 upstream spotters and 2 downstream safety personnel are in place prior to anyone entering the hot zone (Water).

Reporting the Gap: WIR-SR (Water/Ice Rescue) Special Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
WIR-SR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:17:05	0:16:15	-4.88%	0:20:57	0:19:15	-8.11%
FAU Trav	0:09:19	0:09:00	-3.40%	0:12:37	0:11:00	-12.81%
ERF TRT	0:27:00	0:26:30	-1.85%	0:37:45	0:37:00	-1.99%



Risk Category: Aviation Rescue Firefighting / Risk Classification: High

(High Risk) Aircraft Rescue FF – ARF-HR - 90th Percentile Times - Baseline Performance*			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:06:56		N/A	0:07:51	5:09	5:55
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:06:56		N/A	0:07:51	5:09	5:55
Turnout Time Turnout Time 1st Unit		Urban	0:02:07		N/A	0:02:28	2:06	2:03
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:02:07		N/A	0:02:28	2:06	2:03
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:06:03		N/A	0:05:31	6:09	4:19
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:06:03		N/A	0:05:31	6:09	4:19
	Travel Time ERF **Concentration**	Urban	0:26:06		N/A	N/A	N/A	2:06
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:26:06		N/A	N/A	N/A	0:26:06
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:11:15		N/A	0:13:17	10:19	10:27
			n=57		N=0	N=6	N=30	N=21
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	0:11:15		N/A	0:13:17	10:19	10:27
			n=57		N=0	N=6	N=0	N=21
	Total Response Time ERF Concentration	Urban	0:34:40		N/A	N/A	N/A	0:34:40
			n=11		N=0	N=0	N=0	N=11
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	0:34:40		N/A	N/A	N/A	0:34:40
			n=11		N=0	N=0	N=0	N=11

Risk Category: Aviation Rescue Firefighting / Risk Classification: High

BASELINE (ACTUAL) PERFORMANCE STATEMENT
HIGH RISK AVIATION RESCUE FIREFIGHTING – ARF-HR

For high-risk aviation rescue firefighting incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:11:15 Rural: N/A

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:06:56**

For turnout time at the 90th percentile and Countywide: **0:02:07**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:06:03 Rural: N/A

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:34:40 Rural: N/A

The first-arriving unit for all aviation rescue firefighting-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; If an engine and if applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Establish command and assign units/groups/division as needed; Consider need for Mass Casualty response; Locate
airport or airpark manager if applicable; Position to allow approach from uphill and
upwind in line with front of aircraft; Ensure personnel do not approach aircraft until engines are shut down and rotors/propellers have stopped turning; Provide Situation Update Reports.

Risk Category: Aviation Rescue Firefighting / Risk Classification: High

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

HIGH RISK AVIATION RESCUE FIREFIGHTING – ARF-HR

For special-risk water-ice rescue incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 11:00 **Rural: 15:45**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **5:00**
For turnout time at the 90th percentile and Countywide: **02:00**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 05:00 **Rural: 08:00**

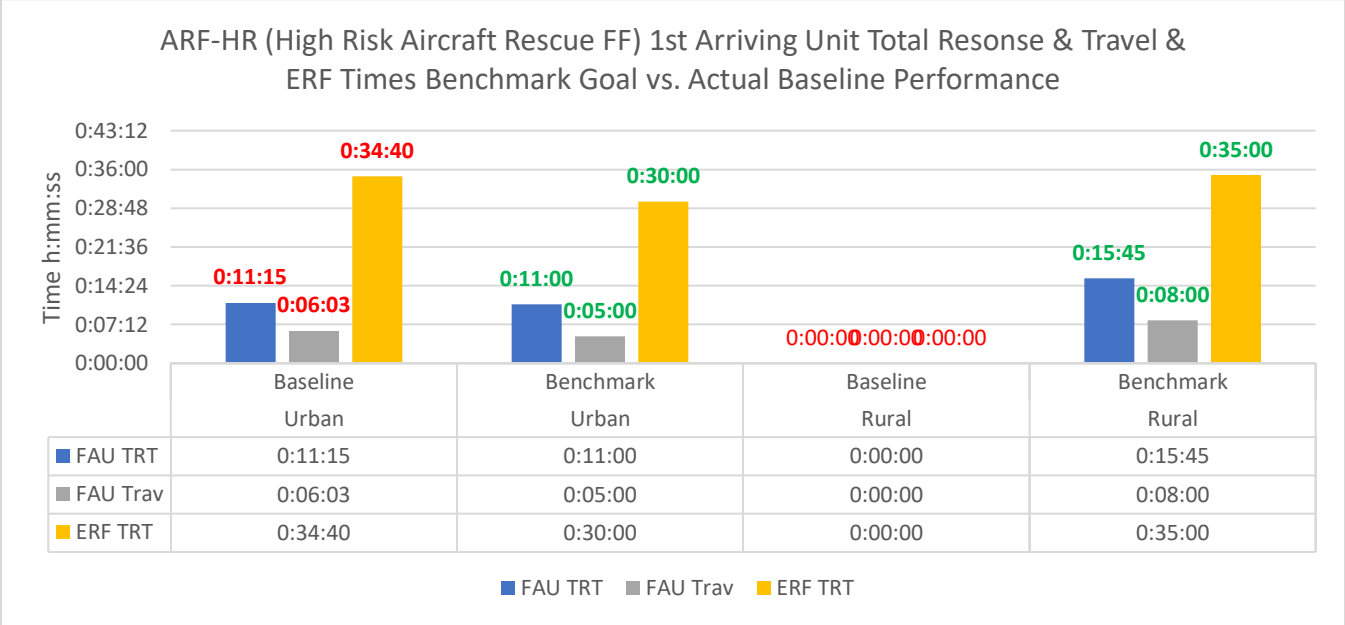
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 30:00 **Rural: 35:00**

The first-arriving unit for all aviation rescue firefighting-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; If an engine and if applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Establish command and assign units/groups/division as needed; Consider need for Mass Casualty response; Locate airport or airpark manager if applicable; Position to allow approach from uphill and upwind in line with front of aircraft; Ensure personnel do not approach aircraft until engines are shut down and rotors/propellers have stopped turning; Provide Situation Update Reports.

Reporting the Gap: ARF-HR (Aircraft Rescue Firefighting) High Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
ARF-HR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:11:15	0:11:00	-2.22%	N/A	0:15:45	#VALUE!
FAU Trav	0:06:03	0:05:00	-17.36%	N/A	0:08:00	#VALUE!
ERF TRT	0:34:40	0:30:00	-13.46%	N/A	0:35:00	#VALUE!



Risk Category: Aviation Rescue Firefighting / Risk Classification: Special

(Special Risk) Aircraft Rescue FF – ARF-SR - 90th Percentile Times - Baseline Performance**			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:04:15		N/A	0:02:03	4:15	4:36
		Rural	0:09:03		N/A	N/A	9:03	N/A
		Countywide	0:04:55		N/A	0:02:03	5:53	4:36
Turnout Time Turnout Time 1st Unit		Urban	0:02:07		N/A	0:02:08	2:12	2:00
		Rural	0:06:41		N/A	N/A	6:41	N/A
		Countywide	0:02:11		N/A	0:02:08	2:21	2:00
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:06:05		N/A	0:04:19	7:01	5:54
		Rural	0:10:41		N/A	N/A	10:41	N/A
		Countywide	0:07:00		N/A	0:04:19	7:03	5:54
	Travel Time ERF **Concentration**	Urban	0:22:22		N/A	0:14:23	22:22	21:11
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:22:22		N/A	0:14:23	22:22	0:21:11
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:10:45		N/A	0:07:43	11:48	10:41
			n=31		N=0	N=2	N=17	N=12
		Rural	0:20:53		N/A	N/A	20:53	N/A
			n=2		N=0	N=0	N=2	N=0
		Countywide	0:11:48		N/A	0:07:43	18:18	10:41
			n=33		N=0	N=2	N=19	N=12
	Total Response Time ERF Concentration	Urban	0:30:23		N/A	0:19:09	0:30:23	0:23:56
			n=15		N=0	N=1	N=10	N=4
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	0:30:23		N/A	0:19:09	0:30:23	0:23:56
			n=15		N=0	N=1	N=10	N=4

Risk Category: Aviation Rescue Firefighting / Risk Classification: Special

BASELINE (ACTUAL) PERFORMANCE STATEMENT
SPECIAL RISK AVIATION RESCUE FIREFIGHTING – ARF-SR

For special-risk aviation rescue firefighting incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 0:10:45 Rural: 0:20:53

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:04:55**

For turnout time at the 90th percentile and Countywide: **0:02:11**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:06:05 Rural: 0:10:41

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 0:30:23 Rural: N/A

The first-arriving unit for all aviation rescue firefighting-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; If an engine and if applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Establish command and assign units/groups/division as needed; Consider need for Mass Casualty response; Locate
airport or airpark manager if applicable; Position to allow approach from uphill and
upwind in line with front of aircraft; Ensure personnel do not approach aircraft until engines are shut down and rotors/propellers have stopped turning; Provide Situation Update Reports.

Risk Category: Aviation Rescue Firefighting / Risk Classification: Special

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

SPECIAL RISK AVIATION RESCUE FIREFIGHTING – ARF-SR

For special-risk aviation rescue firefighting incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of the applicable unit is as follows in each of the density zones:

Urban: 10:30 **Rural: 17:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **3:00**
For turnout time at the 90th percentile and Countywide: **01:30**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 05:00 **Rural: 07:00**

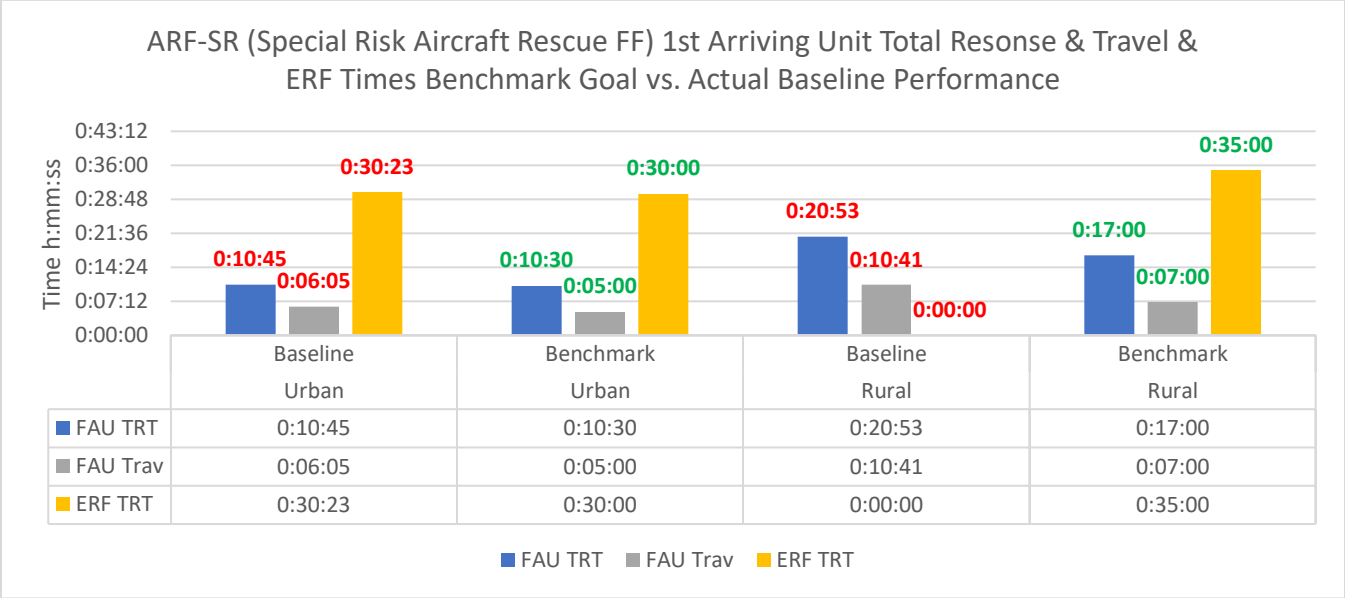
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 30:00 **Rural: 35:00**

The first-arriving unit for all aviation rescue firefighting-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; If an engine and if applicable, establish uninterrupted water supply of a minimum of 500 GPM for 30 minutes with supply line(s) maintained by an operator; Establish command and assign units/groups/division as needed; Consider need for Mass Casualty response; Locate airport or airpark manager if applicable; Position to allow approach from uphill and upwind in line with front of aircraft; Ensure personnel do not approach aircraft until engines are shut down and rotors/propellers have stopped turning; Provide Situation Update Reports.

Reporting the Gap: ARF-SR (Aircraft Rescue Firefighting) Special Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
ARF-SR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:10:45	0:10:30	-2.33%	0:20:53	0:17:00	-18.60%
FAU Trav	0:06:05	0:05:00	-17.81%	0:10:41	0:07:00	-34.48%
ERF TRT	0:30:23	0:30:00	-1.26%	N/A	0:35:00	#VALUE!



Risk Category: Bomb Squad / Risk Classification: Moderate

(Moderate Risk) Bomb Squad – BS-MR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:03:38		0:07:13	0:03:01	3:28	5:51
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:03:28		0:07:13	0:03:01	3:28	5:51
Turnout Time Turnout Time 1st Unit		Urban	N/A		N/A	N/A	N/A	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	N/A		N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit **Distribution**	Urban	0:19:39		0:44:00	0:24:41	13:38	19:39
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:19:39		0:44:00	0:24:41	13:38	19:39
	Travel Time ERF **Concentration**	Urban	0:32:09		0:43:56	0:32:09	0:36:39	0:26:38
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:32:09		0:43:56	0:32:09	0:36:39	0:26:38
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	1:09:29		0:58:40	0:40:48	1:29:24	1:09:29
			n=16		N=5	N=5	N=7	N=4
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	1:09:29		0:58:40	0:40:48	1:29:24	1:09:29
			n=16		N=5	N=5	N=7	N=4
	Total Response Time ERF Concentration	Urban	1:33:46		1:25:28	0:56:34	1:38:51	1:13:08
			n=16		N=5	N=5	N=7	N=4
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	1:33:46		1:25:28	0:56:34	1:38:51	1:13:08
			n=16		N=5	N=5	N=7	N=4

Risk Category: Bomb Squad / Risk Classification: Moderate

BASELINE (ACTUAL) PERFORMANCE STATEMENT
MODERATE RISK BOMB SQUAD INCIDENTS – BS-MR

For moderate-risk bomb squad incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of a Fire Marshal or the BU700 unit is as follows in each of the density zones:

Urban: 1:09:29 Rural: N/A

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:03:38**

For turnout time at the 90th percentile and Countywide: **N/A**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 0:19:39 Rural: N/A

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 1:33:46 Rural: N/A

The first-arriving bomb technician (FM or in BU700) for all bomb squad-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; Establish command/unified command and assign units/groups/division as needed; Consider need for additional resources; Obtain intelligence and background information from the on-scene personnel or witnesses; Obtain detailed description of the suspected package (Polaroid photograph as applicable); Whenever possible, confirmation of the location of the suspected device will be accomplished without an approach; The "initial approach" will be performed by a bomb technician in the bomb suit or by robot as available/ applicable; Provide Situation Update Reports.

Risk Category: Bomb Squad / Risk Classification: Moderate

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

MODERATE RISK BOMB SQUAD INCIDENTS – BS-MR

For moderate-risk bomb squad incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of a Fire Marshal or the BU700 unit is as follows in each of the density zones:

Urban: 1:00:00 **Rural: 1:15:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: 0**5:00**
For turnout time at the 90th percentile and Countywide: **03:00**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 19:00 **Rural: 40:00**

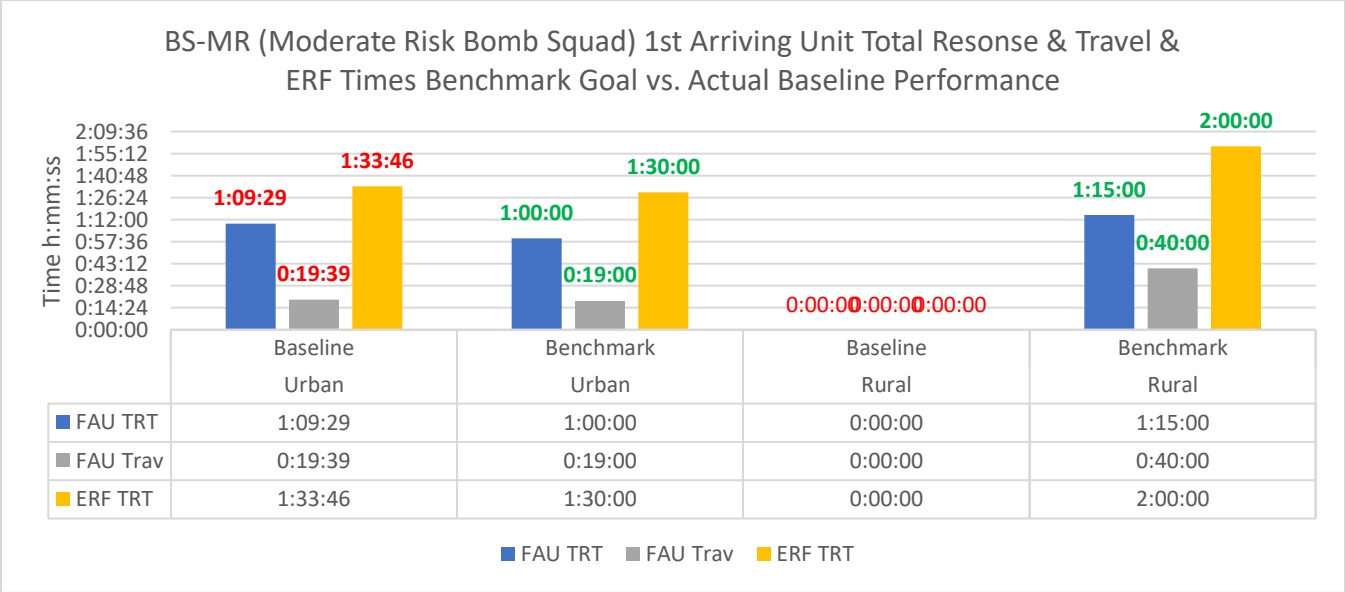
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 1:30:00 **Rural: 2:00:00**

The first-arriving bomb technician (FM or in BU700) for all bomb squad-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; Establish command/unified command and assign units/groups/division as needed; Consider need for additional resources; Obtain intelligence and background information from the on-scene personnel or witnesses; Obtain detailed description of the suspected package (Polaroid photograph as applicable); Whenever possible, confirmation of the location of the suspected device will be accomplished without an approach; The “initial approach” will be performed by a bomb technician in the bomb suit or by robot as available/ applicable; Provide Situation Update Reports.

Reporting the Gap: BS-MR (Bomb Squad Responses) Moderate Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
BS-MR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	1:09:29	1:00:00	-13.65%	N/A	1:15:00	#VALUE!
FAU Trav	0:19:39	0:19:00	-3.31%	N/A	0:40:00	#VALUE!
ERF TRT	1:33:46	1:30:00	-4.02%	N/A	2:00:00	#VALUE!



Risk Category: Bomb Squad / Risk Classification: High

(High Risk) Bomb Squad – BS-HR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	N/A		N/A	N/A	N/A	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	N/A		N/A	N/A	N/A	N/A
Turnout Time Turnout Time 1st Unit		Urban	N/A		N/A	N/A	N/A	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	N/A		N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit **Distribution**	Urban	N/A		N/A	N/A	N/A	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	N/A		N/A	N/A	N/A	N/A
	Travel Time ERF **Concentration**	Urban	N/A		N/A	N/A	N/A	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	N/A		N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
	Total Response Time ERF Concentration	Urban	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0

Risk Category: Bomb Squad / Risk Classification: High

BASELINE (ACTUAL) PERFORMANCE STATEMENT
HIGH RISK BOMB SQUAD INCIDENTS – BS-HR

For high-risk bomb squad incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of an applicable unit is as follows in each of the density zones:

Urban: N/A **Rural: N/A**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **N/A**

For turnout time at the 90th percentile and Countywide: **N/A**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: N/A **Rural: N/A**

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: N/A **Rural: N/A**

The first-arriving bomb technician (FM or in BU700) for all bomb squad-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; Establish command/unified command and assign units/groups/division as needed; Consider need for additional resources; Obtain intelligence and background information from the on-scene personnel or witnesses; Obtain detailed description of the suspected package (Polaroid photograph as applicable); Whenever possible, confirmation of the location of the suspected device will be accomplished without an approach; The "initial approach" will be performed by a bomb technician in the bomb suit or by robot as available/ applicable; Provide Situation Update Reports.

Risk Category: Bomb Squad / Risk Classification: High

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

HIGH RISK BOMB SQUAD INCIDENTS – BS-HR

For high-risk bomb squad incidents, the benchmark target goal total response time (TRT) at the 90th percentile for the first arrival of an applicable unit is as follows in each of the density zones:

Urban: 1:00:00 **Rural: 1:15:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **05:00**
For turnout time at the 90th percentile and Countywide: **03:00**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 26:00 **Rural: 40:00**

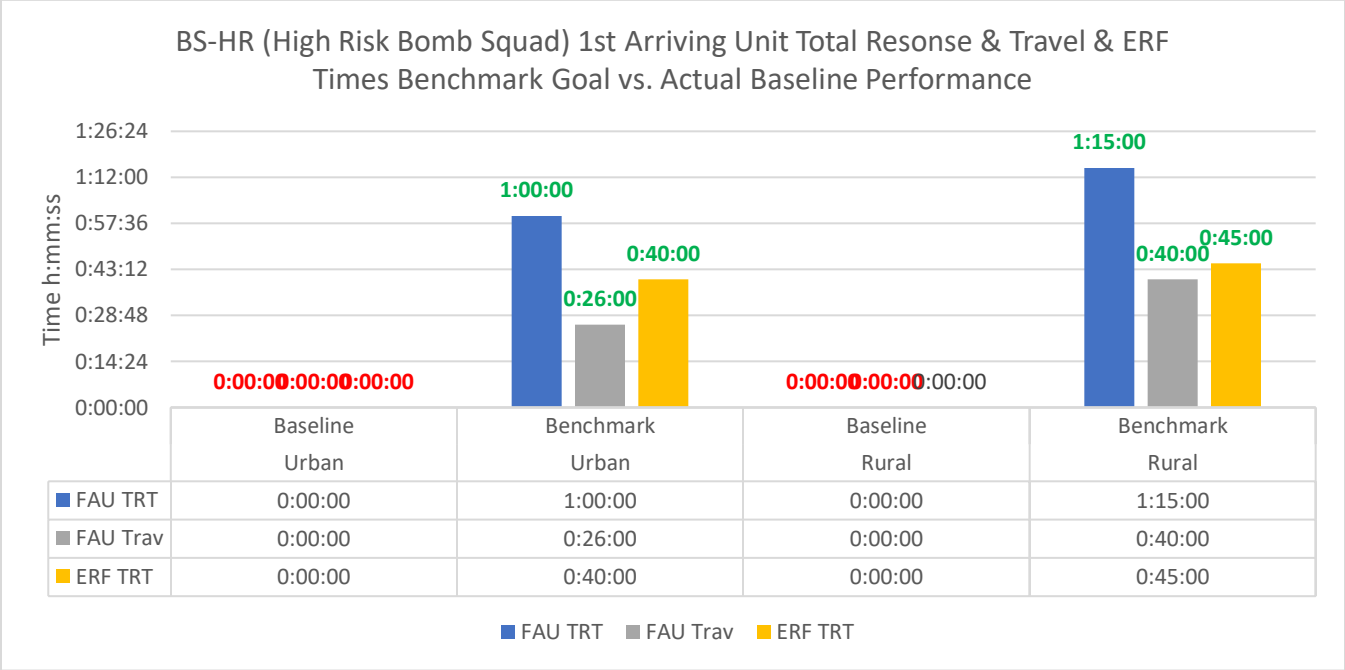
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 40:00 **Rural: 45:00**

The first-arriving bomb technician (FM or in BU700) for all bomb squad-related risks shall: Provide Initial On Scene Report (IOSR); Confirm incident location; Establish command/unified command and assign units/groups/division as needed; Consider need for additional resources; Obtain intelligence and background information from the on-scene personnel or witnesses; Obtain detailed description of the suspected package (Polaroid photograph as applicable); Whenever possible, confirmation of the location of the suspected device will be accomplished without an approach; The “initial approach” will be performed by a bomb technician in the bomb suit or by robot as available/ applicable; Provide Situation Update Reports.

Reporting the Gap: BS-HR (Bomb Squad Responses) High Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
BS-HR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	N/A	1:00:00	#VALUE!	N/A	1:15:00	#VALUE!
FAU Trav	N/A	0:26:00	#VALUE!	N/A	0:40:00	#VALUE!
ERF TRT	N/A	0:40:00	#VALUE!	N/A	0:45:00	#VALUE!



Risk Category: Bomb Squad / Risk Classification: Special

(Special Risk) Bomb Squad – BS-SR - 90th Percentile Times - Baseline Performance			FY 2018 - FY 2022	FY 2022	FY 2021 Q1	FY 2020	FY 2019	FY 2018
Alarm Handling Pick-up to Dispatch		Urban	0:02:18		N/A	N/A	2:18	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
Turnout Time Turnout Time 1st Unit		Countywide	0:02:18		N/A	N/A	2:18	N/A
		Urban	0:02:36		N/A	N/A	2:36	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:02:36		N/A	N/A	2:36	N/A
Travel Time	Travel Time 1st Unit **Distribution**	Urban	N/A		N/A	N/A	N/A	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	N/A		N/A	N/A	N/A	N/A
	Travel Time ERF **Concentration**	Urban	0:55:33		N/A	N/A	0:55:33	N/A
		Rural	N/A		N/A	N/A	N/A	N/A
		Countywide	0:55:33		N/A	N/A	0:55:33	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	0:47:18		N/A	N/A	0:47:18	N/A
			n=1		N=0	N=0	N=1	N=0
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	0:47:18		N/A	N/A	0:47:18	N/A
			n=1		N=0	N=0	N=1	N=0
	Total Response Time ERF Concentration	Urban	1:00:59		N/A	N/A	1:00:59	N/A
			n=1		N=0	N=0	N=1	N=0
		Rural	N/A		N/A	N/A	N/A	N/A
			n=0		N=0	N=0	N=0	N=0
		Countywide	1:00:59		N/A	N/A	1:00:59	N/A
			n=1		N=0	N=0	N=1	N=0

Risk Category: Bomb Squad / Risk Classification: Special

BASELINE (ACTUAL) PERFORMANCE STATEMENT
SPECIAL RISK BOMB SQUAD INCIDENTS – BS-SR

For special-risk bomb squad incidents, the baseline total response time (TRT) at the 90th percentile for first arrival of an applicable unit is as follows in each of the density zones:

Urban: 0:47:18 Rural: N/A

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **0:02:18**

For turnout time at the 90th percentile and Countywide: **0:02:36**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: N/A Rural: N/A

The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 1:00:59 Rural: N/A

The first-arriving bomb technician (FM or in BU700) for all bomb squad-related risks shall: Provide Initial On-Scene Report (IOSR); Confirm incident location; Establish command/unified command and assign units/groups/division as needed; Consider need for additional resources; Obtain intelligence and background information from the on-scene personnel or witnesses; Obtain detailed description of the suspected package (Polaroid photograph as applicable); Whenever possible, confirmation of the location of the suspected device will be accomplished without an approach; The "initial approach" will be performed by a bomb technician in the bomb suit or by robot as available/ applicable; Provide Situation Update Reports.

Risk Category: Bomb Squad / Risk Classification: Special

BENCHMARK (TARGET GOAL) PERFORMANCE STATEMENT

SPECIAL RISK BOMB SQUAD INCIDENTS – BS-SR

For special-risk bomb squad incidents, the benchmark target goal total response time (TRT) at the 90th percentile for first arrival of an applicable unit is as follows in each of the density zones:

Urban: 45:00 **Rural: 1:00:00**

For phone to dispatch (PtoD) call-processing at the 90th percentile and Countywide: **N/A**
For turnout time at the 90th percentile and Countywide: **N/A**

The travel time for the arrival of the first applicable unit is as follows in each of the density zones:

Urban: 20:00 **Rural: 35:00**

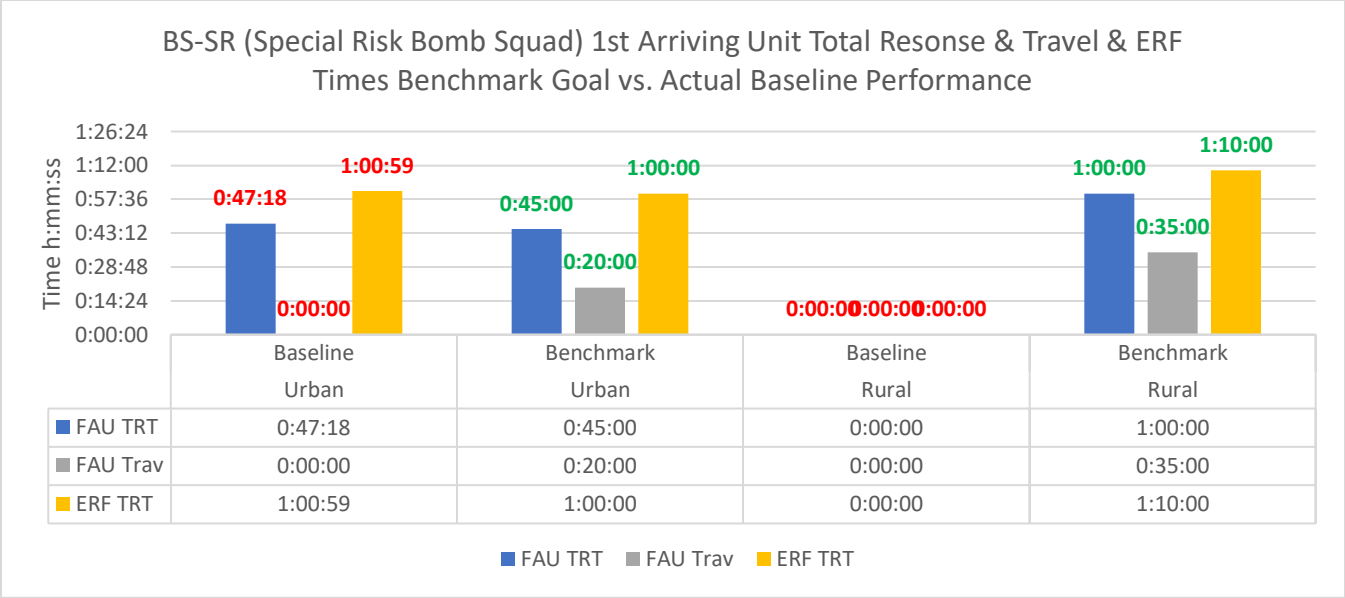
The effective response force (ERF) baseline TRT at the 90th percentile is as follows in each of the density zones:

Urban: 1:00:00 **Rural: 1:10:00**

The first-arriving bomb technician (FM or in BU700) for all bomb squad-related risks shall: Provide Initial On Scene Report (IOSR); Confirm incident location; Establish command/unified command and assign units/groups/division as needed; Consider need for additional resources; Obtain intelligence and background information from the on-scene personnel or witnesses; Obtain detailed description of the suspected package (Polaroid photograph as applicable); Whenever possible, confirmation of the location of the suspected device will be accomplished without an approach; The “initial approach” will be performed by a bomb technician in the bomb suit or by robot as available/ applicable; Provide Situation Update Reports.

Reporting the Gap: BS-SR (Bomb Squad Responses) Special Risk

Program	Urban	Urban	Urban	Rural	Rural	Rural
BS-SR	Baseline	Benchmark	Gap %	Baseline	Benchmark	Gap %
FAU TRT	0:47:18	0:45:00	-4.86%	N/A	1:00:00	#VALUE!
FAU Trav	N/A	0:20:00	#VALUE!	N/A	0:35:00	#VALUE!
ERF TRT	1:00:59	1:00:00	-1.61%	N/A	1:10:00	#VALUE!



Determination if Response Time Performance Objectives Met [CC 2C.5]

Over the years and through the Commission on Fire Accreditation International's (CFAI) framework, MCFRS has developed sophisticated processes to constantly analyze and report service delivery response times, at the 90th percentile fractal and within each component of the response time continuum. These actual/baseline response times are clearly and quantitatively documented within all of the previous data charts provided within this section of the CRA/SOC.

MCFRS has also implemented future benchmark target response time goals for each of these many emergency service delivery programs, which are documented in each of the previous benchmark statements. Equally as important, they are also documented within the MCFRS *2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan* within Table 3 for first-arriving unit and Table 4 for ERF. The benchmark targets were developed with a commitment of attempting to reach national standards' recommendations and well as realistic expectations. MCFRS also understands and continues to attempt to bridge the gap between baseline performance and benchmark targets and acknowledges the CFAI framework and mandates for institutionalization greatly assists with implementing complex solutions to achieving these goals.

However, datamining, monitoring, analyzing, and subsequently implementing programs and changes to address response time gaps does not necessarily define whether an agency can definitively acknowledge it is meeting its response time objectives. Documenting this is a core competency within the CFAI self-assessment processes within numerous criterions under Category V.

To this end, MCFRS has recently developed a process to determine whether its core response programs (i.e., fire suppression and EMS) are meeting response time objectives. This process is explained on the following pages.

MCFRS Determination if Response Time Performance Objectives Met

PERFORMANCE GOAL

To gradually improve MCFRS 90th percentile response times across our 21 emergency response programs as the department works toward achieving our 2022 benchmarks published in our *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*.

PERFORMANCE OBJECTIVES

1. **To improve 90th percentile total response time within each emergency program (for both first-arriving unit and effective response force) each fiscal year by ≥3% compared to the previous year's baseline time.**

2. **To address expected variation in 90th percentile response times from year to year as the department moves toward achieving our 2022 benchmarks, an acceptable increase from one fiscal year to the next (should an increase occur) has been established by the Fire Chief at ≤3% of the 90th percentile total response time for the previous 5-year period.**

MCFRS acknowledges that Objective #1 will not be met for all emergency programs 100% of the time, year after year, due to many variables such as increased call load, resource availability, inclement weather, communications/technology issues, etc.). Variations above and below baseline 90th percentile response times will inevitably occur. To address these variations, an acceptable increase from one fiscal year to the next has been established by the Fire Chief at ≤3% of the 90th percentile response time for the previous 5-year period (i.e., Objective #2). To eventually reach the established benchmarks, any year having an increased 90th percentile time would need to be offset by an equivalent or greater reduction in times in the years that follow.

Improved (decreased) response times, particularly those exceeding -3%, are highly desirable whereas increased times, particularly those exceeding 3%, are a sign of concern that must be addressed as quickly as possible.

Risk Category: Fire Suppression Program / Determination if Total Response Time Performance Objectives Met

For fire suppression, there are 6 individual programs (FFA-HY, FFA-SRHR, FFA-NH, A1F, A1N, A2-3), each having 90th percentile times for our four density zones plus countywide (shown in five columns); thus, there are 30 cells in the first-arriving unit table pertaining to fire suppression. MCFRS has established that if ≤30% of the cells have red shading, then we have met the overall (or final) objective concerning response time. Stated differently, if ≥70% of the cells are not shaded red, then our overall objective has been met. Based upon the 30%/70% threshold, there are 6 red cells of 30 total cells pertaining to fire suppression in the first-arriving unit table, which indicates a 20% failure rate (i.e., an 80% success rate); thus, our overall objective has been met.

MCFRS FIRST-ARRIVING UNIT FY17 BASELINE VS FY16 BASELINE
TOTAL RESPONSE TIME BY DENSITY ZONE AT 90th PERCENTILE PERFORMANCE LEVEL
(EVALUATION OF WHETHER 3% PERFORMANCE OBJECTIVE WAS MET)

	METROPOLITAN			URBAN			SUBURBAN			RURAL			COUNTYWIDE		
Program	FY17 BL	FY16 BL	Δ - Gap	FY17 BL	FY16 BL	Δ - Gap	FY17 BL	FY16 BL	Δ - Gap	FY17 BL	FY16 BL	Δ - Gap	FY17BL	FY16BL	Δ - Gap
Fire-Full Assignment (FFA-HY)	9:11 (422)	9:08 (507)	**0:03**	10:03 (35)	9:21 (52)	0:39	10:43 (32)	9:04 (45)	1:39	9:48 (42)	11:30 (32)	-1:42	9:34 (531)	9:17 (636)	0:17
Fire-Full Assignment – High-rise(FFA-SRHR)	9:12 (46)	8:33 (68)	0:39	N/A	N/A	N/A	6:24 (1)	N/A	N/A	N/A	7:12 (2)	N/A	9:12 (47)	8:18 (70)	0:54
Fire-Full Assignment – Non-Hydranted (FFA-NH)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10:21 (1)	N/A	13:43 (24)	13:22 (29)	0:21	13:43 (24)	13:20 (30)	0:23
Adaptive 1- Fire (A1F)	12:20	11:42	0:38	13:58	15:17	-1:19	12:58	13:33	-0:35	15:38	16:52	-1:14	13:24	13:17	**0:07**
Adaptive 1- Non-Fire (A1N)	10:14	10:16	**-0:02**	**11**:18	11:15	**0:03**	11:14	11:24	**-0:10**	14:26	14:25	**0:01**	10:51	11:03	**-0:12**
Adaptive 2-3 (A2-3)	9:24	9:33	**-0:09**	10:28	10:35	**-0:07**	10:32	11:04	-0:32	12:55	15:07	-2:12	9:51	9:58	**-0:07**

TRT = Total Response Time (PtoD + Turnout + Travel) BL-Baseline BM-Benchmark N/A – not applicable
(#) Incident count – based on number of incidents where all needed timestamps were available to calculate the TRT. Count not provided when >100 except for FFA-HY Metro & County. **Red font**: increase ≤3% Red shading: increase >3% **Green font**: decrease ≤3% Green shading: decrease >3%

Risk Category: Fire Suppression Program / Determination if Total Response Time Performance Objectives Met

In the ERF table, there are 3 of 20* cells pertaining to fire suppression shaded red; thus, only 15% of the cells indicate a failure to meet the objective (i.e., an 85% success rate).

*The A1F & A1N programs are not applicable for ERF because they are single-unit responses; therefore, these 10 cells are left out, thus leaving 20 applicable cells.

MCFRS EFFECTIVE RESPONSE FORCE FY17 BASELINE VS FY16 BASELINE TOTAL RESPONSE TIME BY DENSITY ZONE AT 90th PERCENTILE PERFORMANCE LEVEL

	METROPOLITAN			URBAN			SUBURBAN			RURAL			COUNTYWIDE		
Program	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ-Gap	FY17BL	FY16BL	Δ-Gap
Fire-Full Assignment (FFA-HY)	20:55 (149)	21:55 (172)	-1:00	20:10 (16)	24:01 (19)	-3:51	25:10 (13)	23:34 (25)	1:36	18:49 (20)	23:32 (12)	-4:43	20:39 (198)	22:56 (228)	-2:17
Fire-Full Assignment – High-rise (FFA-SRHR)	19:28 (9)	21:46 (17)	-2:18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11:34 (1)	N/A	19:28 (9)	21:46 (18)	-2:18
Fire-Full Assignment – Non-Hydranted (FFA-NH)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	52:00 (8)	32:41 (15)	19:19	52:00 (8)	32:41 (16)	19:19
Adaptive 1- Fire (A1F)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Adaptive 1- Non-Fire (A1N)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Adaptive 2-3 (A2-3)	12:20	12:35	**-0:15**	13:50	13:33	**0:17**	13:45	13:21	**0:24**	15:32	17:17	-1:45	12:54	13:10	**-0:16**

TRT = Total Response Time (PtoD + Turnout + Travel) BL-Baseline BM-Benchmark N/A – not applicable
(#) Incident count – based on number of incidents where all needed timestamps were available to calculate the TRT. Count not provided when >100 except for FFA-HY Metro & County.
Red font: increase ≤3% Red shading: increase >3% **Green font**: decrease ≤3% Green shading: decrease >3%

Risk Category: EMS Program / Determination if Total Response Time Performance Objectives Met

In the First-Arriving Unit table, there is 1 of 15 cells pertaining to the EMS program shaded red; thus, only 6.6% of the cells indicate a failure to meet the objective (i.e., a 93.4% success rate). Since ≥70% of the cells are not shaded red, then our overall EMS FY 17 First-Arriving Unit objective has been met.

MCFRS FIRST-ARRIVING UNIT FY17 BASELINE VS FY16 BASELINE TOTAL RESPONSE TIME BY DENSITY ZONE AT 90th PERCENTILE PERFORMANCE LEVEL (EVALUATION OF WHETHER 3% PERFORMANCE OBJECTIVE WAS MET)

	COUNTYWIDE			METROPOLITAN			URBAN			SUBURBAN			RURAL		
Program	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ - Gap	FY17 BL	FY16 B	Δ-Gap	FY17BL	FY16BL	Δ-Gap
Advanced Life Support 1 (ALS1)	10:33	10:44	**-0:11**	11:22	11:27	**-0:05**	11:33	11:36	**-0:03**	12:44	13:02	**-0:18**	10:54	11:05	**-0:11**
Advanced Life Support 2 (ALS2)	9:55	9:45	**0:10**	10:11	10:18	**-0:07**	10:38	10:44	**-0:06**	12:49	11:51	0:58	10:14	10:06	**0:08**
Basic Life Support (BLS)	11:42	11:44	**-0:02**	12:42	12:35	**0:07**	12:24	12:17	**0:07**	13:46	13:41	**0:05**	12:02	12:03	**-0:01**

TRT = Total Response Time (PtoD + Turnout + Travel) BL-Baseline BM-Benchmark N/A – not applicable
(#) Incident count – based on number of incidents where all needed timestamps were available to calculate the TRT. Count not provided when >100 except for FFA-HY Metro & County.
Red font: increase ≤3% Red shading: increase >3% **Green font**: decrease ≤3% Green shading: decrease >3%

Risk Category: EMS Program / Determination if Total Response Time Performance Objectives Met

In the ERF table, there are 4 of 15 cells pertaining to the EMS program shaded red; thus, 27% of the cells indicate a failure to meet the objective (i.e., a 73% success rate). Since ≥70% of the cells are not shaded red, then our overall EMS FY17 ERF objective has been met.

MCFRS EFFECTIVE RESPONSE FORCE FY17 BASELINE VS FY16 BASELINE TOTAL RESPONSE TIME BY DENSITY ZONE AT 90th PERCENTILE PERFORMANCE LEVEL

	COUNTYWIDE			METROPOLITAN			URBAN			SUBURBAN			RURAL		
Program	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ-Gap	FY17 BL	FY16 BL	Δ-Gap	FY17BL	FY16BL	Δ-Gap
Advanced Life Support 1 (ALS1)	11:52	12:11	**-0:19**	12:48	13:08	**-0:20**	12:56	13:00	**-0:04**	14:22	15:12	-0:50	12:16	12:37	**-0:21**
Advanced Life Support 2 (ALS2)	12:14	11:41	0:33	12:09	12:59	-0:50	12:46	12:00	0:46	16:42	13:53	2:52	12:39	12:05	0:34
Basic Life Support (BLS)	12:27	12:27	0:00	13:35	13:38	**-0:03**	13:21	13:28	**-0:07**	14:52	14:46	**0:06**	12:51	12:53	**-0:02**

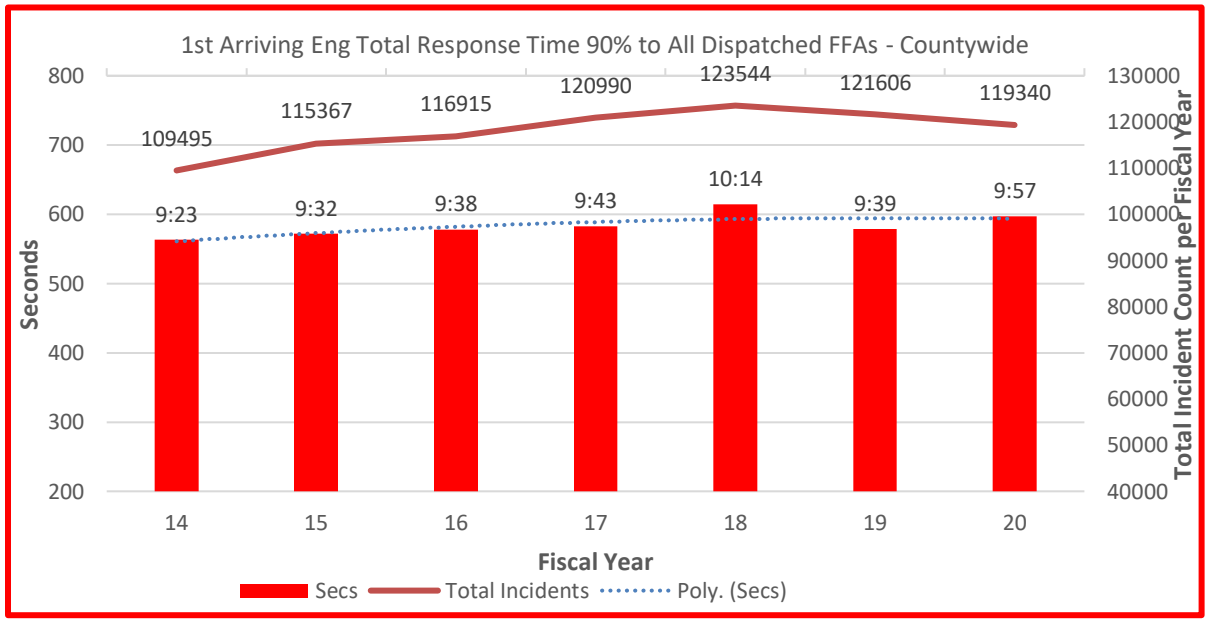
TRT = Total Response Time (PtoD + Turnout + Travel) BL-Baseline BM-Benchmark N/A – not applicable
(#) Incident count – based on number of incidents where all needed timestamps were available to calculate the TRT. Count not provided when >100 except for FFA-HY Metro & County.
Red font: increase ≤3% Red shading: increase >3% **Green font**: decrease ≤3% Green shading: decrease >3%

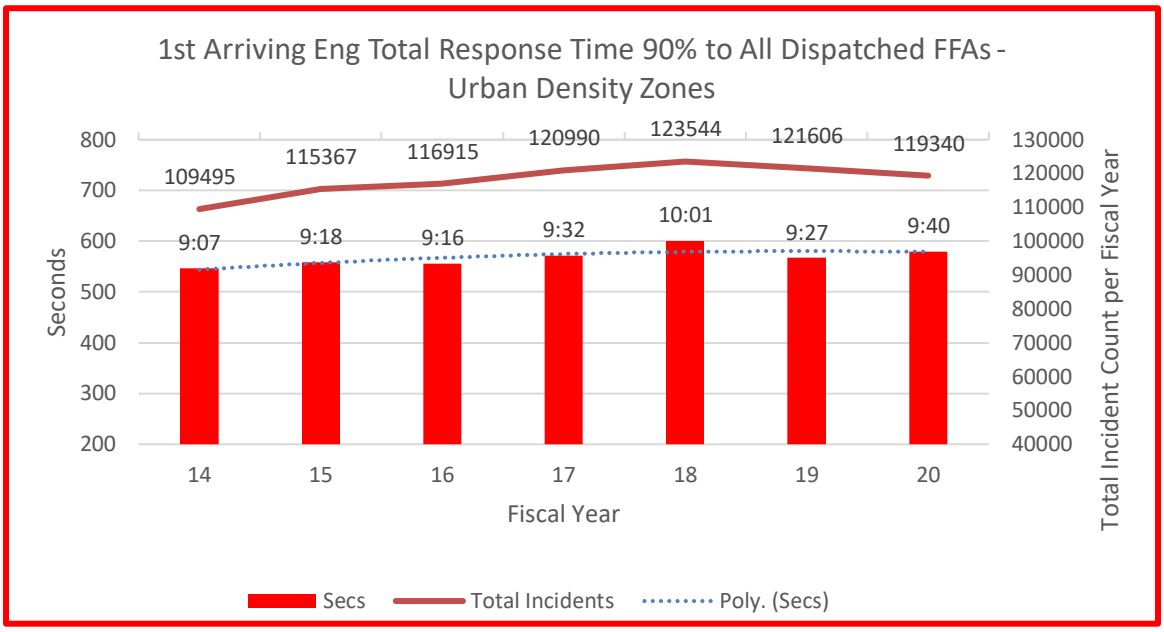
Additional Core Program Total Response Time Continuum Performance Charts

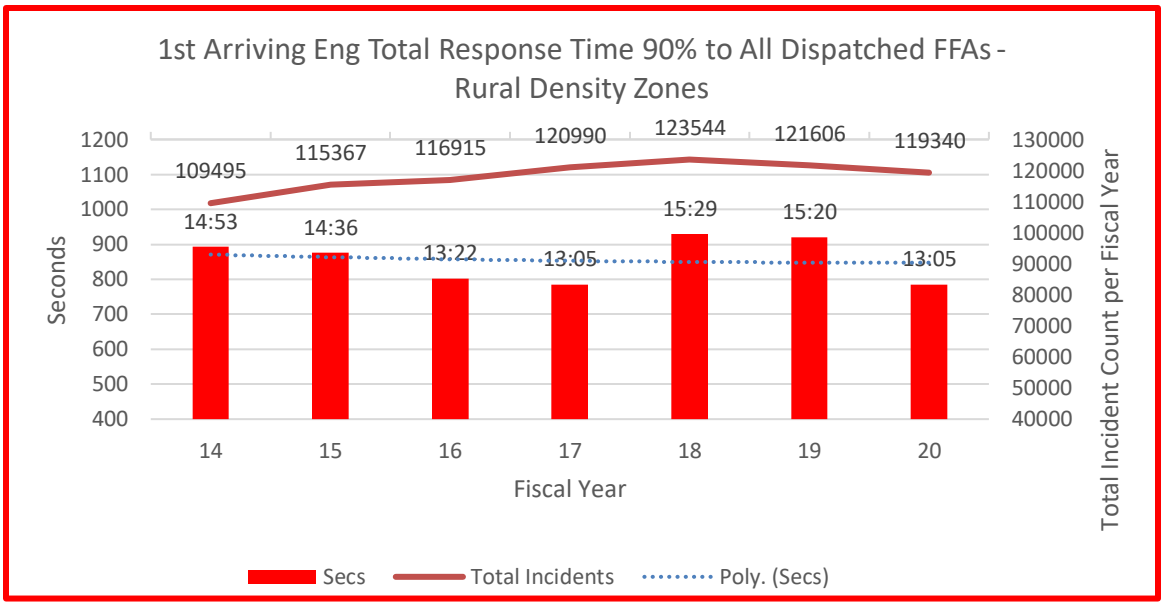
The response time of the first arriving engine company to reported structure fires is important. The National Fire Protection Association (NFPA) Standard 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* (2020 edition) maintains a benchmark (goal) turnout time for suppression incidents at 80 seconds (1 minute and 20 seconds) coupled with the benchmark travel time of the first arriving engine company to these incidents at 240 seconds (4-minutes) for a total of 5 minutes and 20 seconds.

However, this does not include the 911 call processing time. NFPA 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems* (2019 edition) sets a benchmark to process the "highest prioritization level of emergency events", which include "Fire involving or potentially extending to a structure(s)" at 60 seconds from [911] call answer to units dispatched. This said, between these two NFPA standards, the **total response time** benchmark (goal) for the first arriving engine to fire suppression incidents is 380 seconds (6 minutes and 20 seconds).

The following charts depict MCFRS' multi fiscal year baseline (actual performance) at the 90th percentile to each component of the total response time continuum (ECC 911 phone pick-up to dispatch, turnout time, travel time, and total response time) for the first arriving engine company to *reported* structure fires (fire full assignments), countywide.




1st Arriving Eng Total Response Time 90% to All Dispatched FFAs - Urban Density Zones
Seconds
800
700
600
500
400
300
200
Total Incident Count per Fiscal Year
130000
120000
110000
100000
90000
80000
70000
60000
50000
40000
109495
115367
116915
120990
123544
121606
119340
9:07
9:18
9:16
9:32
10:01
9:27
9:40
14
15
16
17
18
19
20
Fiscal Year
Secs
Total Incidents
Poly. (Secs)


1st Arriving Eng Total Response Time 90% to All Dispatched FFAs - Rural Density Zones
Seconds
1200
1100
1000
900
800
700
600
500
400
Total Incident Count per Fiscal Year
130000
120000
110000
100000
90000
80000
70000
60000
50000
40000
109495
115367
116915
120990
123544
121606
119340
14:53
14:36
13:22
13:05
15:29
15:20
13:05
14
15
16
17
18
19
20
Fiscal Year
Secs
Total Incidents
Poly. (Secs)

Identifies Outcomes & Ties Back to CRA During Updates/Adjustments [2C.6]

FUTURE

This is a new performance indicator in the 10th edition model (other performance indicator numbers within this criterion have been renumbered to make this one 2C.6)

Service Delivery Total Response Time Continuum Assessment by RMZs [2C.7]

As described in 2C.5, MCFRS has identified, and will continue identifying, total response time (TRT) for delivery of services as the summation of three component times: call processing time, turnout time and travel time. Each component time, as well as TRT, is documented and analyzed at the 90th percentile for each of the department's 21 emergency service programs, broken down by the four population density zones used by MCFRS. Call processing time, turnout time, travel time and TRT are documented for first-arriving unit and for the effective response force (ERF) as referenced below.

The department assesses TRTs for these service programs mostly by population density zone (four separate zones) and county-wide and to a lesser extent by station area (i.e., 35 separate fire station areas) and by risk management zone (i.e., fire box area). Due to the large number of risk management zones (RMZs) – there are 850 - in the County, the department only assesses TRTs by select RMZs such as those associated with an area under consideration for a new station or additional resources, an area of particularly high risk, or an area experiencing a significant issue requiring in-depth analysis.

In an effort to convey to the reader MCFRS' commitment to in-depth and routine analysis and reporting of each component of the response time continuum, the following five pages of Crystal Report screenshots are provided. The significant investment into the development of these sophisticated reports, that quickly analyze millions of records to produce the analysis, confirm the importance to the agency of being able to assess and compare baseline times (at the 90th percentile fractal) to benchmark targets, which assists in defining opportunities for improvement. Each of the following five pages presents a five-year analysis of reported moderate risk structure fires (Adaptive 2-3 [A2-3]), which have a response assignment of two engines and one special service unit, in Station 1's and Station 2's RMZs and Station Response Area planning zones. The first page is phone to dispatch, the second turnout, the third travel, and the fourth total response time. The fifth page is the ERF times. An A2-3 analysis within each geographic density zone is also provided on each page.

Accreditation First Arriving Phone to Dispatch

Incident Date: 01/01/2013 To 12/31/2017
Program: PHONETODISP

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
0101	104	Adaptive2_3	90	00:03:36	216
0102	172	Adaptive2_3	90	00:03:30	210
0103	43	Adaptive2_3	90	00:03:58	238
0104	21	Adaptive2_3	90	00:02:31	151
0105	8	Adaptive2_3	90	00:02:35	155
0106	40	Adaptive2_3	90	00:02:52	172
0107	58	Adaptive2_3	90	00:03:22	202
0108	7	Adaptive2_3	90	00:05:25	325
0110	42	Adaptive2_3	90	00:03:11	191
0201	2	Adaptive2_3	90	00:04:11	251
0202	38	Adaptive2_3	90	00:03:30	210
0203	34	Adaptive2_3	90	00:03:29	209
0204	36	Adaptive2_3	90	00:03:23	203
0205	28	Adaptive2_3	90	00:04:05	245
0206	32	Adaptive2_3	90	00:03:37	217
0207	26	Adaptive2_3	90	00:03:52	232
0208	54	Adaptive2_3	90	00:04:11	251
0209	97	Adaptive2_3	90	00:03:32	212
0210	13	Adaptive2_3	90	00:04:20	260
0213	3	Adaptive2_3	90	00:02:36	156
0214	9	Adaptive2_3	90	00:04:10	250

Accreditation First Arriving Phone to Dispatch

Incident Date: 01/01/2013 To 12/31/2017
Program: PHONETODISP

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
01	495	Adaptive2_3	90	00:03:30	210
02	372	Adaptive2_3	90	00:03:37	217

Accreditation First Arriving Phone to Dispatch

Incident Date: 01/01/2013 To 12/31/2017
Program: PHONETODISP

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
Metropolitan	8,130	Adaptive2_3	90	00:03:28	208
Rural	687	Adaptive2_3	90	00:03:37	217
Suburban	711	Adaptive2_3	90	00:03:21	201
Urban	658	Adaptive2_3	90	00:03:26	206

Accreditation All Units Turnout Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TURNOUT

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
0101	333	Adaptive2_3	90	00:01:58	118
0102	581	Adaptive2_3	90	00:01:46	106
0103	135	Adaptive2_3	90	00:01:52	112
0104	66	Adaptive2_3	90	00:01:50	110
0105	23	Adaptive2_3	90	00:02:27	147
0106	119	Adaptive2_3	90	00:01:41	101
0107	176	Adaptive2_3	90	00:01:53	113
0108	20	Adaptive2_3	90	00:01:45	105
0110	166	Adaptive2_3	90	00:01:58	118
0201	20	Adaptive2_3	90	00:01:19	79
0202	98	Adaptive2_3	90	00:01:45	105
0203	88	Adaptive2_3	90	00:02:21	141
0204	60	Adaptive2_3	90	00:01:45	105
0205	62	Adaptive2_3	90	00:01:38	98
0206	92	Adaptive2_3	90	00:01:48	108
0207	69	Adaptive2_3	90	00:01:56	116
0208	165	Adaptive2_3	90	00:01:51	111
0209	277	Adaptive2_3	90	00:01:43	103
0210	39	Adaptive2_3	90	00:01:47	107
0213	6	Adaptive2_3	90	00:04:11	251
0214	25	Adaptive2_3	90	00:02:35	155

Accreditation All Units Turnout Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TURNOUT

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
01	1,619	Adaptive2_3	90	00:01:52	112
02	1,001	Adaptive2_3	90	00:01:49	109

Accreditation All Units Turnout Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TURNOUT

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
Metropolitan	24,491	Adaptive2_3	90	00:02:03	123
Rural	2,721	Adaptive2_3	90	00:02:28	148
Suburban	2,327	Adaptive2_3	90	00:02:12	132
Urban	2,093	Adaptive2_3	90	00:02:10	130

Accreditation First Arriving Travel Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TRAVEL

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Se
0101	106	Adaptive2_3	90	00:03:35	215
0102	177	Adaptive2_3	90	00:03:33	213
0103	44	Adaptive2_3	90	00:04:05	245
0104	23	Adaptive2_3	90	00:04:24	264
0105	8	Adaptive2_3	90	00:06:22	382
0106	41	Adaptive2_3	90	00:03:42	222
0107	56	Adaptive2_3	90	00:04:13	253
0108	7	Adaptive2_3	90	00:06:09	369
0110	44	Adaptive2_3	90	00:03:49	229
0201	2	Adaptive2_3	90	00:03:39	219
0202	37	Adaptive2_3	90	00:04:34	274
0203	34	Adaptive2_3	90	00:04:50	290
0204	36	Adaptive2_3	90	00:04:34	274
0205	28	Adaptive2_3	90	00:04:38	278
0206	32	Adaptive2_3	90	00:03:49	229
0207	26	Adaptive2_3	90	00:05:34	334
0208	55	Adaptive2_3	90	00:04:29	269
0209	96	Adaptive2_3	90	00:04:18	258
0210	13	Adaptive2_3	90	00:03:38	218
0213	3	Adaptive2_3	90	00:02:57	177
0214	9	Adaptive2_3	90	00:05:14	314

Accreditation First Arriving Travel Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TRAVEL

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
01	506	Adaptive2_3	90	00:03:53	233
02	371	Adaptive2_3	90	00:04:32	272

Accreditation First Arriving Travel Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TRAVEL

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
Metropolitan	8,238	Adaptive2_3	90	00:05:19	319
Rural	690	Adaptive2_3	90	00:09:01	541
Suburban	714	Adaptive2_3	90	00:06:15	375
Urban	659	Adaptive2_3	90	00:06:40	400

Accreditation First Arriving Total Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TOTAL_RESPONSE

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
0101	104	Adaptive2_3	90	00:08:02	482
0102	171	Adaptive2_3	90	00:07:02	422
0103	43	Adaptive2_3	90	00:07:56	476
0104	21	Adaptive2_3	90	00:08:19	499
0105	8	Adaptive2_3	90	00:10:43	643
0106	39	Adaptive2_3	90	00:08:18	498
0107	56	Adaptive2_3	90	00:07:48	468
0108	7	Adaptive2_3	90	00:09:33	573
0110	40	Adaptive2_3	90	00:08:04	484
0201	2	Adaptive2_3	90	00:07:21	441
0202	37	Adaptive2_3	90	00:08:58	538
0203	34	Adaptive2_3	90	00:09:21	561
0204	36	Adaptive2_3	90	00:08:37	517
0205	28	Adaptive2_3	90	00:08:42	522
0206	32	Adaptive2_3	90	00:07:36	456
0207	25	Adaptive2_3	90	00:09:27	567
0208	54	Adaptive2_3	90	00:08:58	538
0209	96	Adaptive2_3	90	00:08:11	491
0210	13	Adaptive2_3	90	00:08:56	536
0213	3	Adaptive2_3	90	00:09:02	542
0214	9	Adaptive2_3	90	00:08:53	533

Accreditation First Arriving Total Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TOTAL_RESPONSE

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
01	489	Adaptive2_3	90	00:07:59	479
02	369	Adaptive2_3	90	00:08:53	533

Accreditation First Arriving Total Response

Incident Date: 01/01/2013 To 12/31/2017
Program: TOTAL_RESPONSE

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
Metropolitan	8,063	Adaptive2_3	90	00:09:18	558
Rural	652	Adaptive2_3	90	00:13:18	798
Suburban	699	Adaptive2_3	90	00:10:15	615
Urban	648	Adaptive2_3	90	00:10:35	635

Accreditation ERF Total Response

Incident Date: 01/01/2013 To 12/31/2017
Program: ERF_TOTAL_RESPONSE

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
0101	86	Adaptive2_3	90	00:11:02	662
0102	147	Adaptive2_3	90	00:09:31	571
0103	36	Adaptive2_3	90	00:14:28	868
0104	17	Adaptive2_3	90	00:09:55	595
0105	8	Adaptive2_3	90	00:30:31	1,831
0106	34	Adaptive2_3	90	00:09:29	569
0107	41	Adaptive2_3	90	00:12:25	745
0108	6	Adaptive2_3	90	00:10:14	614
0110	37	Adaptive2_3	90	00:12:01	721
0201	2	Adaptive2_3	90	00:09:18	558
0202	28	Adaptive2_3	90	00:14:23	863
0203	27	Adaptive2_3	90	00:12:35	755
0204	28	Adaptive2_3	90	00:11:43	703
0205	15	Adaptive2_3	90	00:11:28	688
0206	16	Adaptive2_3	90	00:14:39	879
0207	10	Adaptive2_3	90	00:16:35	995
0208	45	Adaptive2_3	90	00:11:09	669
0209	71	Adaptive2_3	90	00:12:02	722
0210	9	Adaptive2_3	90	00:17:15	1,035
0213	2	Adaptive2_3	90	00:12:08	728
0214	8	Adaptive2_3	90	00:10:37	637

Accreditation ERF Total Response

Incident Date: 01/01/2013 To 12/31/2017
Program: ERF_TOTAL_RESPONSE

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
01	412	Adaptive2_3	90	00:10:35	635
02	261	Adaptive2_3	90	00:12:40	760

Accreditation ERF Total Response

Incident Date: 01/01/2013 To 12/31/2017
Program: ERF_TOTAL_RESPONSE

Geographic Type	*Total Incident Count	Program Type	Measure Type	Response Time	Response Time Sec
Metropolitan	5,867	Adaptive2_3	90	00:12:41	761
Rural	415	Adaptive2_3	90	00:16:35	995
Suburban	473	Adaptive2_3	90	00:14:16	856
Urban	434	Adaptive2_3	90	00:14:38	878

MCFRS Processes to Maintain & Improve Service Delivery Performance [CC 2C.8]

MCFRS has identified and implemented many initiatives during the past five years to maintain and improve its performance in emergency services' delivery. The most significant initiatives include the following, some of which are ongoing:

- Increase of ALS and BLS capacity: Upgraded 5 engines (i.e., Engines 705, 710, 711, 726, 740) to paramedic engines; began the multi-year conversion of medic units to paramedic chase units (e.g., Medic 741→ALS741, Medic 742→ALS742) while retaining the former medic units as BLS transport units; placed Ambulance 706 in service (i.e., new service at Station 6).
- Continued implementation of 4-person staffing: Upgraded 5 three-person engines (i.e., Engines 705, 710, 711, 726, 740) to four personnel, including a firefighter-paramedic. 33 of 35 engines now have 4-person staffing.
- Additional stations: Opened Travilah Station 32 (with paramedic engine and ambulance) in 2014 to better serve the Travilah, Traville, western Rockville, King Farm and Crown communities. Began the planning phase for Montgomery Village Station 39 that will improve response time in the Village and reduce the call load of Station 8 – the County's busiest station.
- Public Safety Systems Modernization (PSSM): Assisted the Department of Technology Services (DTS) with implementation of the new PremierOne CAD system and new Fire Station Alerting system. Currently assisting DTS with implementation of the new P25-compliant radio system.
- Special Operations Improvements: New apparatus (i.e., 2nd Technical Rescue Team vehicle, 2nd command post, replacement of boat fleet with Demaree Inflatable Boats - Chesapeake and Rescue Sled models); standardization of equipment on boats and boat support units; increased on-duty staffing of Technical Rescue Team (i.e., from 1 to 8 personnel) and Swift Water Team (from 1 operator and 1 crew member at both Stations 10 and 30 to 2 operators and 2 crew members at both stations); replacement of atmospheric monitors and detectors on Hazmat units and engines, aerials and rescue squads; addition of CO

detectors on BLS and ALS jump bags; addition of 5-gas detectors with photo ionization detector for Battalion Chiefs and Safety Officers.

- New Training Academy: Opened the new Fire-Rescue Training Academy in October 2016 with improved, expanded and modernized facilities for training of career and volunteer firefighters and EMS providers.
- New Policies: Implemented two key departmental policies impacting performance, including Incident Response Policy #24-01 and Apparatus Staffing Policy #25-08AMII.
- Improve ISO Rating: The County's Insurance Services Office (ISO) rating improved to Class 2 (from Class 3) in urban/hydranted areas and improved to Class 4 (from Class 6) in rural/non-hydranted areas based upon a 2016 evaluation by the ISO.

In addition to all of the aforementioned documented efforts of maintaining and improving performance, another example is the recategorization of CAD Fire Priority Dispatch™ System "Light Smoke Condition" determinants. Through rigorous performance analysis, the Operations Division determined that CAD call types with the determinant suffix "K" (light smoke) could be recategorized from reported high-risk structure fires to moderate-risk structure fires. Changing the response plan to these event types from a Fire Full Assignment-FFA (5-engines, 2-trucks, 1-rescue squad, 2-chiefs, and 1-EMS transport unit) to an Adaptive 2-3 assignment (2-engines and 1-truck or 1-rescue squad) reduced the high-risk, robust FFA assignment by approximately 200+ incidents per year. Since MCFRS' all-hazard service delivery model relies on 33 paramedic engine companies (out of 35 total engine companies) to help provide ALS response, reducing over two hundred incidents per year allowed a majority of those paramedic engines and ALS and BLS transport units to remain in service in their communities. Through this analysis and programmatic change, MCFRS believes it was able to help maintain total response times to numerous programs even though annual calls for service continue to increase. It should be noted that light smoke call types in high-hazard occupancies were not changed.

MCFRS' Emergency Response System Resiliency Doctrines [2C.9]

MCFRS demonstrates its resiliency through execution of comprehensive departmental policies, procedures and best-practices and then assesses this resiliency. The department's resiliency is regularly demonstrated during periods of peak demand call load, concurrent major incidents, and severe weather events as well as during planned special events occurring in the County. When the service delivery system is being stressed under one or more of these circumstances, the department minimizes the increased level of risk by executing the following policies, procedures and practices:

- Apparatus Transfers – As station resources become depleted due to deployments, similar apparatus is temporarily transferred from other areas of the County (and sometimes from out of County – see below) to provide coverage so that service objectives are achieved to the greatest extent possible.
- Mutual Aid – MCFRS has automatic or mutual aid agreements with the five federal fire departments located within Montgomery County plus fire departments from other jurisdictions within the National Capital Region. These neighboring resources can be called upon at any time for quick and reliable response, with occasional exceptions (e.g., major winter storm impacting entire region limiting apparatus mobility).
- "Condition Red" – Allows for temporary reduced apparatus assignments within the County when the system is being challenged to its maximum such as during a major weather event (e.g., blizzard, ice storm, severe thunderstorm), major fire-rescue incident (e.g., multi-alarm incident, mass casualty incident) or concurrent major incidents. When conditions improve, normal apparatus assignments are once again dispatched.
- Increased Staffing - For planned/anticipated events such as tropical storms, winter storms or special events (e.g., charity walkathon, professional golf tournament), the department often places additional staff on frontline apparatus and/or staffs reserve apparatus with both career and volunteer personnel to handle the increased call load and greater complexity of incidents. Call-back of off-duty personnel and/or holdover of personnel beyond their assigned shift may be required.

The department's resiliency is assessed by analyzing performance through response time measures, EMS measures and any feedback provided by customers. Should performance be found to have been unacceptable, the department analyzes the reasons and then initiates actions to improve performance and improve resiliency.

CFAI, within Section 3 of the 6th edition *Community Risk Assessment: Standards of Cover* manual, describes the following concepts, which, if employed, will assist a fire department to "...quickly recover from an incident or events, or to adjust easily to changing needs or requirements."

Resistance is a fire-rescue agency's ability to deploy only the resources it deems necessary to safely and effectively control an incident and bring it to termination. Section 3 of the 6th edition manual also explains ways to assure the resistance concept is attained:

- The importance of reliability and consistently delivering services within performance expectations.
- The importance of conducting a quality risk-assessment and critical task analysis to assure essential resources are deployed based on the level of risk.
- An evaluation of historical workloads within first-due (upper level planning zones) and ERF levels to determine possible opportunities to reduce some resource deployments.

Absorption is a fire department's ability to quickly add resources to maintain service levels during high demand times and/or when long-term large-scale incidents reduce normal operating capabilities. Some considerations to help with absorption:

- Automatic/mutual aid
- Personnel call-back procedures, and
- Incident prevention.

Restoration is the rapid return of resources to their ability to respond again to other emergency calls, both during daily operations and during times/incidents which tax the emergency services system. Ways in which an agency can assure restoration of their emergency response resources:

- Maintaining expectations of rapid return to service of resources through policy and procedures
- Mutual aid station transfers/backfills.

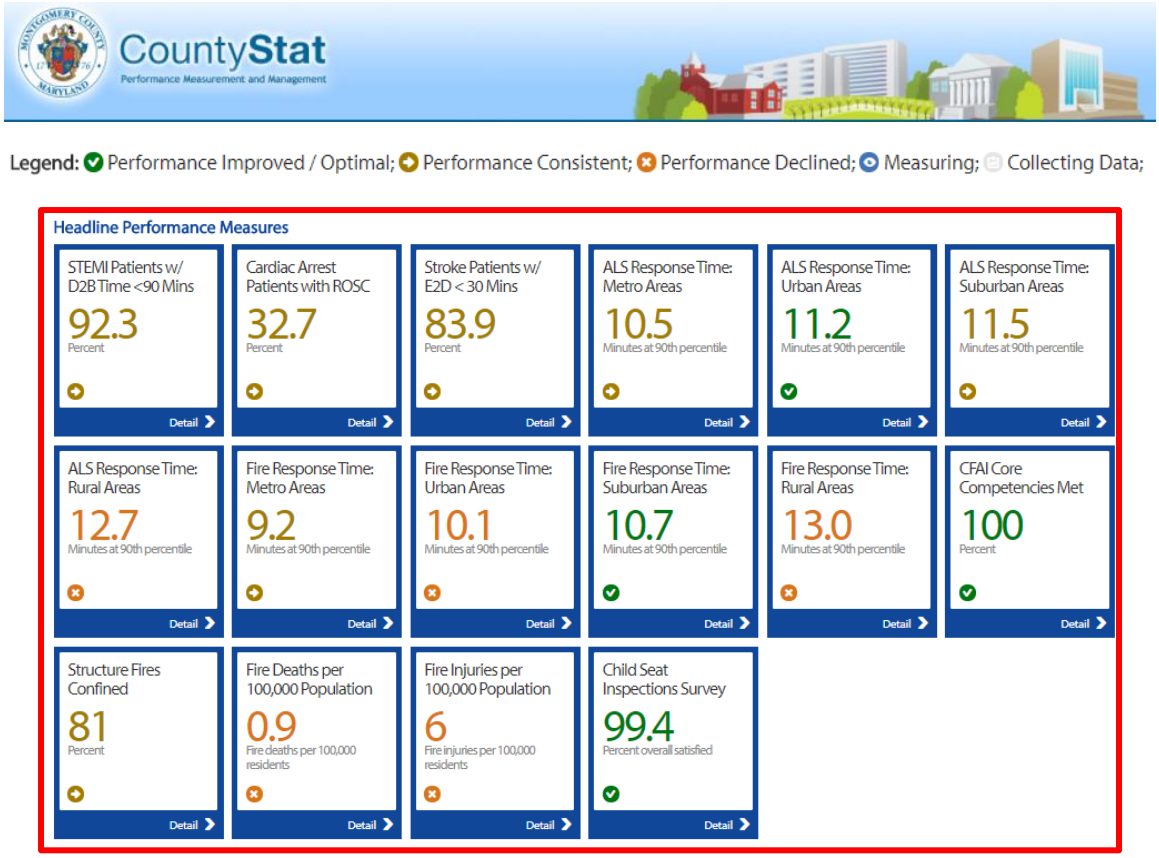
MCFRS assures its emergency response system resiliency which has been articulated within this Performance Indicator's description within the MCFRS self-assessment manual and has been presented in the beginning of this section of this CRA/SOC.

MCFRS has documented in other sections of this CRA/SOC manual examples of how it employs the concepts of resistance, absorption, and restoration to help it "spring back to normalcy" and thus maintain its resiliency.

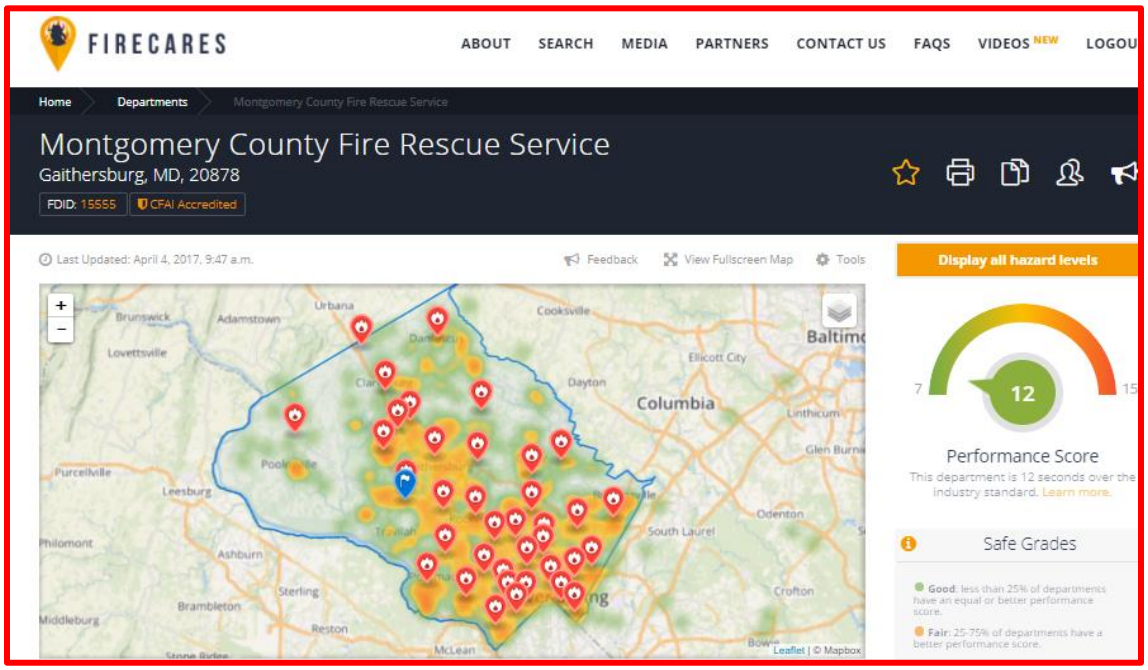
For example, the reader is encouraged to review Section 2C.3 where MCFRS documents its practice of only deploying one engine company and one special service company to automatic fire alarms (AFA) in high-risk occupancies such as nursing homes and high-rise buildings (resistance). This decision is based on sound data analysis and risk assessment practices. Some fire departments opt to deploy more resources on these types of incidents. Other examples are included within the CC 2C.4 section where all the critical task analysis charts are offered as well as documentation on MCFRS' participation in NIST's residential fireground field time-to-task experiments. Incident prevention (absorption) examples are provided within section VI Description of Programs and Services and specially under the many CRR and Community Outreach initiatives MCFRS employs to help "Prevent the 911 call..." see slide 13.

IX. MCFRS Plan to Maintain & Improve Response Capabilities [Criterion 2D]

CountyStat:

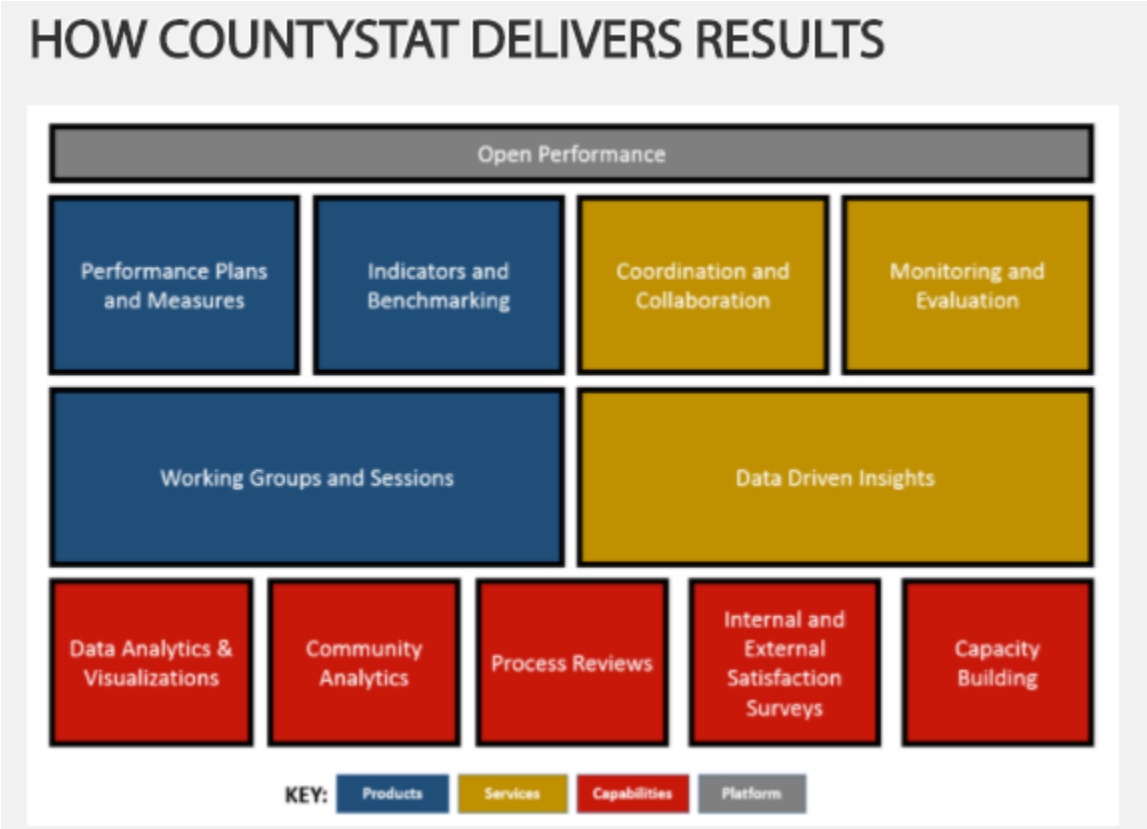


FireCares:



Methods for Assessing Performance and Opportunities for Improvement [CC 2D.1]

Assessment of the department's performance adequacies, consistencies, reliabilities, and resiliencies is addressed and documented in departmental performance measures (i.e., "headline measures" and "supporting measures" per CountyStat nomenclature) and response time performance objectives as well as in performance dashboards prepared by the individual Sections comprising the five MCFRS Divisions. Additionally, program appraisals for SAM Category 5 programs are conducted annually by program managers.



A significant component to MCFRS' documented and adopted methodologies for mission-critical performance assessment is the mandatory participation with the Montgomery County Performance Management and Data Analytics Team (a.k.a., "CountyStat").

The following CountyStat Principles and Background overview are provided for the reader to understand how this process is critical and transparent to MCFRS' performance assessment methodologies:

COUNTYSTAT PRINCIPLES

Require Data-Driven Performance | Promote Strategic Governance | Increase Government Transparency | Foster a Culture of Accountability

BACKGROUND

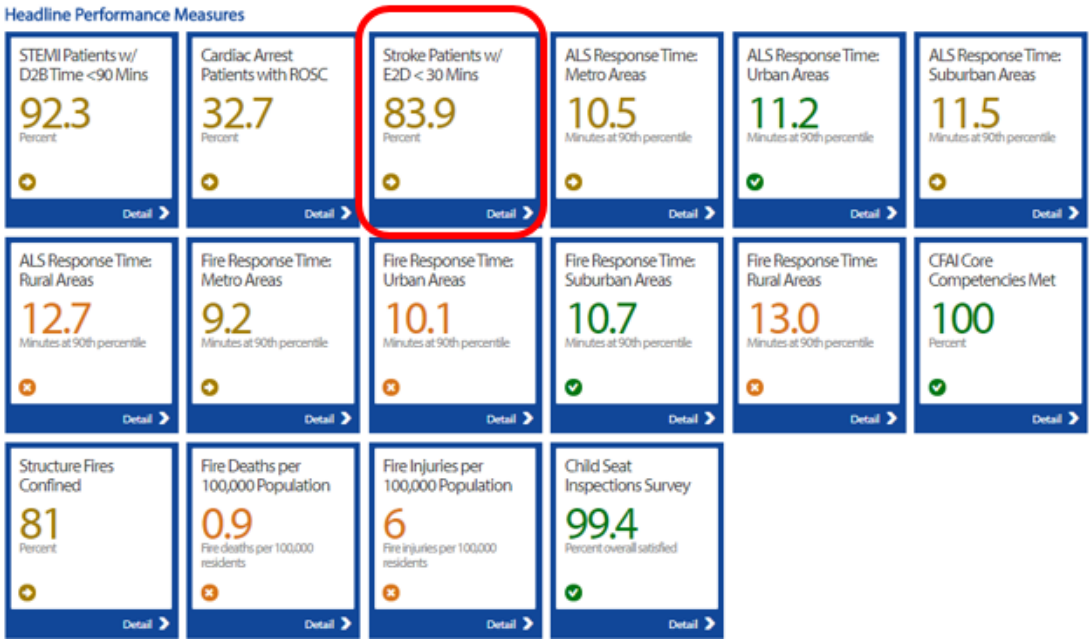
CountyStat is the performance management and data analytics team within the Office of the County Executive of Montgomery County. Established in 2007 and serving under the Chief Administrative Officer (CAO), CountyStat uses data strategically to monitor, assess, and improve the effectiveness, efficiency, and performance of County services, solve problems, and develop targeted action plans and strategies to deliver results for our residents, businesses, and communities. CountyStat requires decisions, actions, and policies that are driven by the extensive use of data, quantitative and qualitative analysis, and outcome-focused performance management.

Beyond its oversight role, CountyStat functions as an internal consultant performing data analyses and developing long-term strategic initiatives, ensuring that our County government leverages its data to make smarter decisions and achieve better outcomes. CountyStat also champions accountability and transparency for our residents and employees. In addition to the focus on individual department performance, CountyStat is the forum to convene stakeholders when collaboration across organizational boundaries is needed to address "cross-cutting" multi-departmental efforts that share a common goal. Collectively, the CountyStat Office's work is designed to ensure, on behalf of the CAO, the development and growth of a culture of "managing for results" in Montgomery County.

The CountyStat framework also assists MCFRS in transparently documenting improvement methodologies within each of our headline measures.

The following example is provided for the reader and focuses on the MCFRS performance (headline) measure for Stroke Patients with an EMS to patient Delivery ("E2D") to a primary stroke center in less than 30-minutes. Online viewers are encouraged to link to this CountyStat webpage.

After the online user clicks on the appropriate dashboard tab, the online system reveals to internal and external customers/stakeholders why this measurement is important - *"Time is Brain." The sooner a patient can be seen at a primary stroke care center, the greater likelihood that there will be no lasting effects of a stroke.*



The viewer is then provided the following information regarding this measurement:

What factors are contributing to MCFRS' existing performance:

- Early identification of patients' stroke symptoms by EMS providers.
- MCFRS quality assurance (QA) program emphasizes the importance of rapidly beginning transport of stroke patients to the hospital.

What factors are restricting performance improvement:

- Behavior of individuals experiencing stroke - ignoring the signs, hesitating to call 911
- Demographic factors: Age, race/ethnicity, gender
- Patient stability: Signs/symptoms presented by the stroke patient upon arrival in the hospital emergency room can delay transfer to the CT lab.
- Traffic congestion, resulting in delayed transport of stroke patient to hospital

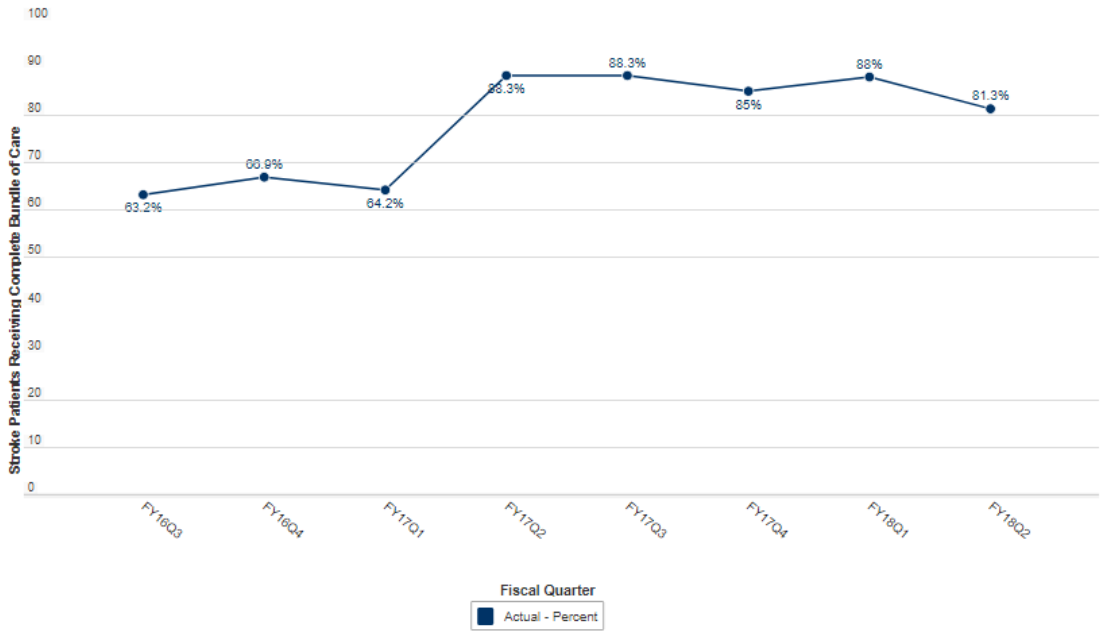
The viewer is then provided a MCFRS improvement plan:

- MCFRS will continue providing feedback to its EMS providers on the importance of this measure.
- MCFRS will work collaboratively with Holy Cross-Germantown Hospital in its ongoing effort to gain primary stroke care center status. Addition of this primary stroke care center in Germantown should result in decreased transport times for stroke patients in the up-county area.
- MCFRS will work collaboratively with primary stroke care center hospitals who aspire to become comprehensive stroke care centers. There are currently no hospitals offering this level of service in Montgomery County.

The viewer is then provided the following “supporting measures” analysis:

SUPPORTING MEASURES

Percentage of stroke patients receiving complete "bundle of care"



Note: Provision of the "bundle of care" to stroke patients includes: completion of stroke scale, recordation of time patient was last seen normal, recordation of blood glucose level, and notification of and transport to a designated stroke center.

This one example provides a clear understanding of MCFRS' commitment to maintaining benchmark targets with the leveraging of industry research and best practices to assist with establishing those benchmarks.

In addition, this one example is supported by MCFRS' commitment to quality assurance and narrowing the gap between baseline actual performance and benchmark target goals. The reader will see on the next page a screenshot from the Operations Division's EMS Blog where providers are shared vital information and insights into improving quality of care and performance.

EMS Matters January 8, 2018

Pasted below are the documented key performance indices for last month. Again please remember we're striving to achieve at least 90% in each category, and I know that the consult percentage should be higher because I hear you consulting but you haven't documented it on your report. Please document it in the Procedures & Treatment section of the e-PCR.

Looking at the data from coded patients we've worked notice we finished the year with a ROSC of slightly over 34% which is about 3.4% better than last year. For the last 4 years our percentage of ROSC with cardiac arrest patients has continued to increase every year. Please keep up the excellent work!

	Scene <15 min	Average scene time	E2D <30 min	Average E2D time	Acquire 12-lead	Transmit 12-lead	Consult		ASA
STEMI	85%	11:14	85%	21:11	92%	73%	85%	[redacted]	100%

						Time Normal		BGL	Use of Anticoags
Stroke	82.61%	11:30	84.06%	22:43	[redacted]	98.55%	76.81%	87	81.16%

MCFRS' commitment and compliance with this CFAI core competency is also displayed by providing the reader another example of a different component of its methodology. MCFRS, through robust planning and goal-tracking mandates, documents more granular division and section goals. The screenshot on the following page displays response time benchmark goals and references the industry standard NFPA 1710.

MCFRS DIVISIONS'/SECTIONS' GOALS AND OBJECTIVES – UPDATED JUNE 2016

Division/Section	Goal / Objective	Accreditation Criterion	FY17	FY18	FY19	FY20	FY21	FY22
Operations /Field Ops	Ensure 4-person staffing for all primary suppression and heavy rescue units: • Plan/budget for, hire, and train personnel to fill current vacancies and to meet future staffing requirements. • Formally acknowledge 4-person staffing as being the minimum staffing requirement for engines, aerial units and rescue squads.	5E, 5G		X		X		
Operations /Field Ops	Meet the accreditation program response time goals as set forth in the County Council-approved Fire, Rescue, EMS and Community Risk Reduction Master Plan as well as voluntary response time standards set forth by NFPA in Standard 1710: • Maintain or construct fire stations in locations that best serve the public. • Relocate or expand existing stations, and build additional stations as needed.	2C, 5E, 5F, 5G, 5H, 5I, 5L					X X	
Operations /Field Ops	Meet the accreditation program response time goals for ALS as set forth in the County Council-approved MCFRS Master Plan as well as voluntary response time standards set forth by NFPA in Standard 1710: • Achieve the goal of paramedic arrival on the scene of 90% of ALS calls within 8 minutes. • Staff the remaining five 3-person engines with 4-persons, including a paramedic, at Stations 10, 11, and 26 (in FY17) and 2 and 20 (in FY19).	2C, 5F	X		X X	X	X	X
Operations /Field Ops	Improve ALS response time by minimizing the percentage of BLS patient care by paramedics: • Strategically place ALS chase cars in service with one or two paramedics per chase car. [ALS chase cars will not normally be dispatched to BLS incidents nor will they transport patients]	2C, 5F		X	X			

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Online viewers are encouraged to click on this link to be directed to this entire document

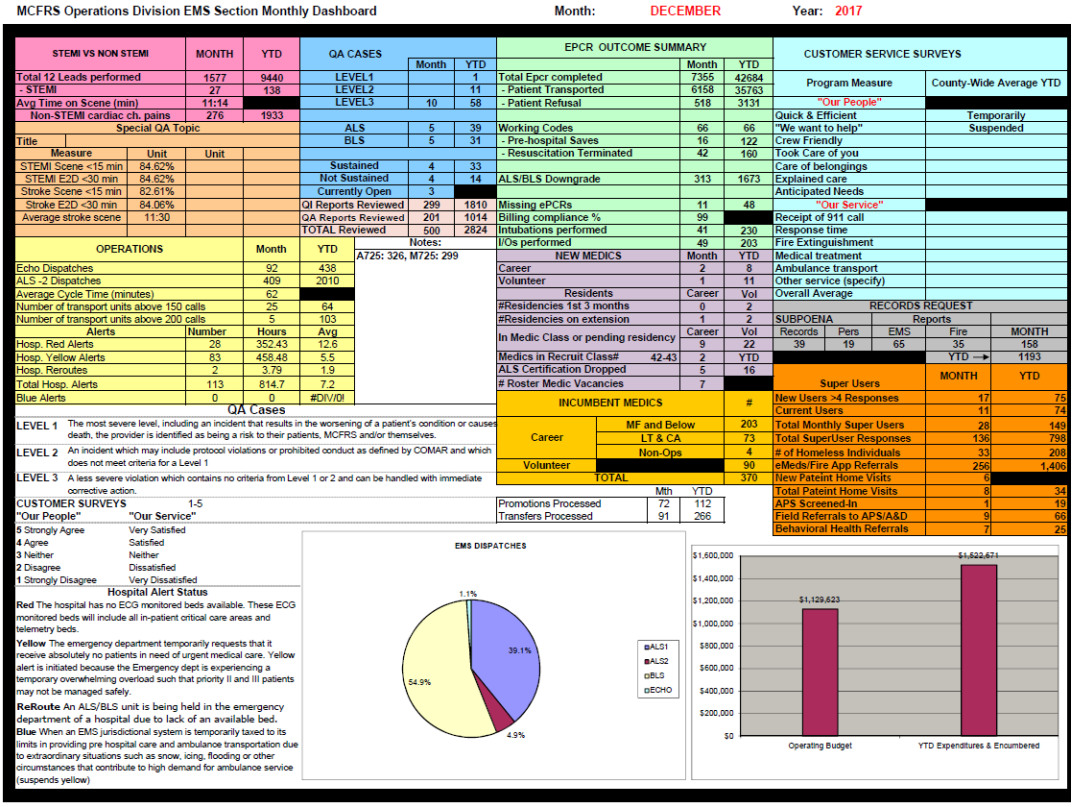
Quarterly Monitoring, Assessing, Reporting Delivery Outcomes & Actions [2D.2]

MCFRS continuously addresses this performance indicator by means of various internal reports as described below.

- Headline performance measures are tracked, assessed and reported quarterly to MCFRS managers and to the CountyStat Office. Most of the headline measures pertain to services provided by the Operations Division, including fire confinement, response times for ALS and fire-full assignment incidents, and provision of ALS services (i.e., services related to cardiac arrest, STEMI and stroke incidents). Performance for these headline measures is reported to the MCFRS leadership/ management during quarterly briefings at the Public Safety Headquarters. Quarterly performance is also reported (electronically) to the CountyStat Office using their quarterly reporting template. When performance in one or more headline measures declines significantly from the previous quarter, or performance is trending negatively over several quarters, the Fire Chief tasks his senior staff to determine the reason(s) and to recommend remedial actions.

CountyStat examples are provided in the previous section (CC 2D.1) of this Community Risk Assessment/Standards of Cover (CRA/SOC) manual.

- Section managers prepare performance dashboards regarding their programs on a quarterly or, in some cases, monthly basis concerning the ability of the service delivery system to meet expected outcomes. Dashboards are presented during quarterly management team briefings and occasionally (per the discretion of each Division Chief) during Division Chiefs meetings with the Fire Chief to support an agenda item or related topic.



MCFRS Operations Division EMS Section Monthly Dashboard — Month: DECEMBER — Year: 2017

STEMI VS NON STEMI	MONTH	YTD
Total 12 Leads performed	1577	9440
- STEMI	27	138
Avg Time on Scene (min)	11:14	
Non-STEMI cardiac ch. pains	276	1933

Special QA Topic

Title		
Measure	Unit	Unit
STEMI Scene <15 min	84.62%	
STEMI E2D <30 min	84.62%	
Stroke Scene <15 min	82.61%	
Stroke E2D <30 min	84.06%	
Average stroke scene	11:30	

QA CASES	Month	YTD
LEVEL1		1
LEVEL2		11
LEVEL3	10	58
ALS	5	39
BLS	5	31
Sustained	4	33
Not Sustained	4	14
Currently Open	3	
QI Reports Reviewed	299	1810
QA Reports Reviewed	201	1014
TOTAL Reviewed	500	2824

Notes: A725: 326, M725: 299

OPERATIONS	Month	YTD
Echo Dispatches	92	438
ALS -2 Dispatches	409	2010
Average Cycle Time (minutes)	62	
Number of transport units above 150 calls	25	64
Number of transport units above 200 calls	5	103

Alerts	Number	Hours	Avg
Hosp. Red Alerts	28	352.43	12.6
Hosp. Yellow Alerts	83	458.48	5.5
Hosp. Reroutes	2	3.79	1.9
Total Hosp. Alerts	113	814.7	7.2
Blue Alerts	0	0	#DIV/0!

QA Cases

LEVEL 1 The most severe level, including an incident that results in the worsening of a patient's condition or causes death, the provider is identified as being a risk to their patients, MCFRS and/or themselves.

LEVEL 2 An incident which may include protocol violations or prohibited conduct as defined by COMAR and which does not meet criteria for a Level 1

LEVEL 3 A less severe violation which contains no criteria from Level 1 or 2 and can be handled with immediate corrective action.

CUSTOMER SURVEYS 1-5

"Our People"	"Our Service"
5 Strongly Agree	Very Satisfied
4 Agree	Satisfied
3 Neither	Neither
2 Disagree	Dissatisfied
1 Strongly Disagree	Very Dissatisfied

Hospital Alert Status

Red The hospital has no ECG monitored beds available. These ECG monitored beds will include all in-patient critical care areas and telemetry beds.

Yellow The emergency department temporarily requests that it receive absolutely no patients in need of urgent medical care. Yellow alert is initiated because the Emergency dept is experiencing a temporary overwhelming overload such that priority II and III patients may not be managed safely.

ReRoute An ALS/BLS unit is being held in the emergency department of a hospital due to lack of an available bed.

Blue When an EMS jurisdictional system is temporarily taxed to its limits in providing pre hospital care and ambulance transportation due to extraordinary situations such as snow, icing, flooding or other circumstances that contribute to high demand for ambulance service (suspends yellow)

EPCR OUTCOME SUMMARY	Month	YTD
Total Epcr completed	7355	42684
- Patient Transported	6158	35763
- Patient Refusal	518	3131
Working Codes	66	66
- Pre-hospital Saves	16	122
- Resuscitation Terminated	42	160
ALS/BLS Downgrade	313	1673
Missing ePCRs	11	48
Billing compliance %	99	
Intubations performed	41	230
I/Os performed	49	203

NEW MEDICS	Month	YTD
Career	2	8
Volunteer	1	11

Residents	Career	Vol
#Residencies 1st 3 months	0	2
#Residencies on extension	1	2
In Medic Class or pending residency	9	22
Medics in Recruit Class# 42-43	2	YTD
ALS Certification Dropped	5	16
# Roster Medic Vacancies	7	

INCUMBENT MEDICS		#
Career	MF and Below	203
	LT & CA	73
	Non-Ops	4
Volunteer		90
TOTAL		370

	Mth	YTD
Promotions Processed	72	112
Transfers Processed	91	266

CUSTOMER SERVICE SURVEYS	
Program Measure	County-Wide Average YTD
"Our People"	
Quick & Efficient	Temporarily
"We want to help"	Suspended
Crew Friendly	
Took Care of you	
Care of belongings	
Explained care	
Anticipated Needs	
"Our Service"	
Receipt of 911 call	
Response time	
Fire Extinguishment	
Medical treatment	
Ambulance transport	
Other service (specify)	
Overall Average	

RECORDS REQUEST				
SUBPOENA Reports				
Records	Pers	EMS	Fire	MONTH
39	19	65	35	158
			YTD →	1193

Super Users	MONTH	YTD
New Users >4 Responses	17	75
Current Users	11	74
Total Monthly Super Users	28	149
Total SuperUser Responses	136	798
# of Homeless Individuals	33	208
eMeds/Fire App Referrals	256	1,406
New Pateint Home Visits	6	
Total Pateint Home Visits	8	34
APS Screened-In	1	19
Field Referrals to APS/A&D	9	66
Behavioral Health Referrals	7	25

The above screenshot is the Operations Division, EMS Section 2017-December Dashboard.

- MCFRS has four daily response time-related reports (covering the 24-hour period from 0700 to 0700 hours) that are generated and emailed to senior management, including:
    - Response times for ALS2/Echo incidents
    - Response times for Fire Full Assignment incidents
    - Fractile response times
    - Response times detail.

These reports are monitored by Operations Division managers and the MCFRS Accreditation Manager for how well actual performance is matching up to expected outcomes and to flag long response times for further examination to determine the causal factors.

Examples of these reports are provided within the *Methodology for Monitoring Quality of Emergency Response Performance [CC 2C.2]* section of this CRA/SOC manual.
As articulated in the Center for Public Safety Excellence's 6th Edition Community Risk Assessment: Standards of Cover manual, "The regular and timely monitoring, assessment, and reporting of system performance is essential to ensure that the actual baseline performance times are maintained or improved over time."

This being quoted and in addition to the aforementioned provided examples, the Emergency Communications Center (ECC) provides weekly analysis pertaining to the emergency call-processing component of the total response time continuum. The responsibilities of monitoring, assessing, and reporting are within the ECC Professional Standards Unit.

ECC management and all telecommunicators, trainers, and support staff utilize the ECC internal web-based SharePoint site to collaborate, learn, share, and view call processing weekly performance. The weekly performance report measures core MCFRS programs and the page provides the stated MCFRS benchmark goals and NPFA standards for these types of core programs to compare. ECC management monitors performance trending, which assists with determining opportunities for improvement and decision-making processes to help solve more complex problems affecting performance and program quality and effectiveness.

Week 8 Stats

Furst, Robert

Calls dispatched: 2299

Phone to dispatch:

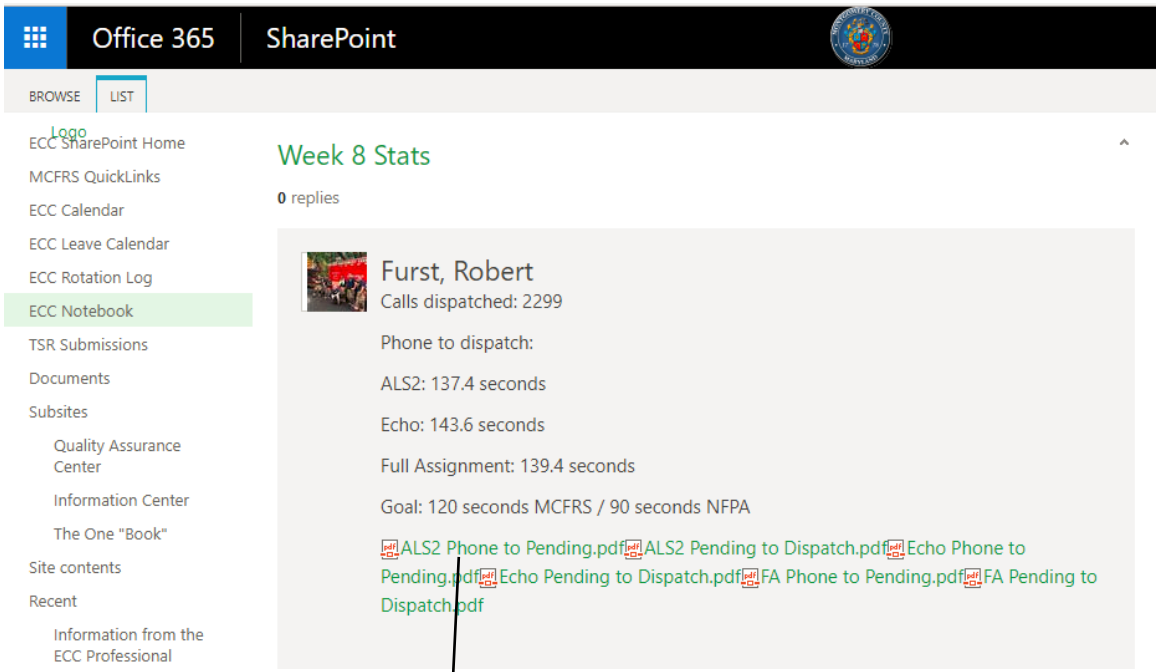
ALS2: 137.4 seconds

Echo: 143.6 seconds

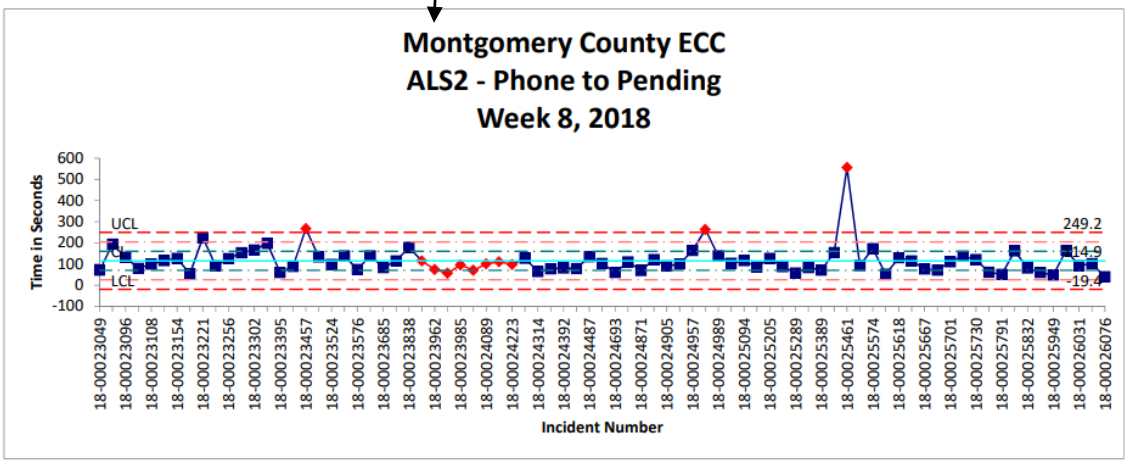
Full Assignment: 139.4 seconds

Goal: 120 seconds MCFRS / 90 seconds NFPA

ALS2 Phone to Pending.pdf ALS2 Pending to Dispatch.pdf Echo Phone to Pending.pdf Echo Pending to Dispatch.pdf FA Phone to Pending.pdf FA Pending to Dispatch.pdf



Screenshot of the ECC SharePoint Professional Standards Unit with Week 8 Stats



Monitoring Future Influencing Factors Which Could Affect Service Delivery [CC 2D.3]

MCFRS actively monitors the County's growth/development and related trends; changing social, demographic, political and economic conditions/trends; external influences; and new or changing risks in analyzing the balance of service delivery capabilities with new or changing conditions and demands. This is achieved through the department's multi-faceted approach involving the following elements:

- Participation in the County's comprehensive community master planning process wherein approximately 5-6 of the nearly 60 community master plans and sector plans within the County are developed or revised annually by the Planning Department (i.e., Maryland-National Capital Park and Planning Commission's Community Planning Division) with the input of its partner agencies. MCFRS provides input for the Community Services and Facilities Section of each community plan as well as reviewing and commenting upon the multiple drafts of each plan; thus, providing MCFRS planners the opportunity to stay abreast of current demographic, political and economic conditions/trends; community issues and risks; future growth/development; and evolving risks. As part of this effort, the MCFRS planning manager has direct interaction with M-NCPPC planners who prepare the community master/sector plans and with M-NCPPC researchers who collect and analyze demographic and economic data in support of these plans. The MCFRS planning manager also receives and views the M-NCPPC's weekly publication "*Info Share*" which provides information on the agency's community planning efforts, agenda packets for the weekly Planning Board meetings, ongoing or completed studies/research, and any newly released reports and publications pertaining to demographic, economic and growth-related statistics and trends within the County.
- Regular interaction with the County's five Citizen Advisory Boards serving the County's five regions (corresponding to the five Regional Services Centers) wherein the Fire Chief and Division Chiefs attend the monthly CAB meetings, keeping abreast of changing conditions, issues and needs within each region.

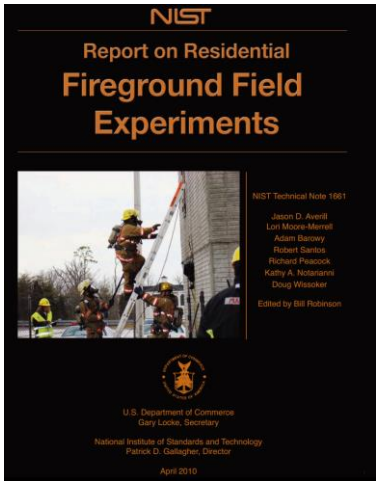
- Participation in periodic meetings with the County Executive's planning staff concerning needs and plans for new fire stations within planned communities.
- Attendance at select work sessions of the County Council's Planning, Housing and Economic Development (PHED) Committee; thus, staying abreast of growth and development trends, economic and social conditions/trends, and community needs.
- The Operations Division monitors threat assessments issued by the federal government (i.e., Department of Homeland Security; Federal Bureau of Investigations; Bureau of Alcohol, Tobacco, Firearms and Explosives) that impact risk levels within the National Capital Region, including Montgomery County.

In addition to the aforementioned bullets, which are MCFRS' self-assessment description of how it meets this core competency, MCFRS also actively collaborates with regional public safety leaders through the Metropolitan Council of Governments (MWCOG). This robust collaborative public safety framework allows MCFRS to maintain a regional and even national situational awareness of current and possible future altering conditions, growth and development trends, and new or changing risks. This type of information sharing assists MCFRS when performing master and strategic planning and specifically when attempting to determine whether current capabilities will be able to sustain future changing contributing factors.

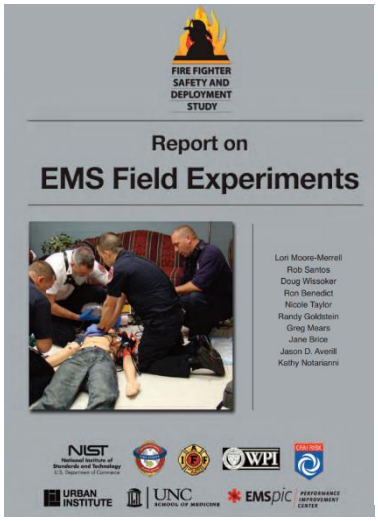
An example of local, regional, and national changing contributing factors that are causing fire service agencies to reanalyze existing service capabilities are building codes allowing for Type V-A wood-frame, 75-foot high-rise residential occupancies to be built and the challenges they pose, especially during the construction phases.

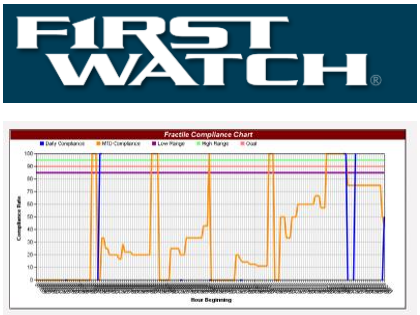
Two recent and local examples of these types of changing contributing factors are an April 1, 2014 Third Alarm large-area luxury apartment building fire under Type V-A construction and only one-month from occupancy, yielding a 21-million dollar loss in Rockville (Montgomery County) and an April 24, 2017 Five Alarm 39-million dollar loss fire in an under construction Type V-A building in College Park (Prince Georges Co.) Maryland.

Performance Monitoring Supports MCFRS Annual Assessment of Programs [2D.4]



[NIST Report on Residential Fireground Field Experiments](#) [IAFF-CFAI-NIST FireCares](#)





[Firefighter Safety and Deployment Study: EMS Field Experiments](#)

The performance monitoring methodology used by MCFRS supports the assessment of the efficiency and effectiveness of our emergency response programs in relation to research performed by the Fire/EMS industry. Our methodology incorporates industry research pertaining to fire suppression and emergency medical services as follows [The online reader is encouraged to click on all hyperlinks]:

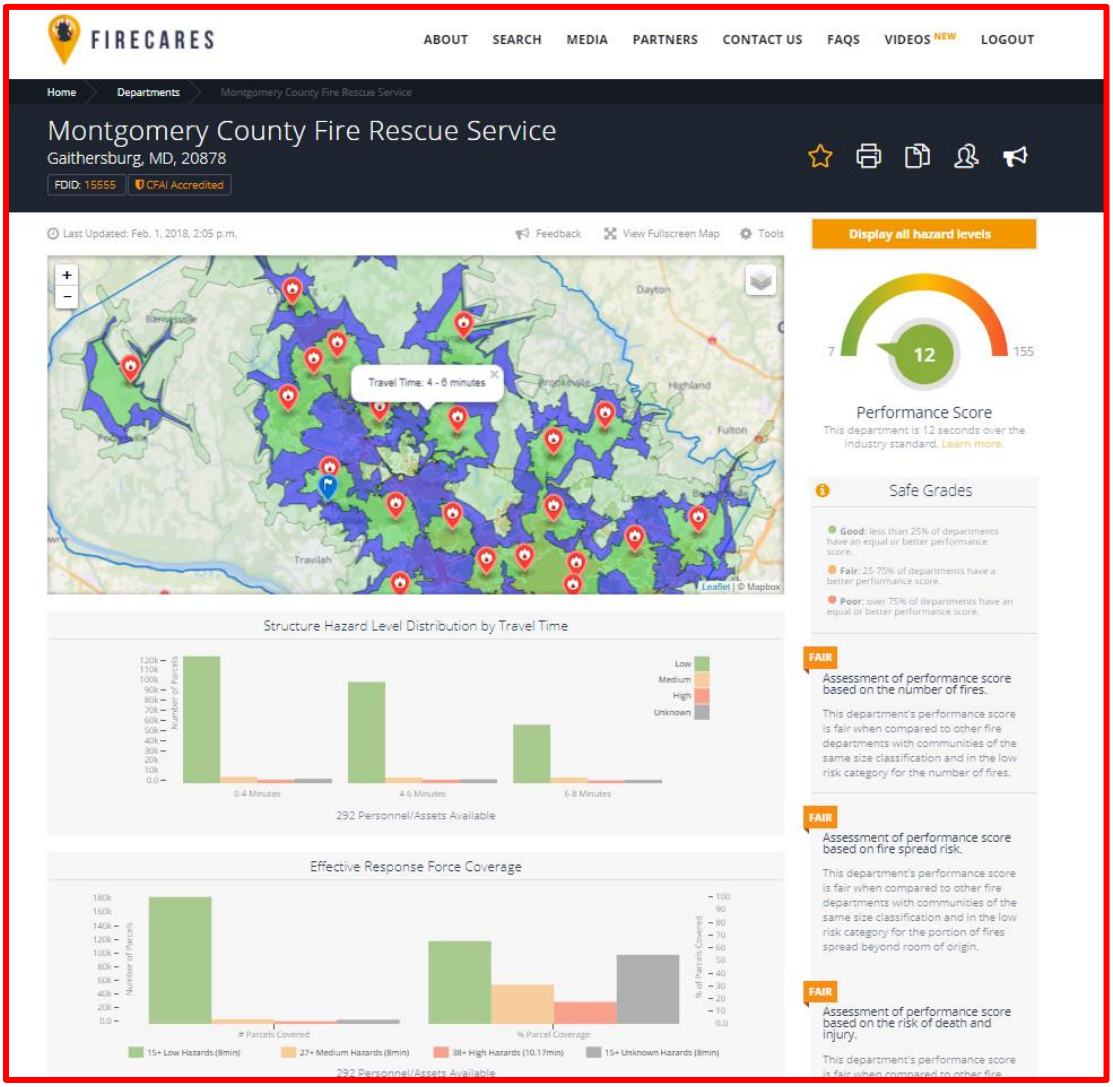
- National Institute for Standards & Technology (NIST): Time-to-task analyses for single-family residential fires, high-rise fires, and emergency medical services. [MCFRS hosted and participated in the NIST studies conducted at the County's Public Safety Training Academy. MCFRS uses the results of these studies in performing critical tasks' analyses for its emergency response programs and for much of the justification for the department's 4-person staffing strategy for the minimum staffing of MCFRS engines, aerial units and rescue squads.]

- NIST and Underwriters Laboratories (UL): Fire flow-path research/studies conducted in recent years. [MCFRS utilizes these research findings in its fire suppression training and during fireground tactics to improve service delivery effectiveness and firefighter safety.]

Master Firefighter/Lieutenant Promotional Exam Source List

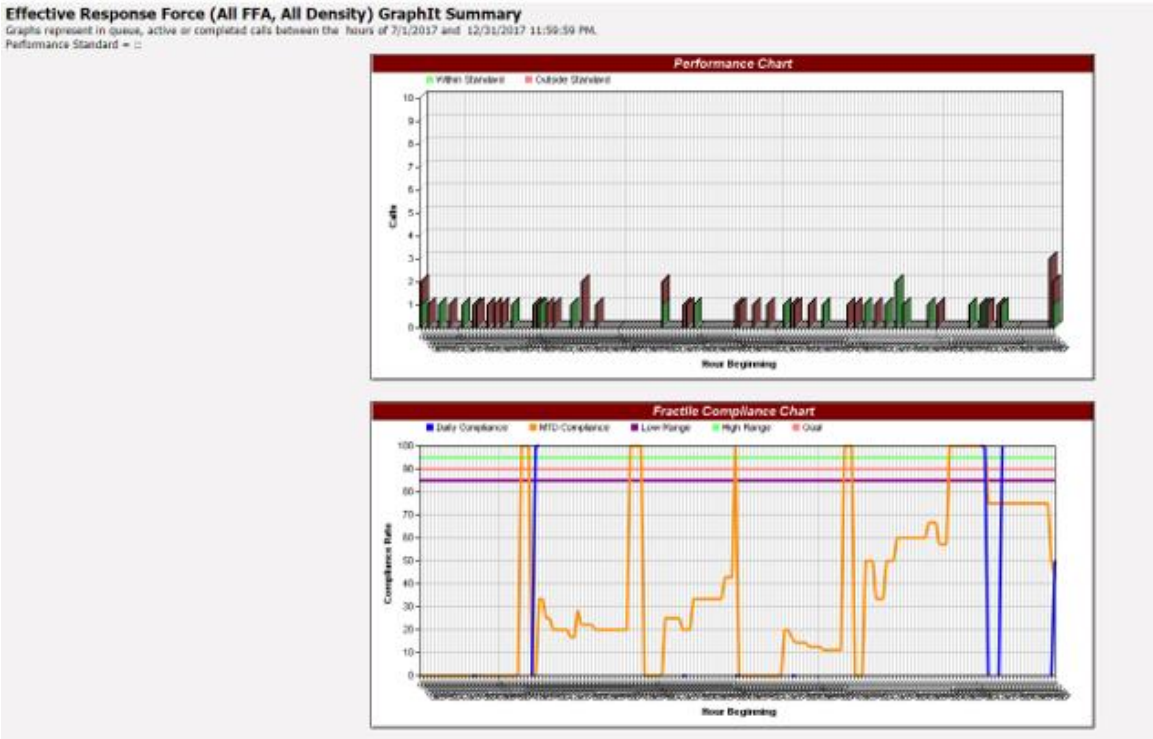
- Article: " Interrupting the Flow Path". UL – New Science article
- Article: " Innovating Fire Attack Tactics"; UL – New Science article
- Article: " What Research Tells Us about the Modern Fireground"
- Article: " Maryland Updates Smoke Alarm Law", August 8, 2013
- Video: " Fire Chief Steve Lohr Inaugural Video Message, April 2014".
- Video in 3 parts: "Understanding the Modern Fire Environment: Flow Paths, Fuels & Tactics, Parts 1, 2 & 3": ATF & Adam St. John
    - Part 1
    - Part 2
    - Part 3
- PPT Presentation: " Driver's Guide to METRO"
- PPT Presentation: " Doughnut Construction"

- Fire-Community Assessment Response Evaluation System (FireCARES™) – Data analysis, performance analysis, and risk assessment computer software developed in recent years. [MCFRS has provided data for inclusion in the FireCARES database as well as input concerning accuracy of previously uploaded data by system developers.]



OUR PARTNERS

- First Watch™ –Software providing a real-time snapshot of resource deployment and performance metrics that can be used in real-time analyses, decision-making, briefings, reports, operational performance monitoring, etc. [Presently used by the MCFRS EMS Section to identify EMS "super users" and to examine transport unit cycle times. MCFRS is looking at expanded use of First Watch.]

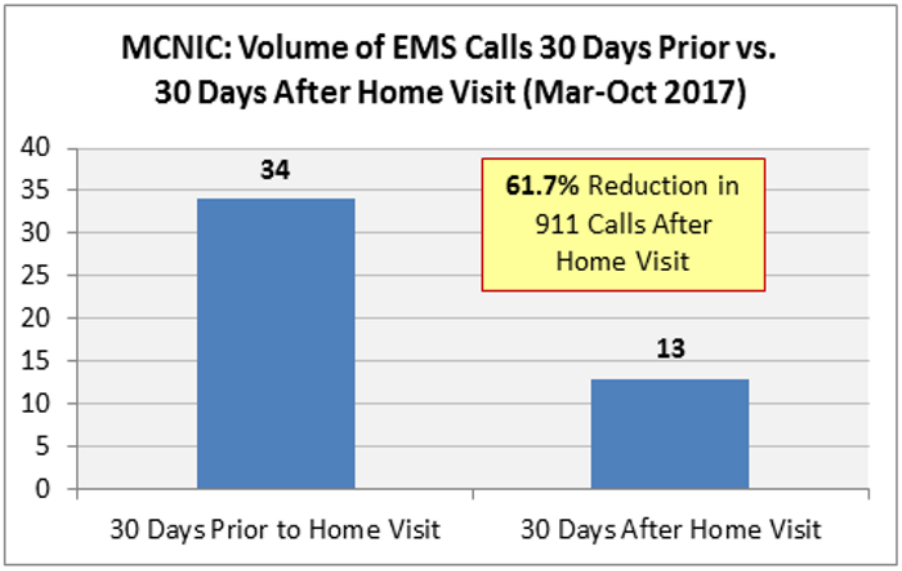


All Triggers | Trend Based Triggers | Performance Triggers | Favorite Triggers

Trigger Links	Status	Standard Deviation
Effective Response Force (All FFA, All Density)	OK	0/1
Effective Response Force - (Alert)	OK	0/1
Effective Response Force - Metropolitan HY (18min)	OK	0/0
Effective Response Force - Rural HY (27min)	OK	0/0
Effective Response Force - Rural NHY (30min)	OK	0/0
Effective Response Force - Suburban HY (23min)	OK	0/0
Effective Response Force - Suburban NHY (25min)	OK	0/0
Effective Response Force - Urban HY (20min)	OK	0/0

- Community Paramedicine – Provision of routine healthcare services to frequent users ("super-users") of emergency medical services (EMS) through use of a multi-organizational, collaborative approach involving a cross-section of public and private sector healthcare providers. Research shows that patients who often utilize EMS have unmet medical and/or social service needs. [Montgomery County has established a community paramedicine program called "Montgomery County Non-emergency Intervention and Community Care Coordination (MCNIC[3)]." The program is provided by MCFRS paramedics in partnership with the County's Department of Health & Human Services and area hospitals. MCNIC[3] seeks to identify unmet needs of EMS super-users and link patients to more appropriate and beneficial resources for care; thus, avoiding the need for emergency care and transport by MCFRS.]

But Does It Work?



2018 Officers Meeting

Programmatic Incident Mitigation Efforts are Assessed for Effectiveness [2D.5]

The MCFRS Community Risk Reduction (CRR) team focuses on studying our community and identifying and evaluating risks to develop and deploy risk reduction programs that help our customers stay safe and be prepared.

The department uses incident and fire reporting data, MCFRS and State Fire and Explosive Investigator reports, census and demographic information, and data from local, regional and national organizations to identify trends, 911 call patterns, and the overall risk within the County. This data is used by the department to provide an integrated and strategic approach and investment of department resources with the goal of reducing occurrences and impact of emergency events while directing resources to priority areas for the most effective community risk reduction and incident mitigation efforts. Our programs take nationally recognized concepts in fire and life safety and localize them for improved community engagement. Evaluation addresses both impact and outcomes and measures both short-term and long-term effects. The CRR model categorizes interventions into the five "E's" (i.e., education, engineering, enforcement, economic incentives and evaluation). Examples of each of these interventions undertaken and supported by MCFRS include:

- Education – school programs, multi-lingual educational materials, Home Safety Visit program.
- Engineering/Technology – Smoke alarm installation for high risk populations and economically challenged residents. Another example is fire-safe cigarettes.
- Enforcement – Maryland's new Smoke Alarm Law requires the replacement of battery-powered 9V smoke alarms with sealed, 10-year lithium batteries by 1/1/18 which is projected to have a significant impact on reducing the number of residential fire deaths throughout the State.
- Economic Incentives – Residential fire sprinklers legislation and tax incentives.
- Evaluation – Identification of successful programs as well as those needing improvement to ensure a strategic and fiscally responsive investment of resources.

MCFRS uses performance measures, benchmarks and trend analyses leading to improved CRR programs and service delivery.

CRR HOME SAFETY CHECK PROGRAM

Total On-Line Requests by Month

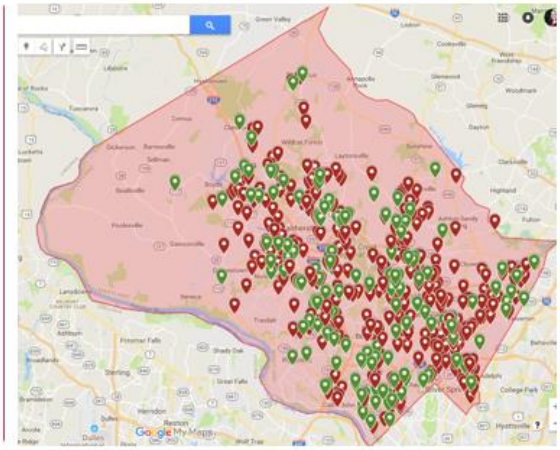
*Does not include >1000 phone calls received in December

6/2015	1	2/2016	24	10/2016	33	6/2017	75
7/2015	1	3/2016	24	11/2016	30	7/2017	72
8/2015	3	4/2016	16	12/2016	21	8/2017	145
9/2015	2	5/2016	32	1/2017	10	9/2017	169
10/2015	17	6/2016	14	2/2017	34	10/2017	67
11/2015	19	7/2016	8	3/2017	36	11/2017	110
12/2015	12	8/2016	22	4/2017	23	12/2017	456
1/2016	17	9/2016	24	5/2017	84		

MCFRS Management Team Briefing

CRR HOME SAFETY CHECK PROGRAM

October 2017 through December 2017

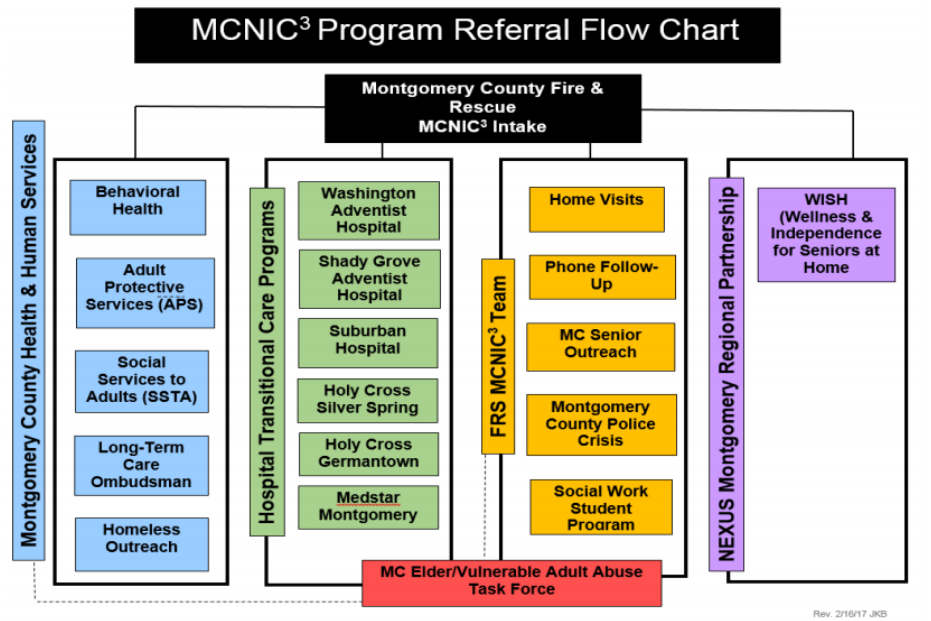


Pending Requests: 353

Completed Requests: 280

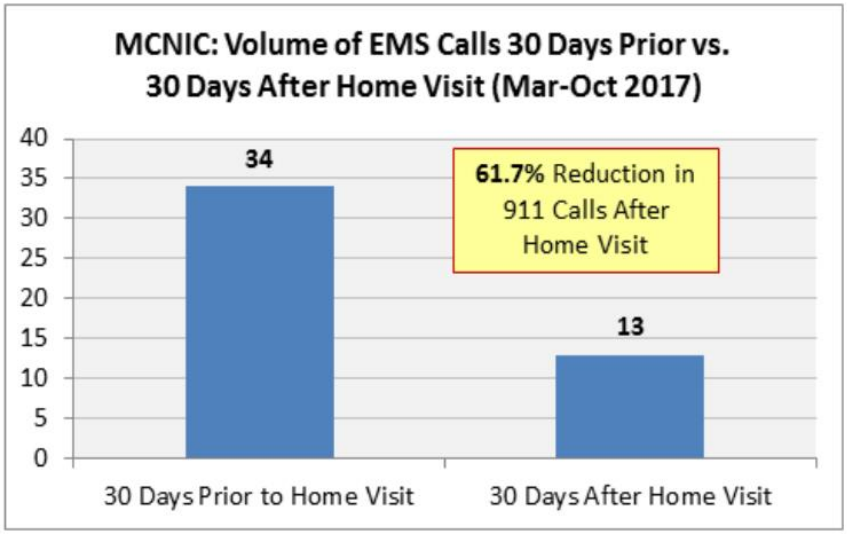
Total Requests: 633

MCFRS Management Team Briefing



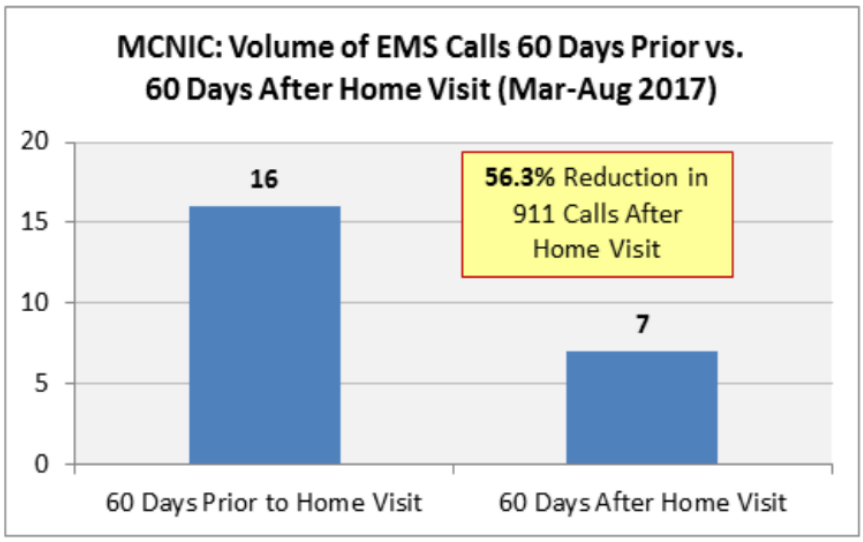
MCFRS Management Team Briefing

But Does It Work?



MCFRS Management Team Briefing

But Does It Work?



MCFRS Management Team Briefing

Performance Gaps (Negative Trending etc.) Determined at Least Annually [CC 2D.6]

MCFRS transparently, both externally and internally, monitors, analyzes, and documents all-hazard emergency services' performance gaps. The systems, processes, and principles used to achieve this mandate are well documented within the section of this Community Risk Assessment/Standard of Cover (CRA/SOC) manual titled, *Determination if Response Time Performance Objectives Met [CC 2C.5]*.

Year	Estimated Population	Tot. Struct. Fires	Civilian Struct. Fire Deaths	Civilian Struct. Fire Injuries	Struct. Fire Loss	Total Fires (Struct + Others)	Civilian Other Fire Deaths	Total Fire-related Civilian Deaths	Total Fire Loss
2014	1,020,036	618	6	37	55,493,809	1276	1	7	58,617,610
2015	1,030,447	594	0	25	24,812,594	1183	2	2	27,405,839
2016	1,040,116	533	5	66	21,118,384	1214	1	6	23,619,964
2017	1,043,863	542	2	26	21,015,602	1221	1	3	23,621,870

The above table serves as an example of MCFRS' methodology that includes monitoring and measuring negative fire consequences (and with 2015's zero structure fire deaths positive consequences) within the service area

The many processes employed to determine, monitor and report programmatic performance gaps are documented throughout this CRA/SOC manual. They include quarterly headline measures performance reported to the AHJ and subsequently to the community through the CountyStat online system, which includes trending analysis and documented performance improvement plans. The processes also include Quarterly Leadership Briefings where Divisions and Sections report to this agency's management team using performance data dashboard presentations. There are many more examples, and the reader is encouraged to re-review the following section of this CRA/SOC manual: *Positive and Negative Service Delivery Outcomes Methodology and Analysis [2A.5] and Event Consequence and Loss Data [2B.3]*.

MCFRS' commitment to analyzing and defining program gaps and the development of sometimes complex solutions to close gaps, support the agency's desire to seek continuous improvement and never-ending organizational excellence.

MCFRS Continuous Improvement Plan to Address Gaps and Inadequacies [CC 2D.7]

The department's plan for achieving continuous improvement is comprised of several integrated documents that serve collectively as our "plan." Together, these documents detail the actions to be taken within an identified timeframe to address departmental needs, gaps, deficiencies and deviations/variations that exist. Our continuous improvement plan; therefore, is comprised of our Master Plan initiatives for the 2016-2022 timeframe, our Annual Strategic Plan initiatives for each fiscal year, and our division/section goals and objectives. It is our goals and objectives document that specifies timeframes for actions to be taken.

The key document in our "continuous improvement plan" is our Master Plan. Our Annual Strategic Plan and goals and objectives are tied to the Master Plan, having been established directly from it. Master Plan initiatives (example shown below), found in Section 6 and Appendix I of the Master Plan, address all facets and program areas of the MCFRS and were systematically developed over the two-year period of Master Plan development, with input provided by our internal and external stakeholders/partners.

OPERATIONS

EMERGENCY MEDICAL SERVICES

1. [***PRIORITY A***] Implement modified ALS delivery model:

   A. Replace the majority of medic units with one-person (or, in limited cases, two-person) ALS chase units; thus allowing for the county-wide redistribution of a limited number of ALS providers. ALS chase units will not normally be dispatched on BLS incidents nor will they transport patients; thus improving the availability of ALS units and reliability[88] of ALS service.

[88] Reliability addresses both availability of a specific type of unit and whether its response time is within established 90th percentile goals of the department.

6-2

See MCFRS 2016-2022 Fire, Rescue, EMS, CRR Master Plan, Section 6 & Appendix I

Notification to AHJ of Significant Operational Gaps Affecting Mitigation Efforts [2D.8]

MCFRS leadership routinely meets with the Montgomery County Council's Public Safety Committee where they are apprised of not only gaps but successes. Additionally, MCFRS meets with this committee during proposed fiscal year budget work sessions, which include documented successes and gaps within legislative analyst memoranda. Service level delivery gaps are documented as well as strategies to close those gaps. Programmatic successes are also documented.

Click to view the complete Legislative Packet and see page 4 for gap-strategy example

MEMORANDUM

April 14, 2017

TO: Public Safety Committee

FROM: Susan J. Farag, Legislative Analyst

SUBJECT: **Worksession: FY18 Operating Budget and FY17-22 CIP Amendments Montgomery County Fire and Rescue Service (MCFRS)**

Those expected for this worksession:
Chief Scott Goldstein, MCFRS
Bruce Meier, Office of Management and Budget (OMB)
Marcine Goodloe, President, Montgomery County Volunteer Fire and Rescue Association (MCVFRA)
Eric Bernard, Executive Director (MCVFRA)

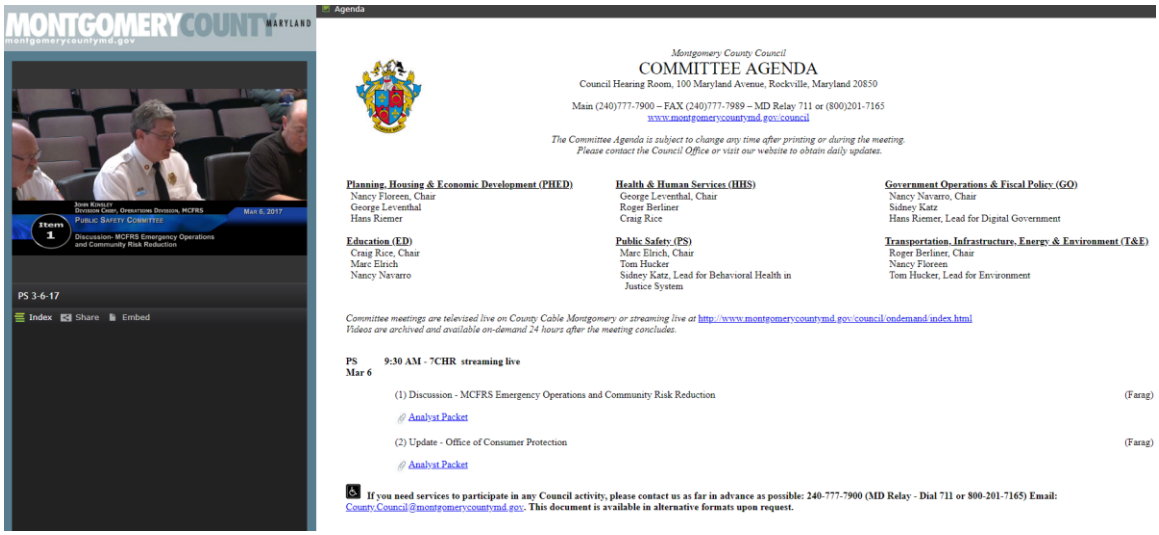
Budget Summary:

- Staffing is reduced by a net total of 21 positions for FY18. This reflects the shift of 27 call taker positions to the Police Department for the Emergency Communications Center. The proposed budget also adds five positions to staff a Paramedic Chase Unit (PCU) at the Aspen Hill Station and one Captain position to provide liaison services with WMATA Rail Center Operations.
- The budget includes a 65-member recruit class to provide the new positions and address attrition.
- $500,000 in overtime has been added to the Sandy Spring Station to reduce response time during the weekdays.
- The new Montgomery County Volunteer Fire and Rescue Association (MCVFRA) agreement has been bargained, and takes effect July 1, 2017.

Example of a gap addressed and a mitigation strategy (page 4):
Reduce Response Time at Sandy Spring (Station 40) ($500,000)

The FY18 Recommended Budget includes $500,000 for overtime to provide three staffed positions Monday through Friday at Station 40. This overtime staffing began in October 2016 and has effectively reduced failures to respond (FFRs) to 0 during the week.

This staffing change adds to the FY 16 staffing increase of six personnel (including a paramedic) from 5am during weekdays and 3pm during nights and weekends. It reduced FFRs during nights and weekends, but FFRs remained high during the weekdays. The additional overtime proposed in FY18 will continue to support the reduced FFRs. MCFRS indicates that the Local Fire and Rescue Department (LFRD) "continues to support this full staffing during daytime hours and the data supports the need for this to be part of the operating budget."



Click here to watch the 3/6/17 Public Safety Committee Meeting with MCFRS

The agenda for this 3/6/17 work session was MCFRS providing an update to the AHJ and the community as a whole on Emergency Operations and the Community Risk Reduction (CRR) program.

The online reader is also encouraged to click on this hyperlink to see this work session's legislative packet and the Operations Division and the Community Outreach Section's CRR presentations to the AHJ and community as a whole.

Regular work sessions with the Public Safety Committee are one way in which MCFRS formally notifies the AHJ of operational capabilities and, at times, gaps in the delivery system. Posting headline performance data quarterly to the CountyStat system is another way MCFRS reports any performance gaps. Trending is documented and performance improvement plans are listed as well.

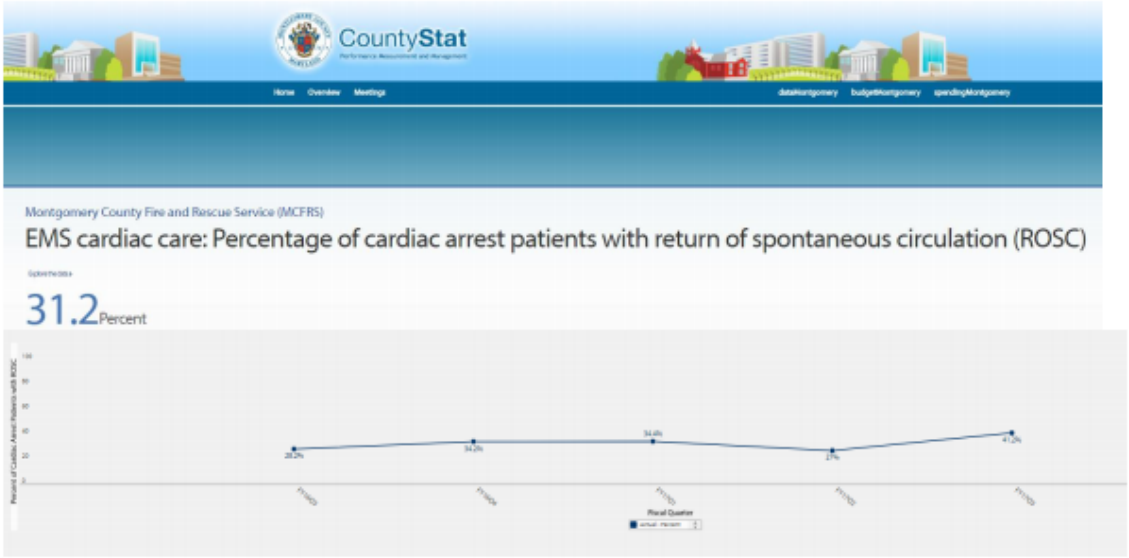
The online reader is also encouraged to click on this hyperlink to view the 2/12/18 MCFRS work session with the Public Safety Committee to discuss the Capital Improvements Program.

AHJ Notification: Gaps bet. Current Capabilities & Approved Service Levels [2D.9]

In addition to what is explained above regarding PI 2D.8 (also applicable to this PI), MCFRS, on a quarterly basis, provides operational performance data to the Montgomery County's CountyStat Office of Performance and Measurement where the data is posted online and compared to prior quarters. This comparison offers a transparent way for the AHJ and all citizen stakeholders to determine baseline gaps and/or enhancements and, thus, the level of service is quantified. In addition, a Performance Improvement Plan is listed for each of the measured programs.

MCFRS also provides a Performance & Accountability Report to the CountyStat Office annually that includes agency headline performance measures' data for the past fiscal year compared to the previous three years (i.e., performance trends), factors contributing to current performance, factors restricting performance improvement, and a performance improvement plan for each headline measure. The Performance & Accountability Report is also posted online by CountyStat; thus, making it available to the County Council as well as the public.

https://stat.montgomerycountymd.gov/stories/s/Montgomery-County-Fire-Rescue-Service-MCFRS-/rgm5-yy5h



Why is this measure important?
Montgomery County experiences approximately 50 out-of-hospital sudden cardiac arrests each month. The goal is to have all of these patients walk out of the hospital with all of their faculties intact. Measuring return of spontaneous circulation (ROSC) is the first step in this process. MCFRS hopes to measure ultimate outcomes in the future, but this is dependent upon coordination with and cooperation from our hospital partners.

Factors contributing to current performance

- Implementation of high performance CPR and treating patient on scene.
- Provision of Lucas devices (automatic CPR machines) for use during patient transport. [Note: The primary objectives for using Lucas devices are over-the-road CPR effectiveness and safety of our personnel, as these devices perform over-the-road CPR more effectively than would a standing EMS provider (who would be adversely impacted by the physical forces exerted by a vehicle in motion) and with minimal risk to EMS providers.]
- Quality improvement (QI) feedback loop within the department.

Factors restricting performance improvement

- Lack of lay person CPR being performed prior to arrival of MCFRS
- Lack of sufficient number of Lucas devices on MCFRS apparatus. [Note: These devices are costly to purchase and maintain; thus, in view of budget limitations, it will take several years to purchase a sufficient number of devices to achieve the goal whereby a unit in each station will carry one.]

Performance improvement plan

- In accordance with Brianna's Law, CPR/AED training is now required for graduation from public high schools in Maryland. This should improve the frequency and quality of lay person CPR throughout the County and State.
- Hands-free CPR training for the public will continue to be offered by MCFRS during the County Agricultural Fair and various community events and special events.
- MCFRS will continue building out its fleet of Lucas devices (approximately two devices per year) so that eventually a unit in each station will carry this device.
- County Police, who are trained as first-responders, will now be responding priority to all cardiac arrest incidents. Some police vehicles carry AEDs that officers are trained to use. This initiative should improve the provision of early CPR and defibrillation.
- MCFRS is participating with MIEMSS in "CARES" - a national project administered by Emory University which seeks to improve out-of-hospital cardiac arrest care.

Interactions: External Stakeholders & AHJ: Determine Program Expectations [2D.10]

The following provide examples of how MCFRS routinely interacts with external stakeholders and the AHJ. These interactions provide effective feedback on service delivery programs, expectations, and levels of service to name a few.

Click here for Exhibit 9 that packages numerous documents to support these examples.

(a) The Office of the County Executive's Fire and Emergency Services Commission holds monthly meetings as required in Chapter 21 of the County Code to discuss and perform appropriate actions in reference to MCFRS. This Commission is composed of 7 voting members appointed by the County Executive and confirmed by the County Council. Two members must be County career fire/rescue personnel, 2 members must be volunteer local fire and rescue department personnel, and 3 members must have no personal, family, or business connection with the County volunteer or career fire and emergency services. FESC members must be County residents and reside in various geographic areas of the County and have a variety of occupational backgrounds.

(b) The Fire Chief has directed Division Chiefs, or their designee, to serve as liaisons to Citizen Advisory Boards by attending monthly meetings at the five Montgomery County Government Regional Services Centers. The mission statement of these centers is "to represent the County in their respective regions by providing effective, timely liaison between Montgomery County and its residents and businesses and by working with individuals, community groups, regional Citizens' Advisory Boards, and other public agencies to provide information, identify and assess regional problems and issues, and recommend and/or implement solutions."

(c) The MCFRS Master Planning process requires public hearing(s) per County Code, Section 21-12(b). The MCFRS Planning Manager attends Citizens Advisory Board meetings and presents the draft Master Plan to solicit input.

(d) Information pertaining to PI 2D.8 and 2D.9 along with the exhibits previously documented in this report.

(e) MCFRS is part of the Metropolitan Washington Council of Governments (MWCOG). As such, MCFRS participates, interacts, and collaborates with other regional Fire/Rescue and public safety agencies to develop synergistic solutions to complex problems. These external stakeholders meet monthly. For Fire/Rescue, there is a Fire Chief's Committee that is broken down under numerous subcommittees. Chief Goldstein is currently the Vice Chairman of the Fire Chief's Committee.

Historically Significant Incidents

Throughout Montgomery County Fire-Rescue history, there have been many significant incidents that have formed the landscape now known as the modern day MCFRS. While the department runs over 120,000 emergency and public service calls per year, some of the more notable incidents have resulted in the formation of policy and law that affect how MCFRS does business.

1935 School bus/train collision in Rockville, 14 children killed, 13 injured
1965 Fire Station 17 and apparatus destroyed by fire
1966 Travilah Road fatal house fire, 4-person family killed
1971 Columbia Union College fire in Takoma Park
1975 Washingtonian Country Club fire
1981 Arcola Avenue nursing home fatal fire, several injured, 2 died, no sprinklers
1982 IBM office building shootings in Bethesda, 9 injured, 3 killed
1983 Gasoline spill in Takoma Park sewer system caused multiple house fires
1986 Fatal farmhouse fire in Boyds, 6 fatalities
1992 Tanker explosion from crash under I-495 overpass, 2 killed, 3 injured
1996 MARC & AMTRAK train collision with fire in Silver Spring, 11 killed
1998 Pipe bomb explosion in Bethesda home – 4 teenagers killed
1998 Fatal basement fire in Gaithersburg home, 2 children killed
2001 Home destroyed by natural gas explosion in White Oak, 2 killed
2002 AMTRAK double-decker train derailment in Kensington, 101 injured
2002 Multi-week sniper incident, 6 fatalities in Montgomery County
2002 Fatal Gaithersburg house fire, 1 adult and 2 children killed
2002 Parking garage collapse in Rockville, 3 fatalities
2005 Fatal Leisure World fire, 1 killed, MCFRS Mayday policy rewritten and new department policies put in place for fire ground operations
2007 Fatal Derwood house fire, 2 adults, 1 child killed
2007 Fatal Kensington house fire, 2 elderly killed, genesis of the Senior Citizen Fire Safety Task Force Report
2007 Fatal Burtonsville garden apartment fire, 1 adult and 3 children killed
2008 Fatal Twinbrook apartment fire, one resident killed, 3 fire fighters severely injured, further revision of the Mayday policy
2011 500-acre Darnestown brush fire, largest MCFRS resource deployment to date
2014 Third Alarm large-area luxury apartment building fire under Type V-A construction and one-month from occupancy, yielding a multi-million dollar loss in Rockville
2014 Small jet crashes into house on approach to Montgomery Airpark, with fire; 6 fatalities
2015 Marks first time in 30 years without a residential fire death in the County

2016 Garden apartment explodes into fire and is fully involved upon FD arrival; 7 fatalities and 36 injured
2016 Multi-day fire at the County's Resource Recovery Incinerator facility
2017 Line of Duty Death (LODD) of posthumously-promoted Master Firefighter Charles "Rick" Gentilcore while on duty at Fire Station 15.
2017 Line of Duty Death (LODD) of Rockville VFD Lieutenant and Maryland State Police Deputy State Fire Marshal Sander Cohen while on scene of a vehicle incident on Interstate 270
2018 Third Alarm garden apartment complex fire in Rockville

2019 Third Alarm high-rise apartment fire in Kensington. Click for video

2020 COVID-19 Pandemic planning and response

Service Milestones

1970 First "Heartmobile" was placed in service at Station 19. The Heartmobile provided cutting edge, advanced life support care, leading the way for our modern ALS medic unit

1973 First fire-rescue recruit graduated from County's Fire Rescue Training Academy

1974 First Cardiac Rescue Technician Class offered. First County to provide advanced life support in the Washington area

1981 SETT Team created (high angle rescue team). This team would eventually become part of the technical component of the US&R Team

1981 Haz-Mat Team created, housed at Fire Station 7 (Chevy Chase).

1985 US&R Team formed; initially called the Collapse Rescue Team, then in 1989 became Maryland Task Force One, a FEMA Urban Search and Rescue Team. The team provides heavy search and rescue, dog searches, medical care, and logistical services. Among notable deployments have been the Murrah Federal Building explosion in Oklahoma City, Pentagon in 2001, the 2002 Salt Lake City Olympics, the 2004 Democratic Convention, and to Alabama and Louisiana during Hurricane Katrina. Their most recent deployment in 2016 was to Columbia, SC to assist with efforts surrounding Hurricane Matthew.

1990 Swift Water Rescue Team created and formally organized in 1992 to support the need for swift water rescues on the Potomac River and flash flooding the County experiences on a regular basis.

1994 Montgomery County placed the first arson dog in service

1998 Fire Investigation Bomb Squad was formed

2000 Water Supply Study – identified need for CAFS engines, increased number of tankers, large diameter supply lines, standardization of engines/apparatus, and rural water supply SOPs

2001 Responded to the Pentagon for the 9/11 attack

2001 Aerial Unit Study – studied relocation of aerial trucks in the County, benefits of tractor drawn vs. tower ladders, and strategic deployment of aerial units. Recommendations made in Master Plan based upon this study.

2002 Fire Rescue Occupation Medical Section opened and MCFRS adopted the IAFF Wellness Fitness Initiative

2002 Command Development Center established at the Training Academy

2003 Switched radio system to 800 MHz trunked system

2003 MCFRS Command Bus placed in service

2004 24-hour safety officer coverage and full time Safety Office created

2004 Rescue Squad Study – studied squad locations, tiered response to collisions, integration of rescue trucks, created 9 recommendations

2004 Residential Sprinkler enacted to mandate sprinklers in new single-family homes

2004 Creation of Special Operations Section headed by an Assistant Chief overseeing Stations 7, 20, 10, 30, 29, 31, 25, and 28, consolidating operations of US&R, Hazmat, Swift Water Rescue, Investigations, Special Operations Planning, Emergency Operations and NCIMT (National Capital Incident Management Team).

2004 Centralized SCBA repair facility opens
2005 County Fire Chief takes over MCFRS based upon legislation (Bill 30-03)
2005 Introduction and adoption of NIMS
2005 Opened Clarksburg Station 35 in a temporary facility – 1st new station in 25 years
2005 Opened Logistics – uniforms, gear, emergency equipment
2005 Cooperative DFRS/MCP/Sheriff/public works response to New Orleans to assist the New Orleans FD after Hurricane Katrina
2006 1&1 ALS model – one medic with one EMT, expanding ALS first-responder units, decreasing response to patient time for critical care patients
2006 Initiated 4-person staffing implementation, adding additional units every year
2006 Opened new Silver Spring Station 1 - joint police/fire/public education building
2007 Change to Council of Governments (COG) apparatus numbering system, consistent with surrounding jurisdictions
2007 Added 2 "flex" ambulances to accommodate the growing needs of our commuter community, operating during peak hours of 0800-2000
2008 Added 2 new EMS Duty Officers, resulting in a total of 3 to address EMS issues
2008 Medical Ambulance Bus & Medical Support Unit placed in service as part of the Urban Area Security Initiative federal grant (UASI)
2009 Opened Station 22 – West Germantown (Kingsview)
2009 Opened Central Maintenance Facility (CMF) and CMF training facility - consolidating fleet management
2009 Implemented the ePCR, (electronic patient care reporting) program
2009 Driver training facility opens at Public Service Training Academy – multi agency training facility, high-speed track, cone course and lecture rooms
2010 Opened Station 34 – East Germantown (Milestone)
2010 Flex units eliminated due to lack of funding
2010 Eliminated the extra EMS duty officers, now only have one due to lack of funding
2012 Implementation of ambulance billing
2013 Aerial Service at FS24 and an additional EMS Duty Officer are re-established in the FY2014 budget
2014 2/27/14: Opened new Station 32 – Travilah - providing additional resources to MCFRS with Paramedic Engine 732 and Ambulance 732

2014 Monies included and sustained during future years to staff three additional engines with a fourth firefighter (PE704, E709, PE713). In addition, one of these engines, E709, is now a paramedic engine (the other two were already paramedic engines but with only three personnel).
2016 ALS enhancements with E726 now staffed with 4 as Paramedic Engine 726 (PE726)

2016 10/26/16: New $14M 23,000 Ft² Fire Station 18 opens in the Glenmont/Wheaton area

2016 10/28/16: New $69M Public Safety Training Academy campus opens in Gaithersburg

2016 Montgomery County Government transfers Fire Prevention and Code Compliance Section from MCFRS to the Department of Permitting Services (DPS) in an effort to realize efficiencies of costs and staffing.

2016 88 new Firefighter/Rescuer recruits began 25-week recruit training in December at the new Public Safety Training Academy marking Recruit Class #41 as the largest class ever hired by MCFRS.

2017 New Motorola PremierOne™ Computer Aided Dispatch (CAD) and PURVIS Fire Station Alerting systems placed in service through the multi-year Public Safety System Modernization (PSSM) capital improvements project.

2017 Launched the Montgomery County Non-Emergency Intervention and Community Care Coordination (MCNIC³) initiative with goal of reducing EMS 911 calls for service originating from super-users. Acknowledgement received at CFAI dinner.

2017 ALS enhancements by converting the 3-firefighter staffed Engines 710 and 711 to 4-firefighter staffed Paramedic Engine companies. Downgrade of Medics 704, 730, and 735 to BLS ambulances and the new resource, A706, placed into service.

2017 40 new EMS transport units, 5 new aerial ladders, 2 new tanker/tenders, 1 new heavy rescue squad, and 2 new mobile command units as well as many new marked staff vehicles placed into service during FY16 and FY17.

2017 County's Public Protection Classification (PPC) has been upgraded from a 3 / 6 to a 2 / 4. The PPC for urban/hydranted areas is now PPC-2 and the non-hydranted rural areas is PPC-4. These upgrades were a result of a 2016 survey by ISO.

2018 ALS enhancements by converting the 3-firefighter staffed Engines 702 and 720 to 4-firefighter staffed Paramedic Engine companies. This completes the multiyear initiative of staffing all 35 engine companies with a firefighter paramedic and each engine being staffed with an officer and three firefighters.

2019 24 new Pierce Type I engines ordered and will finish being manufactured between April 2019 and July 2019.

2019 The Emergency Medical Services (EMS) Section changed its name to the Emergency Medical and Integrated Healthcare Services (EMIHS) Section

2020 Three new utility task vehicles (UTV), one new aerial tower (Rockville VFD), 16 new Freightliner/PL Custom EMS units, 4 new brush engines, and 1 new heavy rescue (Burtonsville VFD) placed into service.

2020 All 37 fire stations now have at least one LUCAS mechanical CPR device.

Financial Basis

Funding for the Montgomery County Fire-Rescue has come a long way since the days when the local departments received funds based on the length of hose they housed in their stations. The first tax assessment districts were formed by legislation in 1927 in Chevy Chase and Silver Spring. The other local departments relied on bingo, bake sales, carnivals, and other fund raisers to support their equipment purchases and station management needs.

In 1933, the State of Maryland passed legislation authorizing local jurisdictions to assess fire taxes throughout their counties. In 1949, a fire tax district was created for every local fire department in the County. Several of the departments refused the tax money until the 1960s, fearing it would take away their independence. These departments continued to rely on donations and fund raising for operations.

The local departments have always managed their own monies that are obtained through donations. In the past, the Fire Board, the County's previous Fire Department managing entity, had budget and fiscal responsibility over tax distribution. Bill 37-97 enacted in 1997, shifted control of the fire department budget to the Fire Administrator. Bill 30-03, signed into law on January 1, 2005, created a County Fire Chief, giving this individual full budgetary authority over the fire department.

The fiscal year (FY) for Montgomery County runs from July 1st through June 30th. The total approved FY21 (07/01/20 to 06/30/21) Operating Budget is $224,995,408, which is an increase of $1,744,949 or 0.78 percent from the FY20 approved budget of $223,250,459.

The budget process is a never-ending cycle. When one year is submitted for approval, the next year's process begins. Analysis on previous year's spending trends are assessed, future needs are created, and baselines are listed. Every year MCFRS is given a mark by the Office of Management and Budget based on expected revenue that includes, but is not limited to, property tax and fire taxes.

Although the fire tax is listed as a line item on County property tax bills; fire tax revenues do not go directly or solely into the Fire-Rescue budget. Instead, the fire tax revenues go into the County general fund. The Fire-Rescue budget is distributed from the general fund and may or may not correlate with the amount collected from the fire tax.

In addition to annual operational expenditures, the fire tax sometimes supports multi-year Capital Improvement Projects (CIP). The MCFRS FY2015-2020 CIP budget is $151.6 million and will fund numerous capital projects, including a new White Flint fire station, new apparatus, and a new Clarksburg Fire Station (see page 4 of the CIP budget for some MCFRS examples).

Chapter 21 of the County Code also dictate how and when the entire budget is created, submitted and implemented. The law dictates the dates the budget must be submitted by the County Executive, the dates the County Council must complete its review and the date it must be finalized. Fire Rescue is just one of many county departments required to work within the fiscal and logistical constraints of the county budget as a whole.

There are two phases of the Montgomery County budget process. The first phase is submitted as the full expected operating costs. Included in these costs are personnel and benefits (80% of the annual costs), equipment, fuel, building, maintenance, and gear. The second phase is the "reduction phase" or the revised, slimmed-down version that includes mandated cuts per County Council based upon the expected decreased revenue.

The County is legally obligated to negotiate with the firefighters representative, IAFF Local 1664, for a collective bargaining agreement. Negotiations occur the year before the CBA expires, be it a one, two or three-year contract. The Union negotiates with County and department representatives for wages, conditions of work, benefits, safety issues, gear, and equipment. Once an agreement is reached, either through negotiations, mediation or arbitration, the contract is ratified by the membership, and County law stipulates that the County Executive include the CBA costs in the budget submittal to County Council. The County Council then decides whether to fund the agreement as it is

submitted. Although the arbitration is binding, the County Executive can choose not to include the CBA in his budget, which he did in 2011.

Financing a department with over 1200 career employees, 800 volunteers, County-owned buildings and apparatus, and corporation-owned (i.e., LFRD-owned) buildings and apparatus can be challenging at best. The corporations are funded, in part, through the County budget with tax dollars. Each corporation submits a budget to operate the stations they own to be included in the overall tax-funded Fire-Rescue budget. This could include utilities, station supplies, small tools, and building maintenance. The final approved amount of each of the 19 "mini" budgets is then distributed to each corporation for them to manage for the fiscal year; however, the County has recently moved to centralize all of these station support functions and plans to substantially cut the amount of tax funds given to the corporations. The individual corporations still have the opportunity to earn income through events, fire hall rentals or fundraisers through citizens or business donations. This money is controlled solely by the volunteers to cover items not included (or allowed) in the County budget or items not allowed to be in the budget. The current Montgomery County Volunteer Fire-Rescue Association (MCVFRA) bargaining agreement with the County covers a period of FY15-FY17. Budgets and expenditures are not subject to negotiation per Article 3, Section B (1).

Another avenue of funds for the volunteer corporations is the Senator Amoss Fund (a.k.a., "508" monies), a Maryland State grant specifically available for volunteer fire companies in Maryland. Annually, an average of $1.3-1.4 million dollars is given to Montgomery County to distribute to the corporations. This money is to be used strictly for volunteer operations such as recruiting, station operations and equipment. In FY17 Montgomery County Council, through Resolution No. 18-741, provided Supplemental Appropriation #17-406 to the FY17 Operating Budget of $1,975,500 from this Maryland State Grant.

The County Code, Chapter 21, Section 21-21, mandates a program that rewards long-time volunteers with a compensation benefit. The Length of Service Awards Program, LOSAP, is managed by and included in the annual operating budget of the Fire-Rescue

Service. The LOSAP award is a monthly stipend earned by volunteers based on age and years of service. The monthly benefits paid out based on this criteria range from $92/mo to a maximum of $345/mo. Also offered to the volunteers are a $5000 death benefit, disability benefits, and a survivor's benefit. The Montgomery County Volunteer Fire-Rescue Association is the duly authorized representative bargaining agent for the County volunteers of the Local Fire and Rescue Departments (LFRD) in the direct negotiation process set forth in Chapter 21-6 of the Montgomery County Code. In 2007, the MCVFRA became the first volunteer organization in the country to bargain for volunteer benefits, such as improved death benefits, additional medical expenses associated with annual physicals, apparel, and nominal fee payments.

Grants have recently become an important part of funding special events or items not funded by the current budget. The volunteer corporations can apply for and be awarded grants as well. They regularly earn grants to purchase equipment, provide for recruiting, or purchase gear.

There are a number of considerations when applying for and using a grant:

- The time constrains placed on the user
- The strict rules on what the grant can be spent on
- The strict time limit of the grant
- The peripheral costs not included in the grant that will be incurred (e.g. the cost of gear and benefits associated with the hiring of the recruits with the FEMA SAFER grant).

Occasionally the need for a supplemental or emergency request arises. A supplemental request would be for an item that was not planned for in a fiscal year but is considered important enough not to wait for. An emergency item would be an item that was budgeted but the costs rose and the budget was not able to cover it during the fiscal year.

In the spring of 2012, the County Council approved the Emergency Medical Services Transport Reimbursement Program (EMST). The intent of the EMS billing program was to generate additional revenue streams by billing insurance companies for EMS services

provided to County residents by MCFRS. Since the inception of this program, the revenue generated for MCFRS has been approximately $16 million annually. This revenue serves to support FY17 and later years' budgeted items including:

- Equipment and apparatus replacement
- Increased staffing levels
- Facility improvements
- Staff training
- Outreach and safety education services for seniors
- Support for Local Volunteer Fire Rescue Departments

Fire-Rescue Planning

Much of the way in which MCFRS conducts business has been formed and dictated over the years by Master Plans and various studies and reports. These documents assess service delivery and resource needs in light of current and future trends so that the needs of the community and the department are met. The reports have covered subjects such as equipment, station locations, apparatus relocation, and delivery models in the context of the ever-changing population, demographics and hazards within the County.

The first report was drafted in 1958 and another in 1973, together providing recommendations and a blueprint for short and long-term fire station location considerations. Many of the fire stations that were built during that period are aligned with these recommendations.

In 1980, the Fire and Rescue Commission, the governing body of the department at that time, mandated that a Master Plan was needed for the ever-growing Fire, Rescue and Emergency Medical Services of Montgomery County. Chapter 21, Section 21-12 of the Montgomery County Code requires the department to prepare a Master Plan; thus, making Fire-Rescue the only department in the County mandated to develop a master plan. The Master Plan was mandated to cover a period of 10 years, reassessed annually, and when appropriate, updated. The Master Plan and subsequent amendments must be approved by the County Council. The first Master Plan was adopted in October 1994 and defined its purpose as:

> "It gives County residents a comprehensive description of how the fire rescue and emergency medical service fulfills their many public safety functions for which it is responsible and how changes in the County are likely to affect the delivery of service. Second, it provides direction for the present and the future through a set of recommendations that specifically address the steps to provide a desired level and quality of service."

In 1996, the Fire and Rescue Commission initiated a massive multi-faceted examination of six issues highlighted in the 1994 Master Plan. In 1998, the Master Plan Priority Issues Study was completed. The issues addressed included:

- Technology
- Data Management
- Communications
- Risk Analysis
- Response Times
- Staffing

Six workgroups were created, and, over the course of two years, they produced a very thorough and comprehensive set of conclusions and recommendations to improve upon each of these priority issues. For the first time in the history of Montgomery Fire-Rescue, a report was crafted with input from field personnel through surveys. This allowed the end user in the stations to bring field knowledge to the work group reports. By 2011, 75% of the recommendations from the '98 report had been implemented.

The second Master Plan was approved in October 2005 and was updated and revised through a 2009 County Council-approved amendment. It covered incident response time goals and guided MCFRS planning, operations, and community outreach goals and objectives until 2015.

In 2014 the fire chief mandated the next Master Plan to cover a period of six years to better plan for a rapidly changing community, increased service needs, as well as align with the County's Capital Improvements Plan timeframe. The most recent plan, called the 2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan, was approved on June 28, 2016 and will sunset on June 30, 2022.

The purpose of this *Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan* is to set a forward-thinking, rational, and attainable blueprint for the continued delivery of effective and efficient fire, rescue, emergency medical services, special operations, and community risk reduction services to meet the all-hazards mission of the Montgomery County Fire and Rescue Service (MCFRS). The Plan guides the

MCFRS in how best the department can meet the needs and expectations of its customers and address the overall fire-rescue related risk present in the County.

This Master Plan addresses:

- Planning Assumptions
- The annual strategic planning process and mandates
- Laws, Statutes, Standards, and Best Practices applicable to MCFRS
- MCFRS Organization and Partnerships including the:
    - Vision
    - Mission
    - Guiding principle/values
    - Goals and objectives
- Fire Department Accreditation through the Commission on Fire Accreditation International
- A Montgomery County All-Hazards Risk Assessment and elements of a Standards of Cover for MCFRS that includes emergency programmatic baseline response time performance and benchmark response time goals.
- Issues and Needs and Initiatives and Priorities that include:
    - Preparedness/Readiness
    - Resource Deployment and Staffing
    - Planning and Assessment
    - Infrastructure, Communications, IT
    - Data Analysis and Application
    - Training Health and Wellness
    - Apparatus maintenance and replacement
    - Fiscal, Support Services, and Human Resources

The Montgomery County Fire and Rescue Service is an all-hazard public safety agency providing the following services to its community and region: EMS; Fire Suppression; HazMat; Water and Ice Rescue; Aircraft Rescue Fire Fighting; Arson Investigation; Bomb Squad; Community Risk Reduction Outreach Programs and Public Education; Fire Prevention Planning and Education; Mass Casualty Response; Special Event Planning

and Management; Disaster Management; and many non-emergency functions. The Master Plan provides goals and expectations for the department, the governing bodies of Montgomery County, and the citizens served.

Special Studies

In addition to the Master Plan and Master Plan Issues Study, three major special studies have been completed between 2000 and 2010 which have had a substantial impact on current MCFRS operations.

In 2000, a Water Supply Work Group issued a report listing recommendations and an implementation plan based on the work group's review of the County's water supply resources, deficiencies, delivery capabilities, equipment and water supply Standard Operating Procedures (SOP). Many of the recommendations have been implemented or are in progress. A few highlights are:

- Legislation mandating residential sprinklers in new single-family construction
- New rural water supply SOP
- 4 additional tankers placed in service – three front line, one reserve
- Tankers added to fire response for all streets in non-hydranted areas
- Development of GIS maps with locations of hydrants, connections and static water supplies
- Replacement of all 3" supply lines with 4" lines.

In 2001, the department concluded a yearlong study of aerial units. This study provided an analysis of the Montgomery County aerial unit inventory and needs of the County. The study reviewed the long and short-term solutions for the strategic deployment of MCFRS aerial units. The criteria for this review included response times, area risk assessment, efficiency and effectiveness of the deployment of these resources, and improvements to public safety. From this work group, recommendations were made to relocate a number of aerial units and place one truck permanently out of service.

In January 2004, ten recommendations were offered from the Rescue Squad Work Group which was formed in 2001 to review past rescue squad studies and assess rescue squad response times, locations, vehicles, tiered response, the mission and utilization of the rescue squad, staffing, inventory, SOPs and training required for rescue squad work. Many of the recommendations made by this group have been implemented, including:

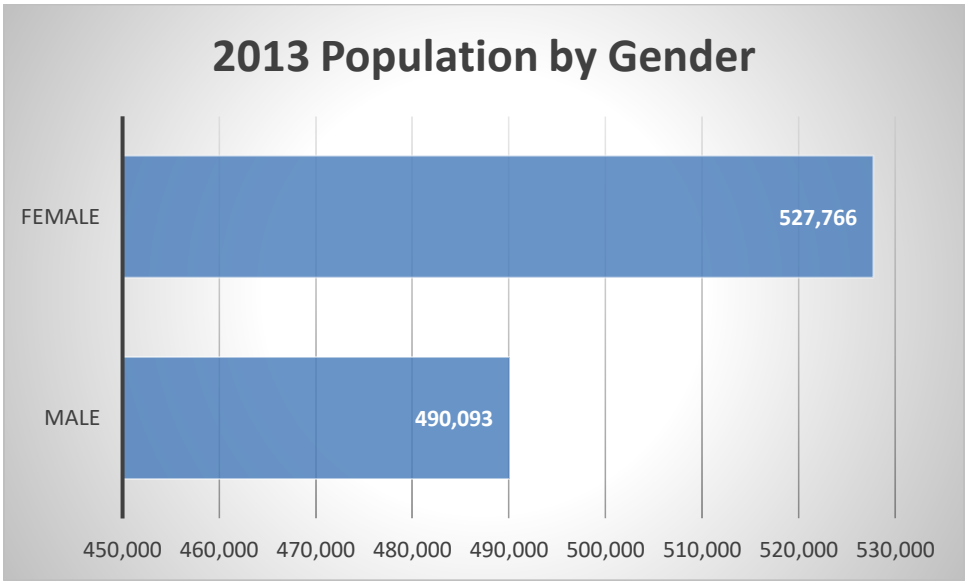
- Rescue squad locations at Stations 3, 15, 17, 29, R1 and R2
- Extrication equipped unit locations
- Dispatch changes to personal injury collisions based on speed limit of road, roll over, level of injury reported, and the number of cars involved
- Change in response time goals
- Training required to be squad qualified
- Equipment recommendations – thermal imagers mandated and blast shields on cascade systems.

The Station Location and Resource Allocation Study is an eight-phase study reviewing current and future locations of fire stations and resources. This study is a cooperative effort between the County, local incorporated municipalities, the Maryland-National Capital Park and Planning Commission, and County residents. Major transportation plans, future County development and relocation trends are studied to determine fire and rescue needs. MCFRS is working in a proactive manner with this study to ensure the department's needs coincide with the needs of new development. For purposes of the study, the County has been divided into eight areas. Each phase studies one of the eight areas in depth and assesses the need for the relocation of existing stations and/or the need for new, additional stations. The Phase 5 report is provided as an example of one of these eight studies.

Population

Based on a U.S. Census Bureau American Fact Finder query for 2016 population estimates, Montgomery County is the 42nd most populous county in the United States. It is the 2nd largest jurisdiction in the Washington D.C. region. The estimated population grew by 7.42% between 2010 and 2016, and the population served by the Montgomery County Fire Rescue Service is estimated at 1,043,863; which is an increase of 72,086 residents since the 2010 census.

Geography	Population Estimates (as of July 1)										
	2010 Census	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Montgomery County, Maryland	971,284	991,185	1,005,100	1,015,200	1,024,600	1,032,800	1,038,800	1,046.800	1,048,500	1,050,700	



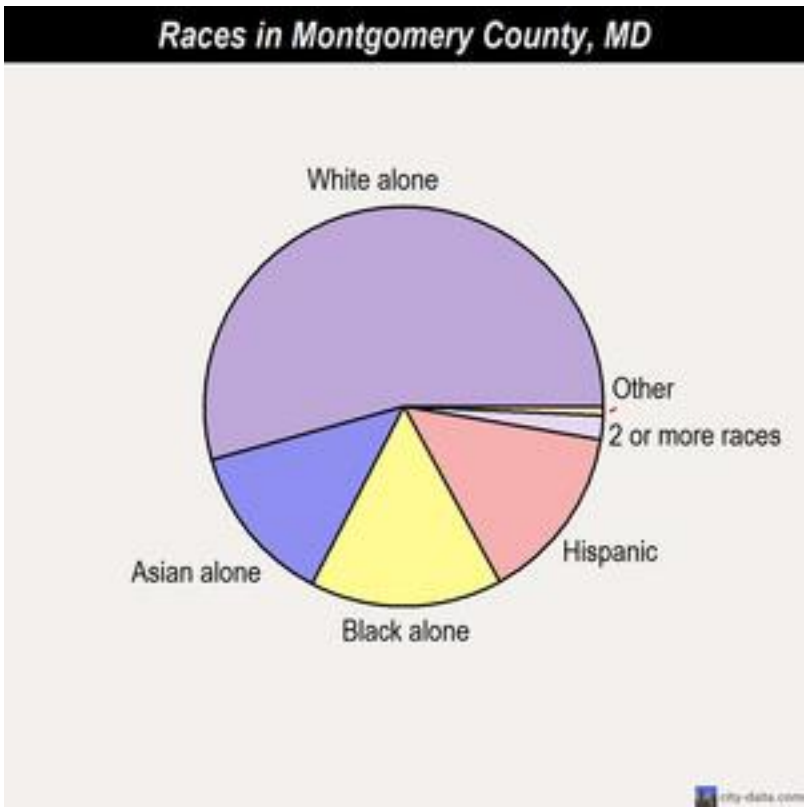
Based on 5-year (2011-2015) population estimates of 1,017,759 from Factfinder Census data, the Montgomery County female population outnumbers the male population by 37,673, which is 48.1% male and 51.9% female. This equates to a ratio of 92.9 males per 100 females.

The median age of the Montgomery County population is 38.5, and the median age of residents 65 years and older is estimated at 73.7.

Subject	Montgomery County, Maryland					
	Total		Male		Female	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total population	1,017,859	*****	490,093	+/-88	527,766	+/-88
AGE						
Under 5 years	6.5%	+/-0.1	6.9%	+/-0.1	6.2%	+/-0.1
5 to 9 years	6.5%	+/-0.1	7.0%	+/-0.2	6.0%	+/-0.1
10 to 14 years	6.6%	+/-0.1	6.8%	+/-0.2	6.4%	+/-0.1
15 to 19 years	6.2%	+/-0.1	6.6%	+/-0.1	5.8%	+/-0.1
20 to 24 years	5.5%	+/-0.1	5.9%	+/-0.1	5.2%	+/-0.1
25 to 29 years	6.6%	+/-0.1	6.7%	+/-0.1	6.5%	+/-0.1
30 to 34 years	7.0%	+/-0.1	7.1%	+/-0.1	6.9%	+/-0.1
35 to 39 years	7.1%	+/-0.2	7.1%	+/-0.2	7.0%	+/-0.2
40 to 44 years	7.0%	+/-0.2	6.9%	+/-0.2	7.1%	+/-0.2
45 to 49 years	7.4%	+/-0.1	7.2%	+/-0.1	7.5%	+/-0.1
50 to 54 years	7.6%	+/-0.1	7.4%	+/-0.1	7.7%	+/-0.1
55 to 59 years	6.8%	+/-0.1	6.8%	+/-0.2	6.8%	+/-0.1
60 to 64 years	6.0%	+/-0.1	5.7%	+/-0.2	6.2%	+/-0.1
65 to 69 years	4.3%	+/-0.1	4.1%	+/-0.1	4.5%	+/-0.1
70 to 74 years	3.0%	+/-0.1	2.8%	+/-0.1	3.2%	+/-0.1
75 to 79 years	2.2%	+/-0.1	1.9%	+/-0.1	2.4%	+/-0.1
80 to 84 years	1.7%	+/-0.1	1.4%	+/-0.1	2.0%	+/-0.1
85 years and over	2.1%	+/-0.1	1.5%	+/-0.1	2.7%	+/-0.1
SELECTED AGE CATEGORIES						
5 to 14 years	13.1%	+/-0.1	13.8%	+/-0.1	12.4%	+/-0.1
15 to 17 years	4.0%	+/-0.1	4.2%	+/-0.1	3.8%	+/-0.1
18 to 24 years	7.8%	+/-0.1	8.3%	+/-0.1	7.2%	+/-0.1
15 to 44 years	39.4%	+/-0.1	40.4%	+/-0.1	38.5%	+/-0.1
16 years and over	79.1%	+/-0.1	77.8%	+/-0.1	80.2%	+/-0.1
18 years and over	76.4%	*****	75.1%	+/-0.1	77.6%	+/-0.1
60 years and over	19.2%	+/-0.1	17.4%	+/-0.2	20.9%	+/-0.1
62 years and over	16.6%	+/-0.1	15.0%	+/-0.1	18.2%	+/-0.1
65 years and over	13.3%	+/-0.1	11.7%	+/-0.1	14.7%	+/-0.1
75 years and over	6.0%	+/-0.1	4.8%	+/-0.1	7.0%	+/-0.1
SUMMARY INDICATORS						
Median age (years)	38.5	+/-0.2	37.0	+/-0.2	40.0	+/-0.2
Sex ratio (males per 100 females)	92.9	+/-0.1	(X)	(X)	(X)	(X)
Age dependency ratio	58.4	+/-0.1	(X)	(X)	(X)	(X)
Old-age dependency ratio	21.0	+/-0.1	(X)	(X)	(X)	(X)
Child dependency ratio	37.4	+/-0.1	(X)	(X)	(X)	(X)
PERCENT IMPUTED						
Sex	0.1%	(X)	(X)	(X)	(X)	(X)
Age	2.1%	(X)	(X)	(X)	(X)	(X)

The 2000 census had Montgomery County's population at 873,341 with the 65 years and older population at 98,157 or 11.2% of the total population. The 2011-2015 estimates now have the 65 and older population at 135,583 or 13.3% of the total estimated County population.

The diversity of the Montgomery County population is also shifting. Based on the 2010 census, the Latino/Hispanic origin community grew to outnumber all other minority ethnicities in the County at 165,398 (17% of total population). Of the 165,398 residents, 79,593 claimed white race alone (8.2% of the 17%) and all other races with a Hispanic or Latino origin totaled 85,805 (8.8% of the 17%). The white, non-Hispanic population was the only group in Montgomery County to decline over the last 10 years dropping from 519,318 in the 2000 census to 478,765 in the 2010 census. The majority, by 0.7%, of Montgomery County's population now consists of minorities.



Races in Montgomery County include:

- White Non-Hispanic Alone (49.3%)
- Hispanic or Latino (17.0%)
- Black Non-Hispanic Alone (16.6%)
- Asian alone (13.9%)
- Two or more races (2.6%)

Population by Race and Hispanic Origin Montgomery County, Maryland (2000 to 2010)						
Race and Hispanic Origin	**2000**		**2010**		**Change, 2000 to 2010**	
	Number	**Population Share**	**Number**	**Population Share**	**Number**	**Percent**
White (non-Hispanic)	519,318	59.5%	478,765	49.3%	-40,553	-7.8%
Hispanic or Latino	100,604	11.5%	165,398	17.0%	64,794	64.4%
Black	129,371	14.8%	161,689	16.6%	32,318	25.0%
Asian and Pacific Islander	98,632	11.3%	135,104	13.9%	36,472	37.0%
Other	25,416	2.9%	30,821	3.2%	5,405	21.3%
Total Population	873,341	100%	971,777	100%	98,436	11.3%
Minority Population	354,023	40.5%	493,012	50.7%	138,989	39.3%

Education

Based on a 2011-2015 U.S. Census American Community Survey (5-Year Estimates), 62.9% of Montgomery County's residents 25 years of age or older maintain a college degree, 91.2% of all residents maintain a high school diploma or GED, and 8.9% do not have a high school or equivalency diploma.

Level of Education	Age 25+ (698,595)	% of Population Age 25+
Masters/Graduate/Professional Degree	218,487	31.3%
Bachelor's Degree	185,755	26.6%
Associate's Degree	35,203	5.0%
Some College, no Degree	99,932	14.3%
High School/GED	97,586	14.0%
No High School Diploma	61,632	8.9%

Employment

Jobs in Montgomery County are diverse and varied. Based on a Maryland Department of Labor, Licensing, and Regulation report, the Q1 2013 labor force averaged 534,604 with an average employment rate of 507,671. This placed the average unemployment rate at 5%. Montgomery County has a large cross-section of government and publicly supported organizations as well as many private corporations. The chart below lists the largest public and private sector employers residing in the county.

10 Largest Public Sector Employers	10 Largest Private Sector Employers
National Institutes of Health	Adventist Healthcare
Walter Reed National Military Med. Ctr.	Marriot International
Montgomery County Government	Lockheed Martin
U.S. Food and Drug Administration	Verizon
Montgomery County Public Schools	Giant Food
Nat. Oceanic and Atmospheric Admin.	Holy Cross Hospital
U.S. Nuclear Regulatory Commission	Montgomery College
Nat'l Institute of Standards and Tech.	Kaiser Foundation Health Plan
U.S. Department of Energy	Westat Research Inc.
Naval Surface Warfare Ctr., Carderock	GEICO Insurance

Medical Care

Montgomery County is the home of eight hospitals, one of which is a trauma center, and one remote standalone emergency center.

Facility	Location	# of Beds	Specialty
Suburban Hospital	Bethesda	220	Trauma Center, Cardiac Cath Lab, Stroke Center
MedStar Montgomery Medical Center	Olney	213	Cardiac Care, Stroke Center
Holy Cross Hospital	Silver Spring	443	Cardiac Cath Lab, Stroke Center
Adventist Healthcare White Oak Med. Ctr.	Takoma Park	252	Cardiac Care
Adventist Healthcare Shady Grove Med. Ctr.	Rockville	313	Cardiac Cath Lab, Stroke Center
Walter Reed National Military Medical Center	Bethesda	345	Military care
Adventist Healthcare Emergency Center	Germantown	21	Stand alone emergency center
Holy Cross Germantown Hospital (Opened 10/14)	Germantown	93	General acute care
National Institutes of Health	Bethesda	240	Biomedical research (no OB, ER, or trauma service)

Elderly Residential Communities and Long-Term Care Nursing Homes

Many developments have been built in Montgomery County to address the living needs of seniors. Independent living, assisted living, and skilled nursing homes, (registered and independent), span every corner of the County. The increase of senior residents poses new challenges to MCFRS, particularly the EMS services. MCFRS is dedicated to providing the best care and education for seniors and has created a Senior Task Force that submitted a final report in 2008 to address the needs of the ever-growing elderly population.

5% of the County housing is age-restricted (55 and older). There are six major age-restricted communities in Montgomery County offering a variety of care from independent living to end-of-life care.

Facility	Residents	Acres	Living Options
Leisure World	8,500	610	Independent Living
National Lutheran Home	550	30	Independent Living, Alzheimer's Care, Nursing Home
Riderwood	2283 units	120	Independent Living, Assisted living, Nursing Home and end of life care
Charles Smith - Hebrew Home	1,000	6 buildings	Independent Living, Assisted living, Nursing Home and end of life care
Asbury Methodist Village	1194 units	130	Independent Living, Assisted living, Nursing Home and end of life care
Brooke Grove	316 units	220	Independent Living, Assisted living, Nursing Home and end of life care

In 2014, there were 34 registered long-term care nursing homes with 4565 beds in Montgomery County recognized by the MD Health Care Commission

In September 2014, there were 205 independent living communities/facilities that also offer assisted-living services in Montgomery County. These programs/facilities offer a total capacity of 3628 and are licensed through the Maryland Department of Health and Mental Hygiene.

Planned Communities

Planned communities are a new development trend that is appearing throughout the County. These communities bring open spaces, community shopping centers, and mixed-residential options. This combination of amenities attracts a wide range of residents. Currently there are 5 planned communities, with more being developed.

Community	# of Homes	Acres
Lakelands	1,410	340
King Farm	3,200	430
Kentlands	1,800	352
Fallsgrove	Approx 1,200 unknown total	257
Clarksburg Town Center	1,300	268

Kentlands was the first of these communities developed in 1990. These communities are attractive to residents but pose a challenge to the fire-rescue service. The homes are all light weight construction on zero lot lines with massive exposure issues. The small roads and alley ways make for charming neighborhoods but greatly limit fire apparatus access.

The overall building stock in Montgomery County is relatively new; however, 55% of the residential units were built before 1980. The majority of these are small post-World War II era masonry cottages in the down-county area.

There are two designated historic districts - Rockville and Kensington. The homes in these areas are late 1800 Victorian balloon frame homes.

As Montgomery County became more suburban, the housing boom peaked in the 1980s in Gaithersburg and Germantown. This growth spurt brought thousands of lightweight construction single-family homes and townhomes to the area. While the majority of single-family homes in Montgomery County are average sized (1,000 – 2,000 square feet), there are a number of areas that feature homes in the 3,000 – 4,000 square foot range and higher.

Potomac has the highest area median income along with the highest housing costs. Many homes within this area are in the 5,000 - 10,000 or greater square foot range.

Area	Population	Density/Square Mile	# Of Housing Units	Median Household Income
Germantown	86,395	7,999	31,807	$71,226
Rockville	62,476	4,532	17,786	$86,085
Bethesda	55,277	4,205	24,368	$117,723
Silver Spring	71,452	7,584	31,208	$51,653
Gaithersburg	59,933	5,902	20,674	$54,883
Potomac	44,822	1,780	15,960	$154,370
Poolesville	4,883	1,193	1,630	$85,092

The majority of new high-rise residential construction in Montgomery County is concentrated in the North Bethesda area with 1,200 units in four new high-rises, with more in the planning stage. Rockville Town Center is a close second with 644 high-rise units.

Montgomery County is at the forefront of fire suppression laws. In 1976, a County law, the first of its kind, mandated smoke detectors in all residences and in 1988, legislation was passed requiring automatic fire sprinklers in all new multi-family dwellings and townhouses.

On January 14, 2004, Montgomery County Council Bill No. 25-03 became effective requiring new single-family detached homes to have an automatic fire sprinkler system and encouraged the retrofitting of existing residences by offering a tax credits to homeowners.

ISO Rating

The Insurance Services Office (ISO) is an independent organization that rates fire departments. This rating is considered by certain insurance companies when setting their homeowner and business fire insurance premiums. The major elements of a community's fire suppression ability, including location of stations, water supply access, apparatus and equipment are assessed and given a numerical grade from 1 to 10. Montgomery County had exhibited a split rating of 4/9 for several years leading up to 2013. The ISO-4 rating represented urban areas within five miles of a fire station that are served by hydrants. The ISO-9 rating represented the rural areas of the County that are within 5 miles of a fire station but are not served by a hydrant system.

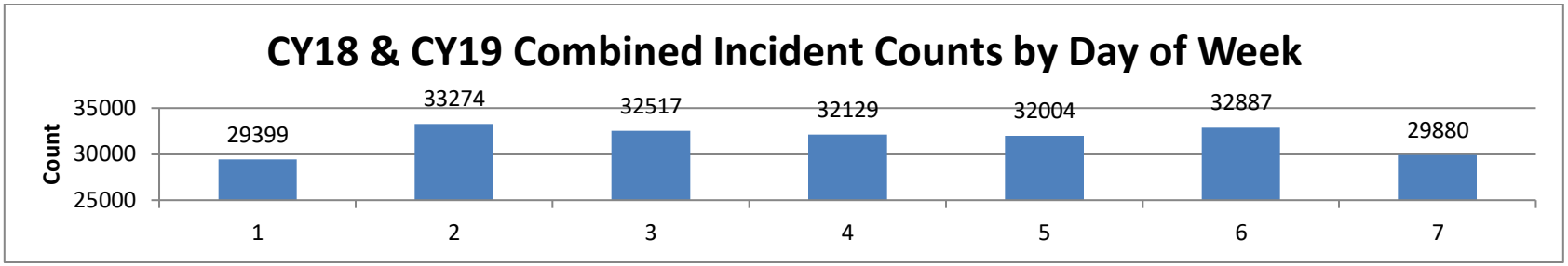
In January of 2013, MCFRS completed a rigorous ISO Fire Suppression Rating Schedule (FSRS) for both hydranted and non-hydranted areas. The evaluation process spanned over several months as the Insurance Services Offices field section evaluated needed fire flow, receipt and handling of fire alarms, water supply, and various other elements within the Fire Department. The conclusion of the evaluation yielded a successful increase in the County's Community Classification Rating in non-hydranted areas from a 9/10 (9 out of 10) to a 6/10 (6 out of 10) and a rating in hydranted areas from a 4/10 to a 3/10. Montgomery County's split ISO rating became a 3/6; a marked increase from our previous rating of 4/9.

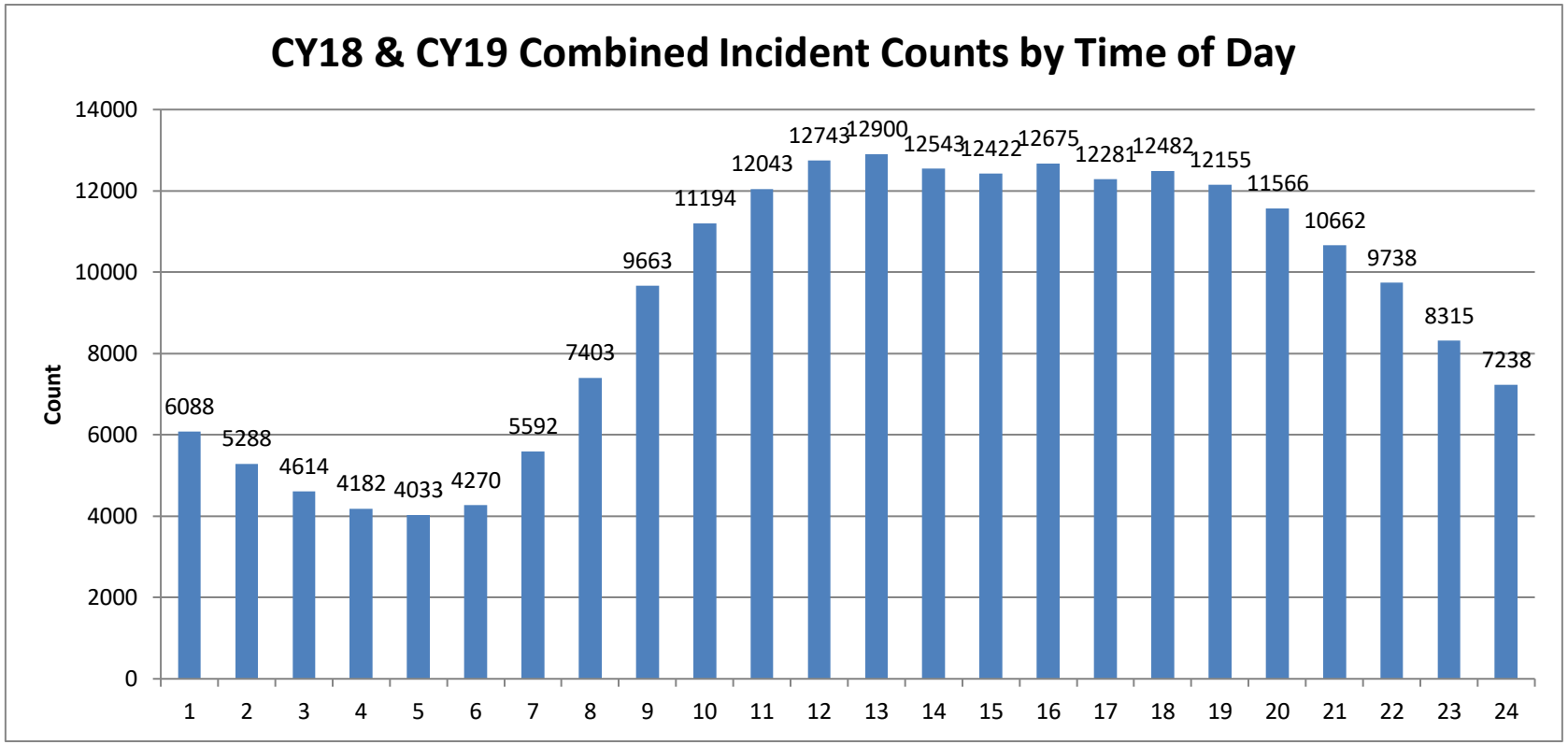
In 2016 ISO requested and was granted another review to "gather information needed to determine a fire insurance classification that may be used in the calculation of property insurance premiums." MCFRS worked closely and cooperated with ISO officials to answer questions and provide data and analysis. On February 2, 2017, ISO notified the County Executive and Fire Chief that the Public Protection Classification (PPC) Review of the Fire Protection Service Area (FPSA: urban/hydranted) had been upgraded from a 3/10 to a 2/10 and the Fire Department Service area (FDS: rural/non-hydrant) from a 6/10 to a 4/10; thus, Montgomery County is now rated a 2/4.

Countywide Service Demand/Workload Charts and Graphs

A workload study can be defined as historical data-driven analysis which includes: call types, location of calls, and frequency of calls.

FY 2018		FY 2019		FY 2020	
Call Type Group 2		**Call Type Group 2**		**Call Type Group 2**	
Program	Incident Cnt	Program	Incident Cnt	Program	Incident Cnt
In-County		**In-County**		**In-County**	
Adaptive	17,008	Adaptive	16,167	Adaptive	15,168
ARFF	0	ARFF	2	ARFF	0
ALS	41,995	ALS	42,514	ALS	40,687
BLS	51,854	BLS	50,359	BLS	49,106
Bomb Squad	83	Bomb Squad	71	Bomb Squad	55
Full Assignment	690	Full Assignment	799	Full Assignment	887
Hazmat	148	Hazmat	193	Hazmat	187
Service Call	8,296	Service Call	8,185	Service Call	8,418
Special Event	44	Special Event	31	Special Event	30
System	16	System	5	System	13
Tech Rescue	17	Tech Rescue	17	Tech Rescue	18
Water-Ice Res.	64	Water-Ice Res.	77	Water-Ice Res.	129
In-County Total	120,215	In-County Total	118,420	In-County Total	114,698
Less System	120,199	Less System	118,415	Less System	114,685
Auto/Mutual Aid		**Auto/Mutual Aid**		**Auto/Mutual Aid**	
Out of County Mut./Auto Aid	3,112	Out of County Mut./Auto Aid	2,859	Out of County Mut./Auto Aid	4,364
Federal FD Box Areas	217	Federal FD Box Areas	323	Federal FD Box Areas	266
OOC System	3	OOC System	0	OOC System	0
Total Responses		**Total Responses**		**Total Responses**	
Total w/System	123,544	Total w/System	121,602	Total w/System	119,328
Total w/o System	123,525	Total w/o System	121,597	Total w/o System	119,315


CY18 & CY19 Combined Incident Counts by Day of Week
Count
35000
30000
25000
29399
33274
32517
32129
32004
32887
29880
1
2
3
4
5
6
7

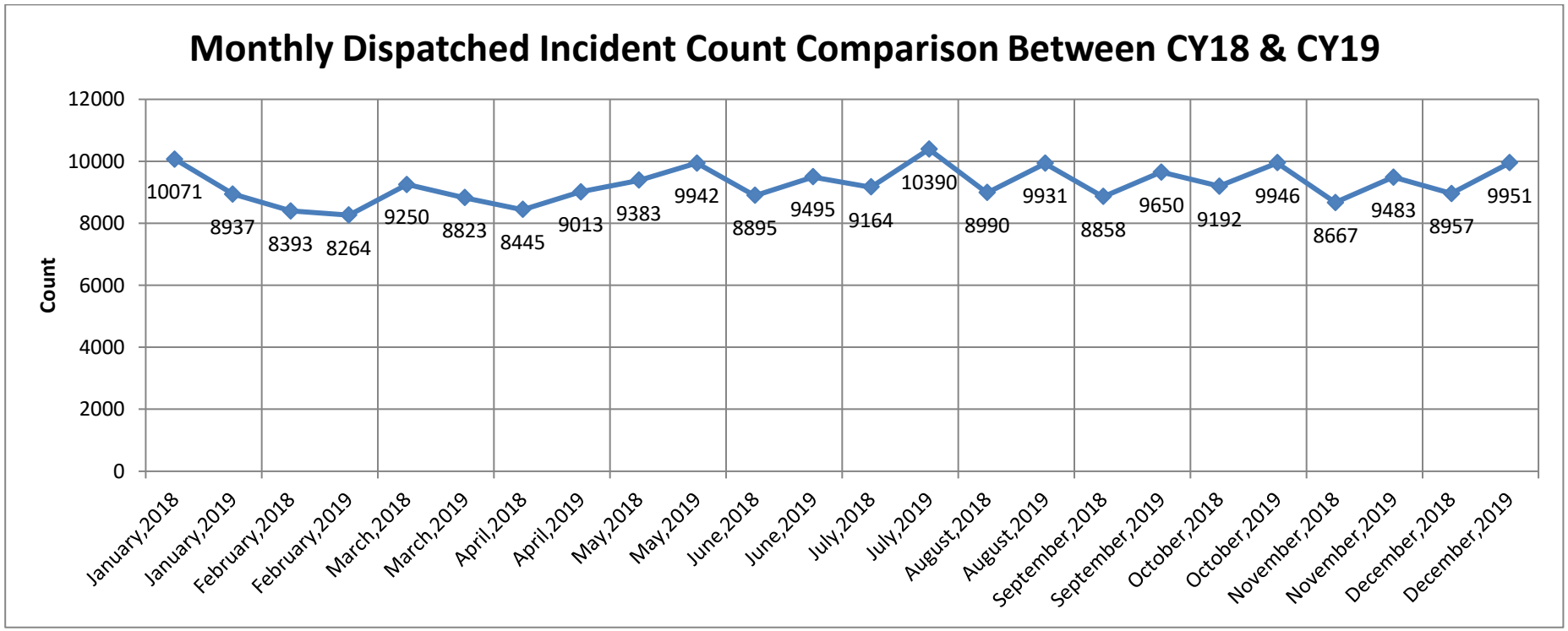

CY18 & CY19 Combined Incident Counts by Time of Day
Count
14000
12000
10000
8000
6000
4000
2000
0
6088
5288
4614
4182
4033
4270
5592
7403
9663
11194
12043
12743
12900
12543
12422
12675
12281
12482
12155
11566
10662
9738
8315
7238
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

CY18 & CY19 Incident Counts by Day of Week and Dispatched Risk Category

Incident Counts by Day of Week and Incident Type Group	A1F	A1N	A23	ALS1	ALS2	ALS2E 1221	ARF SR	BLS	BLS R	BOMB SQ	FFA	FFAE 1221	FFAE SRHR12	FFASR HR	HM HR	HM LR	HM MR	HM SR	SERVICE	SYSTEM	TRSR	WIR HR	WIR MR	WIR SR
Monday	445	2996	717	9552	1293	253	1	12330	578	70	169	52	3	24	4	4	22	3	822	30	4	1	1	23
Tuesday	410	3708	719	11024	1257	244	1	13870	641	104	146	45	7	23	5	9	31	14	919	39	5		39	11
Wednesday	391	3670	728	10835	1171	248		13456	635	94	146	52	5	11	5	8	34	10	969	27	5		8	6
Thursday	431	3680	656	10431	1205	238		13456	704	96	136	43	4	23	8	8	38	12	911	33	3		7	3
Friday	457	3690	676	10474	1149	233		13338	681	95	143	55	2	16	12	7	37	11	874	35	7	2	4	5
Saturday	513	3909	634	10555	1222	268		13762	687	101	157	52	8	27	10	6	34	7	868	44	8		4	7
Sunday	434	3267	671	9503	1299	238		12461	622	71	164	60	4	19	4	5	26	1	948	41	5		12	23

CY18 & CY19 Incident Counts by Fire Station Risk Management Zone and Dispatched Risk Category

Incident Counts by Fire Station Area & Risk Category	A1F	A1N	A23	ALS 1	ALS 2	ALS2 E1221	ARF SR	BLS	BLS R	BOMB SQ	FFA	FFAE1 221	FFAE SRHR12	FFASR HR	HM HR	HM LR	HM MR	HM SR	SERVICE	SYSTEM	TR SR	WIR HR	WIR MR	WIR SR
1	111	1258	266	3522	487	63		4410	279	85	38	10	7	31	2	4	7		384	6	1			
2	69	616	160	1842	220	57		2167	147	4	32	11	2	14	2	1	4	2	170	10				
3	171	1244	255	3756	443	63		5143	268	21	46	18	1	9	3	1	18	4	301	15	1		1	
4	45	392	37	975	104	32	1	1320	61	1	13	5					4	3	51	4	1		2	
5	104	817	147	2479	248	60		3304	165	12	25	5	2	2	2		8	1	219	7	3		3	
6	103	1677	158	2272	259	58		2862	138	60	32	9	2	11	3	4	5	8	326	6	4		1	
7	41	498	63	871	112	18		1670	66	8	13	5		2	1	1	3	1	114	5			3	
8	208	1516	394	7015	835	156		8263	437	51	123	35	3	3	4	2	16	2	447	10	1		6	
9	20	32	8	77	4			154	1		4								2					
10	75	548	51	798	91	16		1377	59	6	11	4					5	1	80	1	1		7	10
11	49	716	78	740	110	13		1024	48	16	15	6		2	1	1	3	2	154	2	6		2	2
12	100	653	190	###	325	72		3162	180	25	44	17	3	20	1		7	2	197	5				
13	69	269	54	1036	115	29		948	41	6	21	10				1	4	2	57	3			1	
14	58	155	27	452	62	8	1	448	22	1	8	2			1		1		40	2	2	2	3	3
15	137	994	224	4047	464	96		4642	226	21	49	22	2	6	2	1	6	1	166	16	1			
16	109	735	143	1846	226	51		2754	121	14	32	14	4	8		2	6		140	13	1		1	
17	71	274	54	796	100	18		813	30	3	11	7					4		53	2			1	
18	131	1109	239	3416	476	81		4494	219	32	50	21		4	5	2	7	3	305	13	2			
19	82	560	109	1428	161	40		1897	67	14	35	10	1		1	1	9	1	139	4			1	
20	73	695	135	1307	150	38		2110	96	13	15	6		8		4	8	3	172	5	2		3	
21	82	317	78	1430	191	37		1878	77	8	24	10		4			5		113	8				
22	64	435	117	1390	179	34		1417	79	12	26	7			2	3	3		107	6	1		3	
23	138	1251	201	3539	401	73		4902	214	30	32	15	4	10		2	17	1	356	13				
24	76	515	70	1835	198	49		2039	92	8	23	9				1	8		146	10				
25	109	939	351	5563	589	130		8235	392	16	75	28	1	4	2	4	14	3	595	25	1			
26	93	782	110	1966	234	46		2831	122	18	27	4		4	1		3	3	208	6	1			
27		4		18				8	4															
28	100	558	118	1899	209	53		2203	121	20	34	8			1	1	12	3	113	8	2			
29	87	579	126	2188	265	48		2482	103	27	35	12			1	1	5	1	198	5	1			
30	42	530	56	509	77	17		653	33	4	17	3						2	78				9	55
31	73	664	134	1415	148	36		1500	65	12	37	8			2	1	6	1	145	2		1	7	8
32	136	1398	223	3794	406	81		4950	230	30	38	12			4	4	8	2	246	16	2		2	
33	49	647	101	1275	168	34		1481	88	8	14	4				2	3	2	177	9			11	
34	93	708	153	###	260	50		2210	108	20	28	12	1	1	3	1	5	2	134	7	2		2	
35	45	330	57	619	77	18		767	35	4	9	4			1		1	2	30				2	
40	61	475	101	1657	197	36		1977	106	19	23	6			1	2	5		144	5			3	


Monthly Dispatched Incident Count Comparison Between CY18 & CY19
Count
12000
10000
8000
6000
4000
2000
0
10071
8937
8393
8264
9250
8823
8445
9013
9383
9942
8895
9495
9164
10390
8990
9931
8858
9650
9192
9946
8667
9483
8957
9951
January,2018
January,2019
February,2018
February,2019
March,2018
March,2019
April,2018
April,2019
May,2018
May,2019
June,2018
June,2019
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October,2018
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November,2018
November,2019
December,2018
December,2019

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Fire Station Descriptions and Multi-Year Incident Counts and Trending Analysis

The apparatus housed listed on the following pages are, in general, controlled in the Computer-Aided Dispatch System. There are additional redundant resources i.e. engines etc., housed within some of these stations that can be used as reserve apparatus or additional capabilities when staffed by volunteer personnel or additional career personnel when needed

In addition, when observing the "dispatched as" incident counts tables for each fire station by fiscal years on the following pages, know the following:

Dispatched as mean these incident counts reflect what the unit(s) were dispatched to based on what 911 callers told the Emergency Communications Center they believed the incidents were. The 911 call takers utilize protocol-based EMS/Fire/Rescue questions to determine the call type, which in turn, determines a response plan that deploys to appropriate MCFRS resources based on the risk.

Also, Adaptive responses include inside and outside natural gas / LPG leaks, except high pressure 2" or greater, which are categorized as a Hazmat incidents.

Fire Station 1

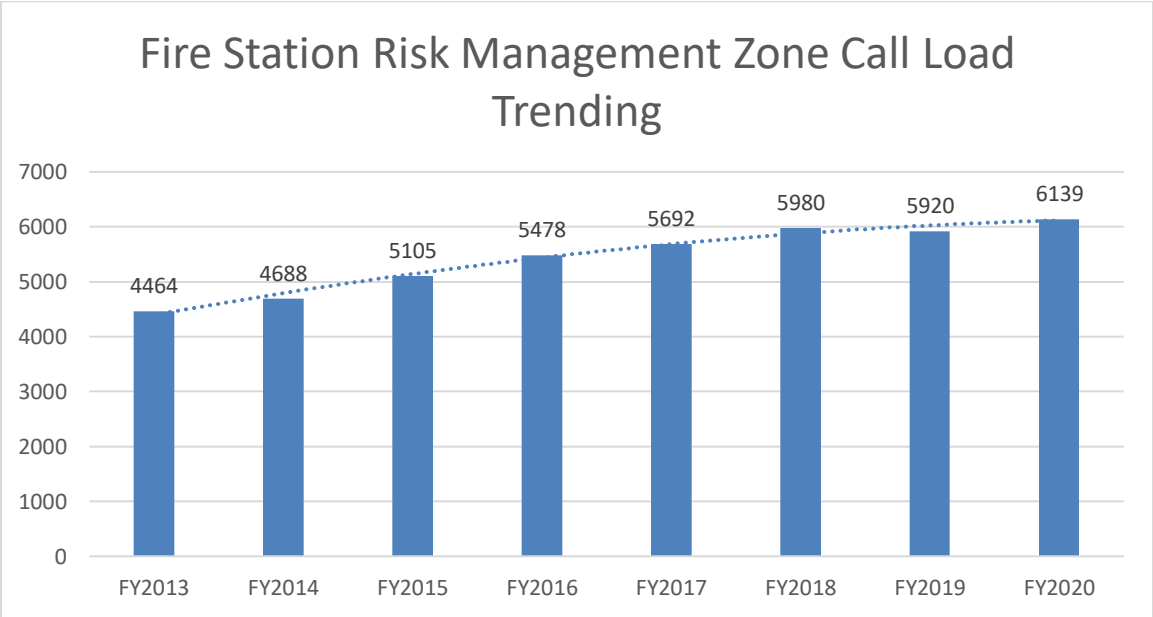
Battalion 1

Silver Spring Station

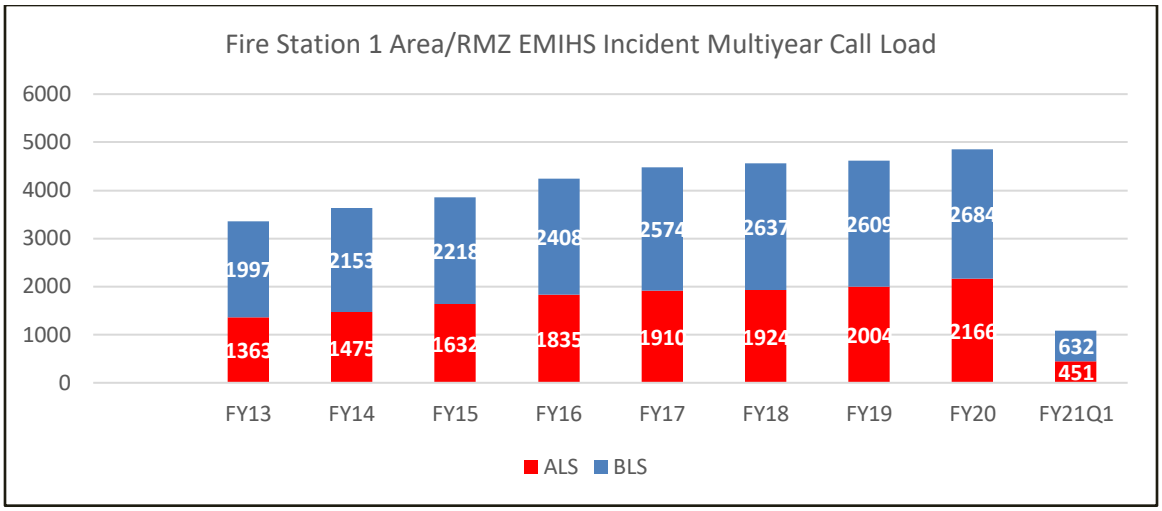
8110 Georgia Avenue, Silver Spring

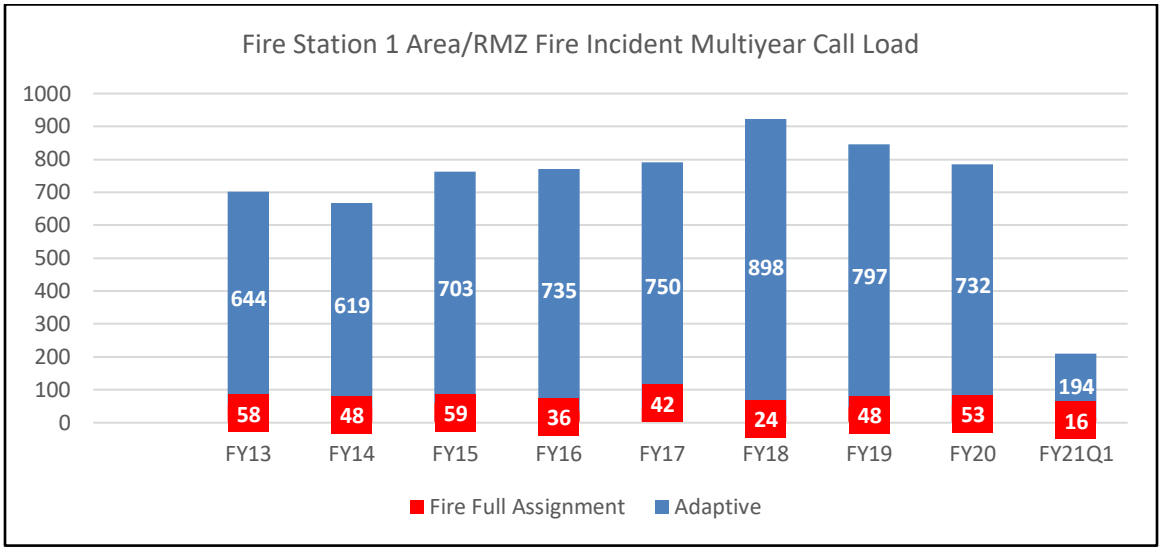
Description

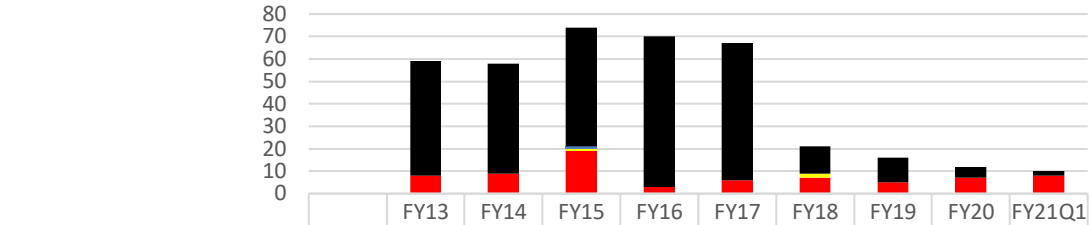
- Ownership: County
- Apparatus Housed: Paramedic Engine, Ambulance, Medic, Decon Unit
- First Due Area: 2.08 mi^2
- Number of Unique Risk Management Zones (box areas): 22
- Predominant Population Density Zone: Metropolitan



Fire Station 1 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	1152	1232	1388	1530	1671	1691	1707	1890	412
ALS2	HR	211	243	244	305	239	233	297	276	39
BLS	LR	1997	2153	2218	2408	2574	2637	2609	2684	632
Fire Full Assignment Hydranted	HR	58	48	59	21	26	14	26	28	8
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	15	16	10	22	25	8
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	0
Adaptive-1F	LR	56	58	51	56	51	73	48	54	14
Adaptive-1N	LR	499	491	558	583	565	689	609	574	149
Adaptive-2-3	MR	89	70	94	96	134	136	140	104	31
Hazmat Low Risk	LR	1	0	0	0	1	0	1	4	3
Hazmat Moderate Risk	MR	1	0	5	3	3	4	3	3	3
Hazmat High Risk	HR	5	4	6	0	2	0	1	0	0
Hazmat Special Risk	SR	1	5	8	0	0	3	0	0	2
Technical Rescue	SR	0	0	1	0	0	2	0	0	0
Water/Ice Rescue Moderate	MR	0	0	1	0	0	0	0	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		51	49	53	67	61	12	11	5	2
Non-Accreditation Counts										
Service Call		343	335	419	394	349	476	446	491	120
Special Event							0	0	1	0
Mutual Aid										
Total Incident Counts		4464	4688	5105	5478	5692	5980	5920	6139	1423
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
ALS		1363	1475	1632	1835	1910	1924	2004	2166	451
BLS		1997	2153	2218	2408	2574	2637	2609	2684	632
Fire Full Assignment		58	48	59	36	42	24	48	53	16
Adaptive		644	619	703	735	750	898	797	732	194
Hazmat		8	9	19	3	6	7	5	7	8
Technical Rescue		0	0	1	0	0	2	0	0	0
Water/Ice Rescue		0	0	1	0	0	0	0	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	0
Bomb Squad Responses		51	49	53	67	61	12	11	5	2

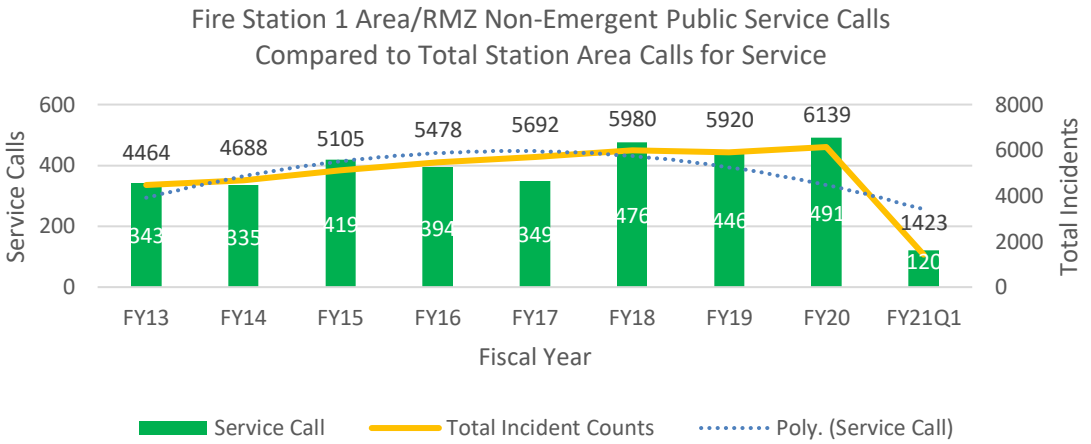

Fire Station 1 Area/RMZ EMIHS Incident Multiyear Call Load
6000
5000
4000
3000
2000
1000
0
1997
2153
2218
2408
2574
2637
2609
2684
632
1363
1475
1632
1835
1910
1924
2004
2166
451
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
FY21Q1
ALS
BLS


Fire Station 1 Area/RMZ Fire Incident Multiyear Call Load
1000
900
800
700
600
500
400
300
200
100
0
644
619
703
735
750
898
797
732
194
58
48
59
36
42
24
48
53
16
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
FY21Q1
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
Bomb Squad Responses	51	49	53	67	61	12	11	5	2
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	1	0	0	0	0	0	0
Technical Rescue	0	0	1	0	0	2	0	0	0
Hazmat	8	9	19	3	6	7	5	7	8

Hazmat Technical Rescue Water/Ice Rescue
Aircraft Rescue Firefighting Bomb Squad Responses



Fire Station 2

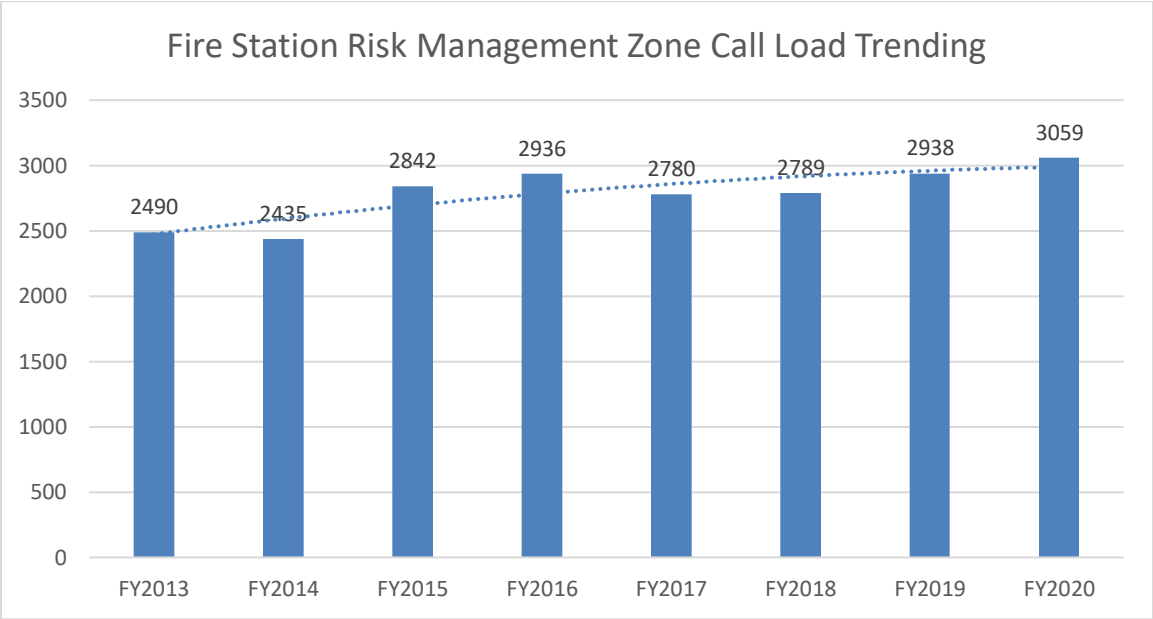
Battalion 1

Takoma Park Station

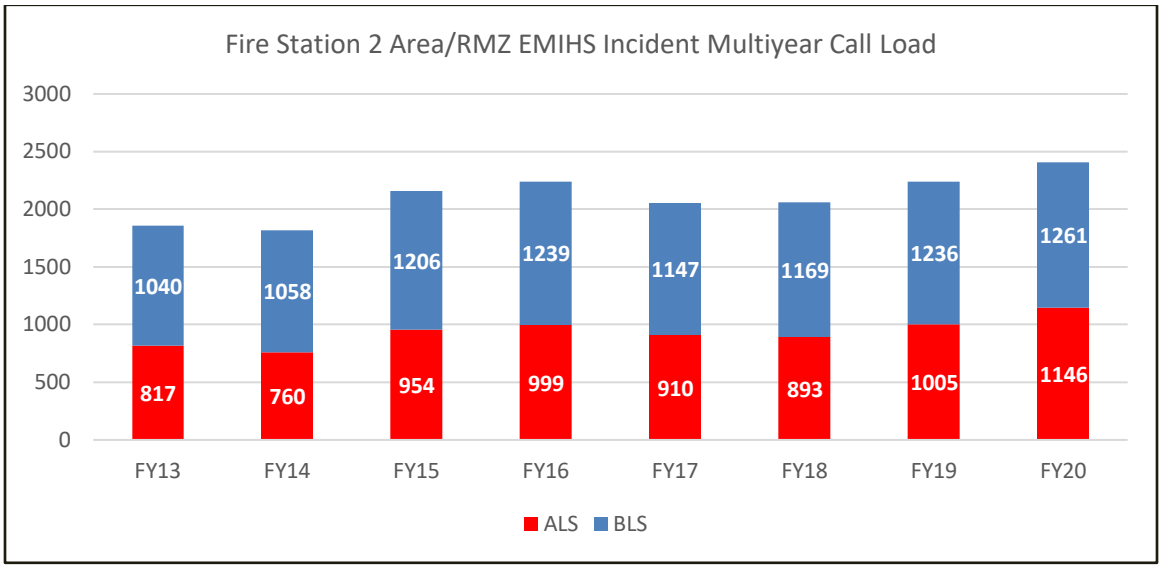
7201 Carroll Avenue, Takoma Park

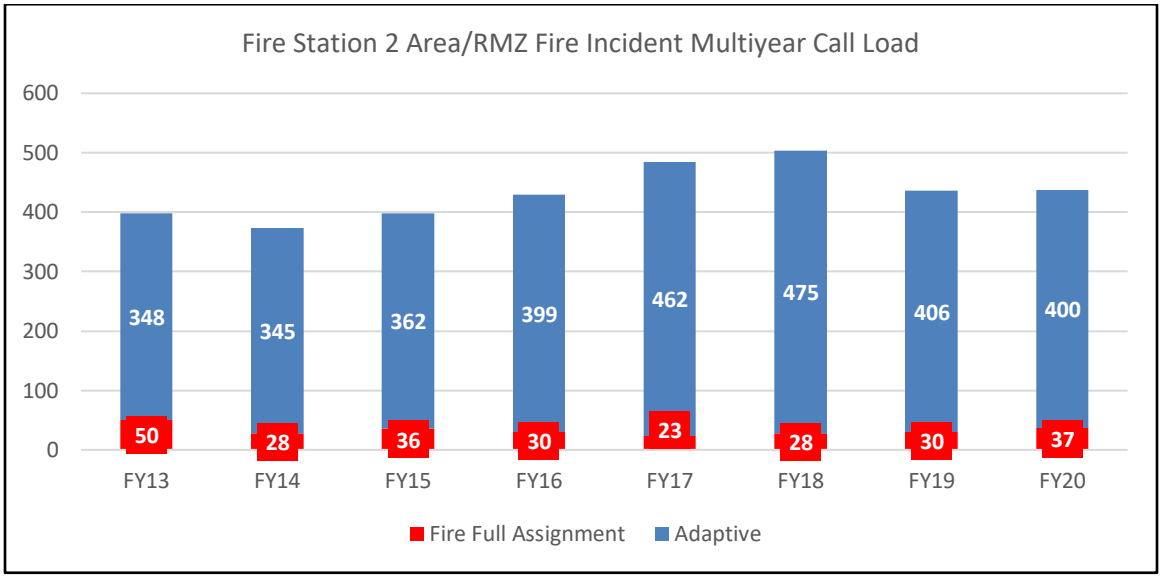
Description

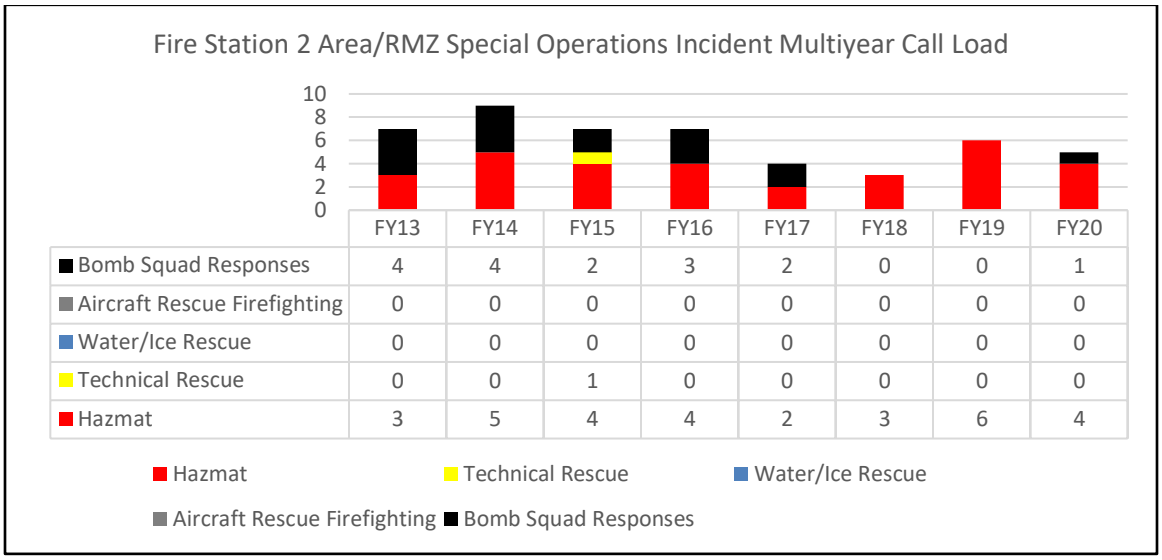
- Ownership: County
- Apparatus Housed: Engine, Ambulance
- First Due Area: 2.54 mi^2
- Number of Unique Risk Management Zones (box areas): 16
- Predominant Population Density Zone: Metropolitan



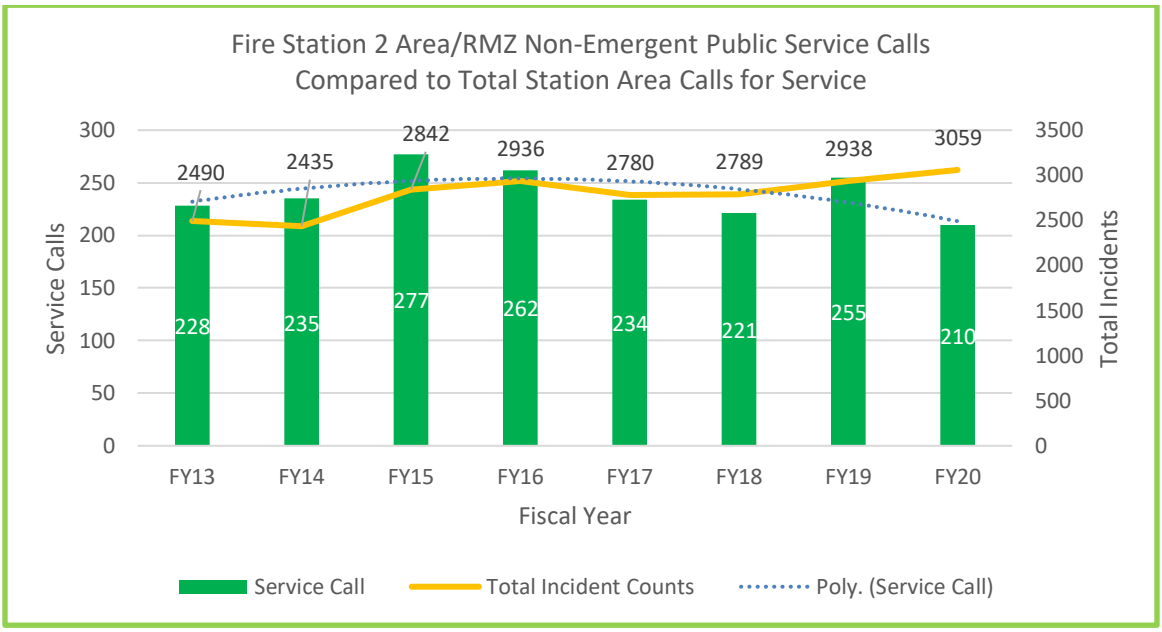
Fire Station 2 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	701	621	801	828	780	774	847	1003	
ALS2	HR	116	139	153	171	130	119	158	143	
BLS	LR	1040	1058	1206	1239	1147	1169	1236	1261	
Fire Full Assignment Hydranted	HR	50	28	36	22	18	27	22	22	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	8	5	1	8	15	
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	
Adaptive-1F	LR	38	35	38	38	46	39	31	40	
Adaptive-1N	LR	257	251	264	292	312	342	308	278	
Adaptive-2-3	MR	53	59	60	69	104	94	67	82	
Hazmat Low Risk	LR	0	1	0	1	1	0	1	2	
Hazmat Moderate Risk	MR	1	1	1	2	1	1	3	0	
Hazmat High Risk	HR	2	2	2	0	0	2	1	0	
Hazmat Special Risk	SR	0	1	1	1	0	0	1	2	
Technical Rescue	SR	0	0	1	0	0	0	0	0	
Water/Ice Rescue Moderate	MR	0	0	0	0	0	0	0	0	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		4	4	2	3	2	0	0	1	
Non-Accreditation Counts										
Service Call		228	235	277	262	234	221	255	210	
Special Event							0	0	0	
Mutual Aid										
Total Incident Counts		2490	2435	2842	2936	2780	2789	2938	3059	
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS		817	760	954	999	910	893	1005	1146	
BLS		1040	1058	1206	1239	1147	1169	1236	1261	
Fire Full Assignment		50	28	36	30	23	28	30	37	
Adaptive		348	345	362	399	462	475	406	400	
Hazmat		3	5	4	4	2	3	6	4	
Technical Rescue		0	0	1	0	0	0	0	0	
Water/Ice Rescue		0	0	0	0	0	0	0	0	
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	
Bomb Squad Responses		4	4	2	3	2	0	0	1	


Fire Station 2 Area/RMZ EMIHS Incident Multiyear Call Load
3000
2500
2000
1500
1000
500
0
1040
1058
1206
1239
1147
1169
1236
1261
817
760
954
999
910
893
1005
1146
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 2 Area/RMZ Fire Incident Multiyear Call Load
600
500
400
300
200
100
0
348
345
362
399
462
475
406
400
50
28
36
30
23
28
30
37
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	4	4	2	3	2	0	0	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	0	0	0	0	0	0
Technical Rescue	0	0	1	0	0	0	0	0
Hazmat	3	5	4	4	2	3	6	4



Fire Station 3

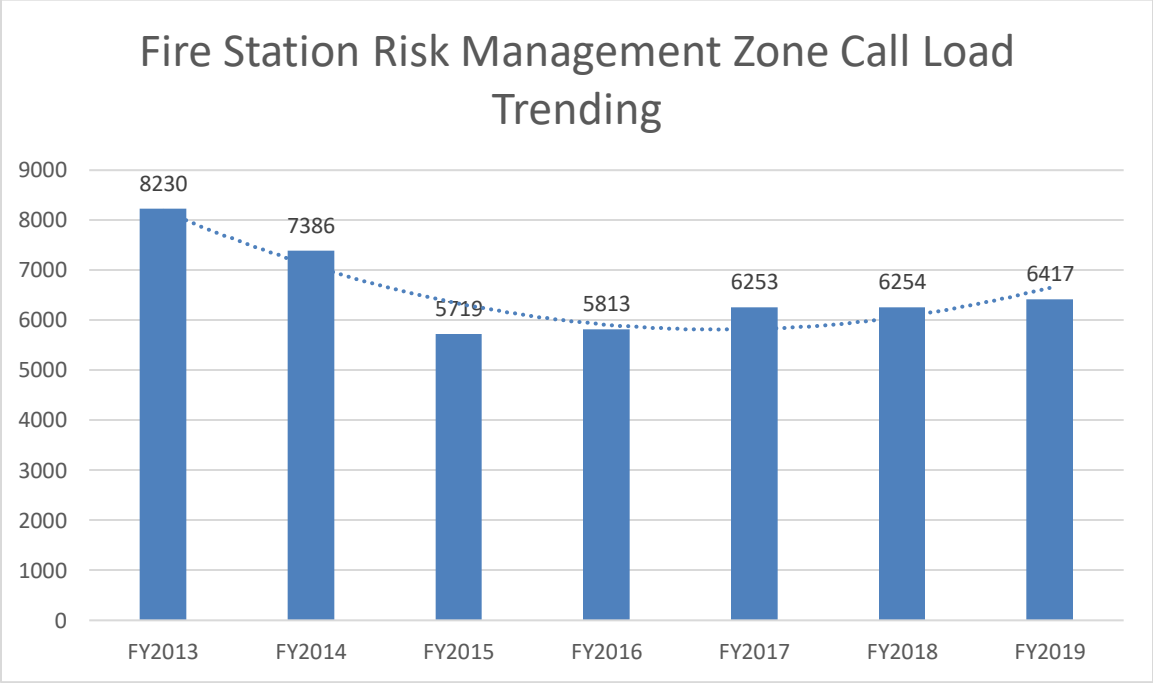
Battalion 3

Rockville Station

380 Hungerford Drive, Rockville

Description

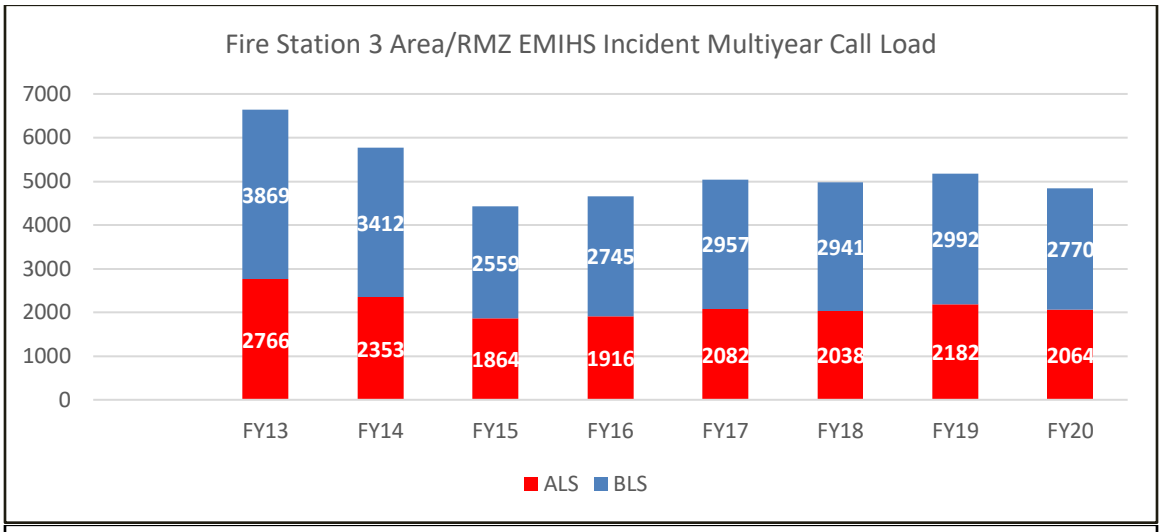
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Truck, Squad, Ambulance, Medic Unit
- First Due Area: 14.32 mi^2
- Number of Unique Risk Management Zones (box areas): 65
- Predominant Population Density Zone: Metropolitan

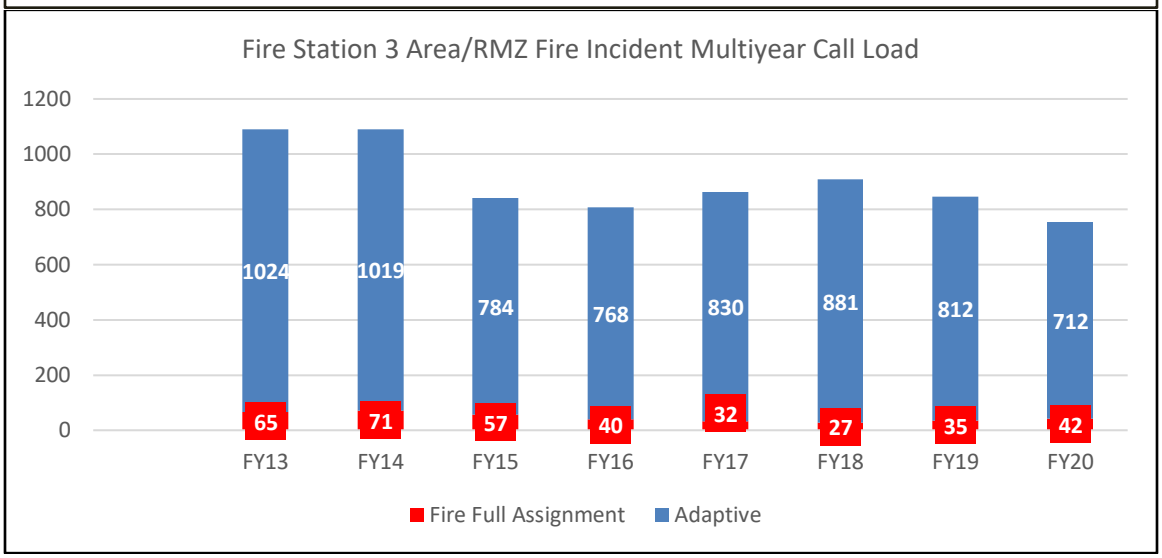


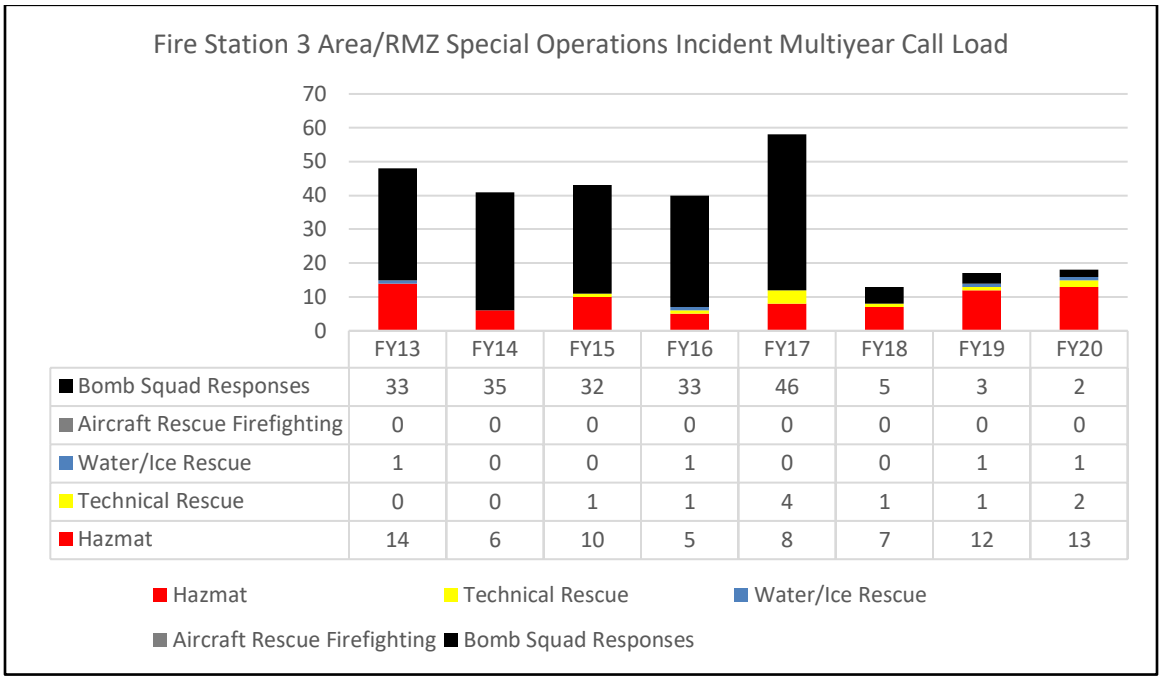
Note: Fire Station 32 opened for the first time on 2/27/14 which explains the decrease in runs in Station 3's area beginning in FY15.

Fire Station 3 (Urban Density Zone) Fiscal Year Response Area:
Number of DISPATCHED Incidents Aggregated by Accreditation Program

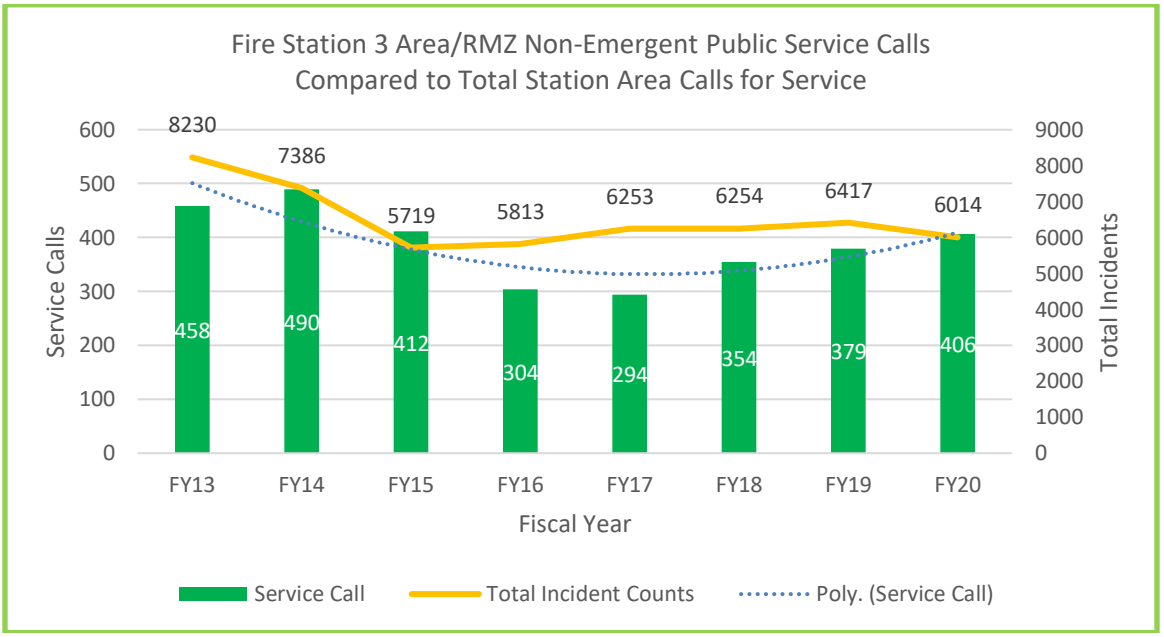
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	2393	2048	1599	1605	1838	1794	1907	1820	
ALS2	HR	373	305	265	311	244	244	275	244	
BLS	LR	3869	3412	2559	2745	2957	2941	2992	2770	
Fire Full Assignment Hydranted	HR	65	71	57	37	31	23	32	39	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	3	1	4	3	3	
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	
Adaptive-1F	LR	152	118	91	117	81	93	95	72	
Adaptive-1N	LR	765	778	596	529	614	640	611	517	
Adaptive-2-3	MR	107	123	97	122	135	148	106	123	
Hazmat Low Risk	LR	2	1	1	0	1	1	1	3	
Hazmat Moderate Risk	MR	1	0	4	4	6	3	9	7	
Hazmat High Risk	HR	8	4	4	1	0	0	1	1	
Hazmat Special Risk	SR	3	1	1	0	1	3	1	2	
Technical Rescue	SR	0	0	1	1	4	1	1	2	
Water/Ice Rescue Moderate	MR	1	0	0	1	0	0	1	1	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		33	35	32	33	46	5	3	2	
Non-Accreditation Counts										
Service Call		458	490	412	304	294	354	379	406	
Special Event							0	0	2	
Mutual Aid										
Total Incident Counts		8230	7386	5719	5813	6253	6254	6417	6014	
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS		2766	2353	1864	1916	2082	2038	2182	2064	
BLS		3869	3412	2559	2745	2957	2941	2992	2770	
Fire Full Assignment		65	71	57	40	32	27	35	42	
Adaptive		1024	1019	784	768	830	881	812	712	
Hazmat		14	6	10	5	8	7	12	13	
Technical Rescue		0	0	1	1	4	1	1	2	
Water/Ice Rescue		1	0	0	1	0	0	1	1	
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	
Bomb Squad Responses		33	35	32	33	46	5	3	2	


Fire Station 3 Area/RMZ EMIHS Incident Multiyear Call Load
7000
6000
5000
4000
3000
2000
1000
0
3869
3412
2559
2745
2957
2941
2992
2770
2766
2353
1864
1916
2082
2038
2182
2064
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 3 Area/RMZ Fire Incident Multiyear Call Load
1200
1000
800
600
400
200
0
1024
1019
784
768
830
881
812
712
65
71
57
40
32
27
35
42
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	33	35	32	33	46	5	3	2
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	1	0	0	1	0	0	1	1
Technical Rescue	0	0	1	1	4	1	1	2
Hazmat	14	6	10	5	8	7	12	13



Fire Station 4

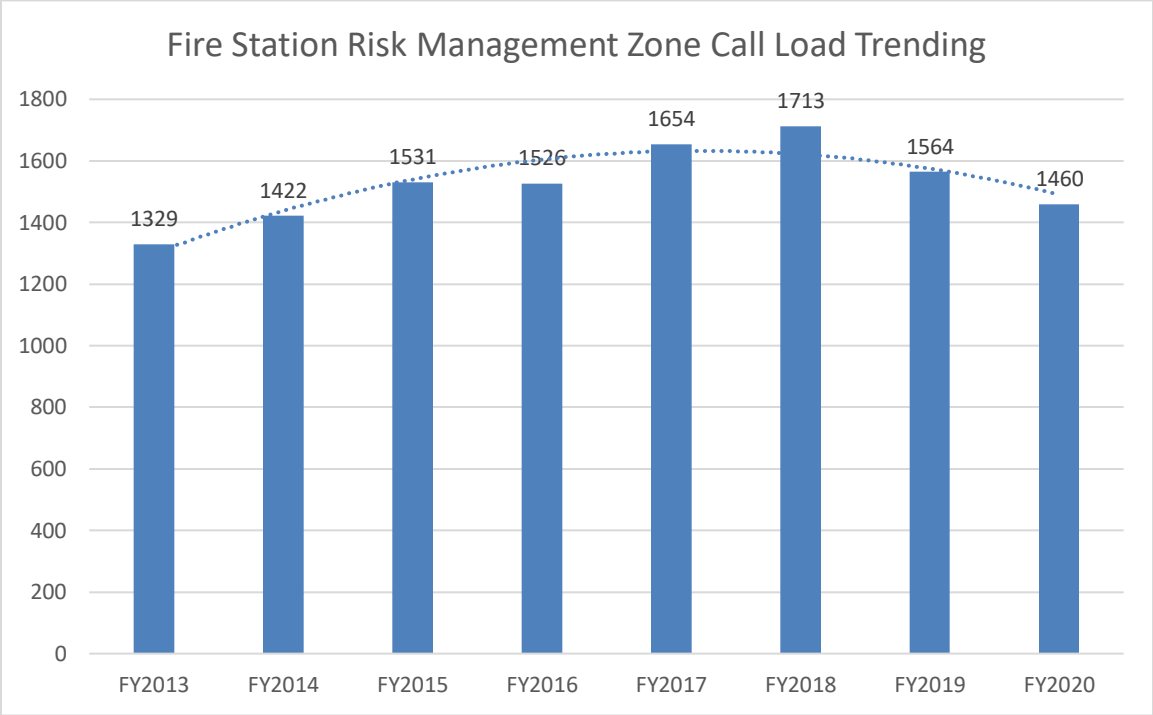
Battalion 4

Sandy Spring Station

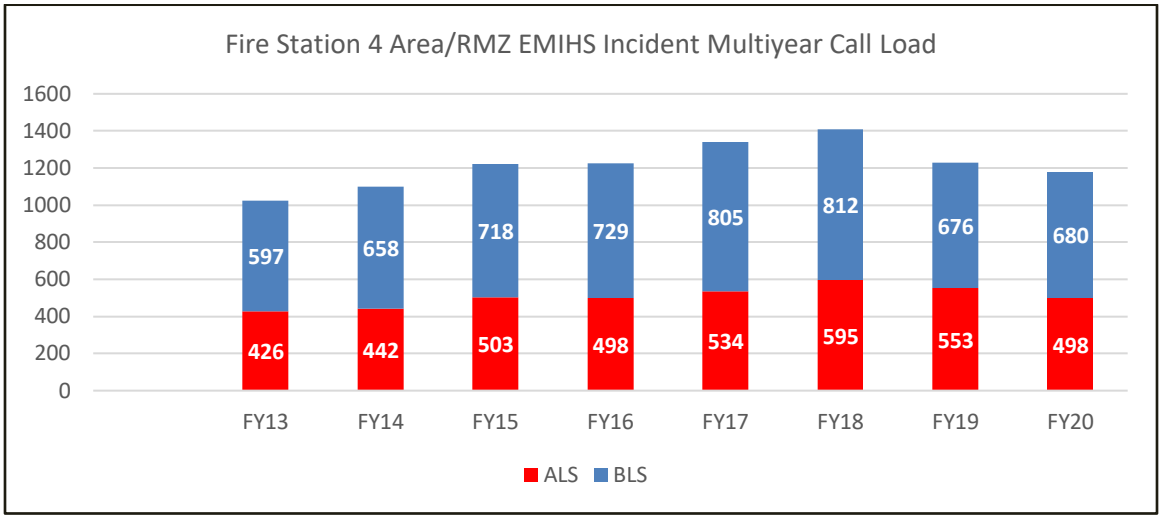
17921 Brooke Road, Sandy Spring

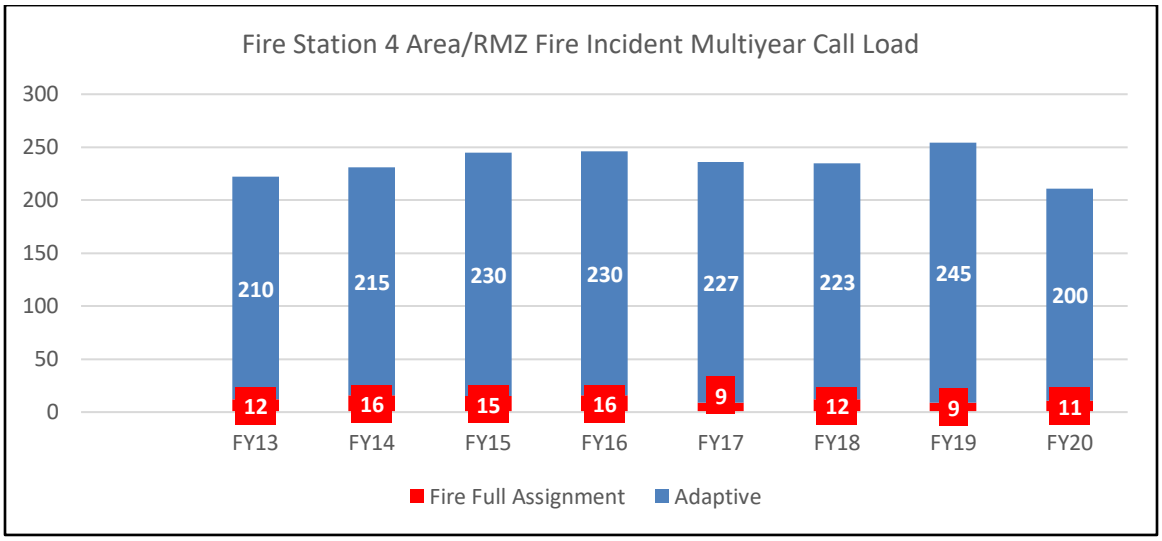
Description

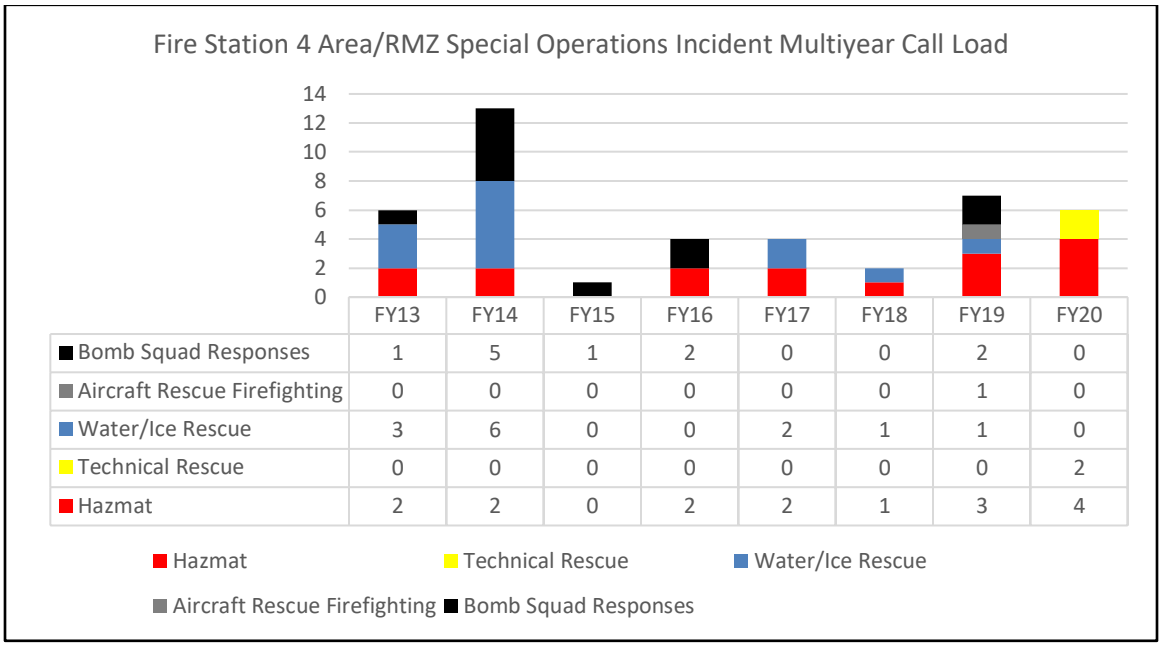
- Ownership: Volunteer (51%), County (49%)
- Apparatus Housed: Paramedic Engine, Tanker, Ambulance, Boat
- First Due Area: 20 mi^2
- Number of Unique Risk Management Zones (box areas): 35
- Predominant Population Density Zone: Rural



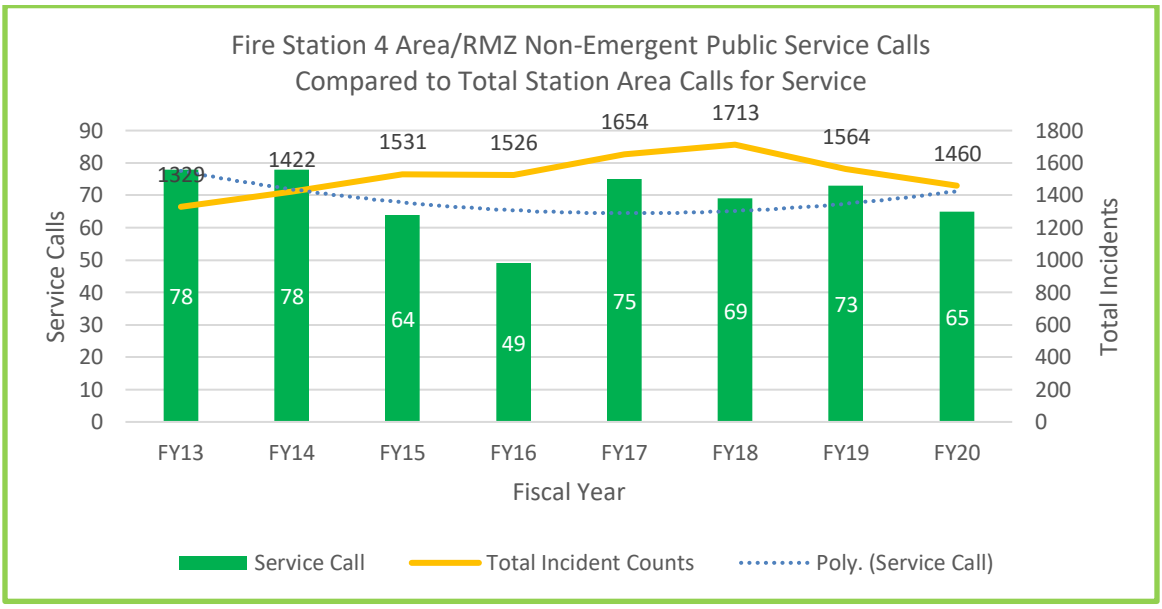
Fire Station 4 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	359	384	439	423	476	536	477	438	
ALS2	HR	67	58	64	75	58	59	76	60	
BLS	LR	597	658	718	729	805	812	676	680	
Fire Full Assignment Hydranted	HR	9	14	11	11	7	7	4	4	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0	
FFA-Non-hydranted Area	SR	3	2	4	5	2	5	5	7	
Adaptive-1F	LR	30	21	22	39	31	25	24	15	
Adaptive-1N	LR	169	175	188	173	170	177	199	163	
Adaptive-2-3	MR	11	19	20	18	26	21	22	22	
Hazmat Low Risk	LR	0	0	0	0	0	0	0	1	
Hazmat Moderate Risk	MR	0	0	0	2	2	1	1	2	
Hazmat High Risk	HR	2	2	0	0	0	0	0	0	
Hazmat Special Risk	SR	0	0	0	0	0	0	2	1	
Technical Rescue	SR	0	0	0	0	0	0	0	2	
Water/Ice Rescue Moderate	MR	3	6	0	0	1	1	1	0	
Water/Ice Rescue High	HR	0	0	0	0	1	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	1	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		1	5	1	2	0	0	2	0	
Non-Accreditation Counts										
Service Call		78	78	64	49	75	69	73	65	
Special Event				0	0	0	0	1	0	
Mutual Aid										
Total Incident Counts		1329	1422	1531	1526	1654	1713	1564	1460	
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS		426	442	503	498	534	595	553	498	
BLS		597	658	718	729	805	812	676	680	
Fire Full Assignment		12	16	15	16	9	12	9	11	
Adaptive		210	215	230	230	227	223	245	200	
Hazmat		2	2	0	2	2	1	3	4	
Technical Rescue		0	0	0	0	0	0	0	2	
Water/Ice Rescue		3	6	0	0	2	1	1	0	
Aircraft Rescue Firefighting		0	0	0	0	0	0	1	0	
Bomb Squad Responses		1	5	1	2	0	0	2	0	


Fire Station 4 Area/RMZ EMIHS Incident Multiyear Call Load
1600
1400
1200
1000
800
600
400
200
0
597
658
718
729
805
812
676
680
426
442
503
498
534
595
553
498
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 4 Area/RMZ Fire Incident Multiyear Call Load
300
250
200
150
100
50
0
210
215
230
230
227
223
245
200
12
16
15
16
9
12
9
11
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	1	5	1	2	0	0	2	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	1	0
Water/Ice Rescue	3	6	0	0	2	1	1	0
Technical Rescue	0	0	0	0	0	0	0	2
Hazmat	2	2	0	2	2	1	3	4



Fire Station 5

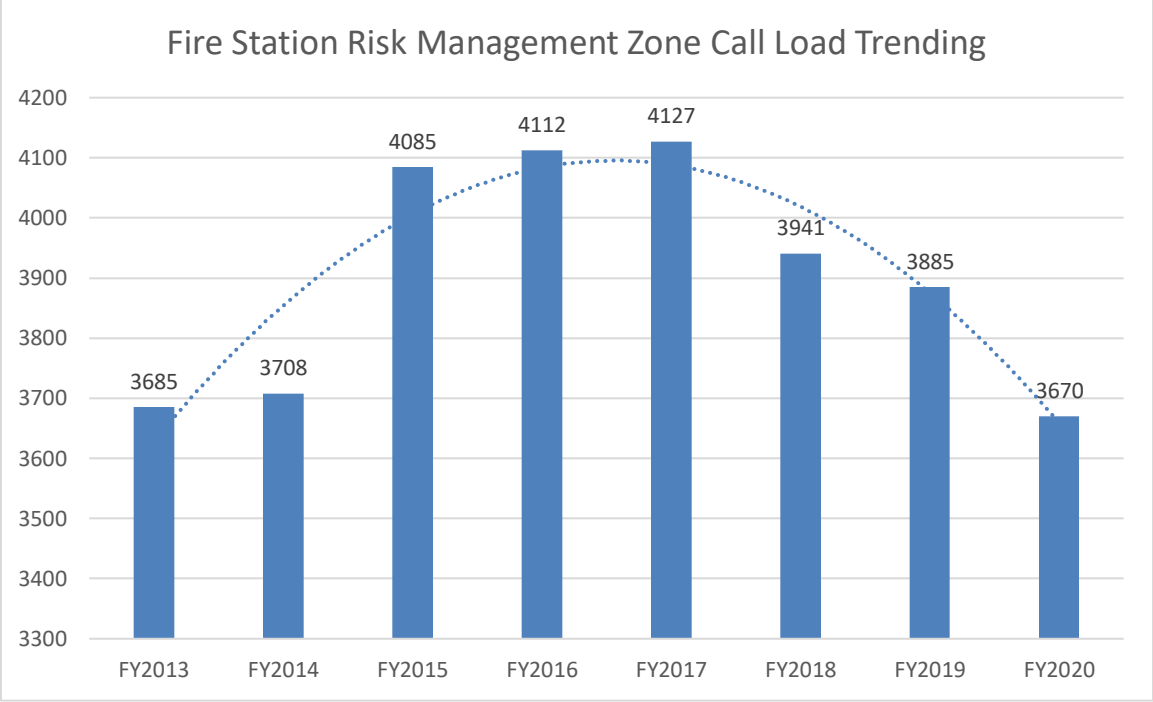
Battalion 4

Kensington Station

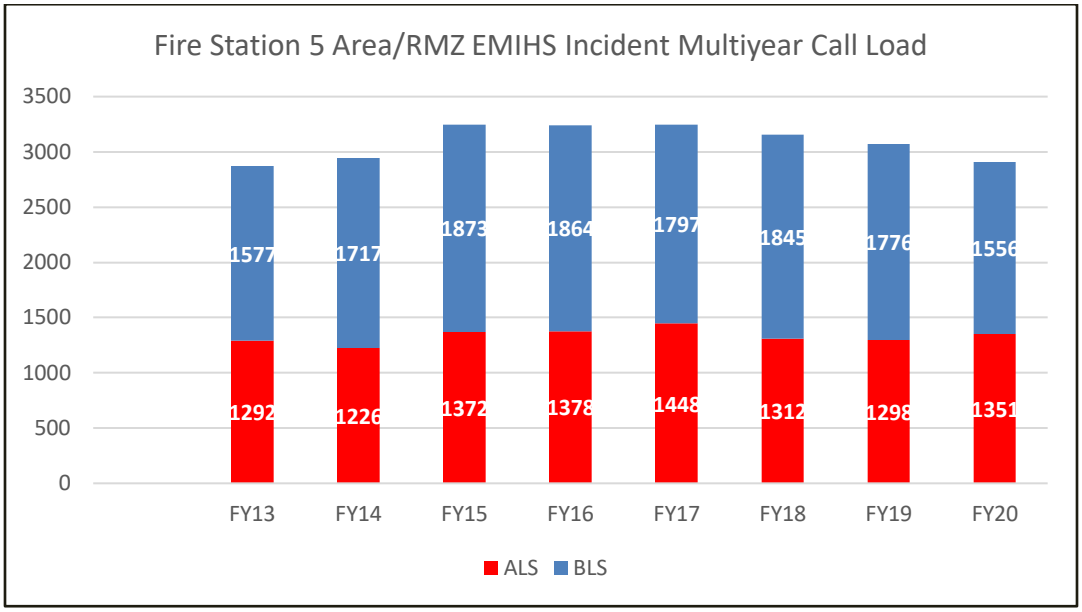
10620 Connecticut Avenue, Kensington

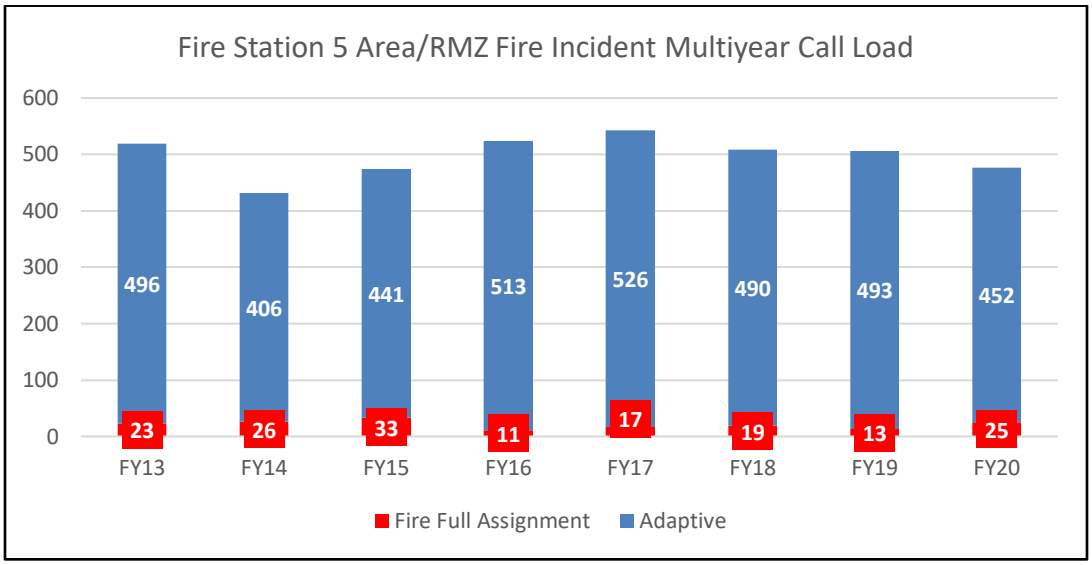
Description

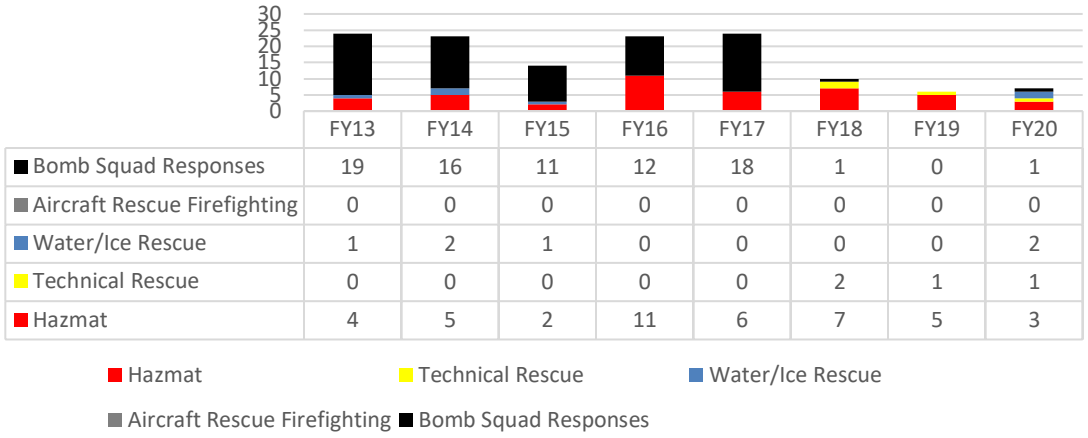
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance, Brush Truck
- First Due Area: 6.01 mi^2
- Number of Unique Risk Management Zones (box areas): 19
- Predominant Population Density Zone: Metropolitan



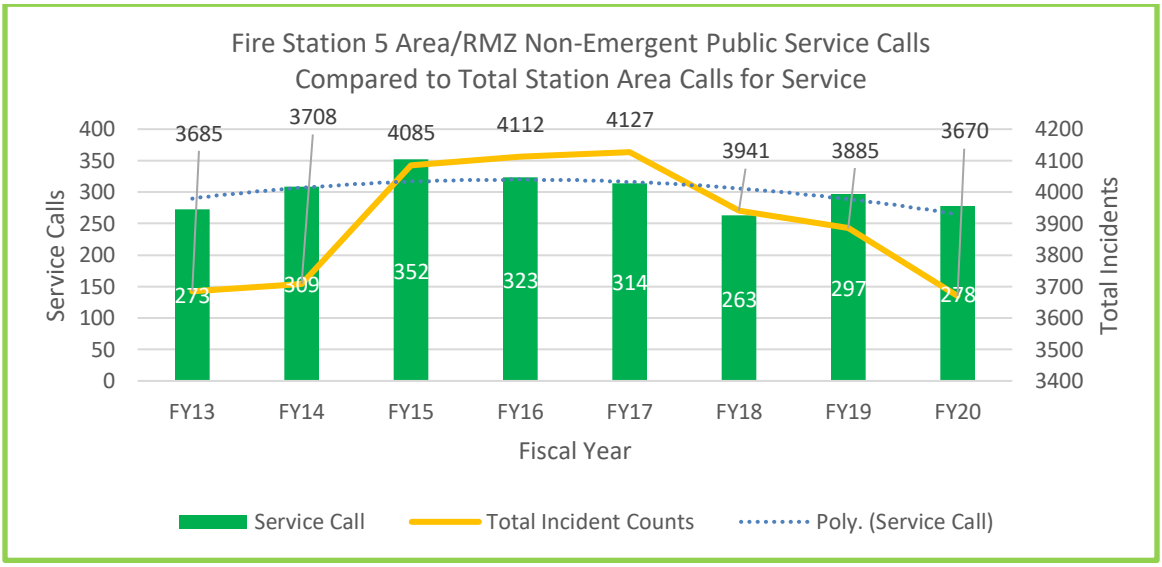
Fire Station 5 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	1111	1049	1191	1187	1265	1198	1123	1209	
ALS2	HR	181	177	181	191	183	114	175	142	
BLS	LR	1577	1717	1873	1864	1797	1845	1776	1556	
Fire Full Assignment Hydranted	HR	23	26	33	11	17	17	12	23	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	2	1	2	
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	
Adaptive-1F	LR	46	41	38	54	61	47	56	37	
Adaptive-1N	LR	399	320	349	400	376	383	370	343	
Adaptive-2-3	MR	51	45	54	59	89	60	67	72	
Hazmat Low Risk	LR	1	1	0	1	2	1	0	2	
Hazmat Moderate Risk	MR	0	1	1	9	3	4	5	1	
Hazmat High Risk	HR	3	2	1	0	1	0	0	0	
Hazmat Special Risk	SR	0	1	0	1	0	2	0	0	
Technical Rescue	SR	0	0	0	0	0	2	1	1	
Water/Ice Rescue Moderate	MR	1	2	1	0	0	0	0	2	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		19	16	11	12	18	1	0	1	
Non-Accreditation Counts										
Service Call		273	309	352	323	314	263	297	278	
Special Event		0	1	0	0	1	2	2	1	
Mutual Aid										
Total Incident Counts		3685	3708	4085	4112	4127	3941	3885	3670	
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS		1292	1226	1372	1378	1448	1312	1298	1351	
BLS		1577	1717	1873	1864	1797	1845	1776	1556	
Fire Full Assignment		23	26	33	11	17	19	13	25	
Adaptive		496	406	441	513	526	490	493	452	
Hazmat		4	5	2	11	6	7	5	3	
Technical Rescue		0	0	0	0	0	2	1	1	
Water/Ice Rescue		1	2	1	0	0	0	0	2	
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	
Bomb Squad Responses		19	16	11	12	18	1	0	1	


Fire Station 5 Area/RMZ EMIHS Incident Multiyear Call Load
3500
3000
2500
2000
1500
1000
500
0
1577
1717
1873
1864
1797
1845
1776
1556
1292
1226
1372
1378
1448
1312
1298
1351
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 5 Area/RMZ Fire Incident Multiyear Call Load
600
500
400
300
200
100
0
496
406
441
513
526
490
493
452
23
26
33
11
17
19
13
25
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	19	16	11	12	18	1	0	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	1	2	1	0	0	0	0	2
Technical Rescue	0	0	0	0	0	2	1	1
Hazmat	4	5	2	11	6	7	5	3



Fire Station 6

Battalion 2

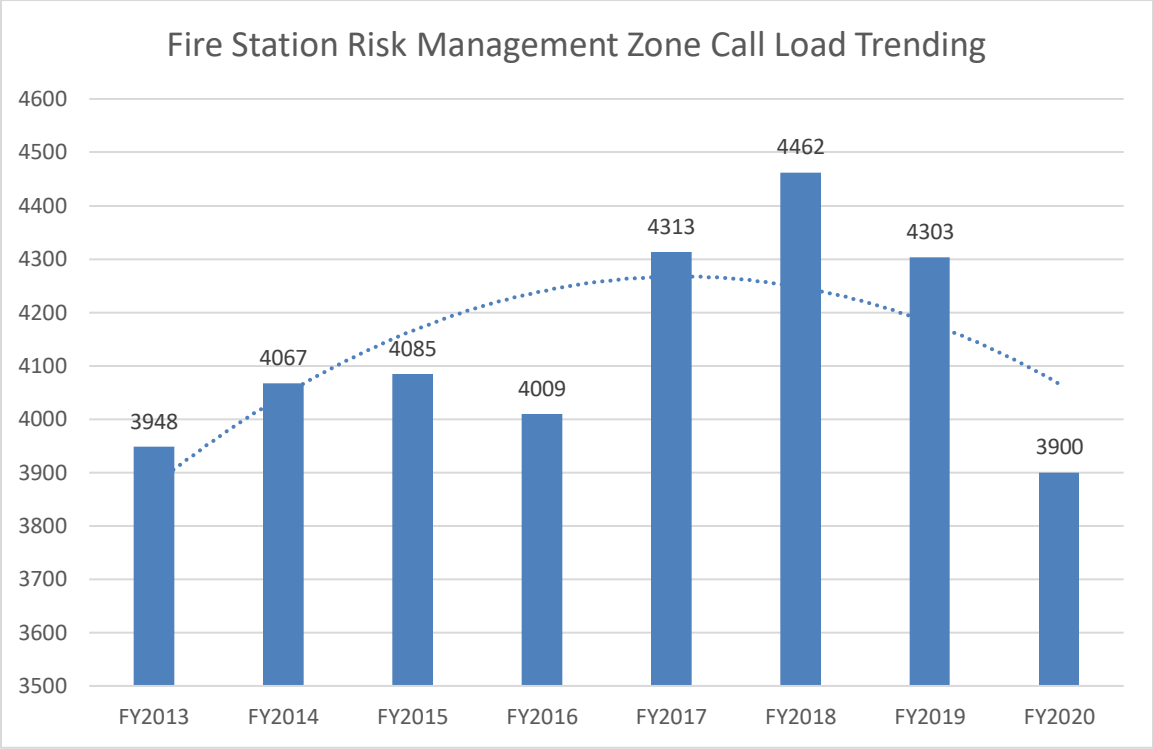
Bethesda Station

6600 Wisconsin Avenue, Bethesda

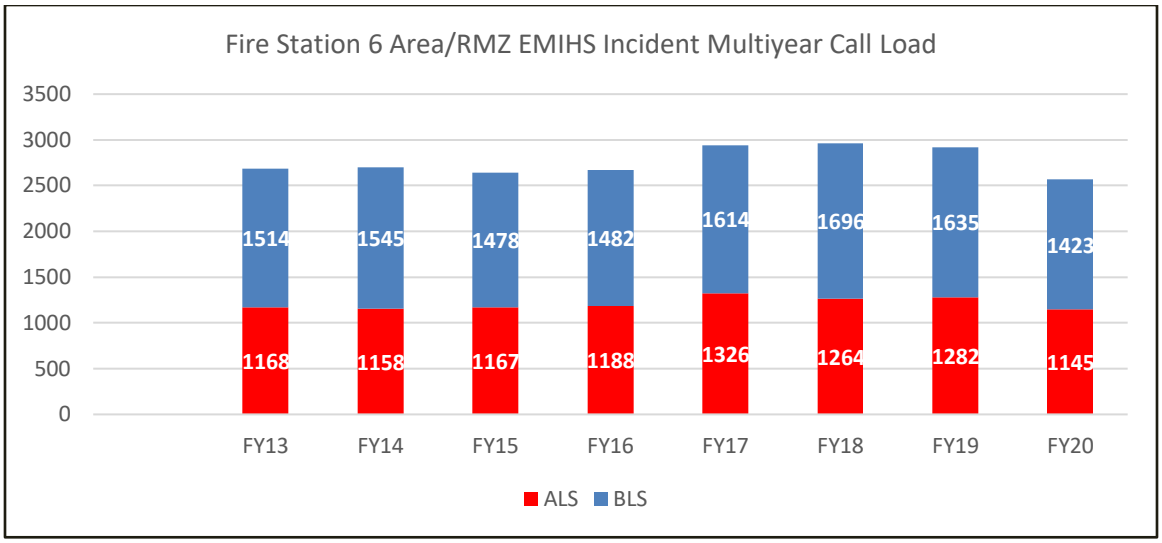
Description

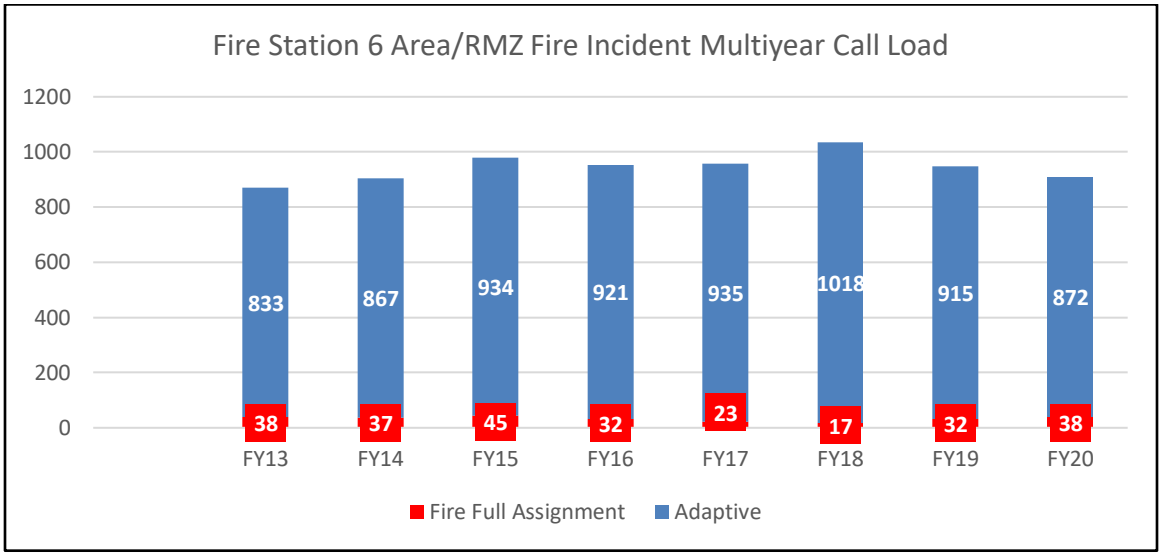
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Truck, Ambulance*
- First Due Area: 3.95 mi^2
- Number of Unique Risk Management Zones (box areas): 16
- Predominant Population Density Zone: Metropolitan

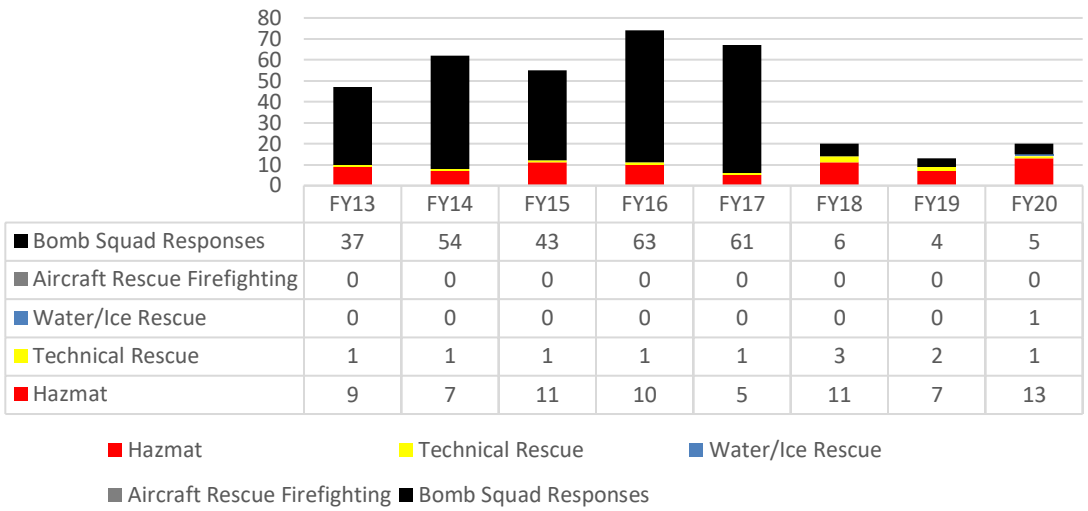
*Monday-Friday during the day only



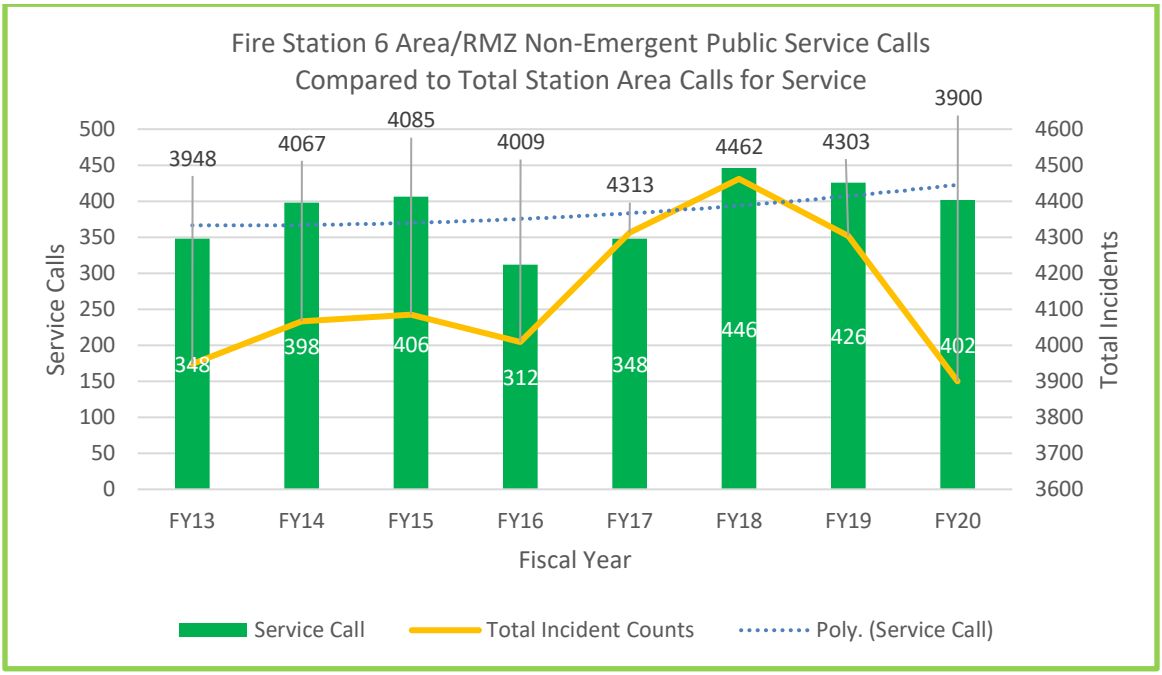
Fire Station 6 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
ALS1	MR	953	936	966	982	1153	1110	1122	1001	
ALS2	HR	215	222	201	206	173	154	160	144	
BLS	LR	1514	1545	1478	1482	1614	1696	1635	1423	
Fire Full Assignment Hydranted	HR	38	37	45	29	20	13	23	25	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	3	3	4	9	13	
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	
Adaptive-1F	LR	53	50	30	44	68	50	53	57	
Adaptive-1N	LR	724	749	818	783	766	872	794	741	
Adaptive-2-3	MR	56	68	86	94	101	96	68	74	
Hazmat Low Risk	LR	0	0	0	1	0	2	0	6	
Hazmat Moderate Risk	MR	0	0	0	6	2	2	2	5	
Hazmat High Risk	HR	5	3	4	1	0	0	1	0	
Hazmat Special Risk	SR	4	4	7	2	3	7	4	2	
Technical Rescue	SR	1	1	1	1	1	3	2	1	
Water/Ice Rescue Moderate	MR	0	0	0	0	0	0	0	1	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		37	54	43	63	61	6	4	5	
Non-Accreditation Counts										
Service Call		348	398	406	312	348	446	426	402	
Special Event							1	0	0	
Mutual Aid										
Total Incident Counts		3948	4067	4085	4009	4313	4462	4303	3900	
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
ALS		1168	1158	1167	1188	1326	1264	1282	1145	
BLS		1514	1545	1478	1482	1614	1696	1635	1423	
Fire Full Assignment		38	37	45	32	23	17	32	38	
Adaptive		833	867	934	921	935	1018	915	872	
Hazmat		9	7	11	10	5	11	7	13	
Technical Rescue		1	1	1	1	1	3	2	1	
Water/Ice Rescue		0	0	0	0	0	0	0	1	
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	
Bomb Squad Responses		37	54	43	63	61	6	4	5	


Fire Station 6 Area/RMZ EMIHS Incident Multiyear Call Load
3500
3000
2500
2000
1500
1000
500
0
1514
1545
1478
1482
1614
1696
1635
1423
1168
1158
1167
1188
1326
1264
1282
1145
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 6 Area/RMZ Fire Incident Multiyear Call Load
1200
1000
800
600
400
200
0
833
867
934
921
935
1018
915
872
38
37
45
32
23
17
32
38
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	37	54	43	63	61	6	4	5
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	0	0	0	0	0	1
Technical Rescue	1	1	1	1	1	3	2	1
Hazmat	9	7	11	10	5	11	7	13



Fire Station 7

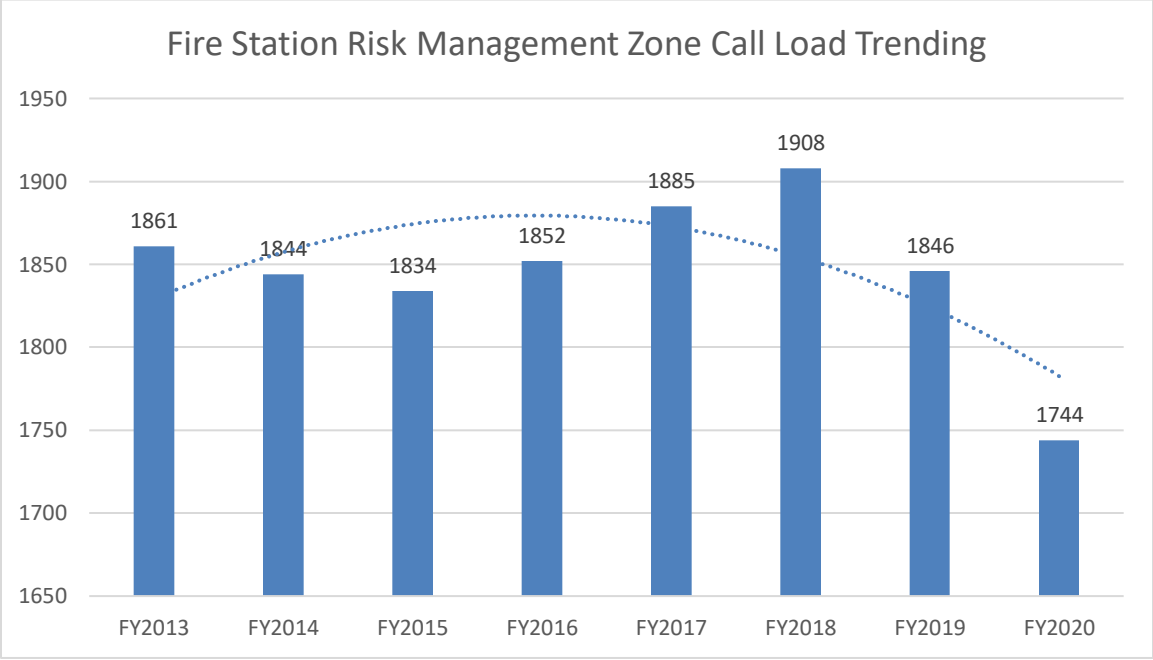
Battalion 2

Chevy Chase Station

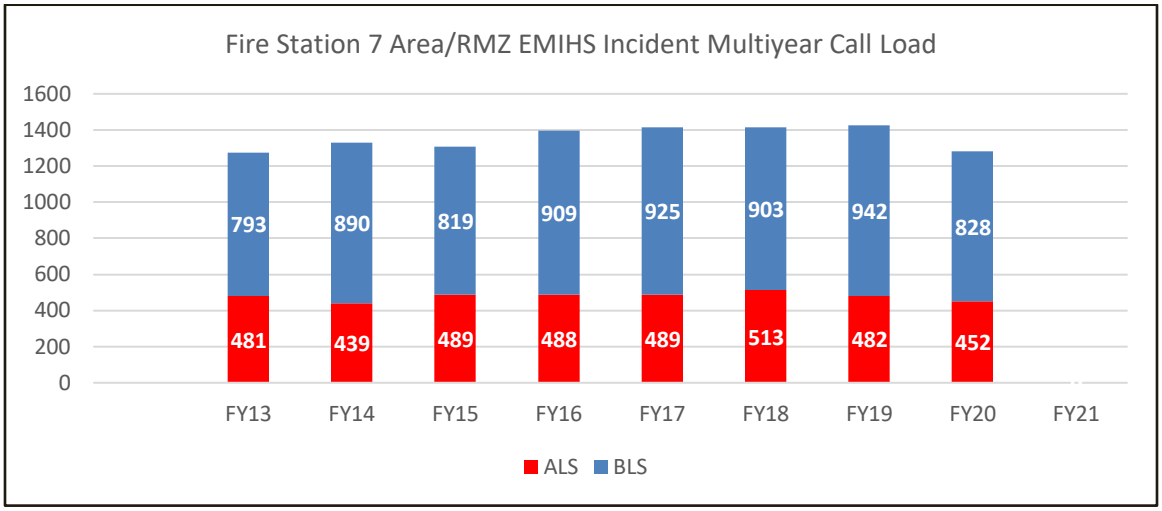
8001 Connecticut Avenue, Chevy Chase

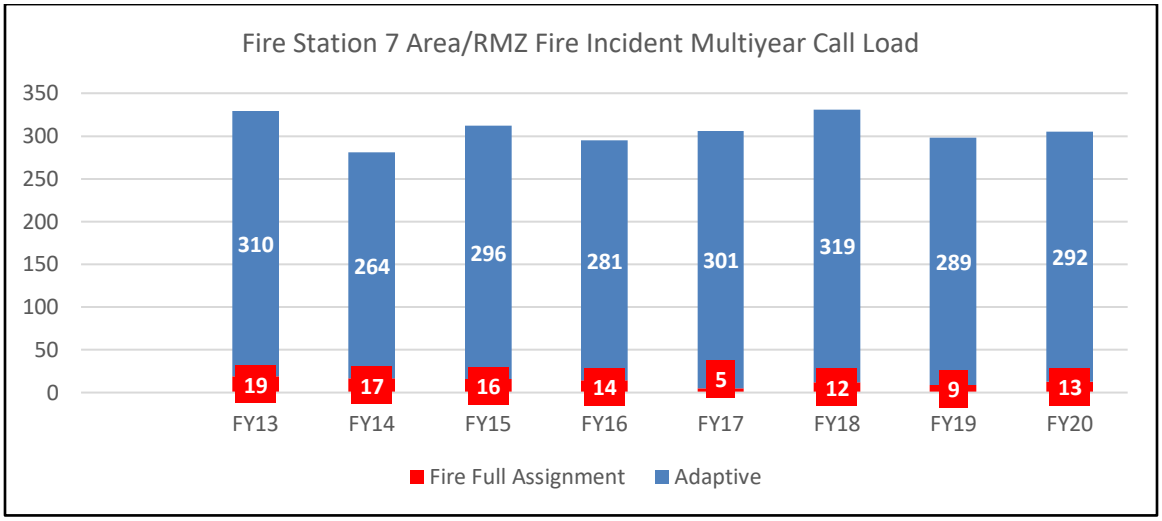
Description

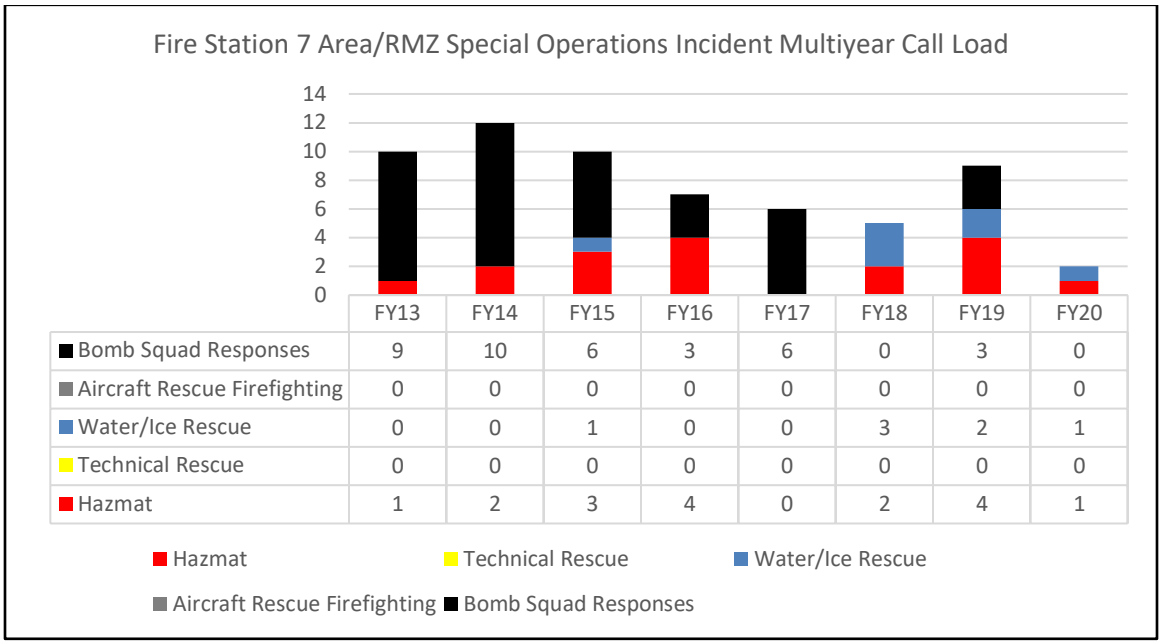
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Hazmat Unit
- Specialty Team: Hazmat
- First Due Area: 3.58 mi^2
- Number of Unique Risk Management Zones (box areas): 18
- Predominant Population Density Zone: Metropolitan



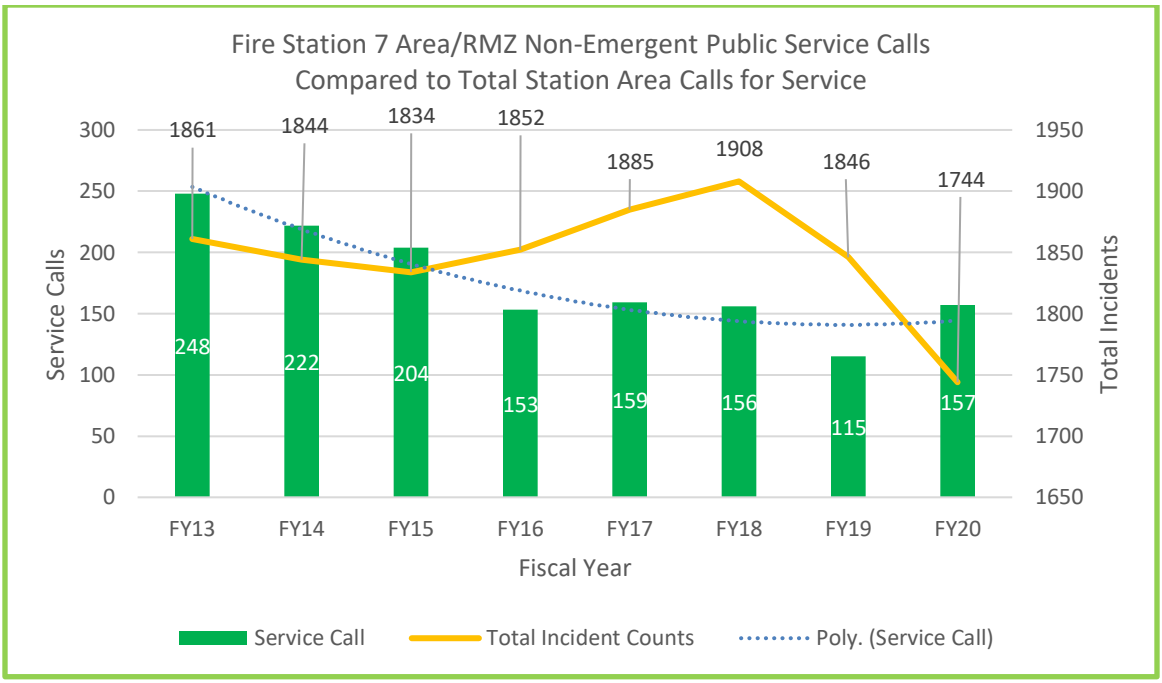
Fire Station 7 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
ALS1	MR	401	368	413	404	440	460	412	391	
ALS2	HR	80	71	76	84	49	53	70	61	
BLS	LR	793	890	819	909	925	903	942	828	
Fire Full Assignment Hydranted	HR	19	17	16	12	5	11	8	12	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	2	0	1	1	1	
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	
Adaptive-1F	LR	42	41	29	28	29	30	20	25	
Adaptive-1N	LR	240	205	240	225	228	261	239	236	
Adaptive-2-3	MR	28	18	27	28	44	28	30	31	
Hazmat Low Risk	LR	0	0	0	0	0	0	1	0	
Hazmat Moderate Risk	MR	0	0	1	4	0	1	2	0	
Hazmat High Risk	HR	0	2	1	0	0	0	0	1	
Hazmat Special Risk	SR	1	0	1	0	0	1	1	0	
Technical Rescue	SR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Moderate	MR	0	0	1	0	0	3	2	1	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		9	10	6	3	6	0	3	0	
Non-Accreditation Counts										
Service Call		248	222	204	153	159	156	115	157	
Special Event							0	0	0	
Mutual Aid										
Total Incident Counts		1861	1844	1834	1852	1885	1908	1846	1744	0
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
ALS		481	439	489	488	489	513	482	452	0
BLS		793	890	819	909	925	903	942	828	0
Fire Full Assignment		19	17	16	14	5	12	9	13	0
Adaptive		310	264	296	281	301	319	289	292	0
Hazmat		1	2	3	4	0	2	4	1	0
Technical Rescue		0	0	0	0	0	0	0	0	0
Water/Ice Rescue		0	0	1	0	0	3	2	1	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	0
Bomb Squad Responses		9	10	6	3	6	0	3	0	0


Fire Station 7 Area/RMZ EMIHS Incident Multiyear Call Load
1600
1400
1200
1000
800
600
400
200
0
793
890
819
909
925
903
942
828
481
439
489
488
489
513
482
452
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
FY21
ALS
BLS


Fire Station 7 Area/RMZ Fire Incident Multiyear Call Load
350
300
250
200
150
100
50
0
310
264
296
281
301
319
289
292
19
17
16
14
5
12
9
13
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	9	10	6	3	6	0	3	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	1	0	0	3	2	1
Technical Rescue	0	0	0	0	0	0	0	0
Hazmat	1	2	3	4	0	2	4	1



Fire Station 8

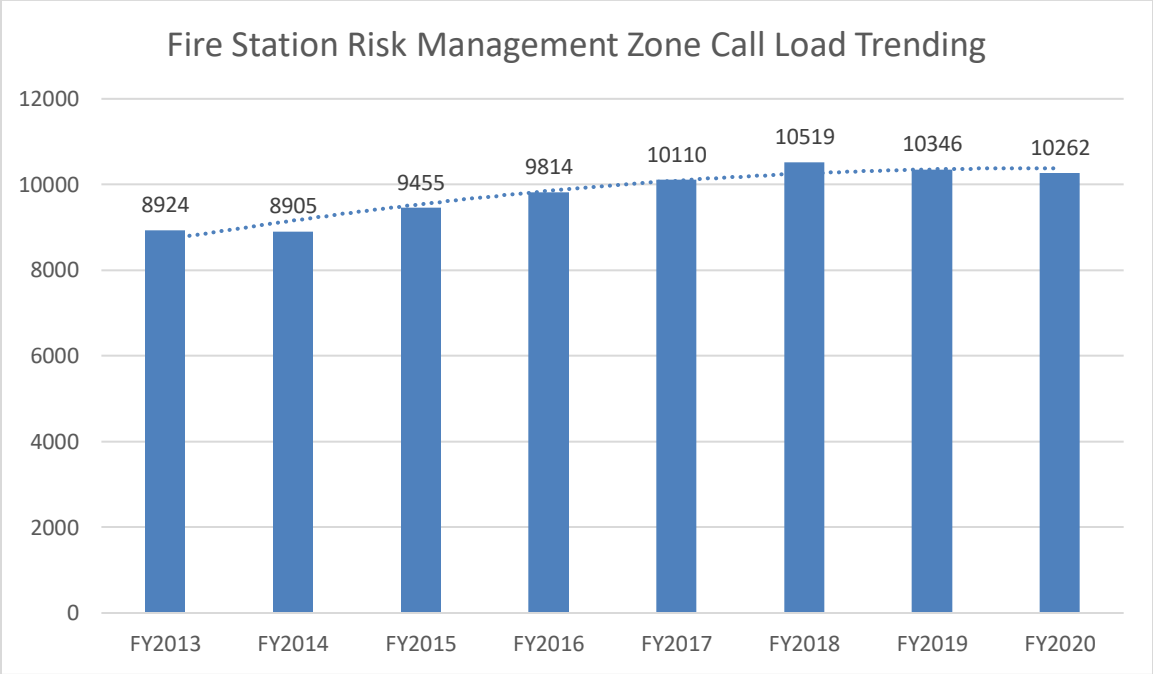
Battalion 3

Gaithersburg Station

801 Russell Avenue, Gaithersburg

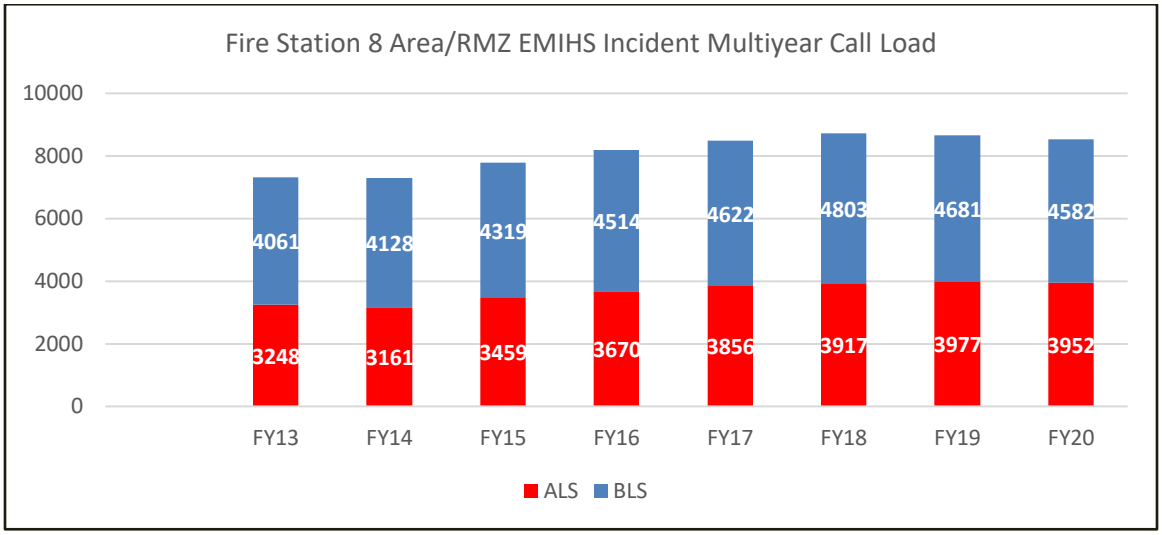
Description

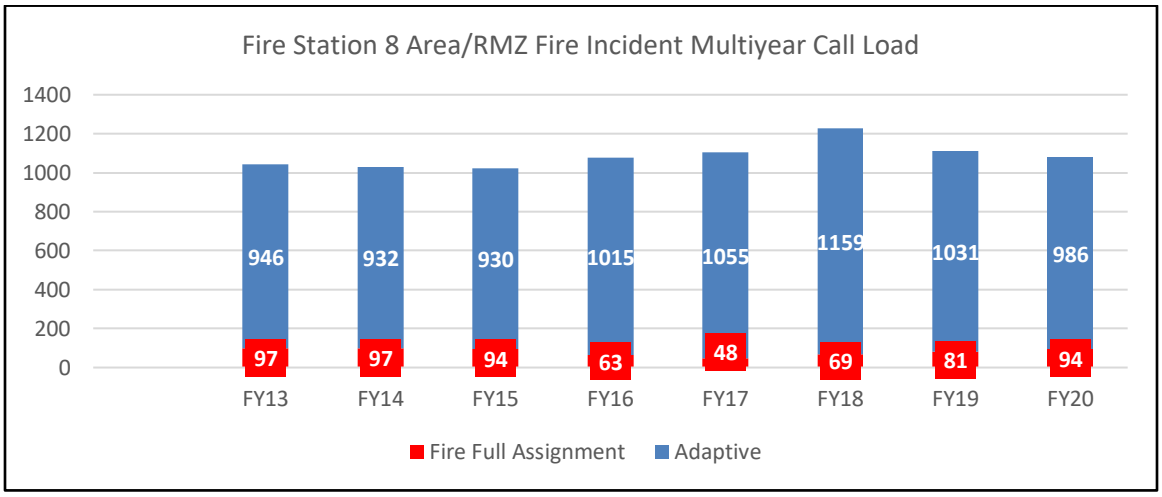
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Paramedic Aerial Tower, Ambulance, 2 Medic Units, Brush Truck, ATV
- First Due Area: 12.73 mi^2
- Number of Unique Risk Management Zones (box areas): 25
- Predominant Population Density Zone: Metropolitan

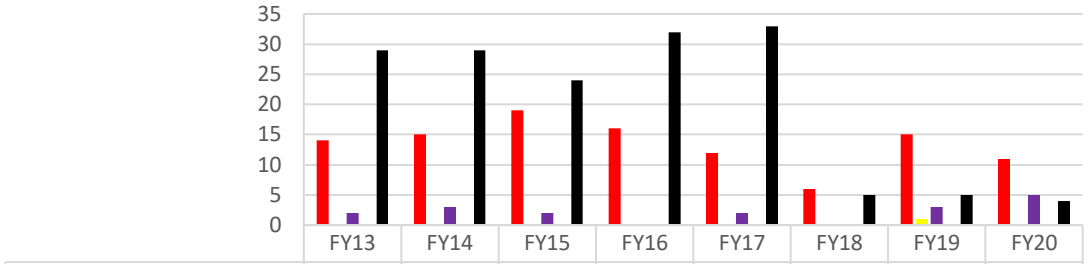


Fire Station 8 (Urban Density Zone) Fiscal Year Response Area:
Number of DISPATCHED Incidents Aggregated by Accreditation Program

Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	2778	2670	2968	3092	3394	3454	3464	3480	
ALS2	HR	470	491	491	578	462	463	513	472	
BLS	LR	4061	4128	4319	4514	4622	4803	4681	4582	
Fire Full Assignment Hydranted	HR	97	97	94	62	48	67	76	93	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	1	0	2	5	1	
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	
Adaptive-1F	LR	148	135	126	161	144	136	99	106	
Adaptive-1N	LR	651	664	645	683	719	795	745	728	
Adaptive-2-3	MR	147	133	159	171	192	228	187	152	
Hazmat Low Risk	LR	0	0	0	1	0	0	0	5	
Hazmat Moderate Risk	MR	0	0	6	12	11	5	11	4	
Hazmat High Risk	HR	12	11	9	0	0	1	1	1	
Hazmat Special Risk	SR	2	4	4	3	1	0	3	1	
Technical Rescue	SR	0	0	0	0	0	0	1	0	
Water/Ice Rescue Moderate	MR	2	3	2	0	2	0	3	5	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		29	29	24	32	33	5	5	4	
Non-Accreditation Counts										
Service Call		499	512	584	475	457	539	531	608	
Special Event		28	28	24	29	25	21	21	20	
Mutual Aid										
Total Incident Counts		8924	8905	9455	9814	10110	10519	10346	10262	0
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS		3248	3161	3459	3670	3856	3917	3977	3952	0
BLS		4061	4128	4319	4514	4622	4803	4681	4582	0
Fire Full Assignment		97	97	94	63	48	69	81	94	0
Adaptive		946	932	930	1015	1055	1159	1031	986	0
Hazmat		14	15	19	16	12	6	15	11	0
Technical Rescue		0	0	0	0	0	0	1	0	0
Water/Ice Rescue		2	3	2	0	2	0	3	5	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	0
Bomb Squad Responses		29	29	24	32	33	5	5	4	0

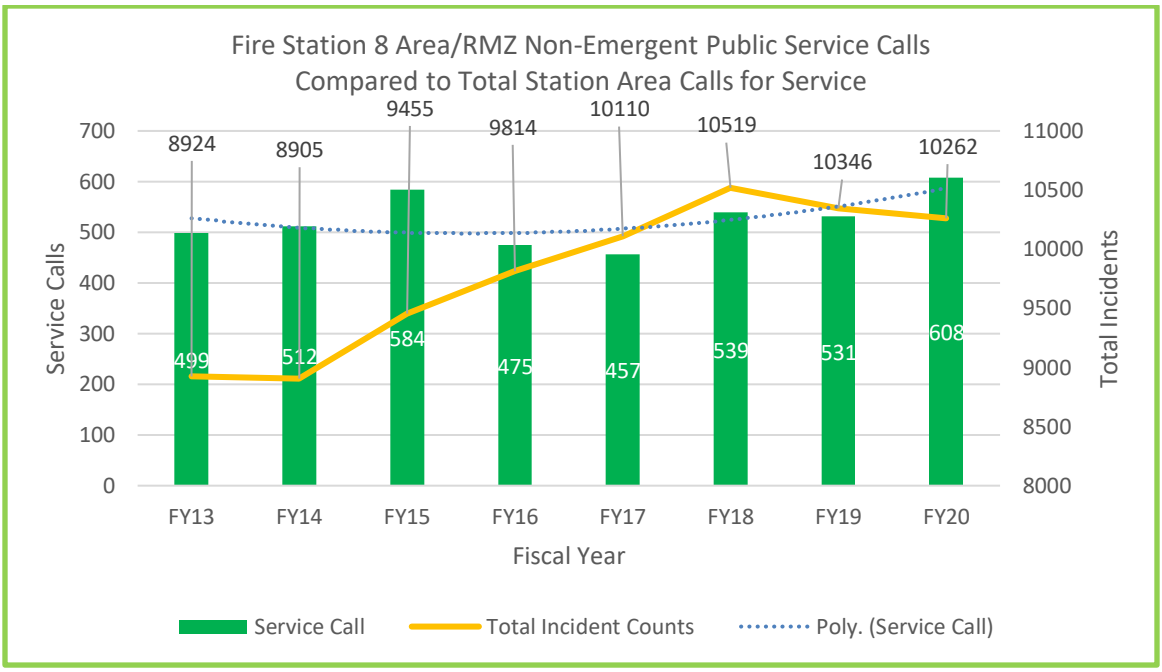

Fire Station 8 Area/RMZ EMIHS Incident Multiyear Call Load
10000
8000
6000
4000
2000
0
4061
4128
4319
4514
4622
4803
4681
4582
3248
3161
3459
3670
3856
3917
3977
3952
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 8 Area/RMZ Fire Incident Multiyear Call Load
1400
1200
1000
800
600
400
200
0
946
932
930
1015
1055
1159
1031
986
97
97
94
63
48
69
81
94
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Hazmat	14	15	19	16	12	6	15	11
Technical Rescue	0	0	0	0	0	0	1	0
Water/Ice Rescue	2	3	2	0	2	0	3	5
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Bomb Squad Responses	29	29	24	32	33	5	5	4

Hazmat Technical Rescue Water/Ice Rescue
Aircraft Rescue Firefighting Bomb Squad Responses



Fire Station 9

Battalion 5

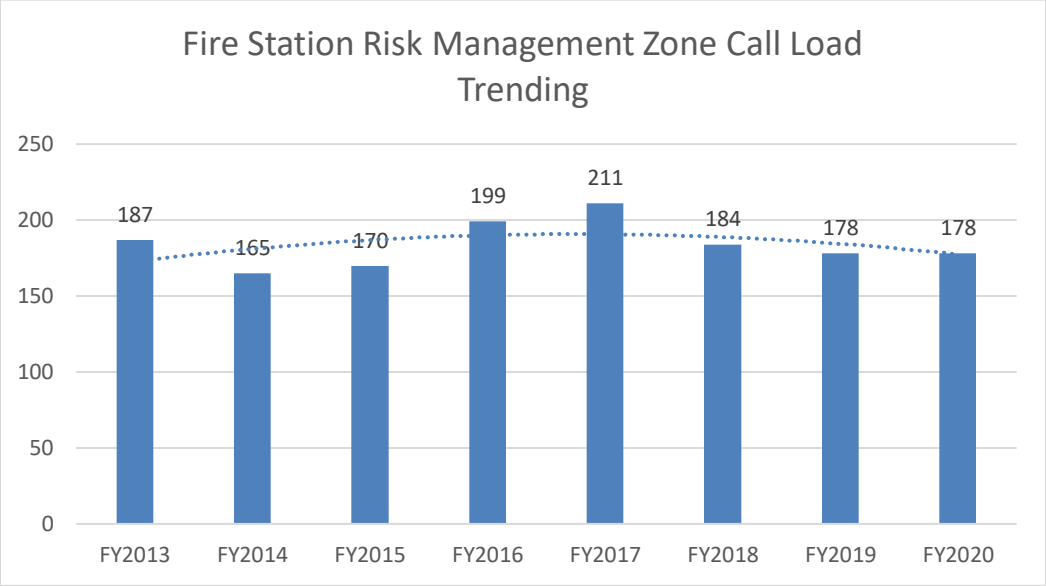
Hyattstown Station

25801 Frederick Road, Clarksburg

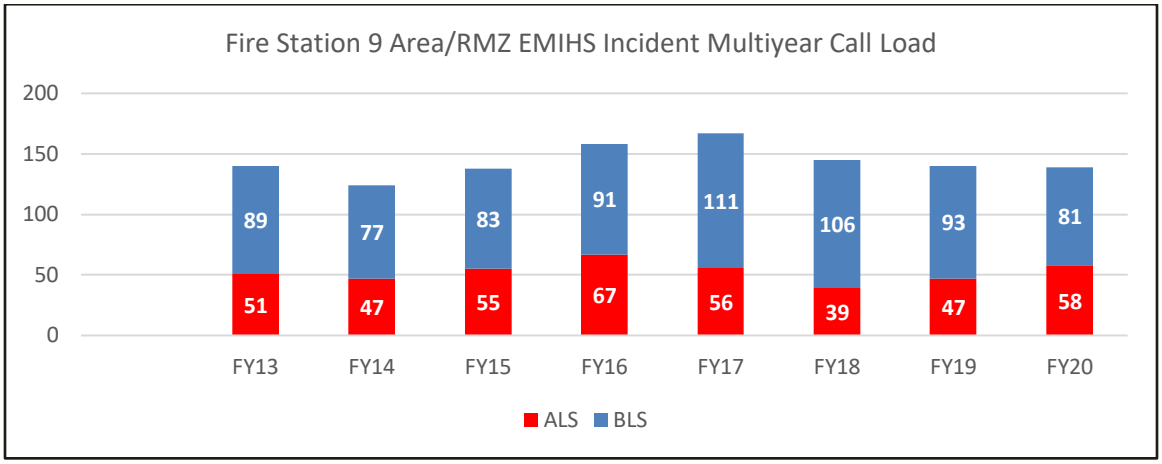
Description

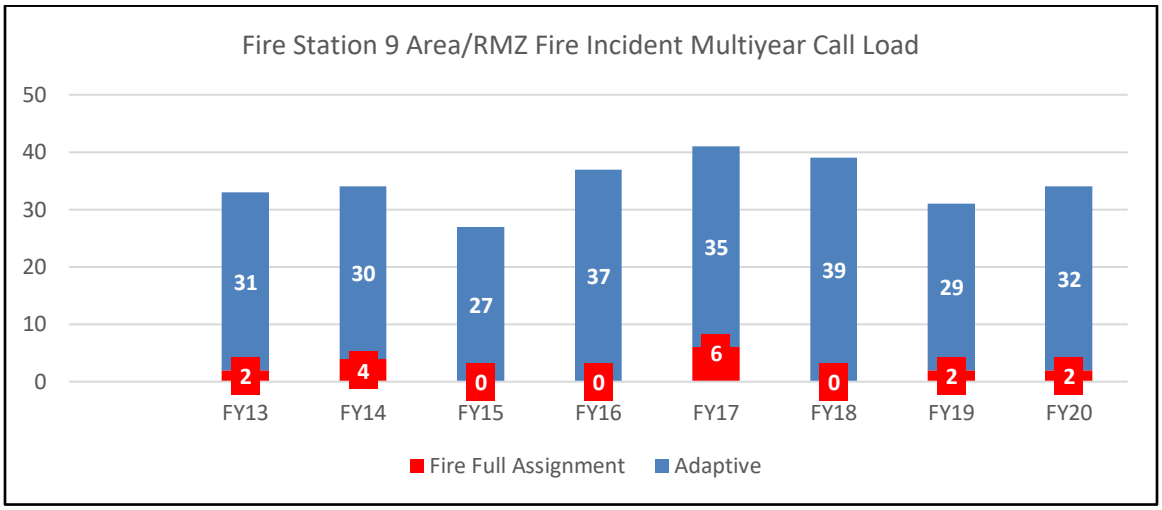
- Ownership: Volunteer
- Apparatus Housed: Paramedic Rescue Engine, Ambulance*, Tanker, 2 Brush Trucks; In a Morton Building a Brush Engine is housed
- First Due Area: 15.42 mi^2; Also covers out-of-county area in Frederick County of 15 mi^2
- Number of Unique Risk Management Zones (box areas): 9
- Predominant Population Density Zone: Rural

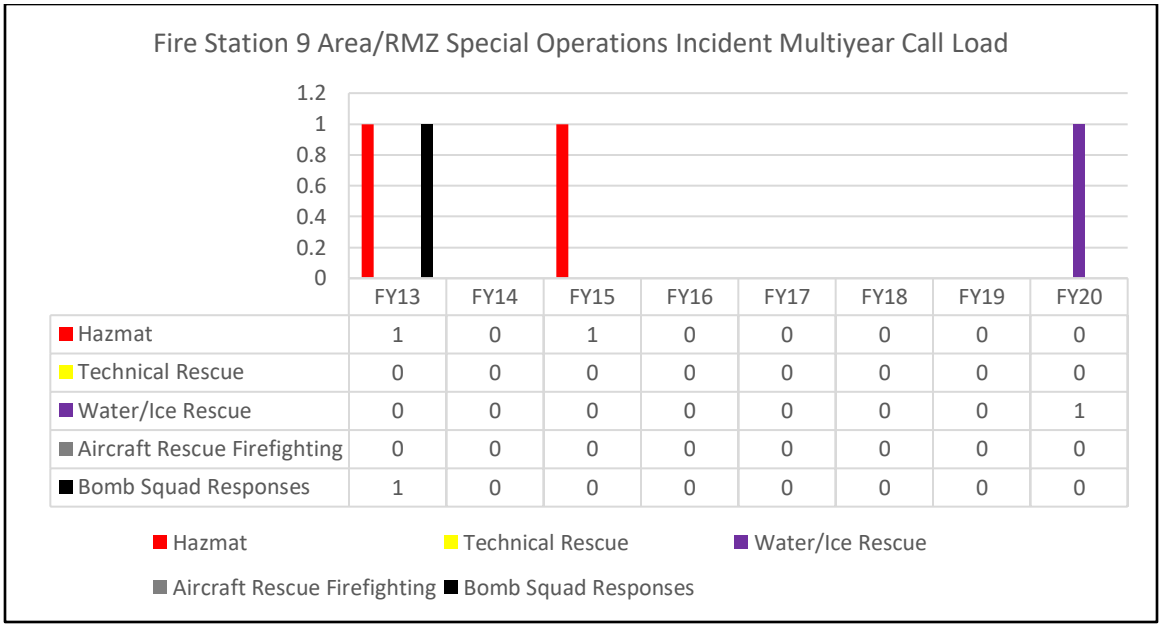
*Only available when volunteer personnel are in the station



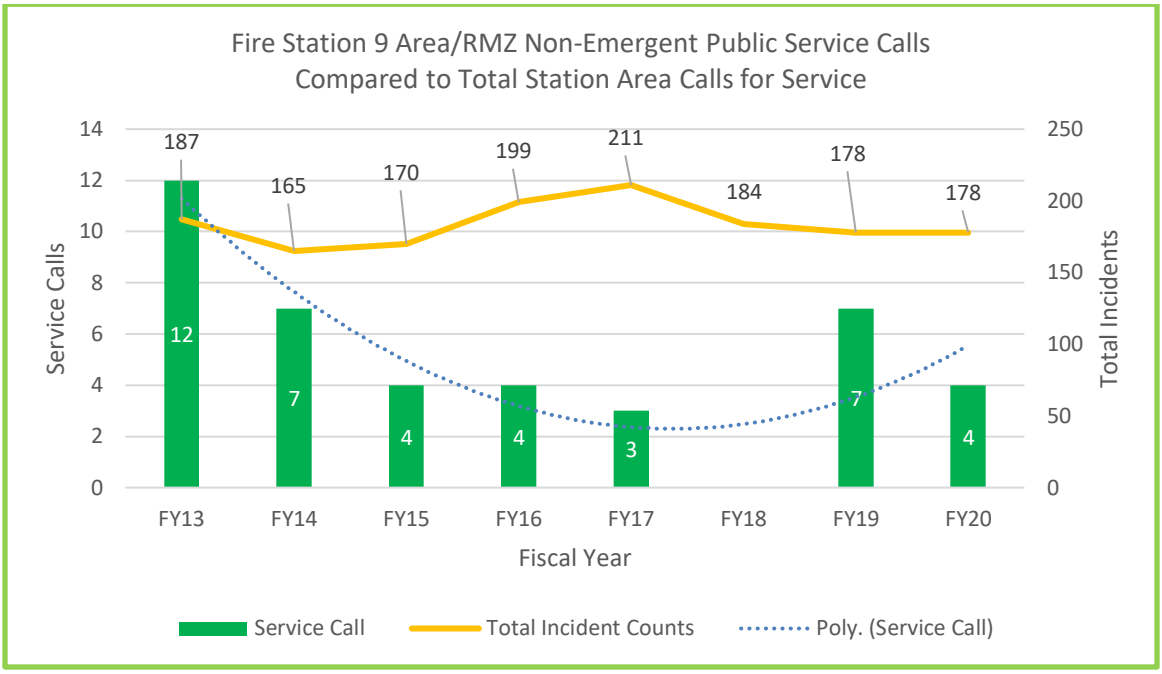
Fire Station 9 (Rural Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	45	44	44	58	51	35	45	50	
ALS2	HR	6	3	11	9	5	4	2	8	
BLS	LR	89	77	83	91	111	106	93	81	
Fire Full Assignment Hydranted	HR	1	2	0	0	3	0	1	2	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0	
FFA-Non-hydranted Area	SR	1	2	0	0	3	0	1	0	
Adaptive-1F	LR	20	11	10	9	10	15	9	12	
Adaptive-1N	LR	9	18	17	23	22	21	15	19	
Adaptive-2-3	MR	2	1	0	5	3	3	5	1	
Hazmat Low Risk	LR	0	0	0	0	0	0	0	0	
Hazmat Moderate Risk	MR	1	0	1	0	0	0	0	0	
Hazmat High Risk	HR	0	0	0	0	0	0	0	0	
Hazmat Special Risk	SR	0	0	0	0	0	0	0	0	
Technical Rescue	SR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Moderate	MR	0	0	0	0	0	0	0	1	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		1	0	0	0	0	0	0	0	
Non-Accreditation Counts										
Service Call		12	7	4	4	3	0	7	4	
Special Event							0			
Mutual Aid										
Total Incident Counts		187	165	170	199	211	184	178	178	0
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS		51	47	55	67	56	39	47	58	0
BLS		89	77	83	91	111	106	93	81	0
Fire Full Assignment		2	4	0	0	6	0	2	2	0
Adaptive		31	30	27	37	35	39	29	32	0
Hazmat		1	0	1	0	0	0	0	0	0
Technical Rescue		0	0	0	0	0	0	0	0	0
Water/Ice Rescue		0	0	0	0	0	0	0	1	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	0
Bomb Squad Responses		1	0	0	0	0	0	0	0	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Hazmat	1	0	1	0	0	0	0	0
Technical Rescue	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	0	0	0	0	0	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Bomb Squad Responses	1	0	0	0	0	0	0	0


Fire Station 9 Area/RMZ Non-Emergent Public Service Calls
Compared to Total Station Area Calls for Service
Service Calls
Total Incidents
Fiscal Year
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
187
165
170
199
211
184
178
178
12
7
4
4
3
7
4
Service Call
Total Incident Counts
Poly. (Service Call)

Fire Station 10

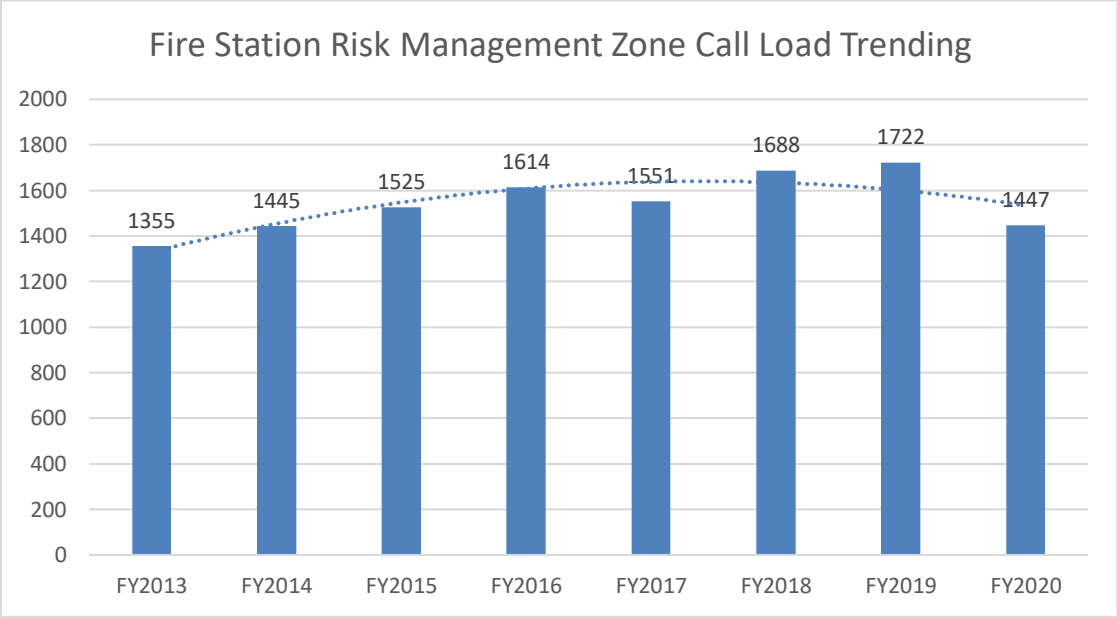
Battalion 2

Cabin John Station

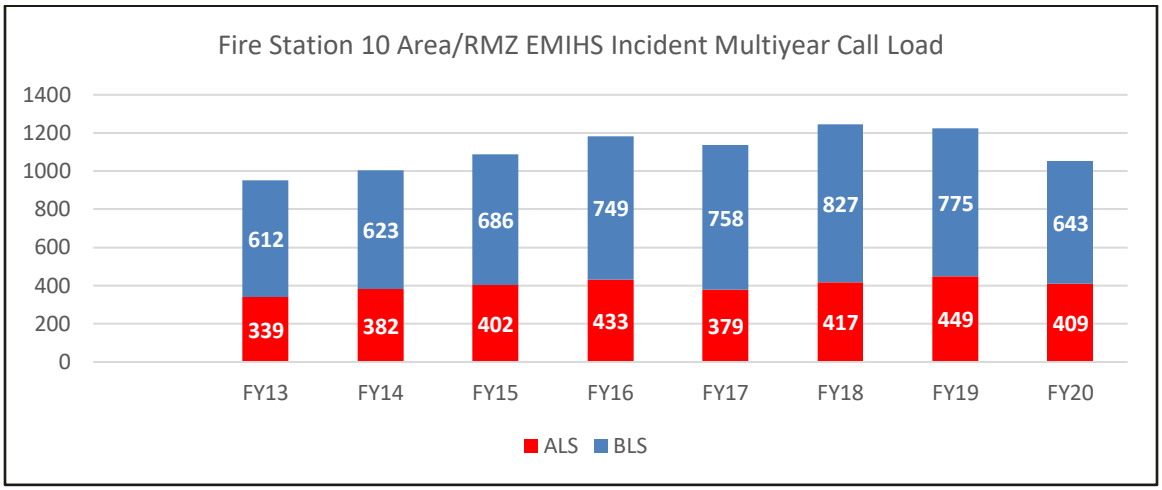
8001 River Road, Bethesda

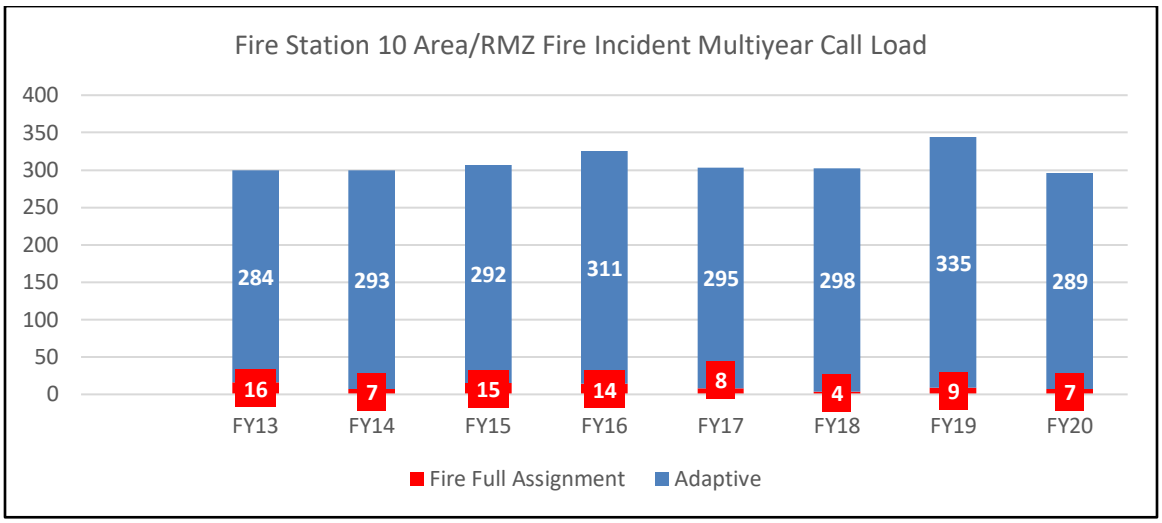
Description

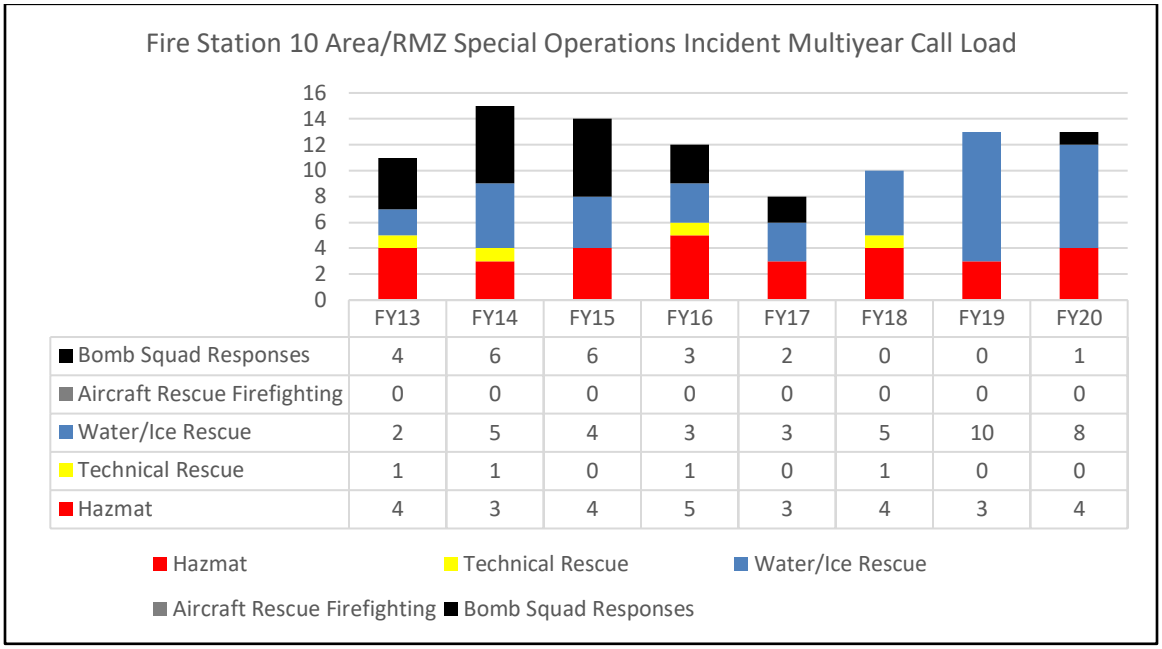
- Ownership: County
- Apparatus Housed: Paramedic Engine, Truck, Ambulance, 2 Boats
- Specialty Team: Swift Water Rescue
- First Due Area: 9.5 mi^2
- Number of Unique Risk Management Zones (box areas): 33
- Predominant Population Density Zone: Suburban



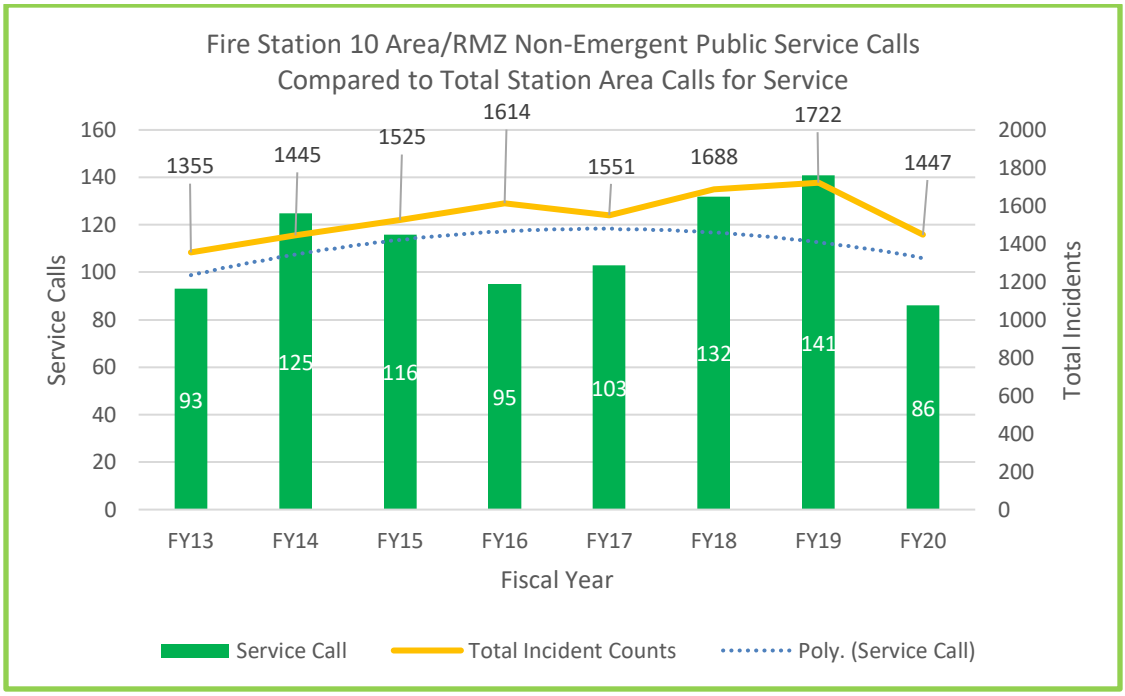
Fire Station 10 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program										
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS1	MR	283	327	357	364	322	361	395	369	
ALS2	HR	56	55	45	69	57	56	54	40	
BLS	LR	612	623	686	749	758	827	775	643	
Fire Full Assignment Hydranted	HR	16	7	15	14	8	4	9	7	
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0	
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0	
Adaptive-1F	LR	43	34	31	39	51	31	42	23	
Adaptive-1N	LR	211	228	240	251	208	240	266	241	
Adaptive-2-3	MR	30	31	21	21	36	27	27	25	
Hazmat Low Risk	LR	0	1	0	0	0	0	0	2	
Hazmat Moderate Risk	MR	1	1	0	3	3	4	3	1	
Hazmat High Risk	HR	0	1	2	0	0	0	0	0	
Hazmat Special Risk	SR	3	0	2	2	0	0	0	1	
Technical Rescue	SR	1	1	0	1	0	1	0	0	
Water/Ice Rescue Moderate	MR	1	3	3	1	0	1	2	5	
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0	
Water/Ice Rescue Special	SR	1	2	1	2	3	4	8	3	
ARFF High Risk	HR	0	0	0	0	0	0	0	0	
ARFF Special Risk	SR	0	0	0	0	0	0	0	0	
Bomb Squad Moderate Risk	MR									
Bomb Squad High Risk	HR									
Bomb Squad Special Risk	SR									
Bomb Squad TOTAL		4	6	6	3	2	0	0	1	
Non-Accreditation Counts										
Service Call		93	125	116	95	103	132	141	86	
Special Event							0	0	0	
Mutual Aid										
Total Incident Counts		1355	1445	1525	1614	1551	1688	1722	1447	0
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21Q1
ALS		339	382	402	433	379	417	449	409	0
BLS		612	623	686	749	758	827	775	643	0
Fire Full Assignment		16	7	15	14	8	4	9	7	0
Adaptive		284	293	292	311	295	298	335	289	0
Hazmat		4	3	4	5	3	4	3	4	0
Technical Rescue		1	1	0	1	0	1	0	0	0
Water/Ice Rescue		2	5	4	3	3	5	10	8	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0	0
Bomb Squad Responses		4	6	6	3	2	0	0	1	0


Fire Station 10 Area/RMZ EMIHS Incident Multiyear Call Load
1400
1200
1000
800
600
400
200
0
612
623
686
749
758
827
775
643
339
382
402
433
379
417
449
409
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 10 Area/RMZ Fire Incident Multiyear Call Load
400
350
300
250
200
150
100
50
0
284
293
292
311
295
298
335
289
16
7
15
14
8
4
9
7
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	4	6	6	3	2	0	0	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	2	5	4	3	3	5	10	8
Technical Rescue	1	1	0	1	0	1	0	0
Hazmat	4	3	4	5	3	4	3	4



Fire Station 11

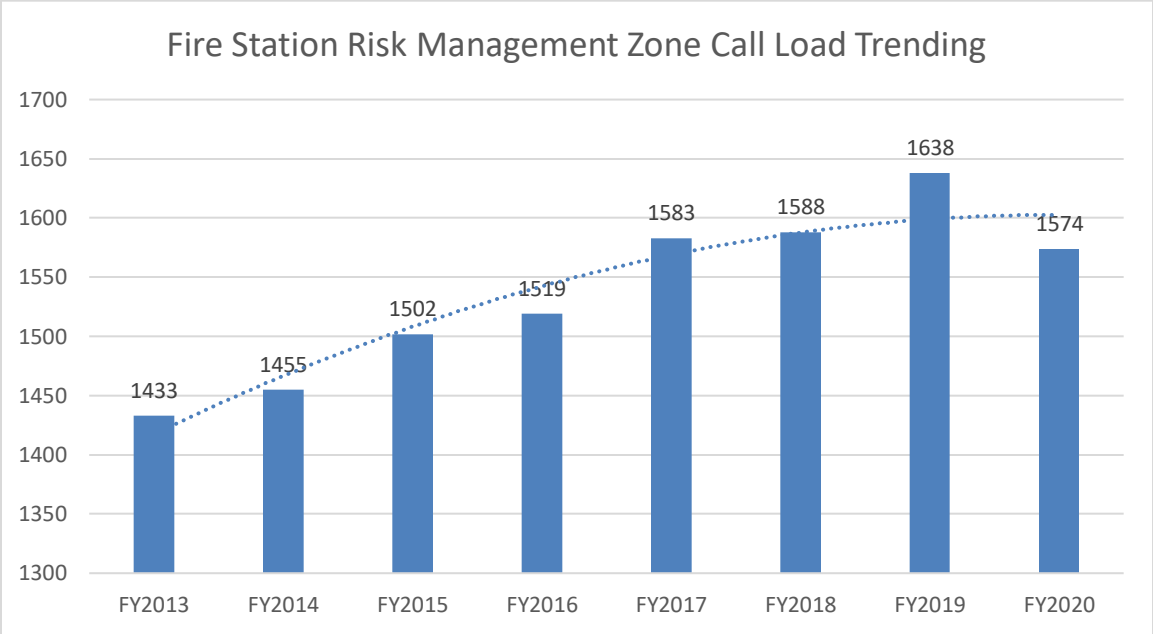
Battalion 2

Glen Echo Station

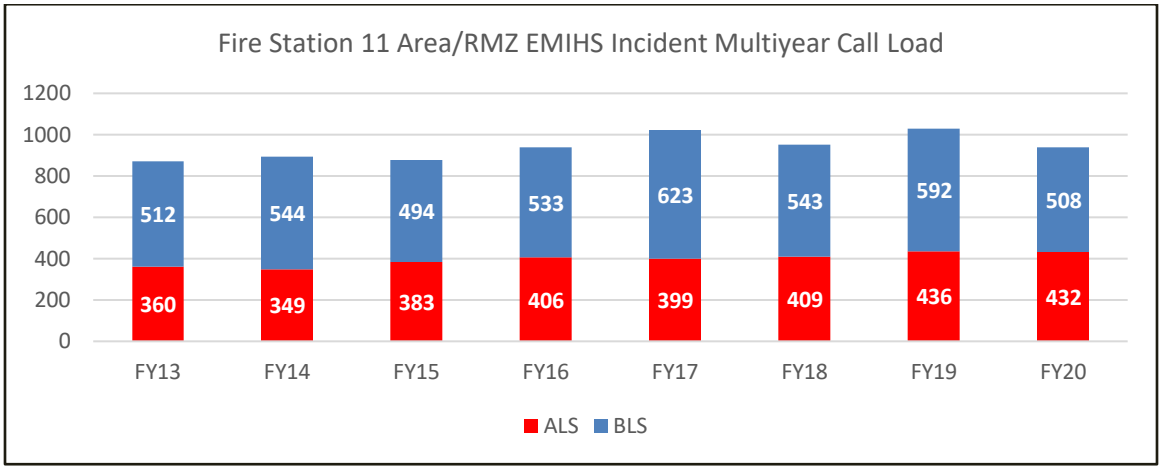
5920 Massachusetts Avenue, Bethesda

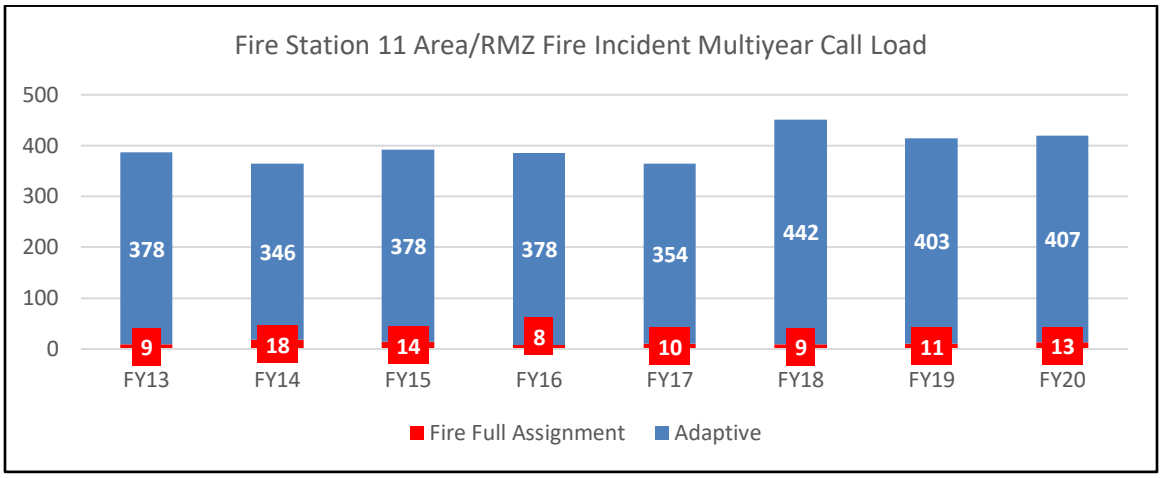
Description

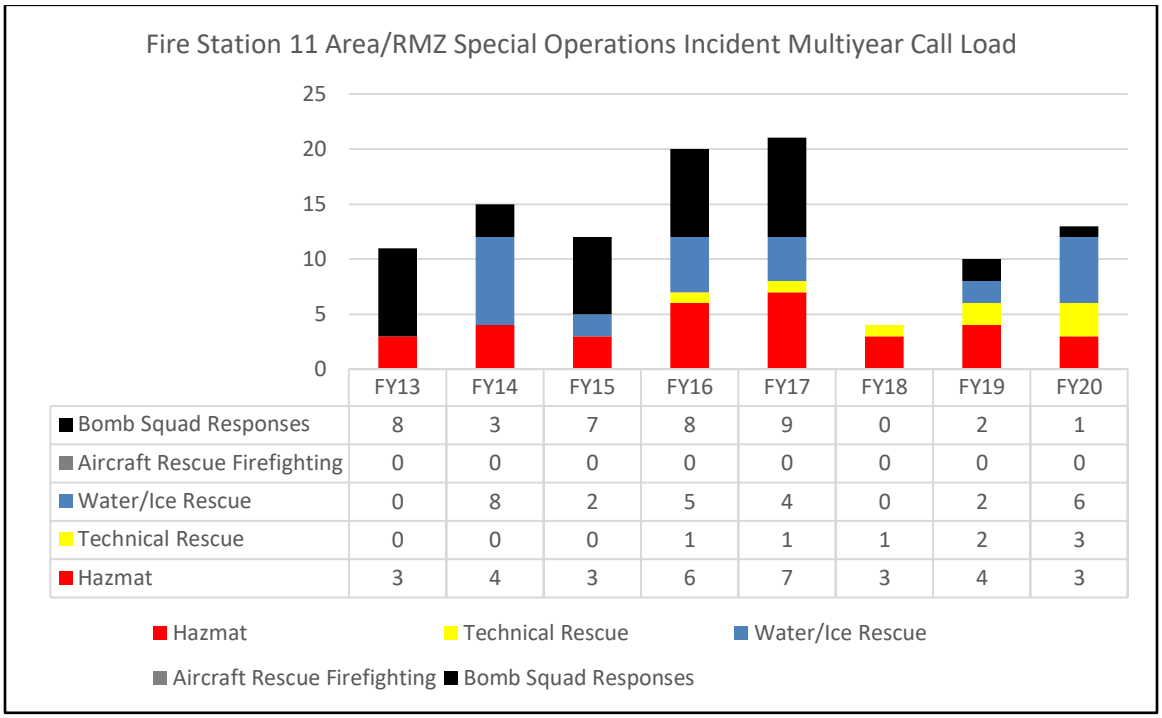
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance, ATV
- First Due Area: 5.17 mi^2
- Number of Unique Risk Management Zones (box areas): 8
- Predominant Population Density Zone: Metropolitan



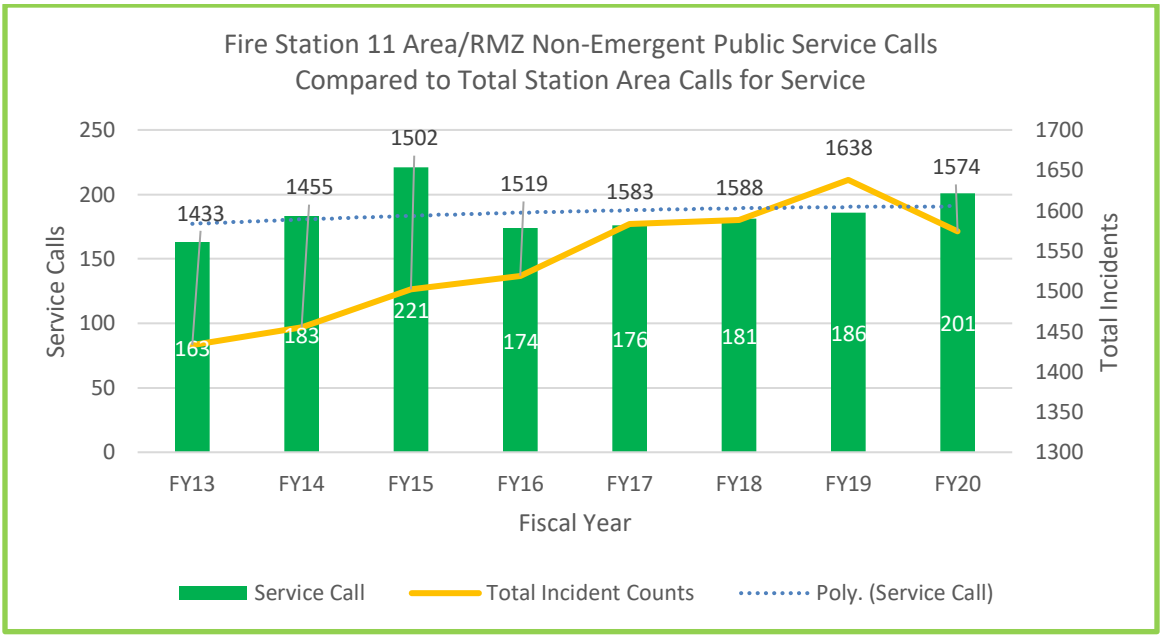
Fire Station 11 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	283	283	296	339	352	355	370	387
ALS2	HR	77	66	87	67	47	54	66	45
BLS	LR	512	544	494	533	623	543	592	508
Fire Full Assignment Hydranted	HR	9	18	14	6	10	9	10	12
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	2	0	0	1	1
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	20	24	18	21	25	36	24	27
Adaptive-1N	LR	337	290	339	313	291	360	338	343
Adaptive-2-3	MR	21	32	21	44	38	46	41	37
Hazmat Low Risk	LR	0	3	0	0	0	1	0	2
Hazmat Moderate Risk	MR	2	0	1	4	3	1	1	1
Hazmat High Risk	HR	1	1	1	1	1	0	1	0
Hazmat Special Risk	SR	0	0	1	1	3	1	2	0
Technical Rescue	SR	0	0	0	1	1	1	2	3
Water/Ice Rescue Moderate	MR	0	1	2	4	1	0	0	4
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	7	0	1	3	0	2	2
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		8	3	7	8	9	0	2	1
Non-Accreditation Counts									
Service Call		163	183	221	174	176	181	186	201
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		1433	1455	1502	1519	1583	1588	1638	1574
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		360	349	383	406	399	409	436	432
BLS		512	544	494	533	623	543	592	508
Fire Full Assignment		9	18	14	8	10	9	11	13
Adaptive		378	346	378	378	354	442	403	407
Hazmat		3	4	3	6	7	3	4	3
Technical Rescue		0	0	0	1	1	1	2	3
Water/Ice Rescue		0	8	2	5	4	0	2	6
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		8	3	7	8	9	0	2	1


Fire Station 11 Area/RMZ EMIHS Incident Multiyear Call Load
1200
1000
800
600
400
200
0
512
544
494
533
623
543
592
508
360
349
383
406
399
409
436
432
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
ALS
BLS


Fire Station 11 Area/RMZ Fire Incident Multiyear Call Load
500
400
300
200
100
0
378
346
378
378
354
442
403
407
9
18
14
8
10
9
11
13
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Fire Full Assignment
Adaptive



	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	8	3	7	8	9	0	2	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	8	2	5	4	0	2	6
Technical Rescue	0	0	0	1	1	1	2	3
Hazmat	3	4	3	6	7	3	4	3



Fire Station 12

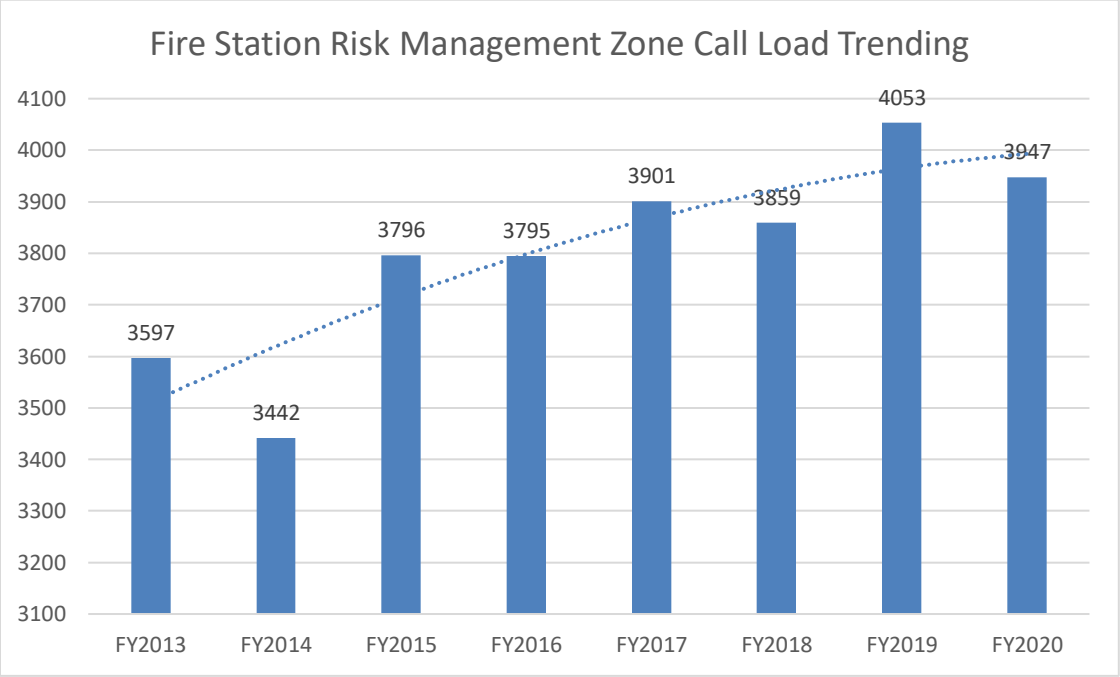
Battalion 1

Hillandale Station

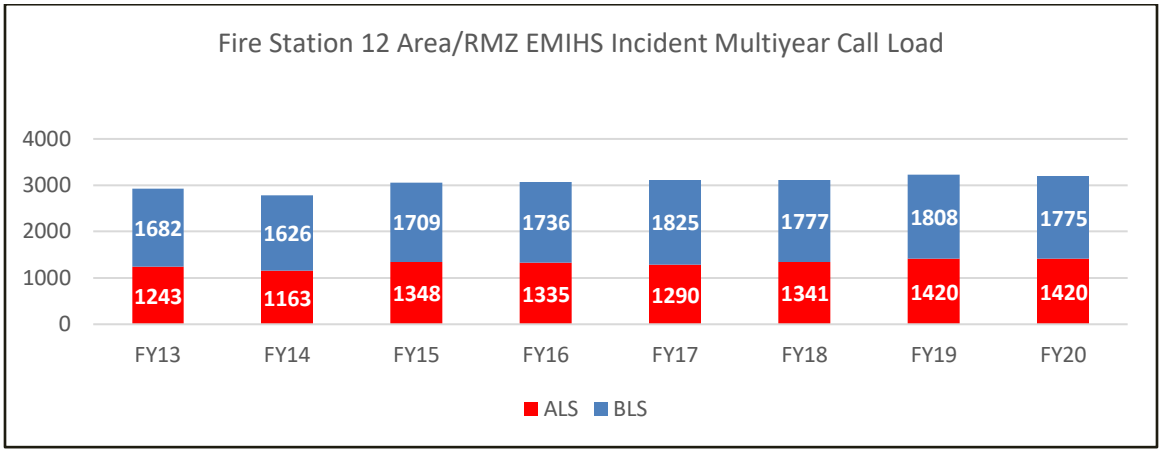
10617 New Hampshire Avenue, Silver Spring

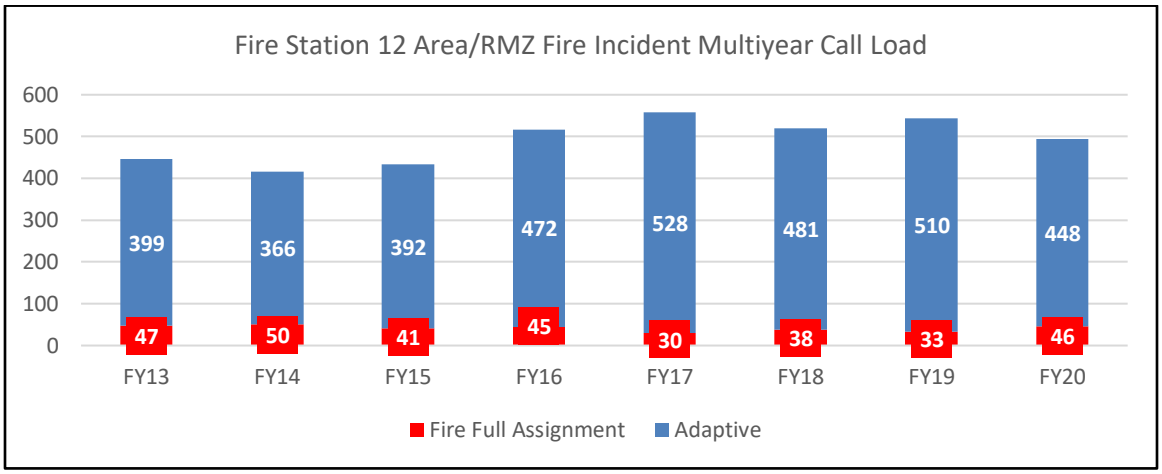
Description

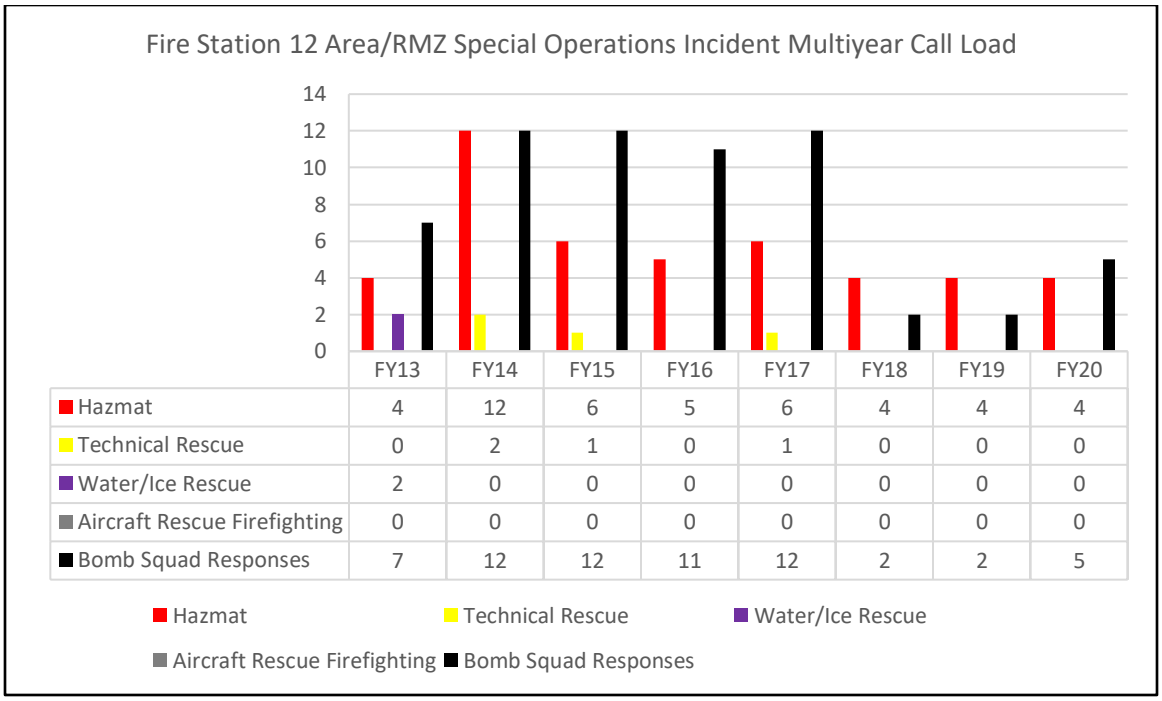
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance, Medic, Battalion Chief
- First Due Area: 6.39 mi^2
- Number of Unique Risk Management Zones (box areas): 16
- Predominant Population Density Zone: Metropolitan



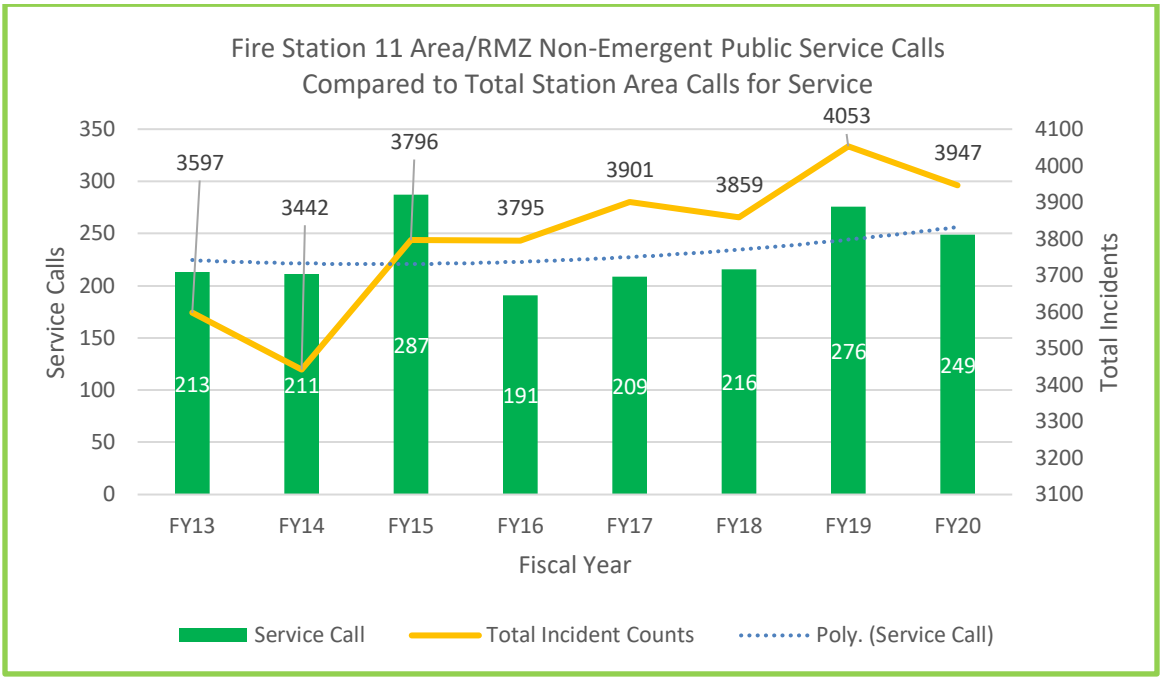
Fire Station 12 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	1016	989	1147	1107	1154	1175	1238	1228
ALS2	HR	227	174	201	228	136	166	182	192
BLS	LR	1682	1626	1709	1736	1825	1777	1808	1775
Fire Full Assignment Hydranted	HR	47	50	41	36	26	31	21	31
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	9	4	7	12	15
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	97	64	46	71	70	50	47	71
Adaptive-1N	LR	237	246	260	316	346	344	349	311
Adaptive-2-3	MR	65	56	86	85	112	87	114	66
Hazmat Low Risk	LR	1	2	0	0	0	1	0	1
Hazmat Moderate Risk	MR	1	0	3	4	6	1	4	2
Hazmat High Risk	HR	2	5	2	1	0	0	0	0
Hazmat Special Risk	SR	0	5	1	0	0	2	0	1
Technical Rescue	SR	0	2	1	0	1	0	0	0
Water/Ice Rescue Moderate	MR	2	0	0	0	0	0	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		7	12	12	11	12	2	2	5
Non-Accreditation Counts									
Service Call		213	211	287	191	209	216	276	249
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		3597	3442	3796	3795	3901	3859	4053	3947
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		1243	1163	1348	1335	1290	1341	1420	1420
BLS		1682	1626	1709	1736	1825	1777	1808	1775
Fire Full Assignment		47	50	41	45	30	38	33	46
Adaptive		399	366	392	472	528	481	510	448
Hazmat		4	12	6	5	6	4	4	4
Technical Rescue		0	2	1	0	1	0	0	0
Water/Ice Rescue		2	0	0	0	0	0	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		7	12	12	11	12	2	2	5







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Hazmat	4	12	6	5	6	4	4	4
Technical Rescue	0	2	1	0	1	0	0	0
Water/Ice Rescue	2	0	0	0	0	0	0	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Bomb Squad Responses	7	12	12	11	12	2	2	5


Fire Station 11 Area/RMZ Non-Emergent Public Service Calls
Compared to Total Station Area Calls for Service
Service Calls
Total Incidents
Fiscal Year
FY13
FY14
FY15
FY16
FY17
FY18
FY19
FY20
3597
3442
3796
3795
3901
3859
4053
3947
213
211
287
191
209
216
276
249
Service Call
Total Incident Counts
Poly. (Service Call)

Fire Station 13

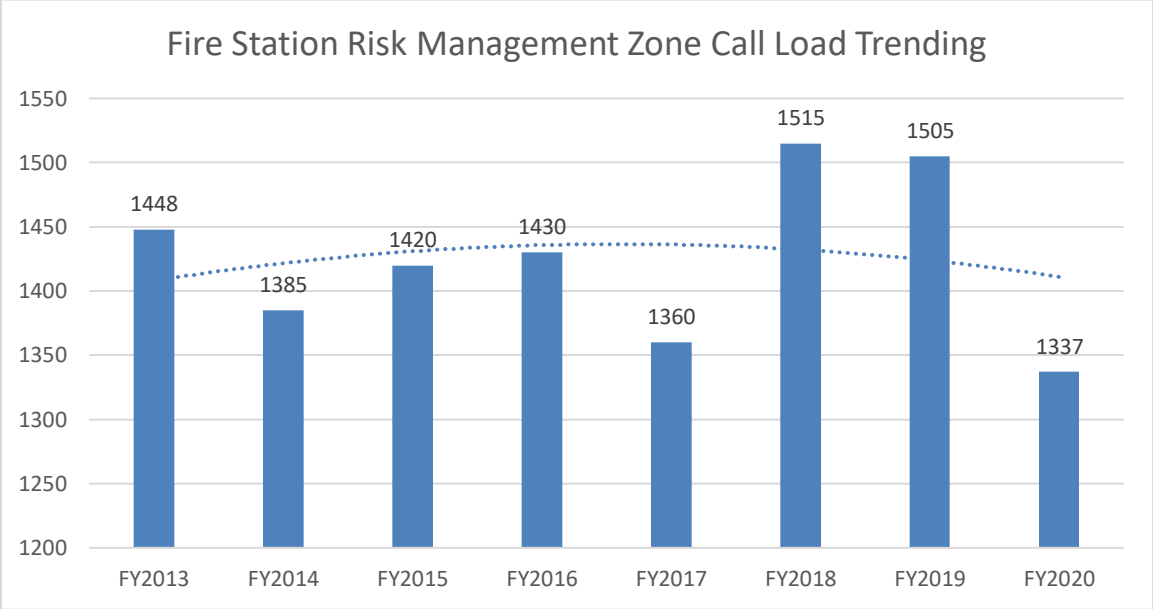
Battalion 5

Damascus Station

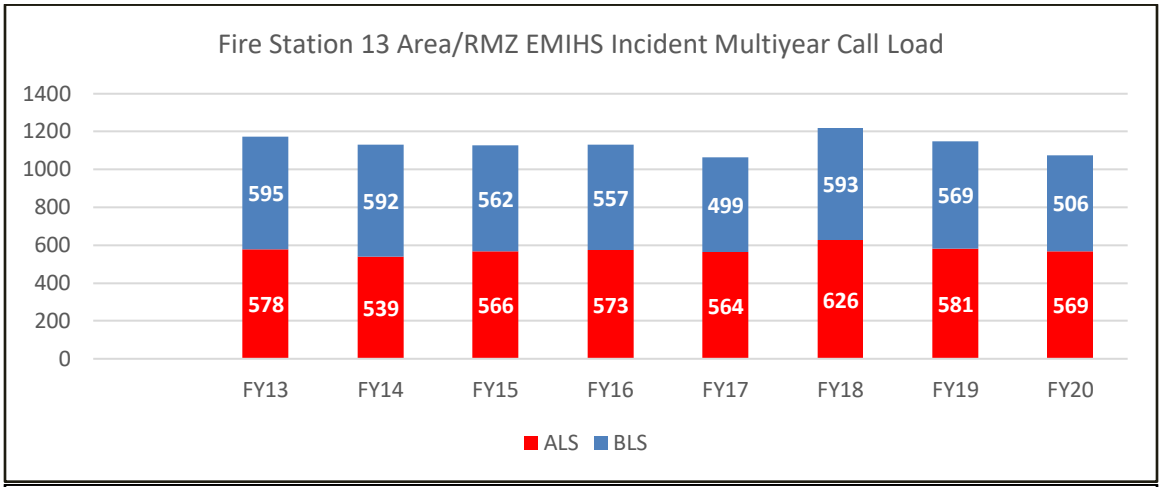
26334 Ridge Road, Damascus

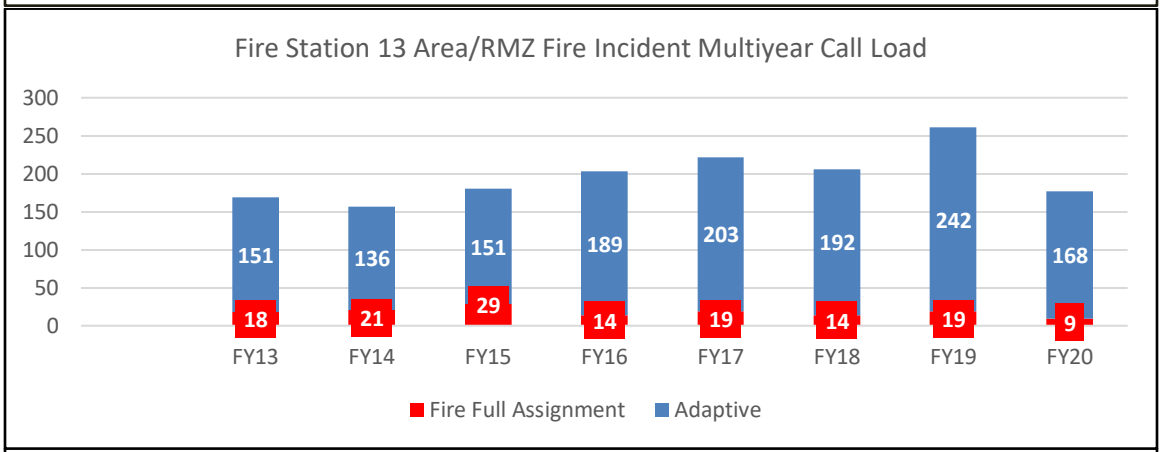
Description

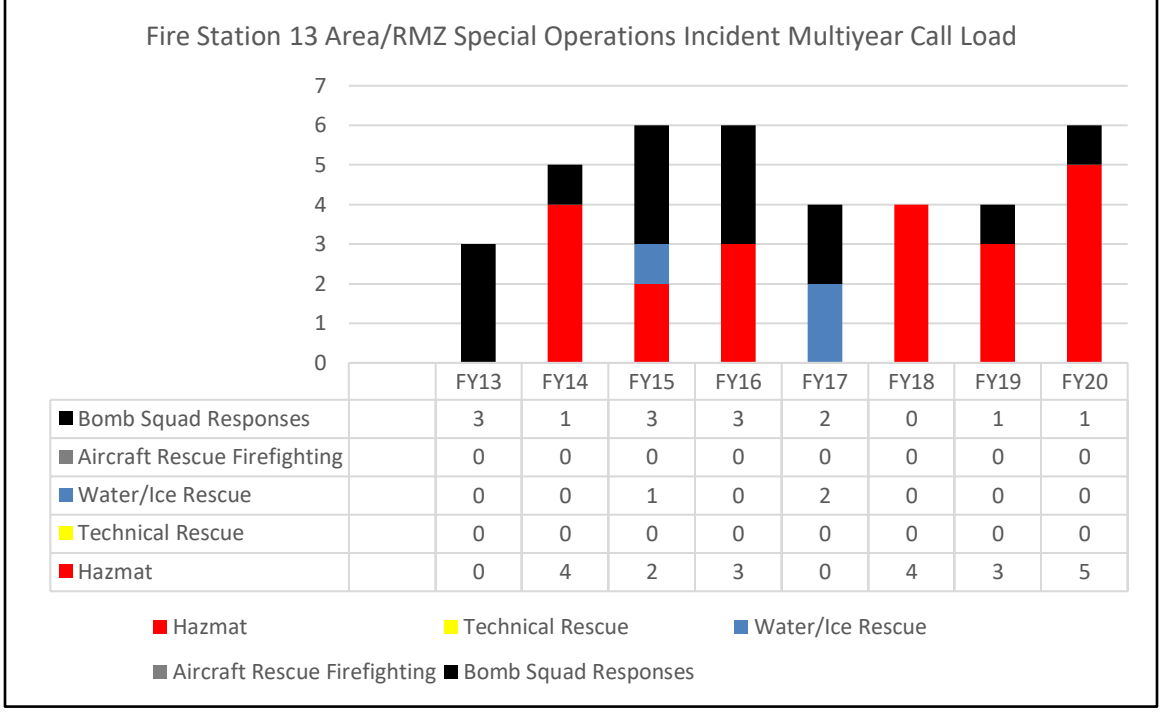
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Medic, Tanker, Brush Truck
  A Brush Engine is available for certain call types
- First Due Area: 33.31 mi^2
- Number of Unique Risk Management Zones (box areas): 33
- Predominant Population Density Zone: Rural



Fire Station 13 (Rural Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	496	454	484	486	489	537	511	498
ALS2	HR	82	85	82	87	75	89	70	71
BLS	LR	595	592	562	557	499	593	569	506
Fire Full Assignment Hydranted	HR	15	17	23	11	14	9	14	4
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	3	4	6	3	5	5	5	5
Adaptive-1F	LR	40	30	32	36	46	36	42	23
Adaptive-1N	LR	98	93	94	132	127	122	170	121
Adaptive-2-3	MR	13	13	25	21	30	34	30	24
Hazmat Low Risk	LR	0	0	0	1	0	0	1	4
Hazmat Moderate Risk	MR	0	1	0	0	0	3	1	1
Hazmat High Risk	HR	0	1	2	0	0	0	0	0
Hazmat Special Risk	SR	0	2	0	2	0	1	1	0
Technical Rescue	SR	0	0	0	0	0	0	0	0
Water/Ice Rescue Moderate	MR	0	0	1	0	2	0	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		3	1	3	3	2	0	1	1
Non-Accreditation Counts									
Service Call		103	92	106	91	71	86	90	79
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		1448	1385	1420	1430	1360	1515	1505	1337
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		578	539	566	573	564	626	581	569
BLS		595	592	562	557	499	593	569	506
Fire Full Assignment		18	21	29	14	19	14	19	9
Adaptive		151	136	151	189	203	192	242	168
Hazmat		0	4	2	3	0	4	3	5
Technical Rescue		0	0	0	0	0	0	0	0
Water/Ice Rescue		0	0	1	0	2	0	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		3	1	3	3	2	0	1	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	3	1	3	3	2	0	1	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	1	0	2	0	0	0
Technical Rescue	0	0	0	0	0	0	0	0
Hazmat	0	4	2	3	0	4	3	5

Fire Station 14

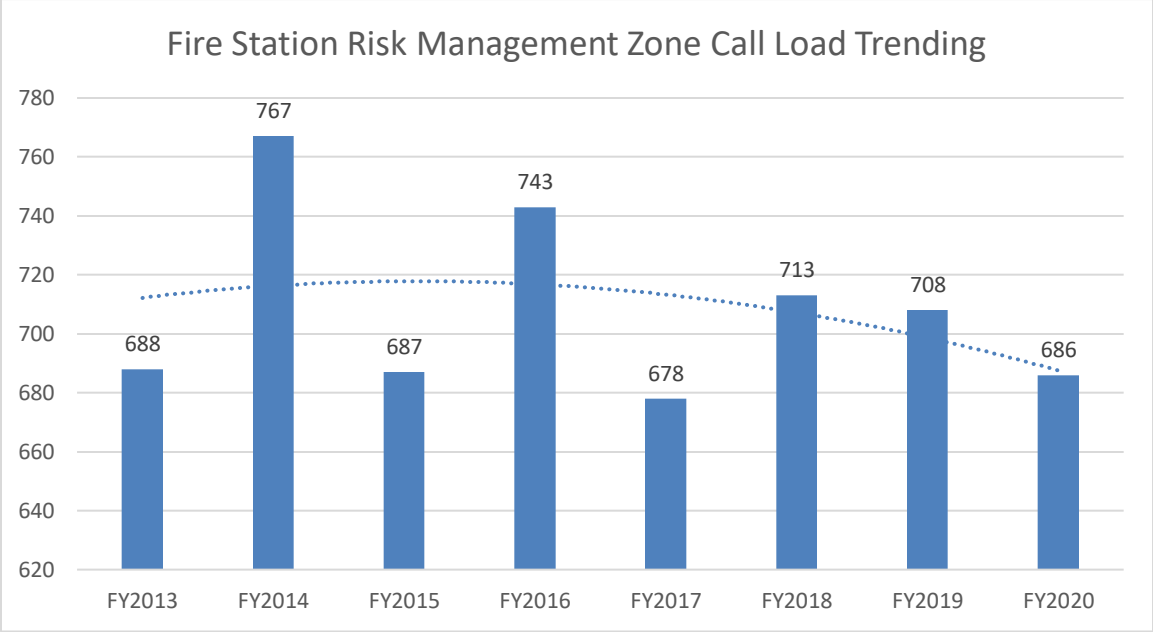
Battalion 5

Upper Montgomery Station

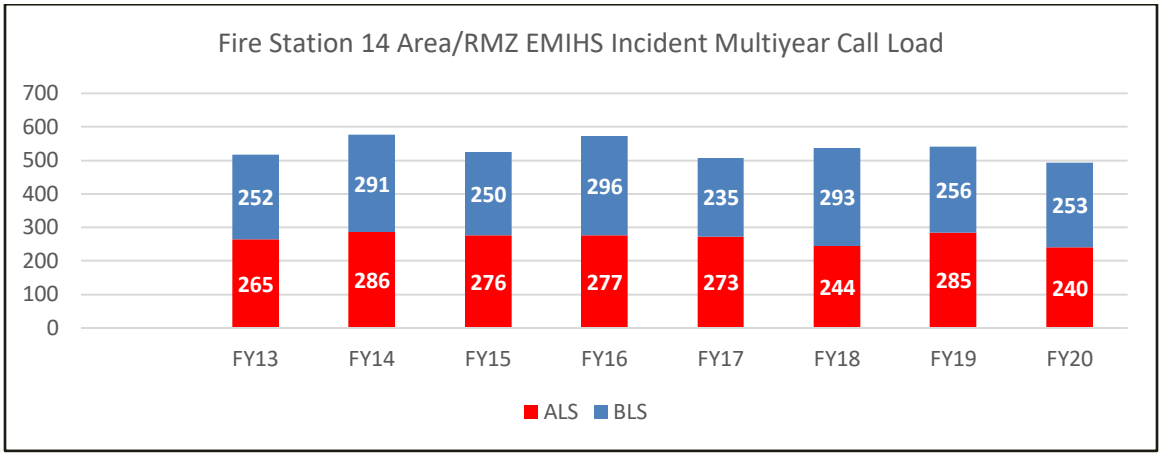
19801 Beallsville Road, Beallsville

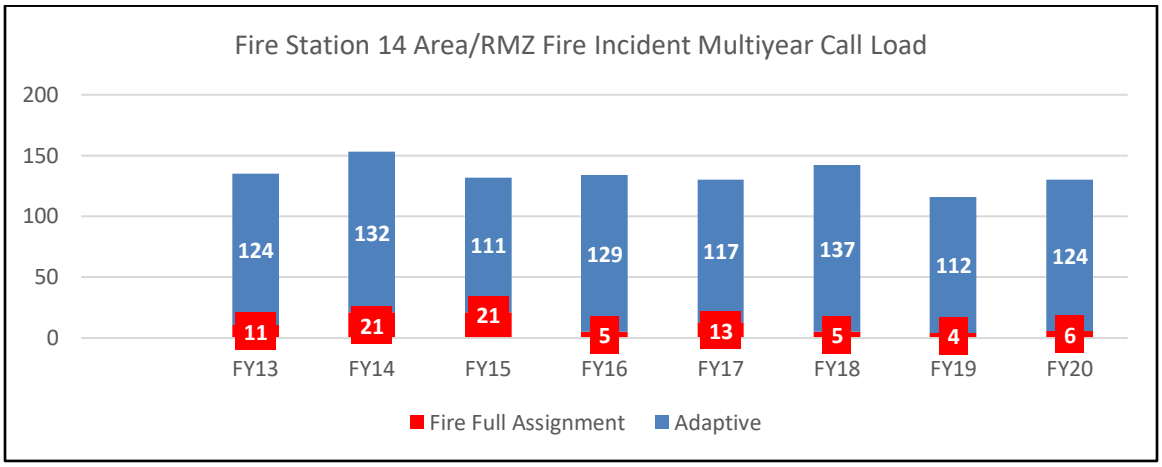
Description

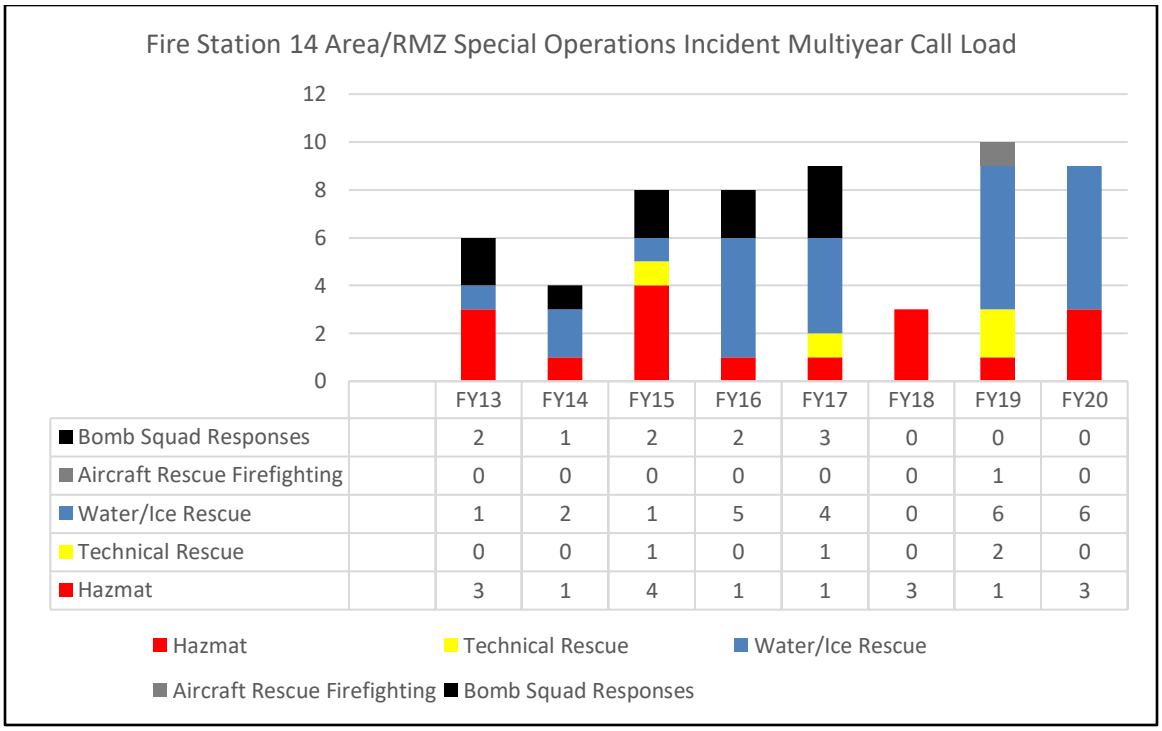
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Medic, Tanker, Brush Truck, Boat
  A Rescue Engine and Brush Engine, are available for certain call types
- First Due Area: 86.68 mi^2
- Number of Unique Risk Management Zones (box areas): 21
- Predominant Population Density Zone: Rural



Fire Station 14 (Rural Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	219	243	238	233	247	210	249	209
ALS2	HR	46	43	38	44	26	34	36	31
BLS	LR	252	291	250	296	235	293	256	253
Fire Full Assignment Hydranted	HR	6	14	14	4	8	3	3	4
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	5	7	7	1	5	2	1	2
Adaptive-1F	LR	30	30	23	33	28	29	28	23
Adaptive-1N	LR	80	94	79	81	73	97	70	90
Adaptive-2-3	MR	14	8	9	15	16	11	14	11
Hazmat Low Risk	LR	0	0	0	0	0	0	0	1
Hazmat Moderate Risk	MR	0	0	1	0	0	1	0	2
Hazmat High Risk	HR	2	0	2	1	0	2	1	0
Hazmat Special Risk	SR	1	1	1	0	1	0	0	0
Technical Rescue	SR	0	0	1	0	1	0	2	0
Water/Ice Rescue Moderate	MR	1	1	0	0	2	0	2	2
Water/Ice Rescue High	HR	0	1	1	4	2	0	1	3
Water/Ice Rescue Special	SR	0	0	0	1	0	0	3	1
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	1	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		2	1	2	2	3	0	0	0
Non-Accreditation Counts									
Service Call		30	33	21	28	31	30	41	54
Special Event						0	1	0	0
Mutual Aid									
Total Incident Counts		688	767	687	743	678	713	708	686
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		265	286	276	277	273	244	285	240
BLS		252	291	250	296	235	293	256	253
Fire Full Assignment		11	21	21	5	13	5	4	6
Adaptive		124	132	111	129	117	137	112	124
Hazmat		3	1	4	1	1	3	1	3
Technical Rescue		0	0	1	0	1	0	2	0
Water/Ice Rescue		1	2	1	5	4	0	6	6
Aircraft Rescue Firefighting		0	0	0	0	0	0	1	0
Bomb Squad Responses		2	1	2	2	3	0	0	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	2	1	2	2	3	0	0	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	1	0
Water/Ice Rescue	1	2	1	5	4	0	6	6
Technical Rescue	0	0	1	0	1	0	2	0
Hazmat	3	1	4	1	1	3	1	3

Fire Station 15

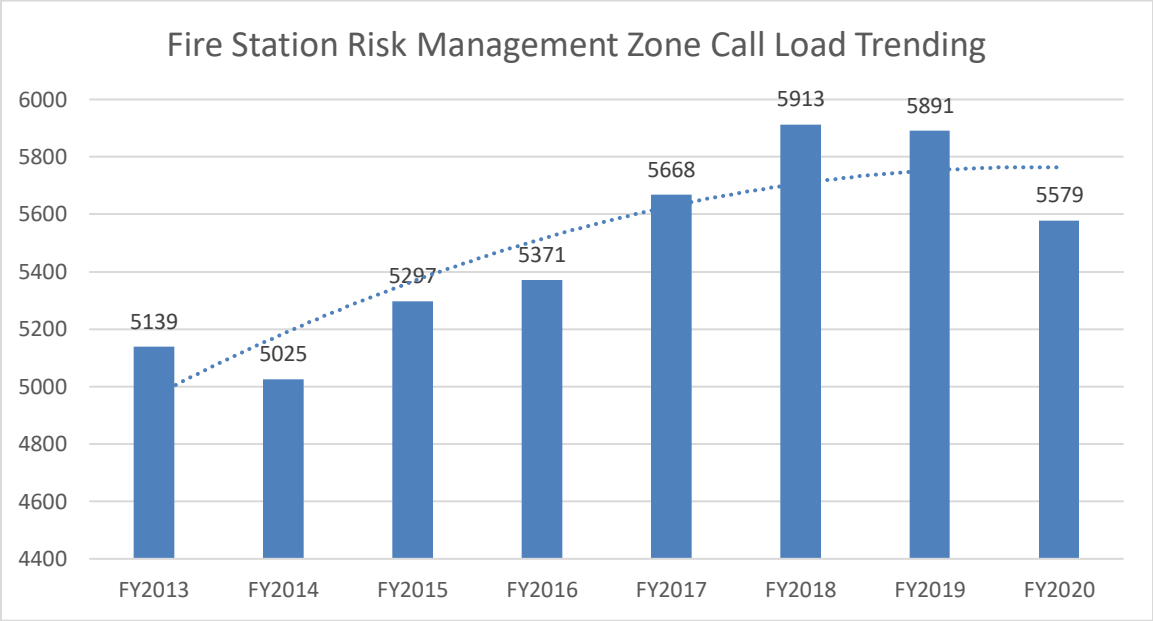
Battalion 1

Burtonsville Station

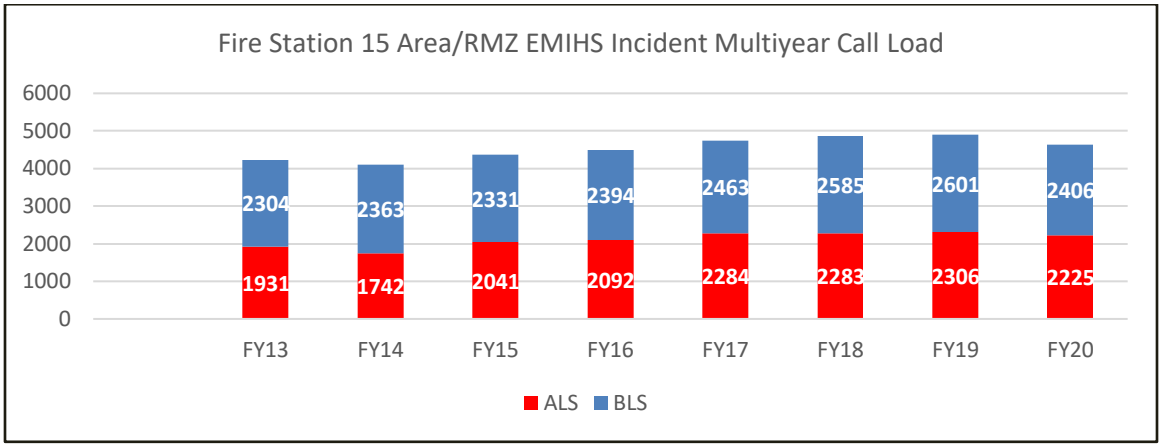
13900 Old Columbia Pike, Burtonsville

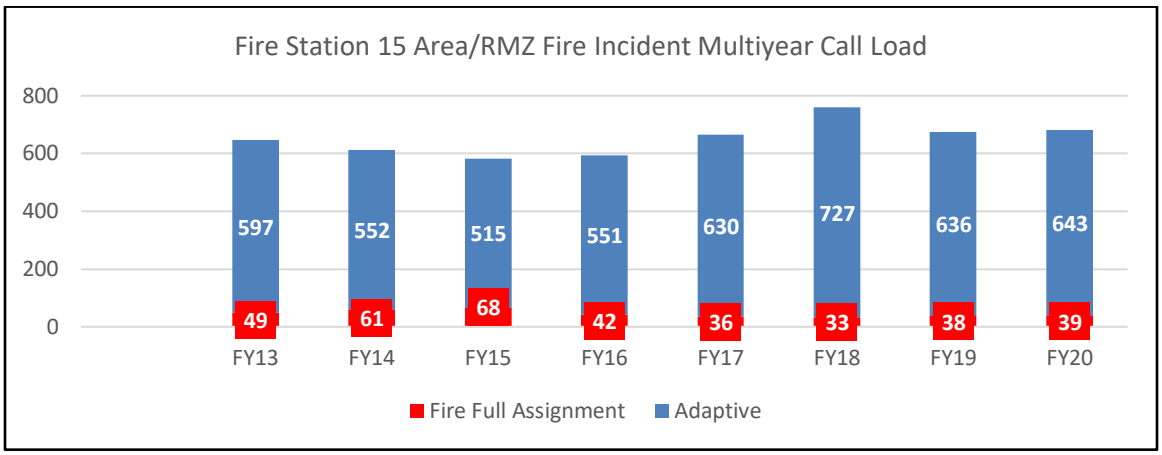
Description

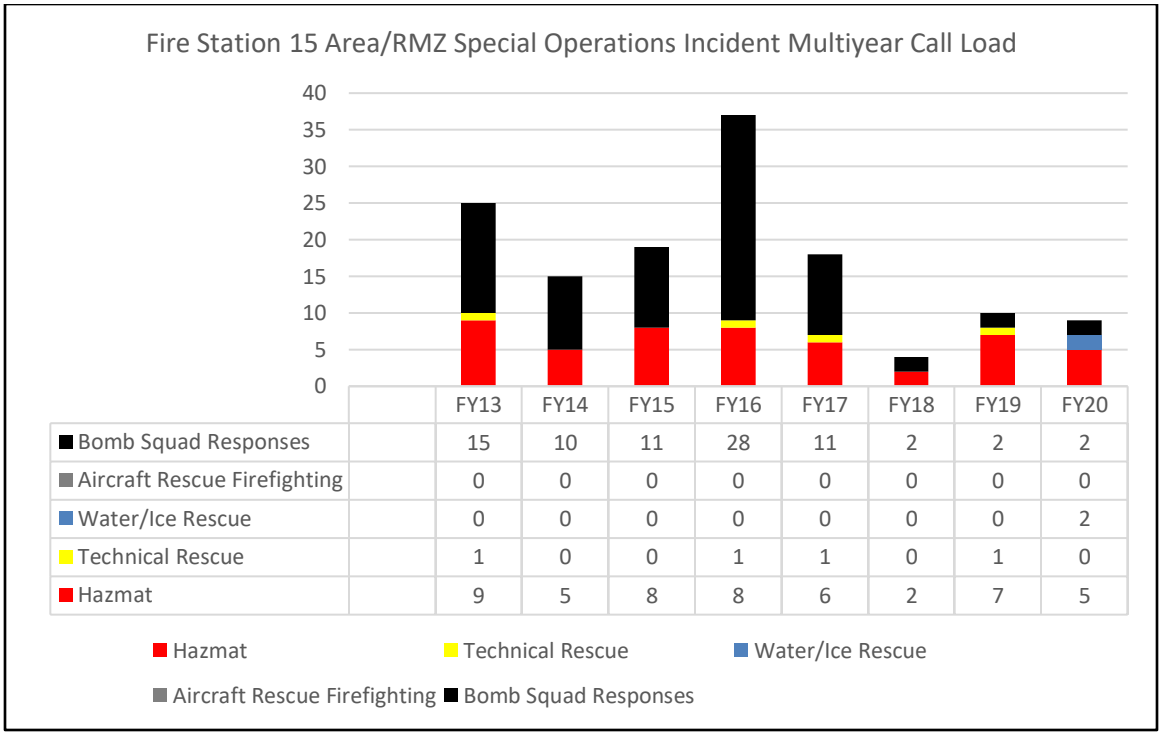
- Ownership: County
- Apparatus Housed: Paramedic Engine, Truck, Rescue Squad, Medic Unit, Ambulance, Brush Truck
- First Due Area: 18.80 mi^2
- Number of Unique Risk Management Zones (box areas): 30
- Predominant Population Density Zone: Urban



Fire Station 15 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	1635	1507	1779	1792	1986	2013	2010	1958
ALS2	HR	296	235	262	300	298	270	296	267
BLS	LR	2304	2363	2331	2394	2463	2585	2601	2406
Fire Full Assignment Hydranted	HR	48	61	68	36	35	32	34	33
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	5	1	1	3	6
FFA-Non-hydranted Area	SR	1	0	0	1	0	0	1	0
Adaptive-1F	LR	105	75	59	74	81	81	59	66
Adaptive-1N	LR	402	384	365	383	424	513	471	477
Adaptive-2-3	MR	90	93	91	94	125	133	106	100
Hazmat Low Risk	LR	0	0	0	1	1	0	0	2
Hazmat Moderate Risk	MR	1	1	1	5	4	1	6	0
Hazmat High Risk	HR	6	2	5	0	1	0	1	1
Hazmat Special Risk	SR	2	2	2	2	0	1	0	2
Technical Rescue	SR	1	0	0	1	1	0	1	0
Water/Ice Rescue Moderate	MR	0	0	0	0	0	0	0	1
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	1
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		15	10	11	28	11	2	2	2
Non-Accreditation Counts									
Service Call		233	292	323	255	237	281	300	257
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		5139	5025	5297	5371	5668	5913	5891	5579
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		1931	1742	2041	2092	2284	2283	2306	2225
BLS		2304	2363	2331	2394	2463	2585	2601	2406
Fire Full Assignment		49	61	68	42	36	33	38	39
Adaptive		597	552	515	551	630	727	636	643
Hazmat		9	5	8	8	6	2	7	5
Technical Rescue		1	0	0	1	1	0	1	0
Water/Ice Rescue		0	0	0	0	0	0	0	2
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		15	10	11	28	11	2	2	2







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	15	10	11	28	11	2	2	2
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	0	0	0	0	0	2
Technical Rescue	1	0	0	1	1	0	1	0
Hazmat	9	5	8	8	6	2	7	5

Fire Station 16

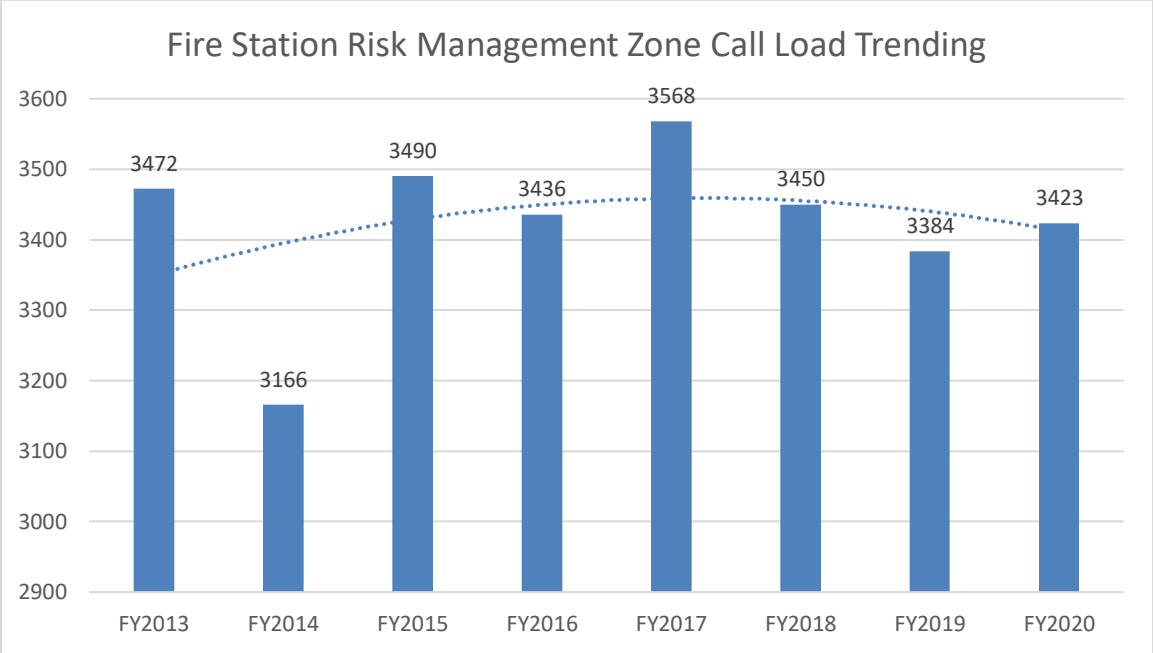
Battalion 1

Silver Spring Station

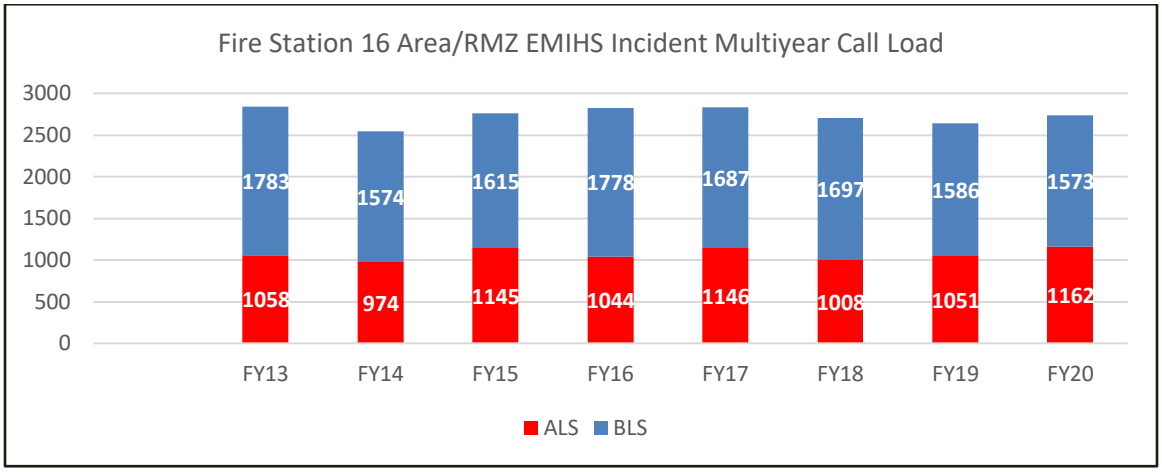
111 University Boulevard East, Silver Spring

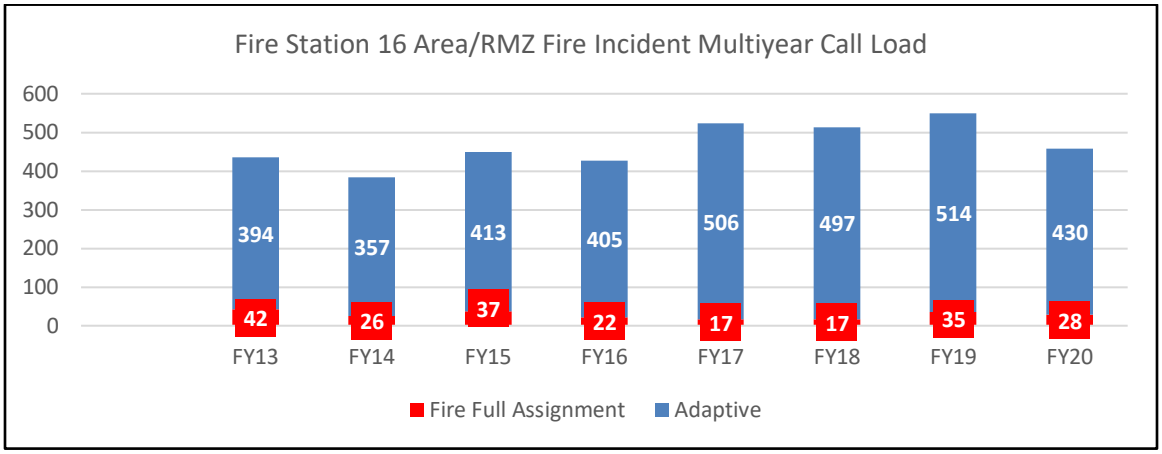
Description

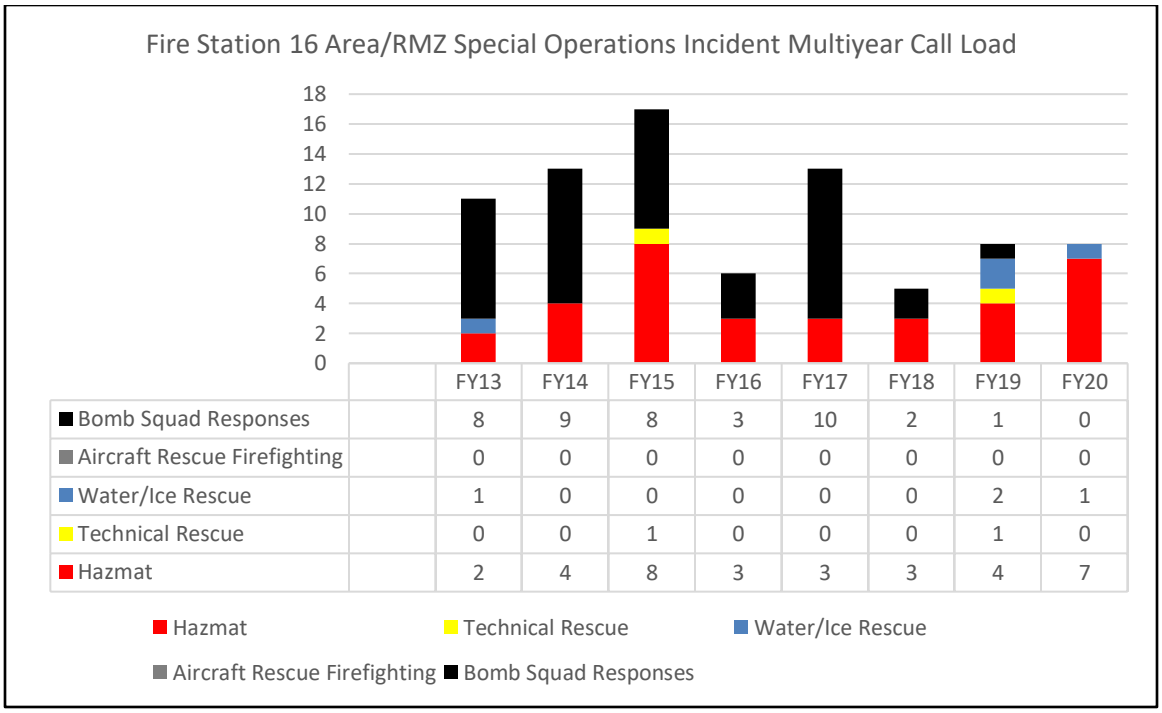
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Truck, Ambulance, Air Unit
- Number of Unique Risk Management Zones (box areas): 18
- Predominant Population Density Zone: Metropolitan



Fire Station 16 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	880	822	960	870	1004	858	912	1025
ALS2	HR	178	152	185	174	142	150	139	137
BLS	LR	1783	1574	1615	1778	1687	1697	1586	1573
Fire Full Assignment Hydranted	HR	42	26	37	14	11	14	28	23
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	8	6	3	7	5
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	105	88	70	66	61	56	63	53
Adaptive-1N	LR	243	212	288	287	336	381	373	310
Adaptive-2-3	MR	46	57	55	52	109	60	78	67
Hazmat Low Risk	LR	1	1	1	0	0	0	0	5
Hazmat Moderate Risk	MR	0	0	2	2	3	2	4	2
Hazmat High Risk	HR	1	1	2	1	0	0	0	0
Hazmat Special Risk	SR	0	2	3	0	0	1	0	0
Technical Rescue	SR	0	0	1	0	0	0	1	0
Water/Ice Rescue Moderate	MR	1	0	0	0	0	0	2	1
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		8	9	8	3	10	2	1	0
Non-Accreditation Counts									
Service Call		184	222	263	181	199	226	190	222
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		3472	3166	3490	3436	3568	3450	3384	3423
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		1058	974	1145	1044	1146	1008	1051	1162
BLS		1783	1574	1615	1778	1687	1697	1586	1573
Fire Full Assignment		42	26	37	22	17	17	35	28
Adaptive		394	357	413	405	506	497	514	430
Hazmat		2	4	8	3	3	3	4	7
Technical Rescue		0	0	1	0	0	0	1	0
Water/Ice Rescue		1	0	0	0	0	0	2	1
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		8	9	8	3	10	2	1	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	8	9	8	3	10	2	1	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	1	0	0	0	0	0	2	1
Technical Rescue	0	0	1	0	0	0	1	0
Hazmat	2	4	8	3	3	3	4	7

Fire Station 17

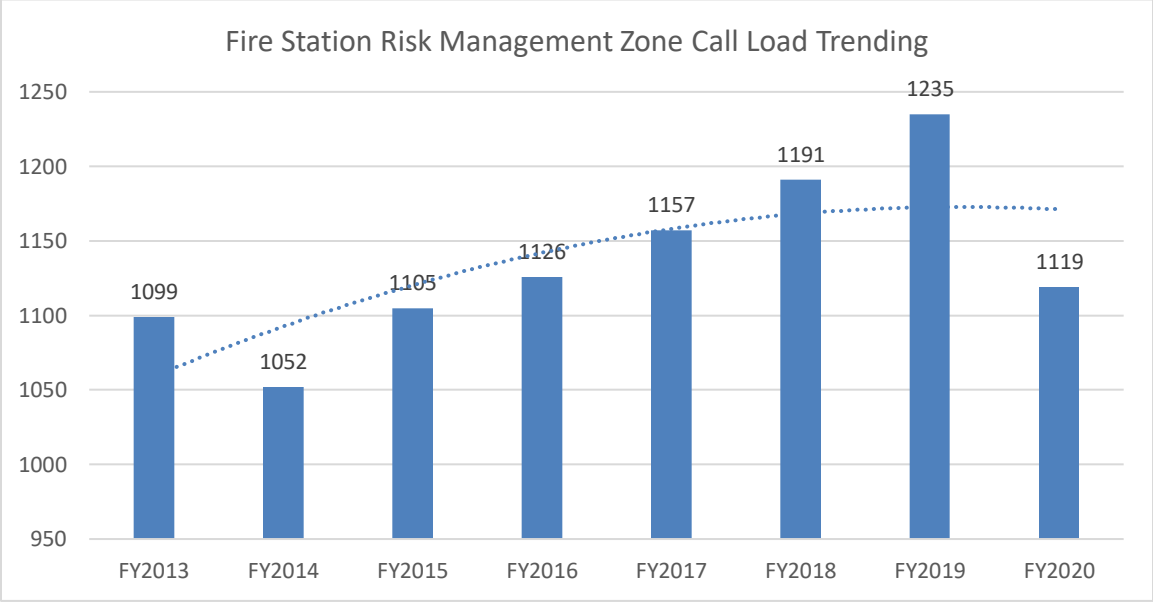
Battalion 5

Laytonsville Station

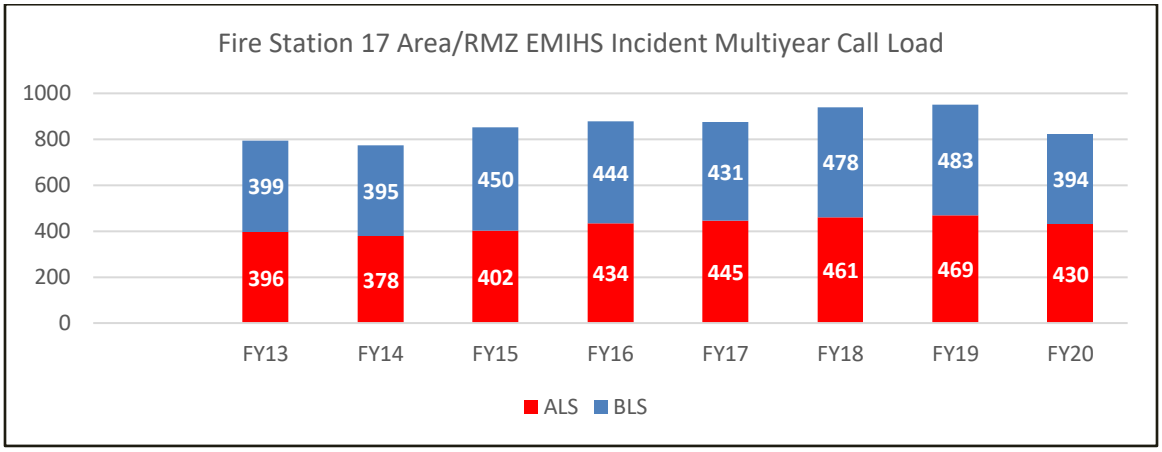
21400 Laytonsville Road, Laytonsville

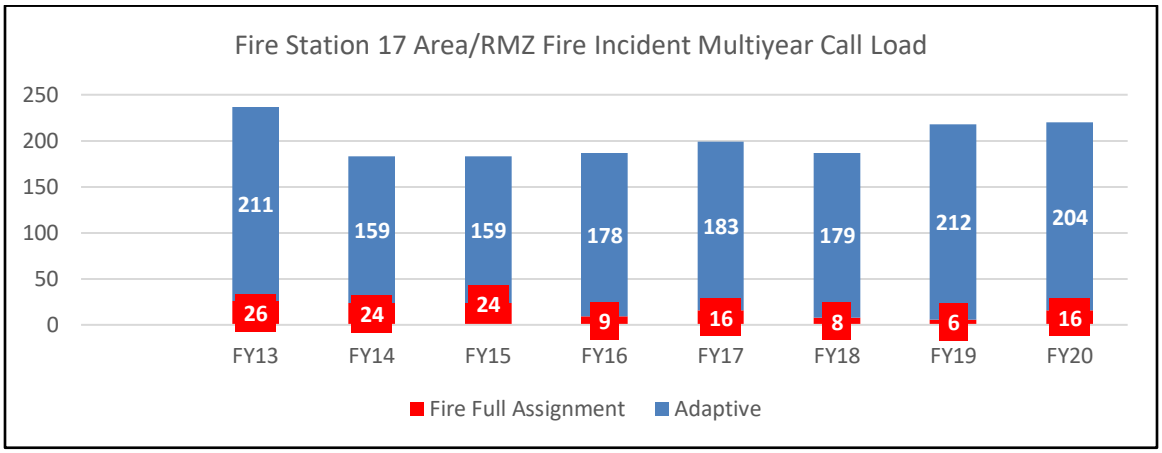
Description

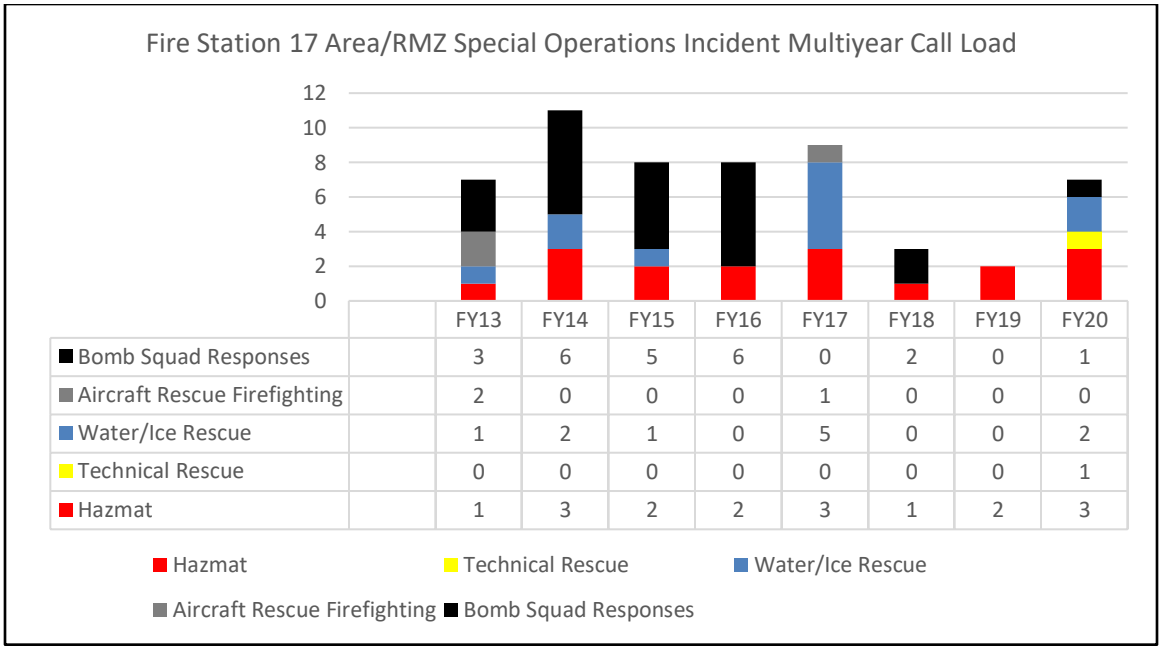
- Ownership: Volunteer
  Apparatus Housed: Paramedic Engine, Squad, Ambulance, Tanker, Brush Truck A
  An Engine Tanker and Brush Engine are available for certain call types
- First Due Area: 41.43 mi^2
- Number of Unique Risk Management Zones (box areas): 27
- Predominant Population Density Zone: Rural



Fire Station 17 (Rural Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	332	301	340	364	379	395	407	378
ALS2	HR	64	77	62	70	66	66	62	52
BLS	LR	399	395	450	444	431	478	483	394
Fire Full Assignment Hydranted	HR	17	14	17	6	10	7	4	15
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	9	10	7	3	6	1	2	1
Adaptive-1F	LR	40	20	31	41	33	33	35	37
Adaptive-1N	LR	156	123	114	112	128	121	145	143
Adaptive-2-3	MR	15	16	14	25	22	25	32	24
Hazmat Low Risk	LR	0	1	0	0	1	0	0	2
Hazmat Moderate Risk	MR	0	0	2	2	1	1	2	0
Hazmat High Risk	HR	1	2	0	0	1	0	0	0
Hazmat Special Risk	SR	0	0	0	0	0	0	0	1
Technical Rescue	SR	0	0	0	0	0	0	0	1
Water/Ice Rescue Moderate	MR	1	2	1	0	5	0	0	2
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	2	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	1	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		3	6	5	6	0	2	0	1
Non-Accreditation Counts									
Service Call		60	85	62	53	73	62	63	68
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		1099	1052	1105	1126	1157	1191	1235	1119
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		396	378	402	434	445	461	469	430
BLS		399	395	450	444	431	478	483	394
Fire Full Assignment		26	24	24	9	16	8	6	16
Adaptive		211	159	159	178	183	179	212	204
Hazmat		1	3	2	2	3	1	2	3
Technical Rescue		0	0	0	0	0	0	0	1
Water/Ice Rescue		1	2	1	0	5	0	0	2
Aircraft Rescue Firefighting		2	0	0	0	1	0	0	0
Bomb Squad Responses		3	6	5	6	0	2	0	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	3	6	5	6	0	2	0	1
Aircraft Rescue Firefighting	2	0	0	0	1	0	0	0
Water/Ice Rescue	1	2	1	0	5	0	0	2
Technical Rescue	0	0	0	0	0	0	0	1
Hazmat	1	3	2	2	3	1	2	3

Fire Station 18

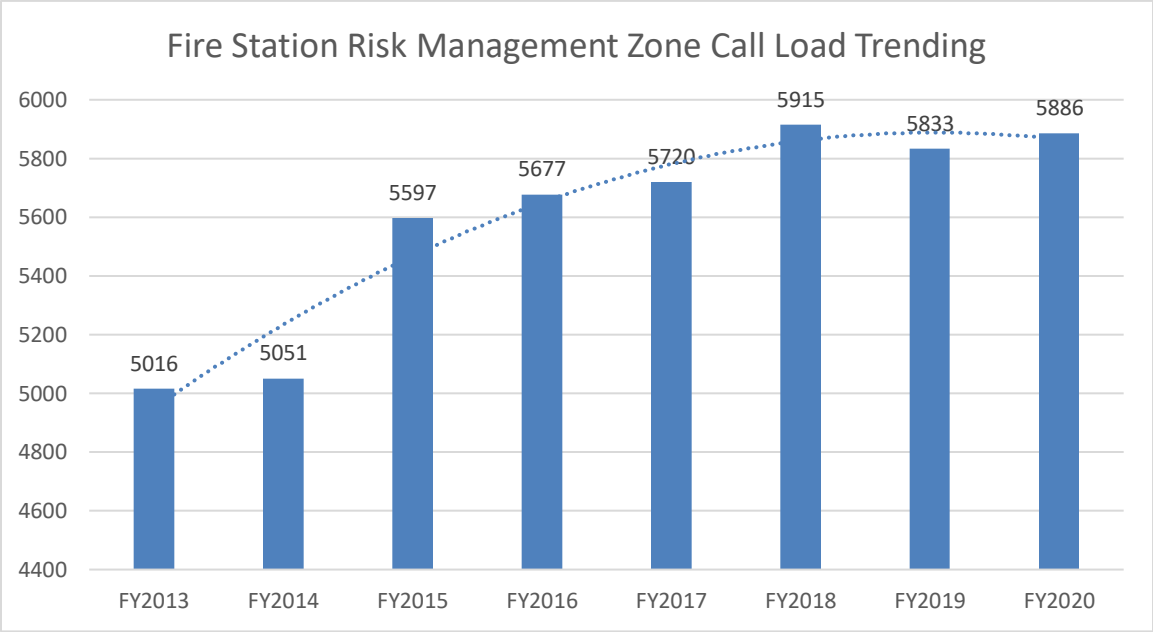
Battalion 4

Kensington (Glenmont) Station

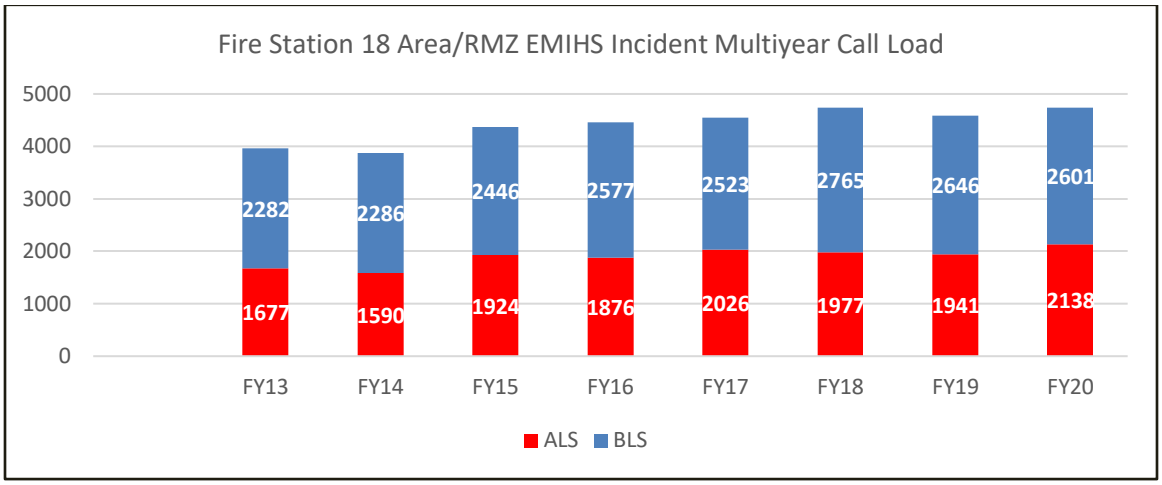
12210 Georgia Avenue, Wheaton

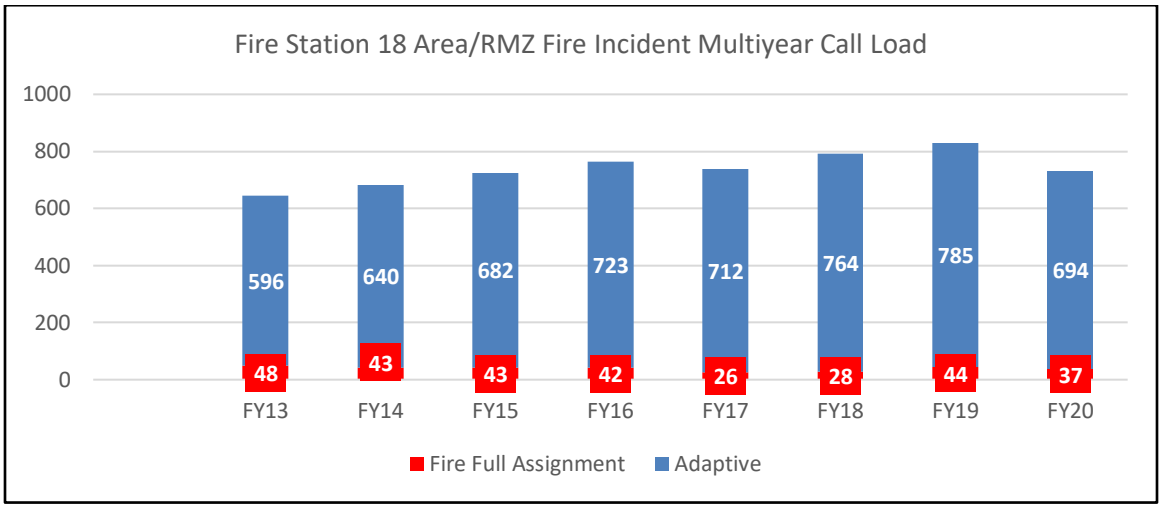
Description

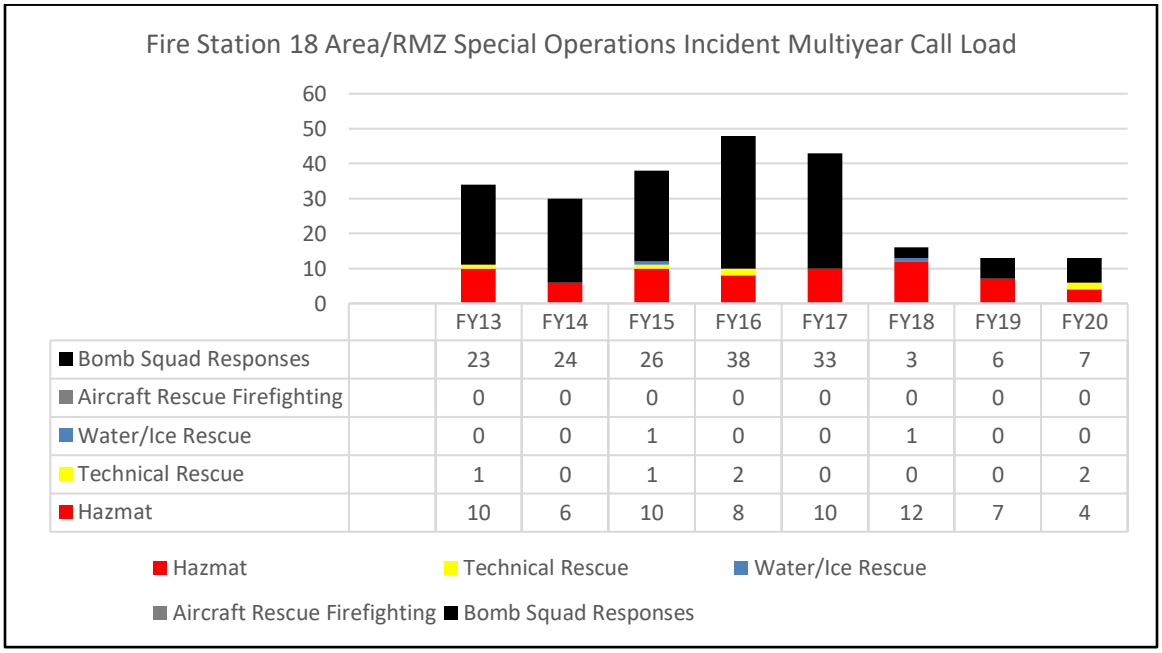
- Ownership: County
- Apparatus Housed: Paramedic Engine, Aerial Tower, EMS Supervisor, Mobile Command Unit
- First Due Area: 8.73 mi^2
- Number of Unique Risk Management Zones (box areas): 28
- Predominant Population Density Zone: Metropolitan



Fire Station 18 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	1376	1317	1618	1555	1767	1714	1650	1869
ALS2	HR	301	273	306	321	259	263	291	269
BLS	LR	2282	2286	2446	2577	2523	2765	2646	2601
Fire Full Assignment Hydranted	HR	48	43	43	42	25	26	42	33
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	1	2	2	4
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	69	73	73	85	86	84	56	70
Adaptive-1N	LR	449	476	505	527	511	562	617	502
Adaptive-2-3	MR	78	91	104	111	115	118	112	122
Hazmat Low Risk	LR	0	0	1	1	1	0	2	4
Hazmat Moderate Risk	MR	2	1	2	4	6	8	4	0
Hazmat High Risk	HR	7	5	6	1	0	1	0	0
Hazmat Special Risk	SR	1	0	1	2	3	3	1	0
Technical Rescue	SR	1	0	1	2	0	0	0	2
Water/Ice Rescue Moderate	MR	0	0	1	0	0	1	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		23	24	26	38	33	3	6	7
Non-Accreditation Counts									
Service Call		379	462	464	411	390	365	404	403
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		5016	5051	5597	5677	5720	5915	5833	5886
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		1677	1590	1924	1876	2026	1977	1941	2138
BLS		2282	2286	2446	2577	2523	2765	2646	2601
Fire Full Assignment		48	43	43	42	26	28	44	37
Adaptive		596	640	682	723	712	764	785	694
Hazmat		10	6	10	8	10	12	7	4
Technical Rescue		1	0	1	2	0	0	0	2
Water/Ice Rescue		0	0	1	0	0	1	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		23	24	26	38	33	3	6	7







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	23	24	26	38	33	3	6	7
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	1	0	0	1	0	0
Technical Rescue	1	0	1	2	0	0	0	2
Hazmat	10	6	10	8	10	12	7	4

Fire Station 19

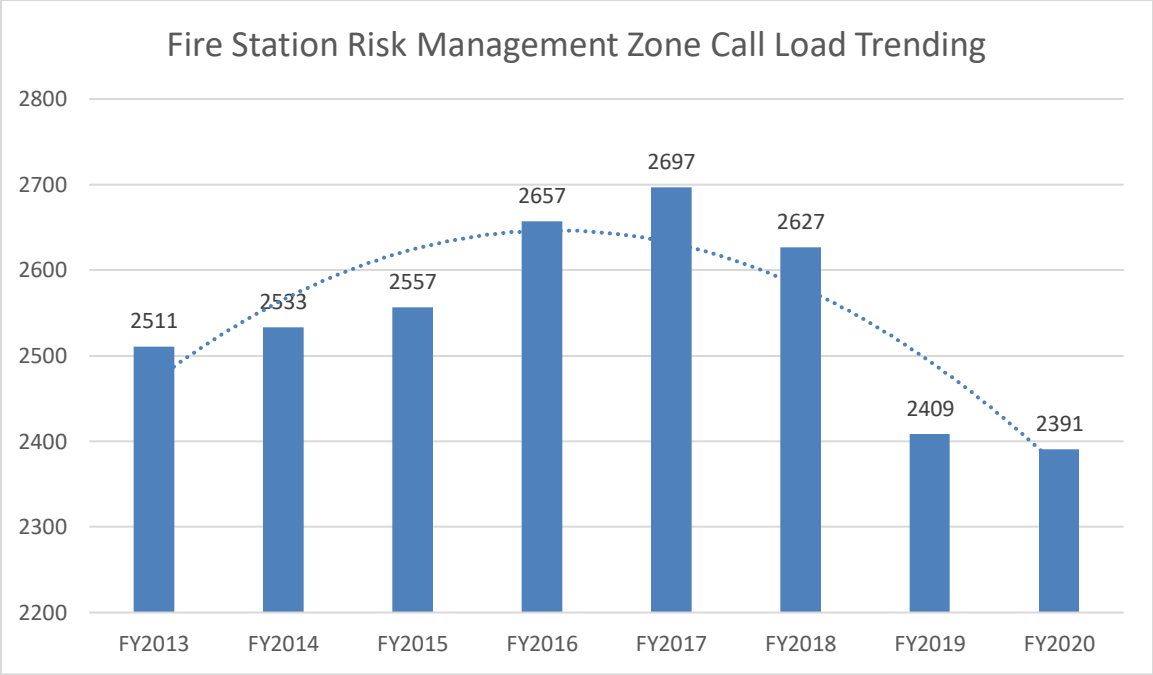
Battalion 1

Silver Spring Station

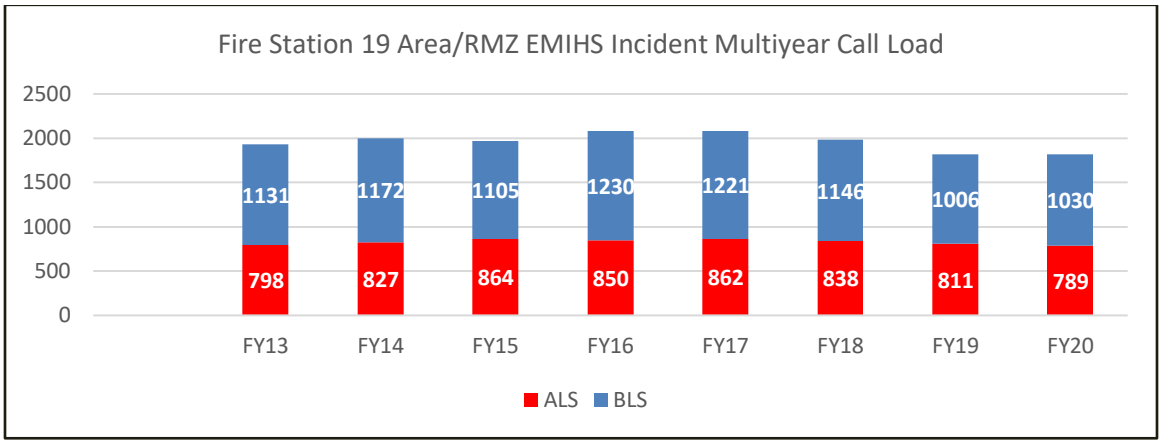
1945 Seminary Road, Silver Spring

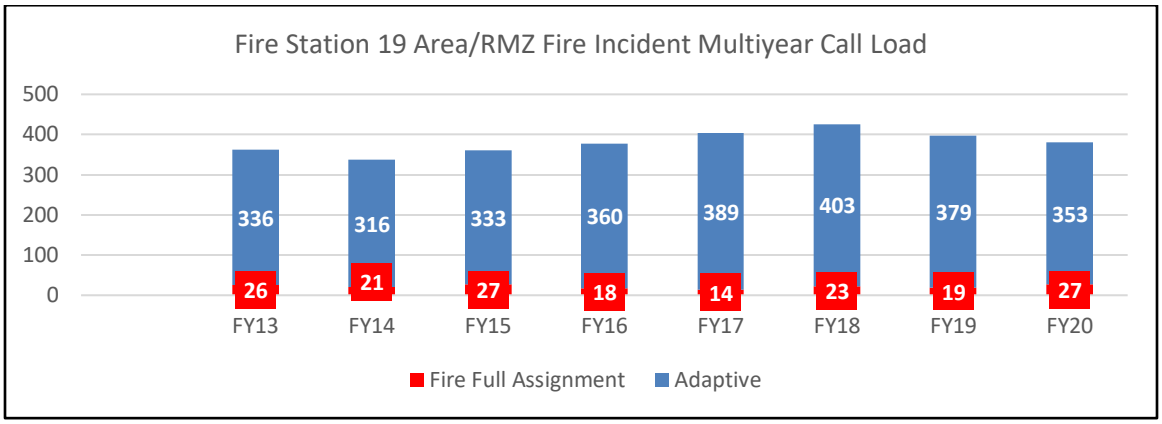
Description

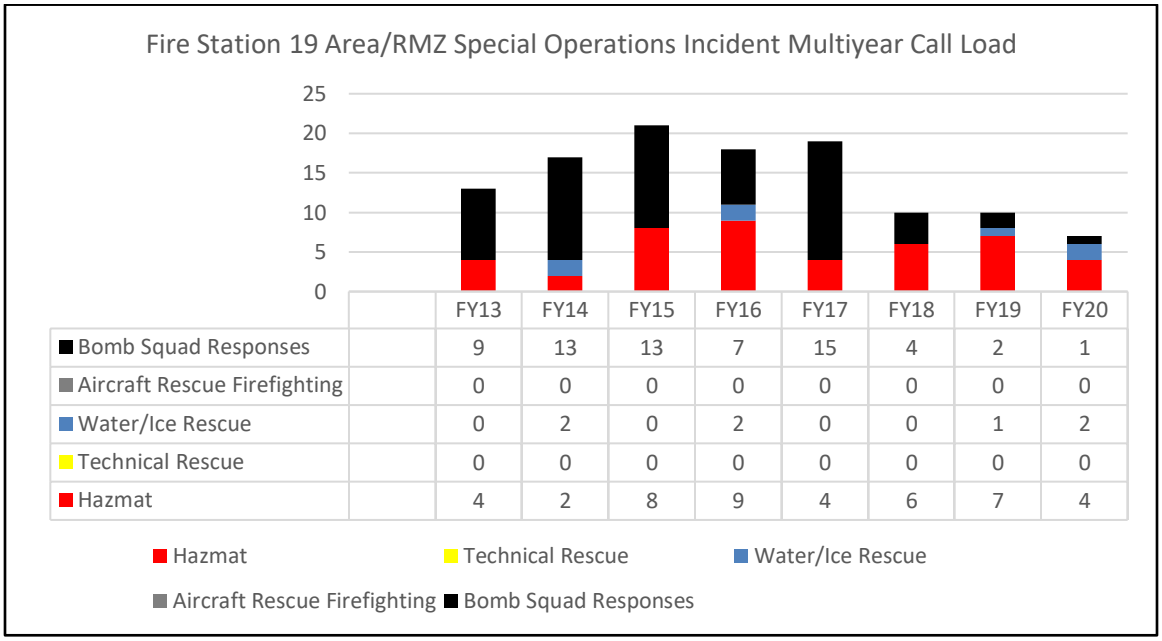
- Ownership: County
- Apparatus Housed: Paramedic Engine, Truck
- First Due Area: 3.8 mi^2
- Number of Unique Risk Management Zones (box areas): 25
- Predominant Population Density Zone: Metropolitan



Fire Station 19 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	669	675	728	715	778	740	708	683
ALS2	HR	129	152	136	135	84	98	103	106
BLS	LR	1131	1172	1105	1230	1221	1146	1006	1030
Fire Full Assignment Hydranted	HR	26	21	27	16	13	21	18	25
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	2	1	2	1	2
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	49	40	23	43	46	58	39	41
Adaptive-1N	LR	236	244	266	259	273	286	286	262
Adaptive-2-3	MR	51	32	44	58	70	59	54	50
Hazmat Low Risk	LR	1	0	1	0	0	1	0	2
Hazmat Moderate Risk	MR	1	0	0	8	2	4	7	2
Hazmat High Risk	HR	2	2	3	0	1	0	0	0
Hazmat Special Risk	SR	0	0	4	1	1	1	0	0
Technical Rescue	SR	0	0	0	0	0	0	0	0
Water/Ice Rescue Moderate	MR	0	2	0	2	0	0	1	2
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		9	13	13	7	15	4	2	1
Non-Accreditation Counts									
Service Call		207	180	207	181	192	207	184	185
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		2511	2533	2557	2657	2697	2627	2409	2391
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		798	827	864	850	862	838	811	789
BLS		1131	1172	1105	1230	1221	1146	1006	1030
Fire Full Assignment		26	21	27	18	14	23	19	27
Adaptive		336	316	333	360	389	403	379	353
Hazmat		4	2	8	9	4	6	7	4
Technical Rescue		0	0	0	0	0	0	0	0
Water/Ice Rescue		0	2	0	2	0	0	1	2
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		9	13	13	7	15	4	2	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	9	13	13	7	15	4	2	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	2	0	2	0	0	1	2
Technical Rescue	0	0	0	0	0	0	0	0
Hazmat	4	2	8	9	4	6	7	4

Fire Station 20

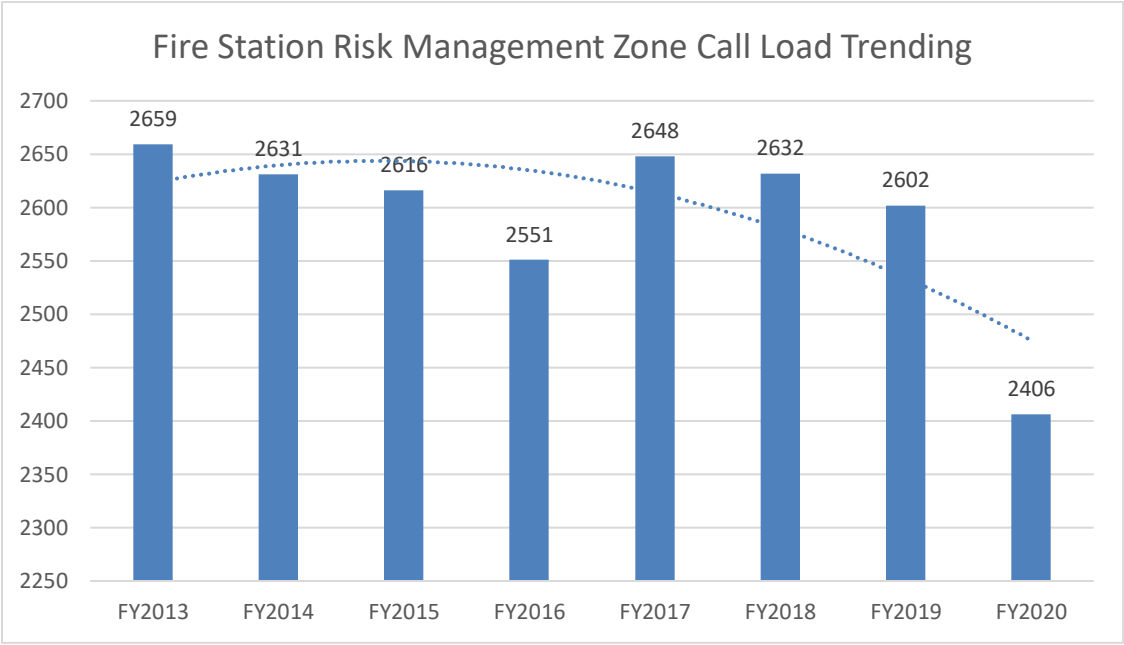
Battalion 2

Bethesda Station

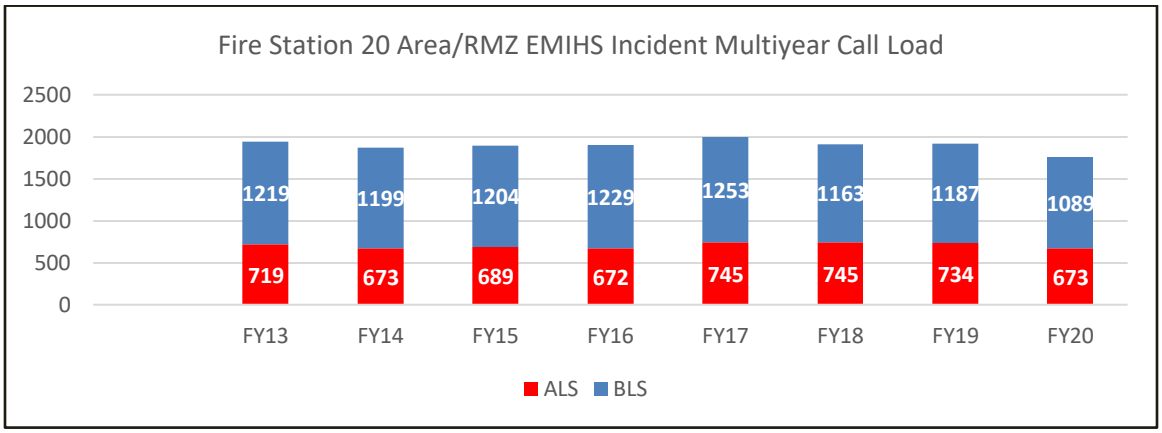
9041 Old Georgetown Road, Bethesda

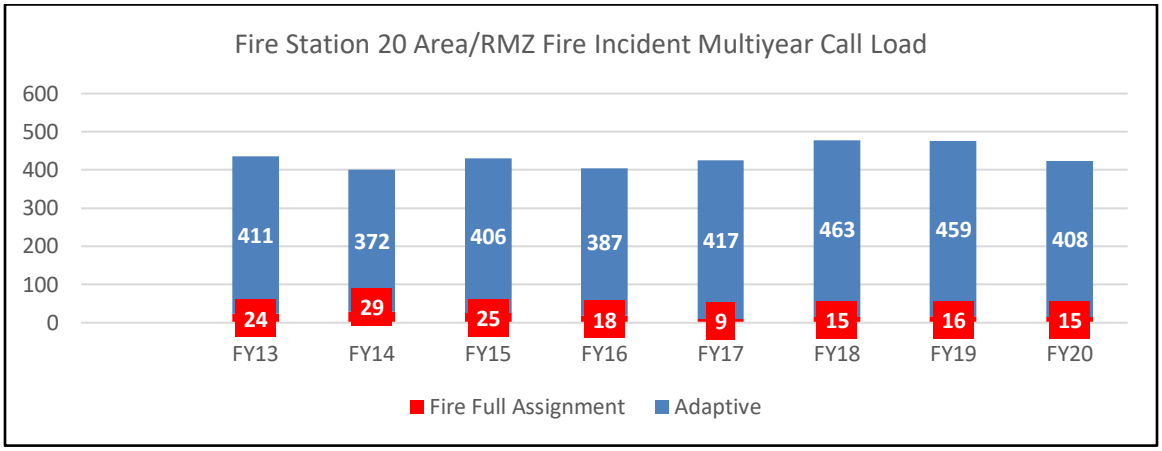
Description

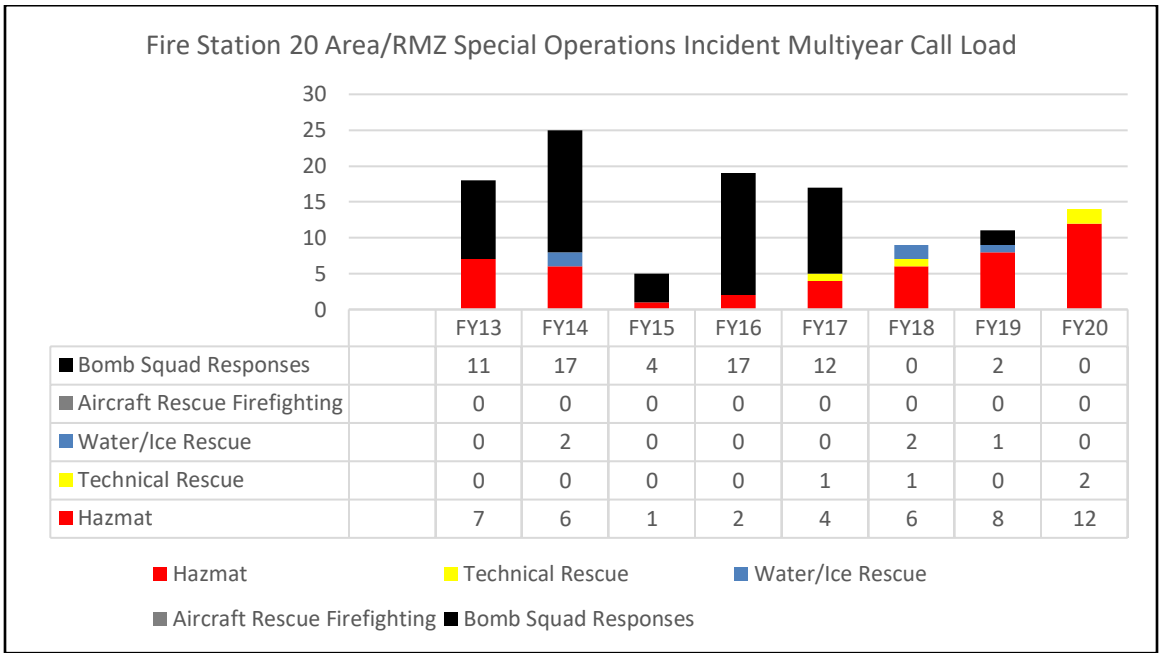
- Ownership: Volunteer
- Apparatus Housed: Engine, Battalion Chief
- Specialty Team: Hazmat
- First Due Area: 4.1 mi^2
- Number of Unique Risk Management Zones (box areas): 29
- Predominant Population Density Zone: Metropolitan



Fire Station 20 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	626	577	572	562	659	648	628	591
ALS2	HR	93	96	117	110	86	97	106	82
BLS	LR	1219	1199	1204	1229	1253	1163	1187	1089
Fire Full Assignment Hydranted	HR	24	29	25	17	8	11	13	9
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	1	1	4	3	6
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	57	42	33	45	37	39	38	32
Adaptive-1N	LR	301	285	311	291	293	361	356	302
Adaptive-2-3	MR	53	45	62	51	87	63	65	74
Hazmat Low Risk	LR	1	0	0	0	0	0	1	7
Hazmat Moderate Risk	MR	1	1	0	2	4	2	6	2
Hazmat High Risk	HR	4	3	0	0	0	0	0	0
Hazmat Special Risk	SR	1	2	1	0	0	4	1	3
Technical Rescue	SR	0	0	0	0	1	1	0	2
Water/Ice Rescue Moderate	MR	0	2	0	0	0	2	1	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		11	17	4	17	12	0	2	0
Non-Accreditation Counts									
Service Call		268	333	287	226	207	234	194	207
Special Event							3	1	0
Mutual Aid									
Total Incident Counts		2659	2631	2616	2551	2648	2632	2602	2406
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		719	673	689	672	745	745	734	673
BLS		1219	1199	1204	1229	1253	1163	1187	1089
Fire Full Assignment		24	29	25	18	9	15	16	15
Adaptive		411	372	406	387	417	463	459	408
Hazmat		7	6	1	2	4	6	8	12
Technical Rescue		0	0	0	0	1	1	0	2
Water/Ice Rescue		0	2	0	0	0	2	1	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		11	17	4	17	12	0	2	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	11	17	4	17	12	0	2	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	2	0	0	0	2	1	0
Technical Rescue	0	0	0	0	1	1	0	2
Hazmat	7	6	1	2	4	6	8	12

Fire Station 21

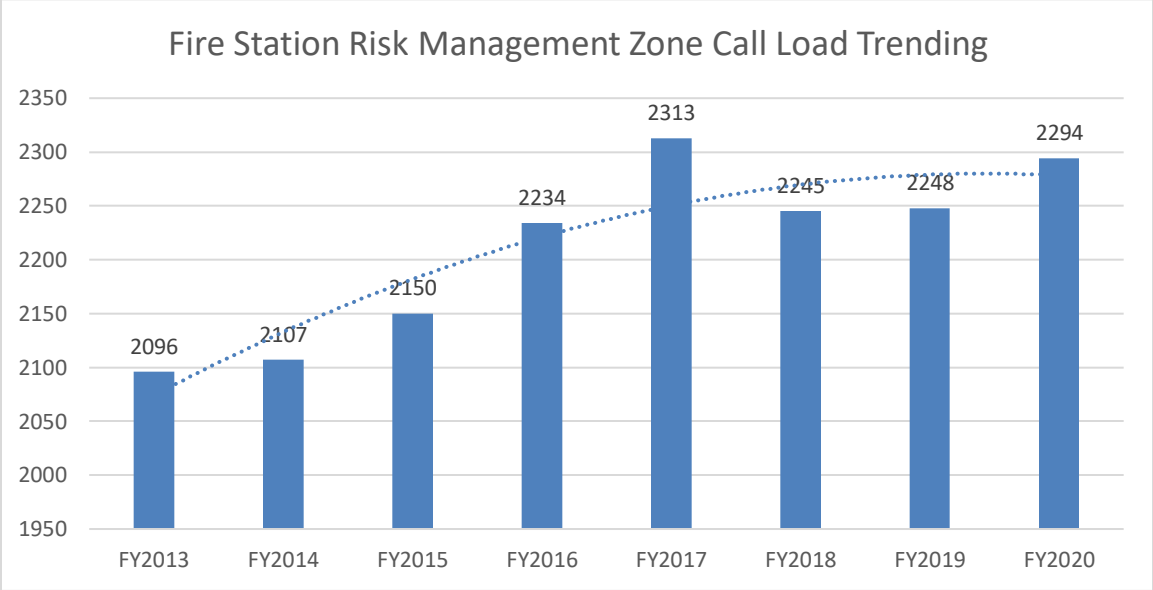
Battalion 4

Kensington Station

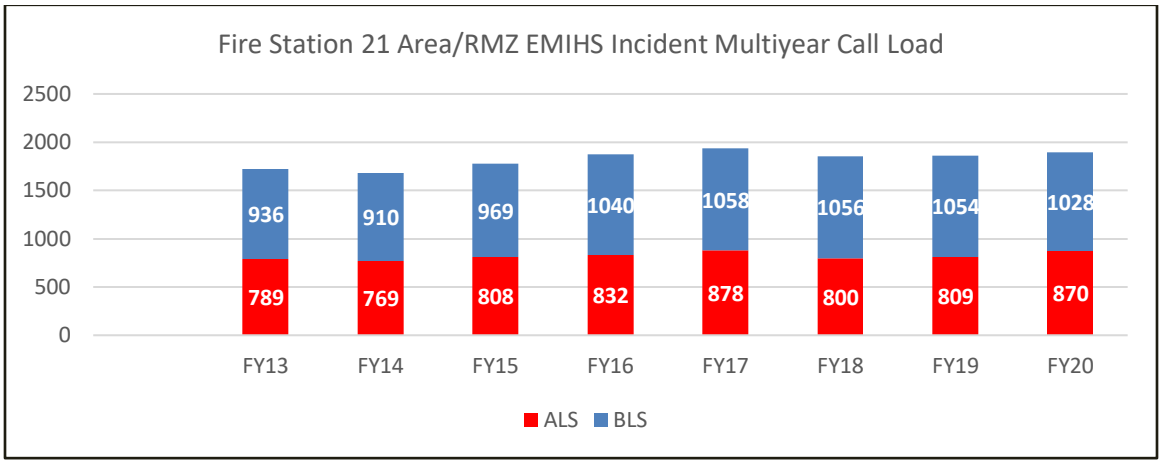
12500 Veirs Mill Road, Rockville

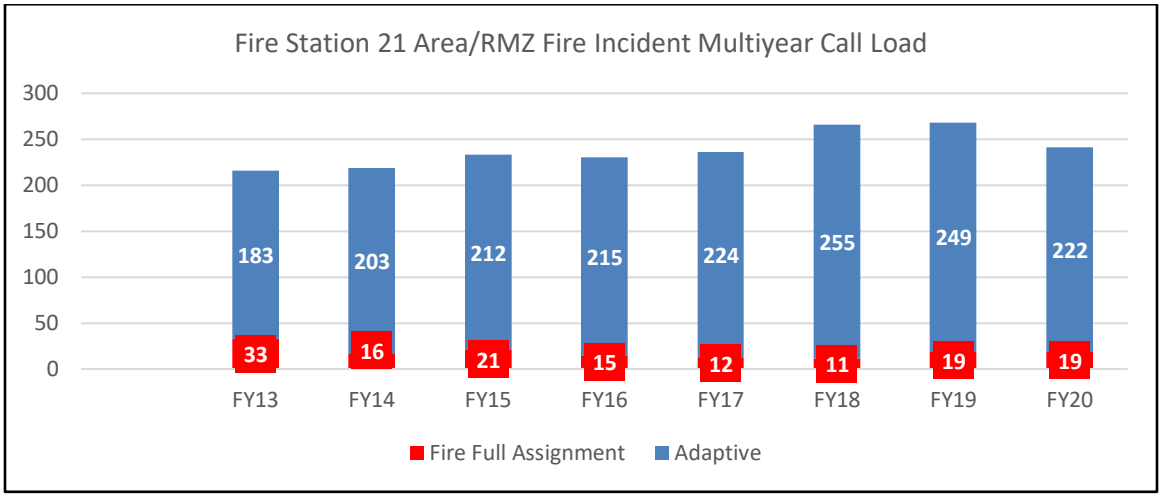
Description

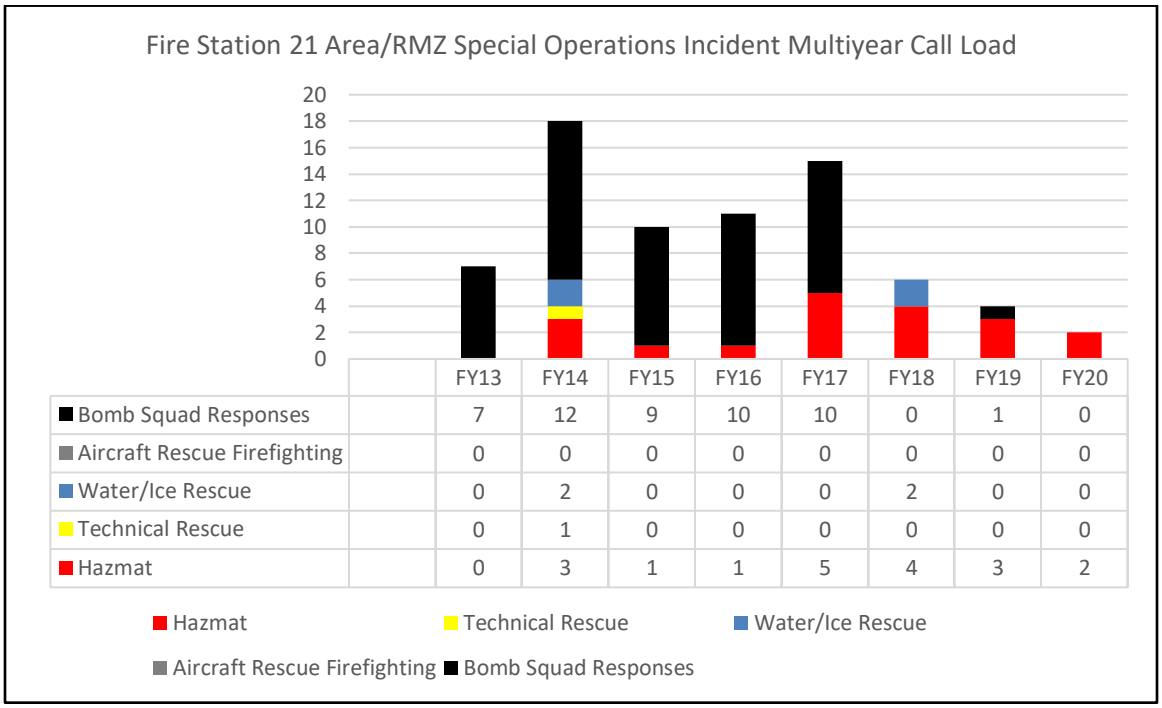
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance
- First Due Area: 4.1 mi^2
- Number of Unique Risk Management Zones (box areas): 11
- Predominant Population Density Zone: Metropolitan



Fire Station 21 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	669	650	690	709	761	692	689	750
ALS2	HR	120	119	118	123	117	108	120	120
BLS	LR	936	910	969	1040	1058	1056	1054	1028
Fire Full Assignment Hydranted	HR	33	16	21	14	12	10	18	16
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	1	0	1	1	3
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	30	28	44	36	18	43	37	37
Adaptive-1N	LR	130	150	136	152	175	162	173	152
Adaptive-2-3	MR	23	25	32	27	31	50	39	33
Hazmat Low Risk	LR	0	0	0	1	0	0	0	0
Hazmat Moderate Risk	MR	0	0	0	0	5	4	3	2
Hazmat High Risk	HR	0	2	0	0	0	0	0	0
Hazmat Special Risk	SR	0	1	1	0	0	0	0	0
Technical Rescue	SR	0	1	0	0	0	0	0	0
Water/Ice Rescue Moderate	MR	0	2	0	0	0	2	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		7	12	9	10	10	0	1	0
Non-Accreditation Counts									
Service Call		148	191	130	121	126	117	113	153
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		2096	2107	2150	2234	2313	2245	2248	2294
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		789	769	808	832	878	800	809	870
BLS		936	910	969	1040	1058	1056	1054	1028
Fire Full Assignment		33	16	21	15	12	11	19	19
Adaptive		183	203	212	215	224	255	249	222
Hazmat		0	3	1	1	5	4	3	2
Technical Rescue		0	1	0	0	0	0	0	0
Water/Ice Rescue		0	2	0	0	0	2	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		7	12	9	10	10	0	1	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	7	12	9	10	10	0	1	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	2	0	0	0	2	0	0
Technical Rescue	0	1	0	0	0	0	0	0
Hazmat	0	3	1	1	5	4	3	2

Fire Station 22

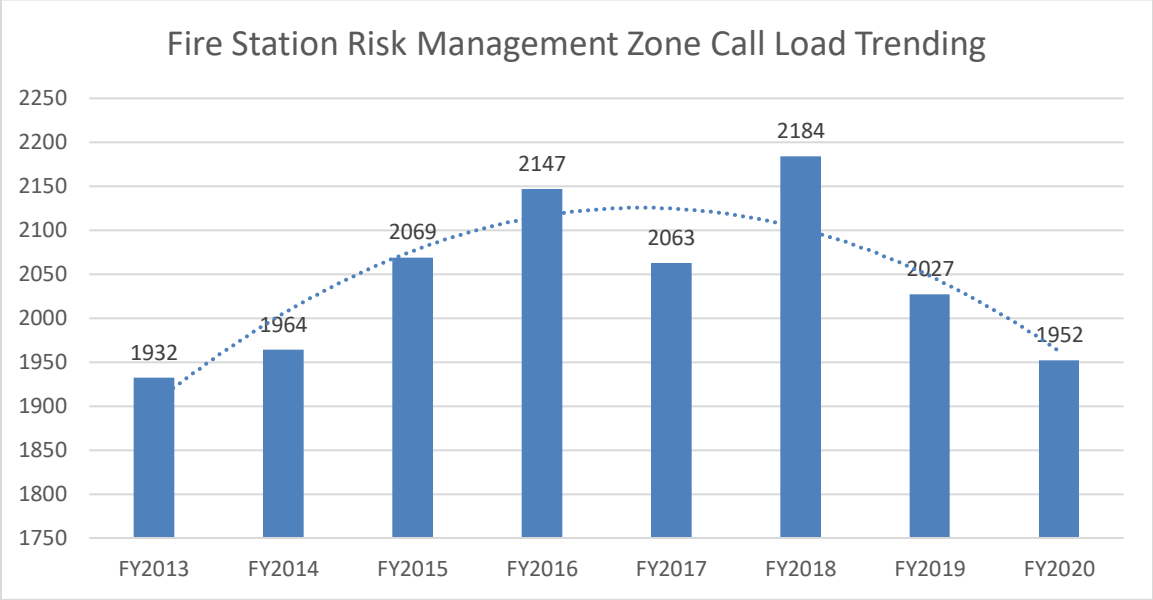
Battalion 5

Germantown (Kingsview) Station

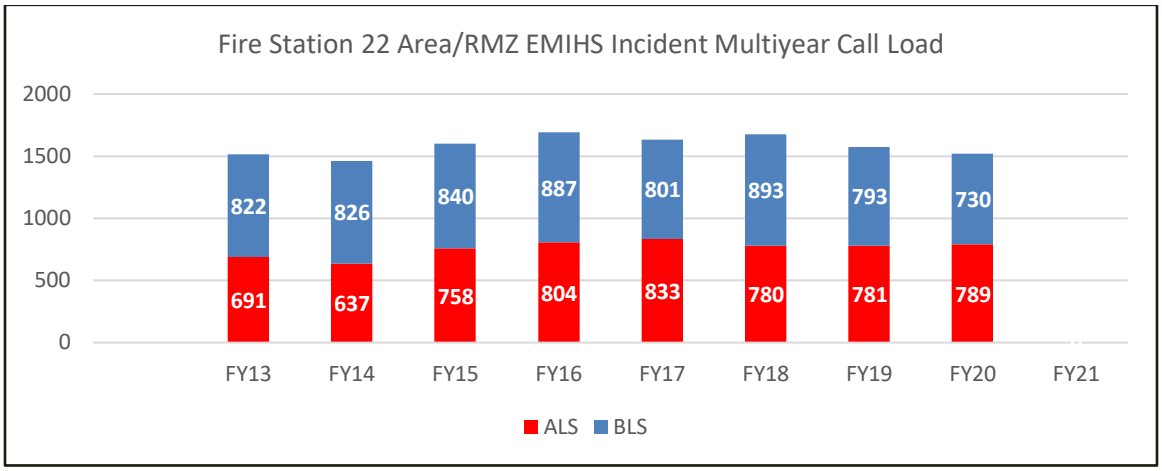
18910 Germantown Road, Germantown

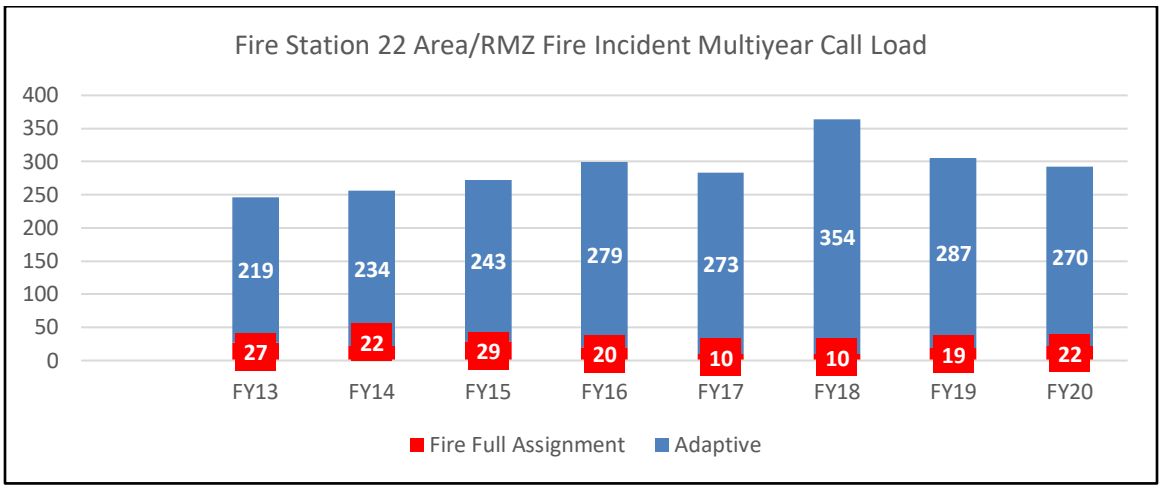
Description

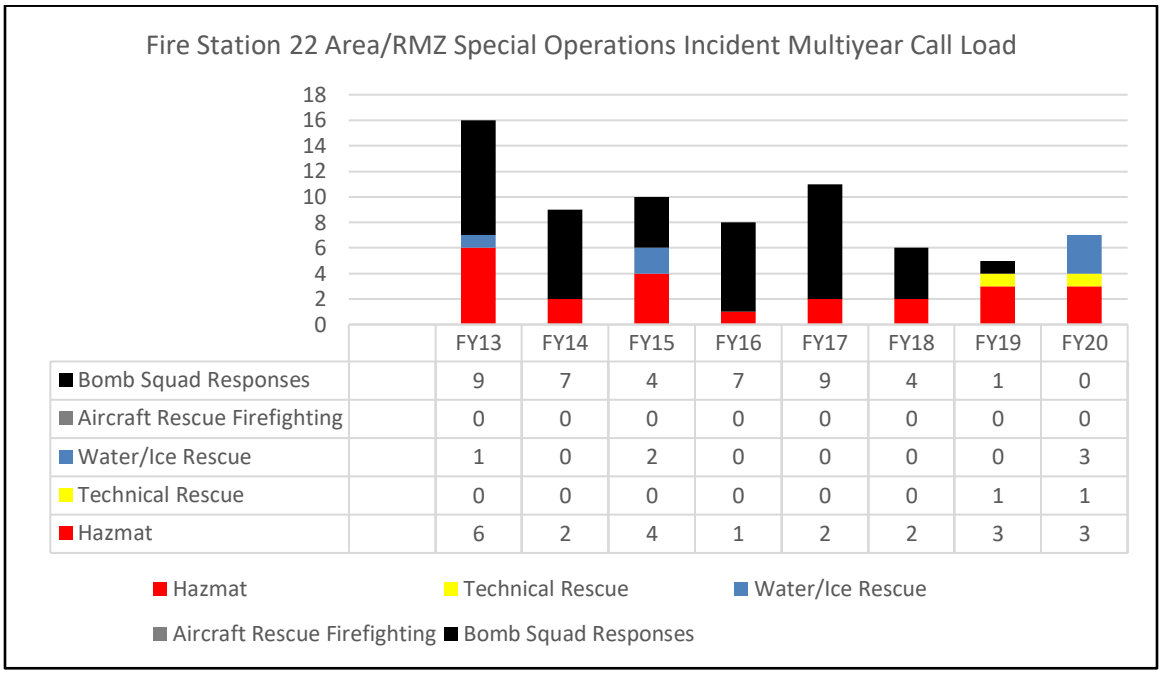
- Ownership: County
- Apparatus Housed: Paramedic Engine, Ambulance, Tanker, Brush Truck, Medical Ambulance Bus 722, Mass Casualty Support Unit 722
- First Due Area: 20.53 mi^2
- Number of Unique Risk Management Zones (box areas): 16
- Predominant Population Density Zone: Suburban



Fire Station 22 (Rural Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	570	539	645	661	709	667	664	702
ALS2	HR	121	98	113	143	124	113	117	87
BLS	LR	822	826	840	887	801	893	793	730
Fire Full Assignment Hydranted	HR	24	20	27	17	9	8	18	21
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	1	0	0
FFA-Non-hydranted Area	SR	3	2	2	3	1	1	1	1
Adaptive-1F	LR	47	26	34	59	41	44	28	31
Adaptive-1N	LR	137	179	169	174	179	240	200	190
Adaptive-2-3	MR	35	29	40	46	53	70	59	49
Hazmat Low Risk	LR	1	0	1	0	1	0	0	2
Hazmat Moderate Risk	MR	0	0	1	1	0	2	2	1
Hazmat High Risk	HR	4	1	2	0	1	0	1	0
Hazmat Special Risk	SR	1	1	0	0	0	0	0	0
Technical Rescue	SR	0	0	0	0	0	0	1	1
Water/Ice Rescue Moderate	MR	1	0	2	0	0	0	0	3
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		9	7	4	7	9	4	1	0
Non-Accreditation Counts									
Service Call		157	236	189	149	135	139	141	133
Special Event							2	1	1
Mutual Aid									
Total Incident Counts		1932	1964	2069	2147	2063	2184	2027	1952
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		691	637	758	804	833	780	781	789
BLS		822	826	840	887	801	893	793	730
Fire Full Assignment		27	22	29	20	10	10	19	22
Adaptive		219	234	243	279	273	354	287	270
Hazmat		6	2	4	1	2	2	3	3
Technical Rescue		0	0	0	0	0	0	1	1
Water/Ice Rescue		1	0	2	0	0	0	0	3
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		9	7	4	7	9	4	1	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	9	7	4	7	9	4	1	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	1	0	2	0	0	0	0	3
Technical Rescue	0	0	0	0	0	0	1	1
Hazmat	6	2	4	1	2	2	3	3

Fire Station 23

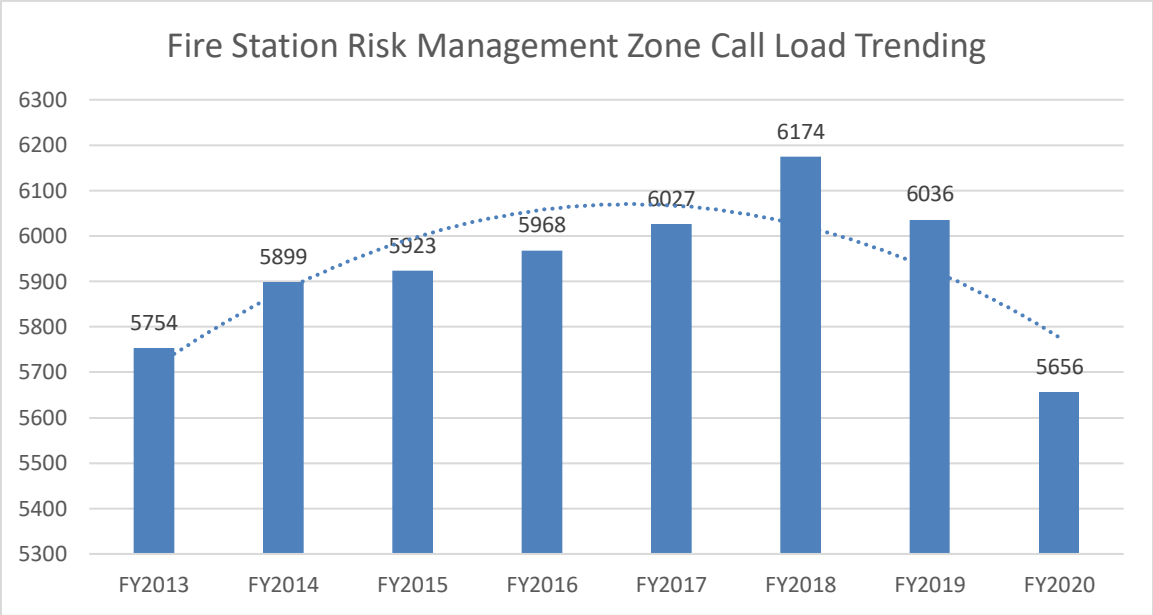
Battalion 3

Rockville Station

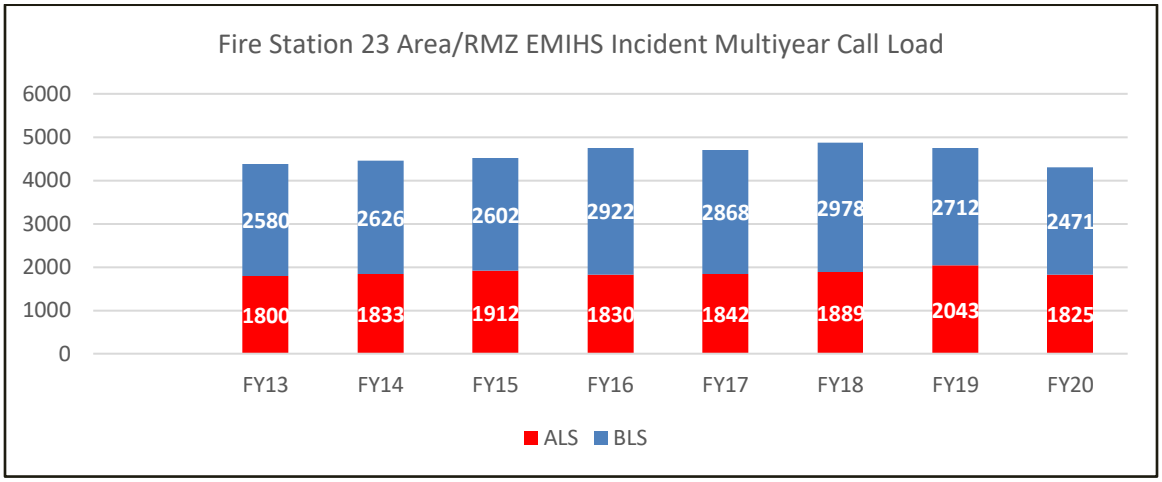
121 Rollins Avenue, Rockville

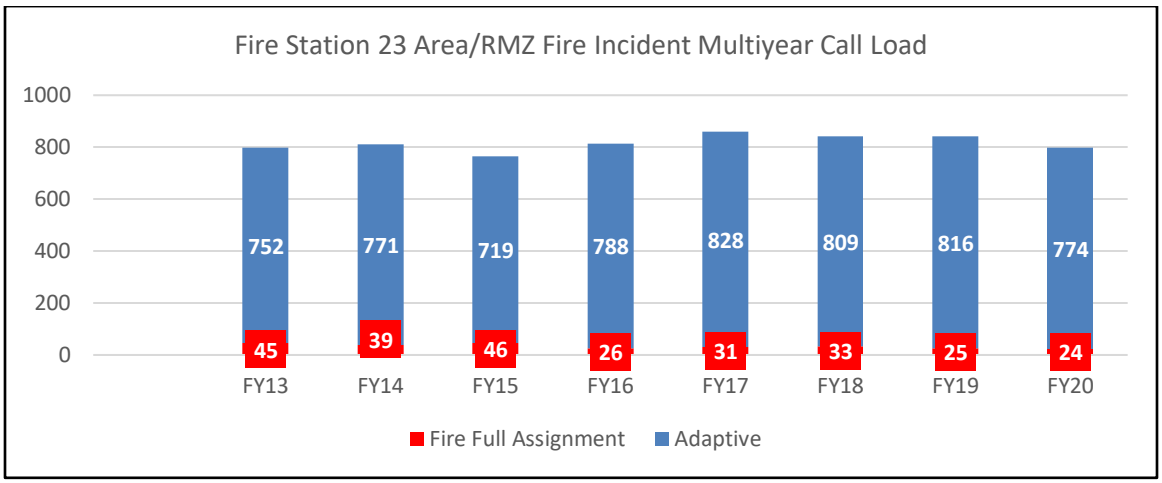
Description

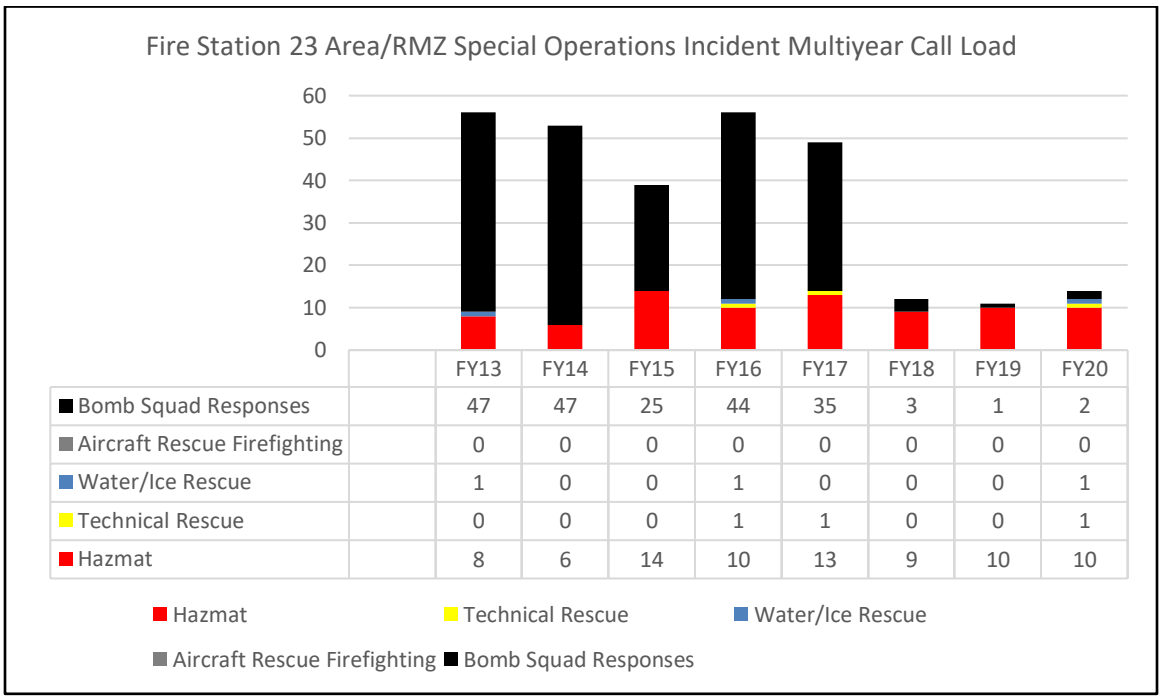
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Aerial Tower, Ambulance, Medic Unit
- First Due Area: 6.58 mi^2
- Number of Unique Risk Management Zones (box areas): 32
- Predominant Population Density Zone: Metropolitan



Fire Station 23 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	1514	1578	1624	1536	1624	1667	1785	1614
ALS2	HR	286	255	288	294	218	222	258	211
BLS	LR	2580	2626	2602	2922	2868	2978	2712	2471
Fire Full Assignment Hydranted	HR	45	39	46	24	26	29	20	13
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	2	5	4	5	11
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	96	70	74	64	63	83	67	65
Adaptive-1N	LR	600	625	550	623	659	631	647	616
Adaptive-2-3	MR	56	76	95	101	106	95	102	93
Hazmat Low Risk	LR	0	0	0	0	1	0	1	5
Hazmat Moderate Risk	MR	1	1	5	4	8	6	9	3
Hazmat High Risk	HR	6	3	8	4	1	1	0	0
Hazmat Special Risk	SR	1	2	1	2	3	2	0	2
Technical Rescue	SR	0	0	0	1	1	0	0	1
Water/Ice Rescue Moderate	MR	1	0	0	1	0	0	0	1
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		47	47	25	44	35	3	1	2
Non-Accreditation Counts									
Service Call		521	577	605	344	408	450	428	548
Special Event					2	1	3	1	0
Mutual Aid									
Total Incident Counts		5754	5899	5923	5968	6027	6174	6036	5656
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		1800	1833	1912	1830	1842	1889	2043	1825
BLS		2580	2626	2602	2922	2868	2978	2712	2471
Fire Full Assignment		45	39	46	26	31	33	25	24
Adaptive		752	771	719	788	828	809	816	774
Hazmat		8	6	14	10	13	9	10	10
Technical Rescue		0	0	0	1	1	0	0	1
Water/Ice Rescue		1	0	0	1	0	0	0	1
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		47	47	25	44	35	3	1	2







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	47	47	25	44	35	3	1	2
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	1	0	0	1	0	0	0	1
Technical Rescue	0	0	0	1	1	0	0	1
Hazmat	8	6	14	10	13	9	10	10

Fire Station 24

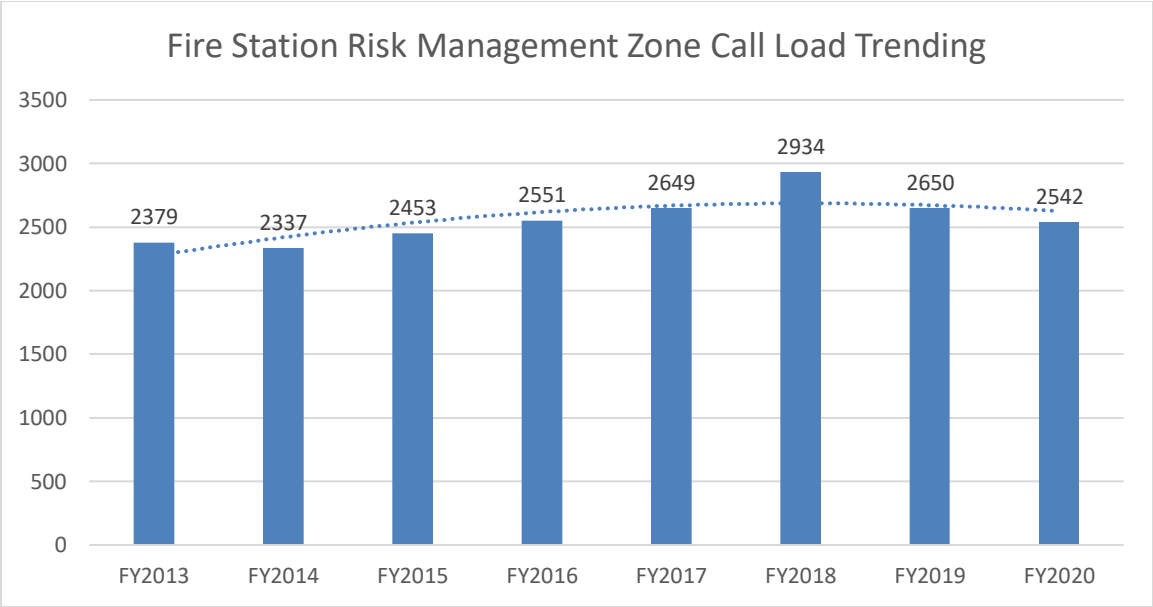
Battalion 1

Hillandale Station

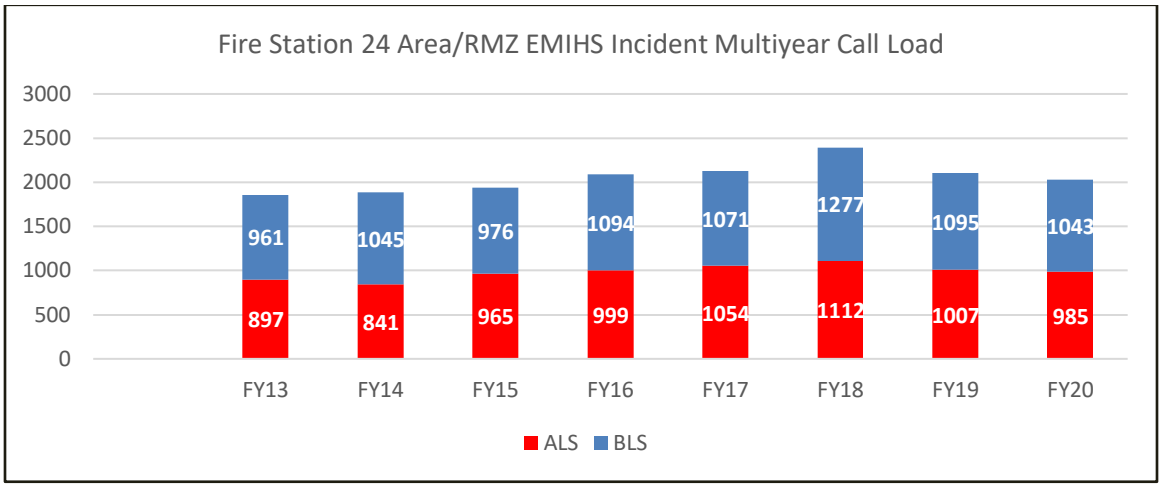
13216 New Hampshire, Silver Spring

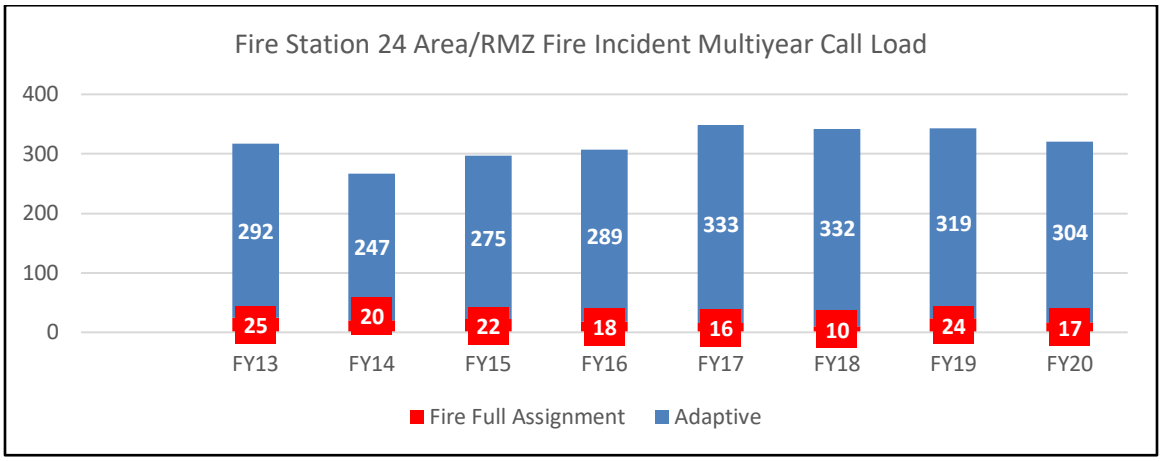
Description

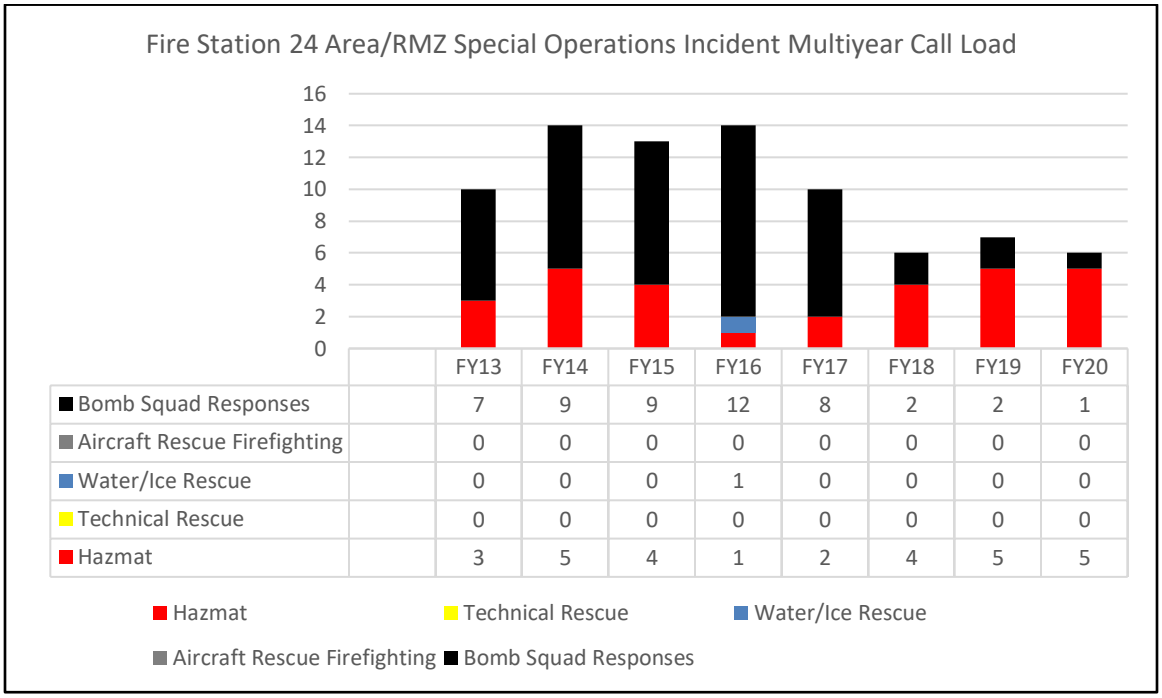
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Aerial Tower, Ambulance, Brush Truck
- First Due Area: 10.37 mi^2
- Number of Unique Risk Management Zones (box areas): 22
- Predominant Population Density Zone: Urban



Fire Station 24 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	742	710	810	850	921	978	884	853
ALS2	HR	155	131	155	149	133	134	123	132
BLS	LR	961	1045	976	1094	1071	1277	1095	1043
Fire Full Assignment Hydranted	HR	25	19	22	18	16	10	21	17
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	0	1	0	0	0	0	3	0
Adaptive-1F	LR	46	44	31	46	53	36	39	37
Adaptive-1N	LR	221	174	205	211	234	256	245	238
Adaptive-2-3	MR	25	29	39	32	46	40	35	29
Hazmat Low Risk	LR	1	0	0	0	0	0	0	3
Hazmat Moderate Risk	MR	0	0	1	0	2	3	5	2
Hazmat High Risk	HR	1	5	2	1	0	1	0	0
Hazmat Special Risk	SR	1	0	1	0	0	0	0	0
Technical Rescue	SR	0	0	0	0	0	0	0	0
Water/Ice Rescue Moderate	MR	0	0	0	1	0	0	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		7	9	9	12	8	2	2	1
Non-Accreditation Counts									
Service Call		194	170	202	137	165	197	198	187
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		2379	2337	2453	2551	2649	2934	2650	2542
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		897	841	965	999	1054	1112	1007	985
BLS		961	1045	976	1094	1071	1277	1095	1043
Fire Full Assignment		25	20	22	18	16	10	24	17
Adaptive		292	247	275	289	333	332	319	304
Hazmat		3	5	4	1	2	4	5	5
Technical Rescue		0	0	0	0	0	0	0	0
Water/Ice Rescue		0	0	0	1	0	0	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		7	9	9	12	8	2	2	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	7	9	9	12	8	2	2	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	0	1	0	0	0	0
Technical Rescue	0	0	0	0	0	0	0	0
Hazmat	3	5	4	1	2	4	5	5

Fire Station 25

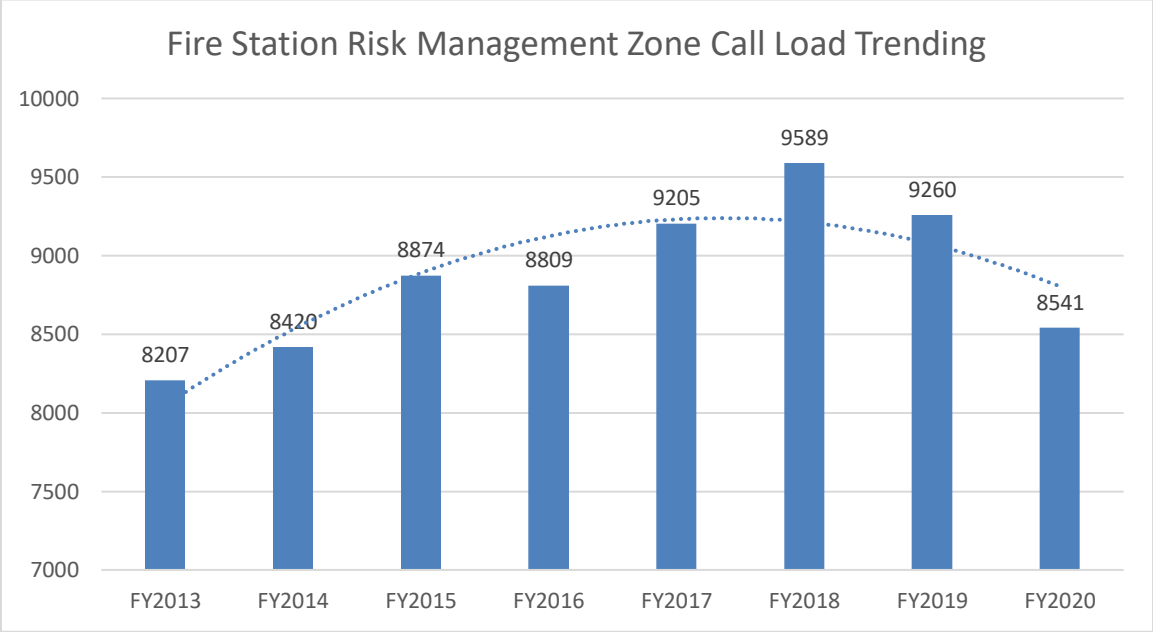
Battalion 4

Kensington Station

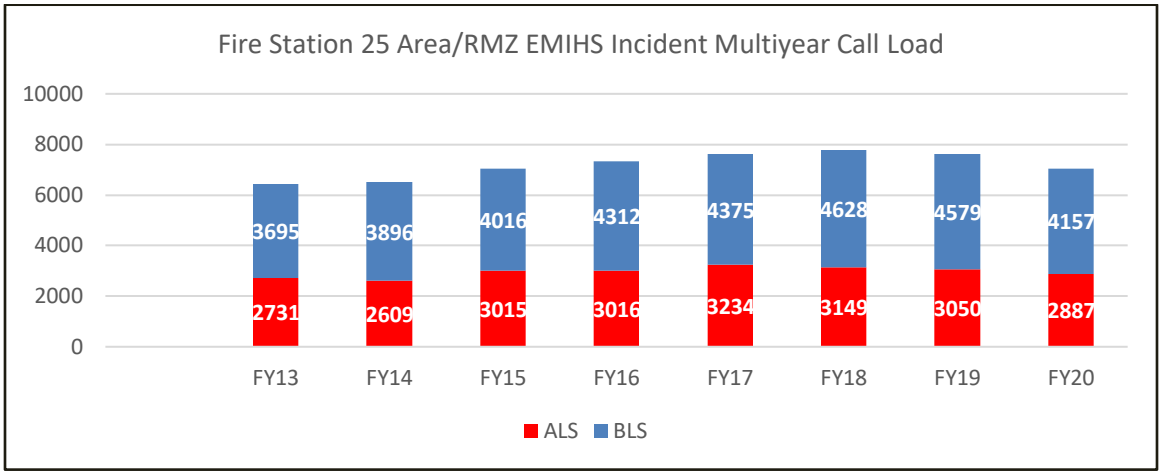
14401 Connecticut Avenue, Silver Spring

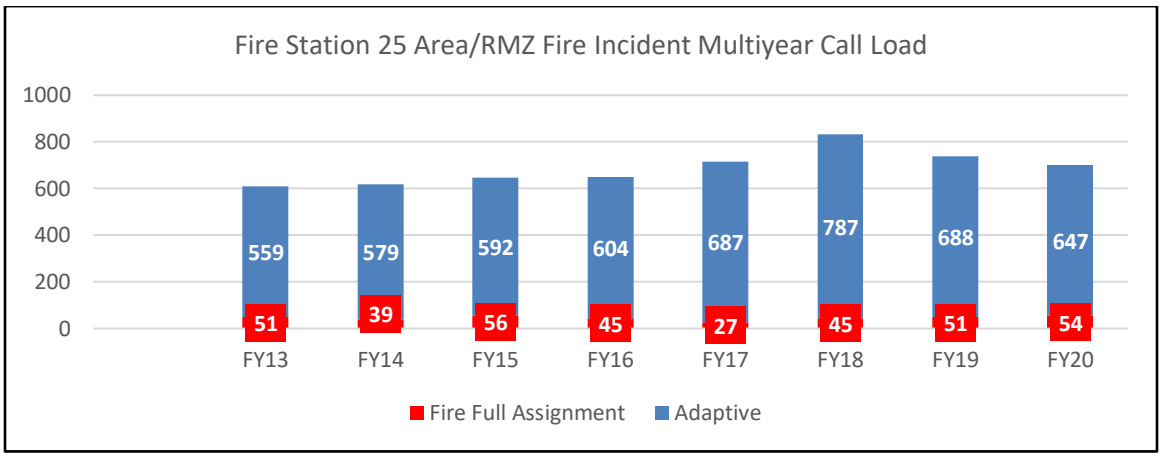
Description

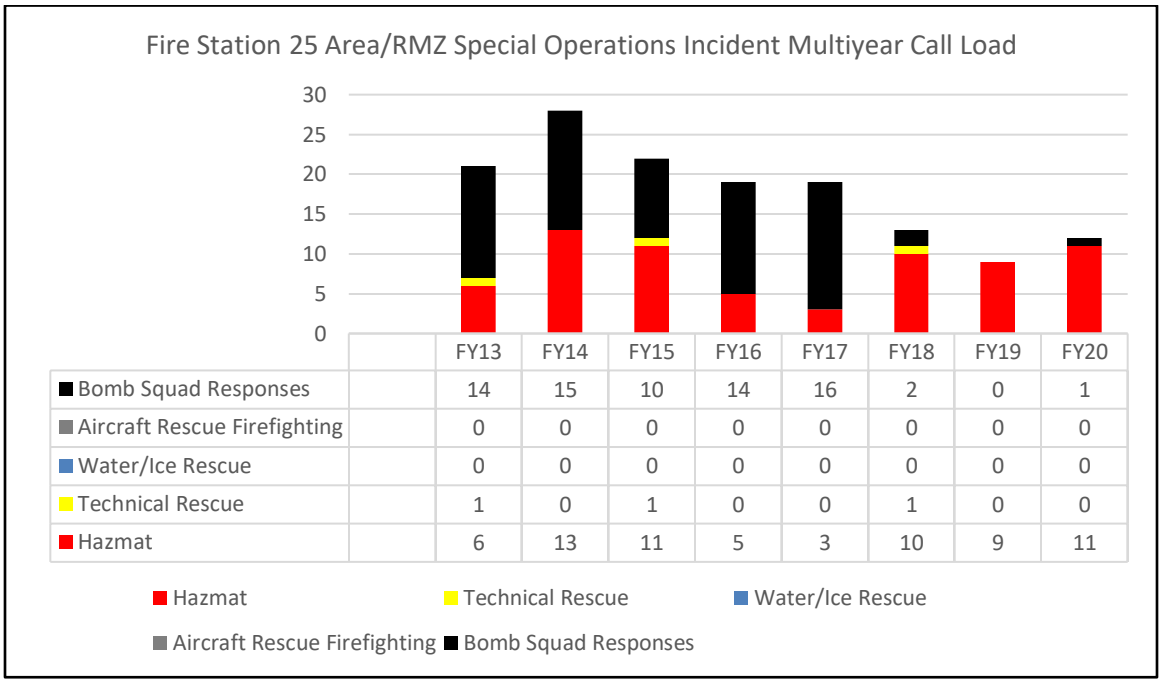
- Ownership: County
- Apparatus Housed: Paramedic Engine, Truck, Medic, Ambulance, Battalion Chief, Boat
- Additional Information: Special Operations Trained Staff & Equipment
- First Due Area: 10.81 mi^2
- Number of Unique Risk Management Zones (box areas): 29
- Predominant Population Density Zone: Metropolitan



Fire Station 25 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	2393	2269	2638	2617	2865	2792	2677	2547
ALS2	HR	338	340	377	399	369	357	373	340
BLS	LR	3695	3896	4016	4312	4375	4628	4579	4157
Fire Full Assignment Hydranted	HR	51	39	56	44	26	43	49	50
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	1	1	2	2	4
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	82	67	53	55	65	66	44	63
Adaptive-1N	LR	351	378	391	390	419	527	473	422
Adaptive-2-3	MR	126	134	148	159	203	194	171	162
Hazmat Low Risk	LR	1	0	0	1	0	0	0	6
Hazmat Moderate Risk	MR	0	2	1	3	2	9	7	4
Hazmat High Risk	HR	5	10	7	0	1	0	1	0
Hazmat Special Risk	SR	0	1	3	1	0	1	1	1
Technical Rescue	SR	1	0	1	0	0	1	0	0
Water/Ice Rescue Moderate	MR	0	0	0	0	0	0	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		14	15	10	14	16	2	0	1
Non-Accreditation Counts									
Service Call		1150	1269	1173	813	863	967	883	784
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		8207	8420	8874	8809	9205	9589	9260	8541
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		2731	2609	3015	3016	3234	3149	3050	2887
BLS		3695	3896	4016	4312	4375	4628	4579	4157
Fire Full Assignment		51	39	56	45	27	45	51	54
Adaptive		559	579	592	604	687	787	688	647
Hazmat		6	13	11	5	3	10	9	11
Technical Rescue		1	0	1	0	0	1	0	0
Water/Ice Rescue		0	0	0	0	0	0	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		14	15	10	14	16	2	0	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	14	15	10	14	16	2	0	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	0	0	0	0	0	0
Technical Rescue	1	0	1	0	0	1	0	0
Hazmat	6	13	11	5	3	10	9	11

Fire Station 26

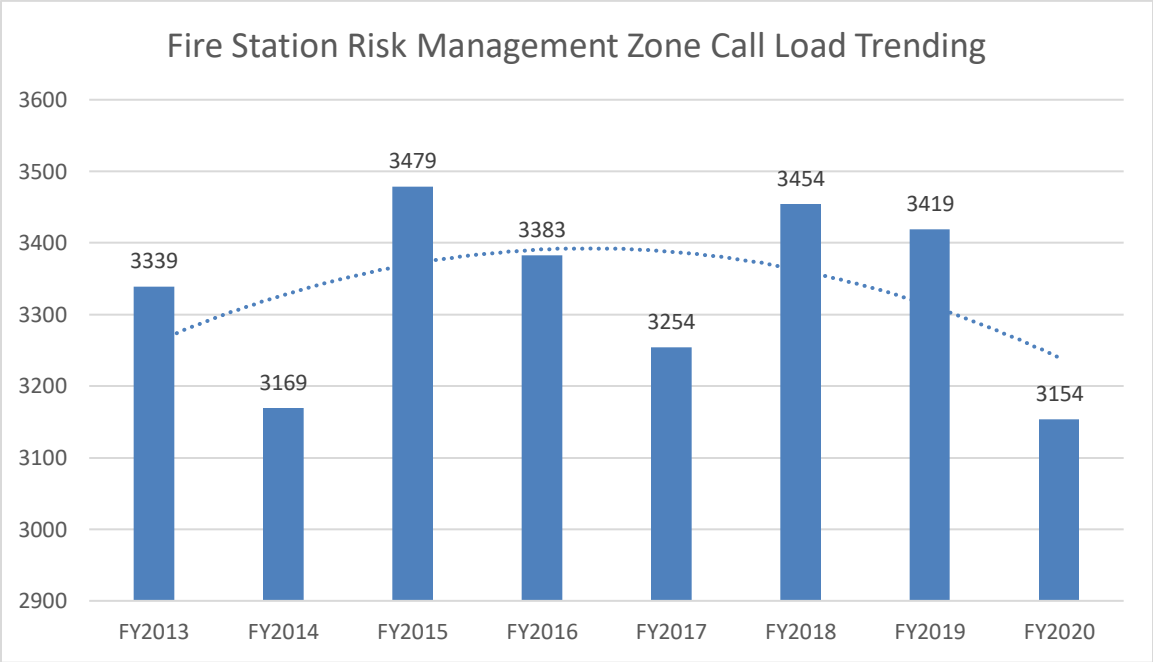
Battalion 2

Bethesda Station

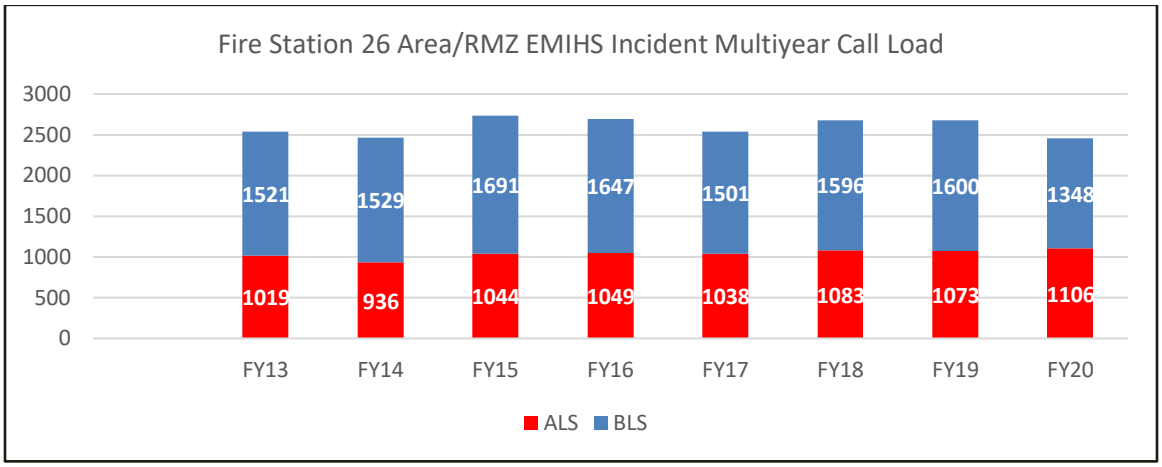
6700 Democracy Boulevard, Bethesda

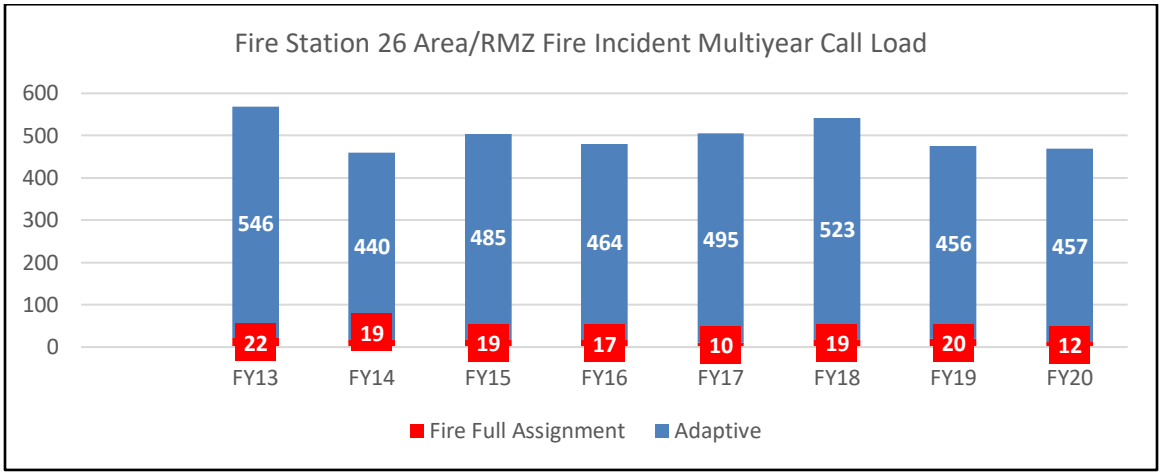
Description

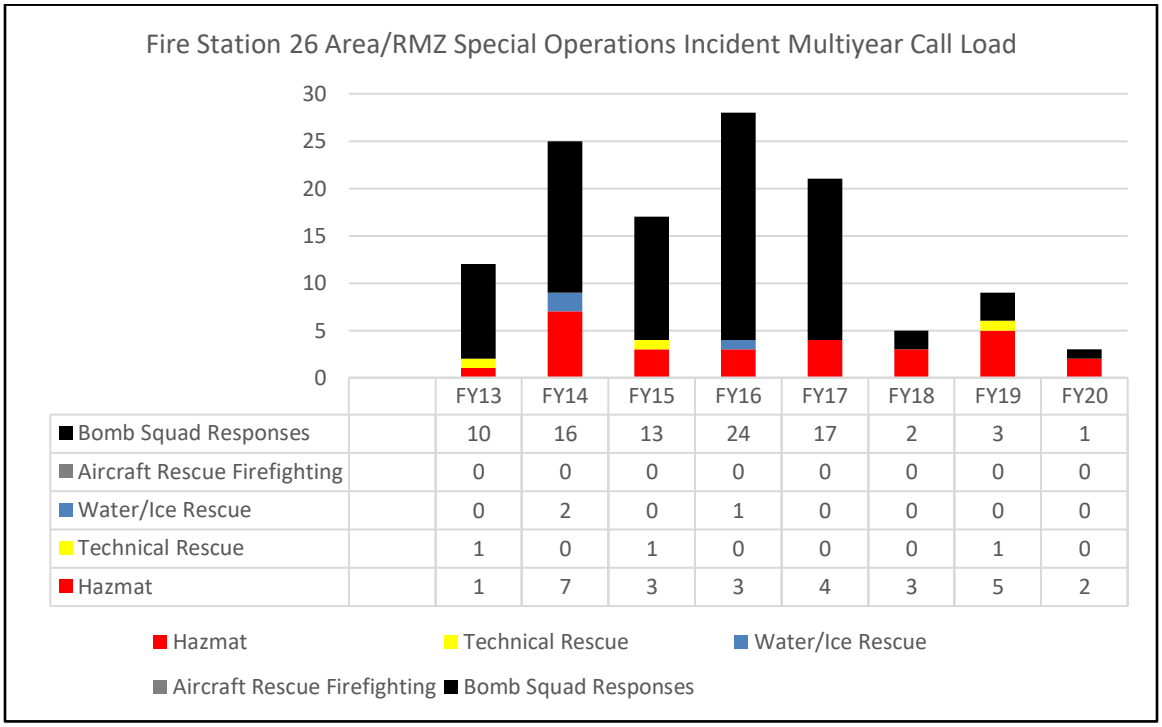
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance, Medical Ambulance Bus, Mass Casualty Support Unit
- First Due Area: 6.51 mi^2
- Number of Unique Risk Management Zones (box areas): 20
- Predominant Population Density Zone: Metropolitan



Fire Station 26 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	893	810	916	901	914	939	942	959
ALS2	HR	126	126	128	148	124	144	131	147
BLS	LR	1521	1529	1691	1647	1501	1596	1600	1348
Fire Full Assignment Hydranted	HR	22	19	19	15	10	19	17	10
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	2	0	0	3	2
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	60	46	43	38	48	50	44	30
Adaptive-1N	LR	439	365	399	372	383	411	359	373
Adaptive-2-3	MR	47	29	43	54	64	62	53	54
Hazmat Low Risk	LR	0	0	2	0	0	0	0	2
Hazmat Moderate Risk	MR	1	1	0	1	1	2	1	0
Hazmat High Risk	HR	0	4	1	2	0	0	1	0
Hazmat Special Risk	SR	0	2	0	0	3	1	3	0
Technical Rescue	SR	1	0	1	0	0	0	1	0
Water/Ice Rescue Moderate	MR	0	2	0	1	0	0	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		10	16	13	24	17	2	3	1
Non-Accreditation Counts									
Service Call		219	220	223	178	189	228	261	228
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		3339	3169	3479	3383	3254	3454	3419	3154
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		1019	936	1044	1049	1038	1083	1073	1106
BLS		1521	1529	1691	1647	1501	1596	1600	1348
Fire Full Assignment		22	19	19	17	10	19	20	12
Adaptive		546	440	485	464	495	523	456	457
Hazmat		1	7	3	3	4	3	5	2
Technical Rescue		1	0	1	0	0	0	1	0
Water/Ice Rescue		0	2	0	1	0	0	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		10	16	13	24	17	2	3	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	10	16	13	24	17	2	3	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	2	0	1	0	0	0	0
Technical Rescue	1	0	1	0	0	0	1	0
Hazmat	1	7	3	3	4	3	5	2

Fire Station 27

Fire Station 27 is the number given to the Training Academy area footprint. Since there are no daily deployable resources there, the response data for this station response area is not analyzed.

8751 Snouffer School Rd, Montgomery Village

Fire Station 28

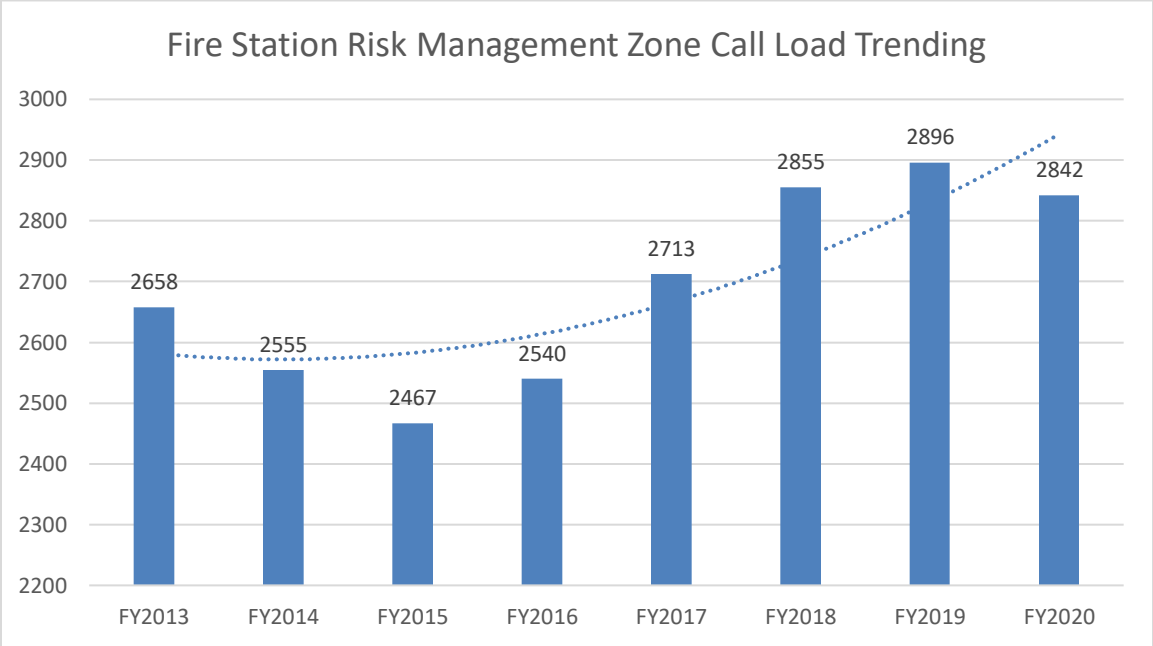
Battalion 3

Gaithersburg Station

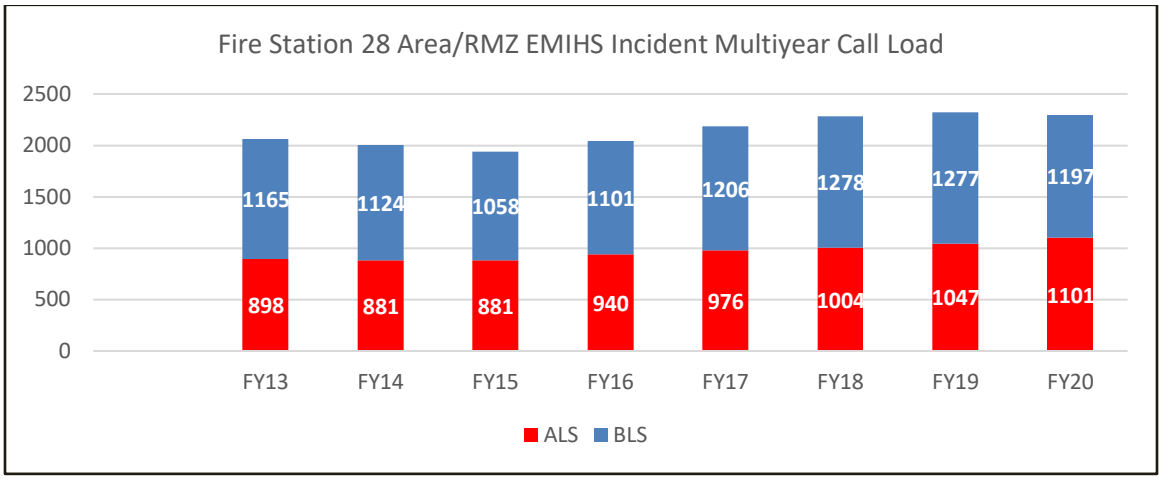
7272 Muncaster Mill Road, Derwood

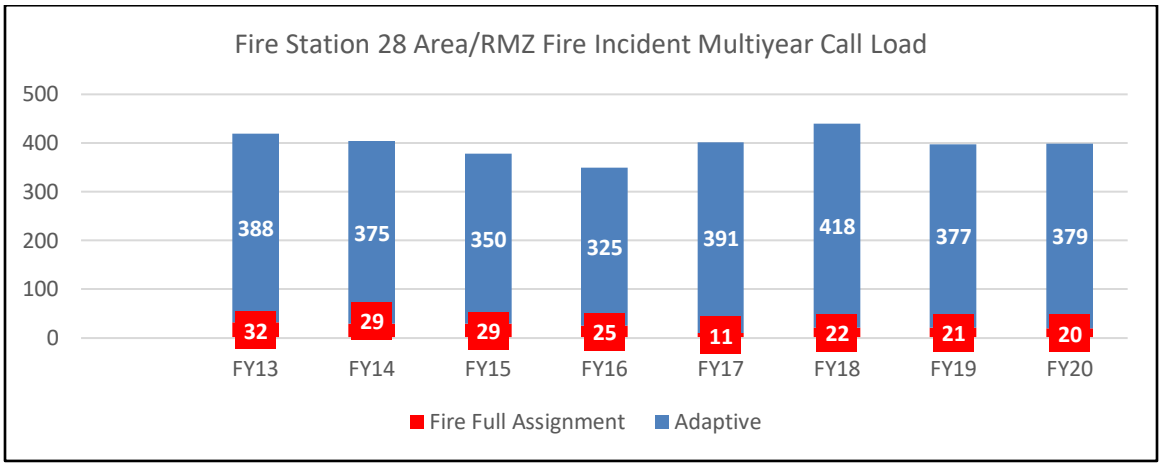
Description

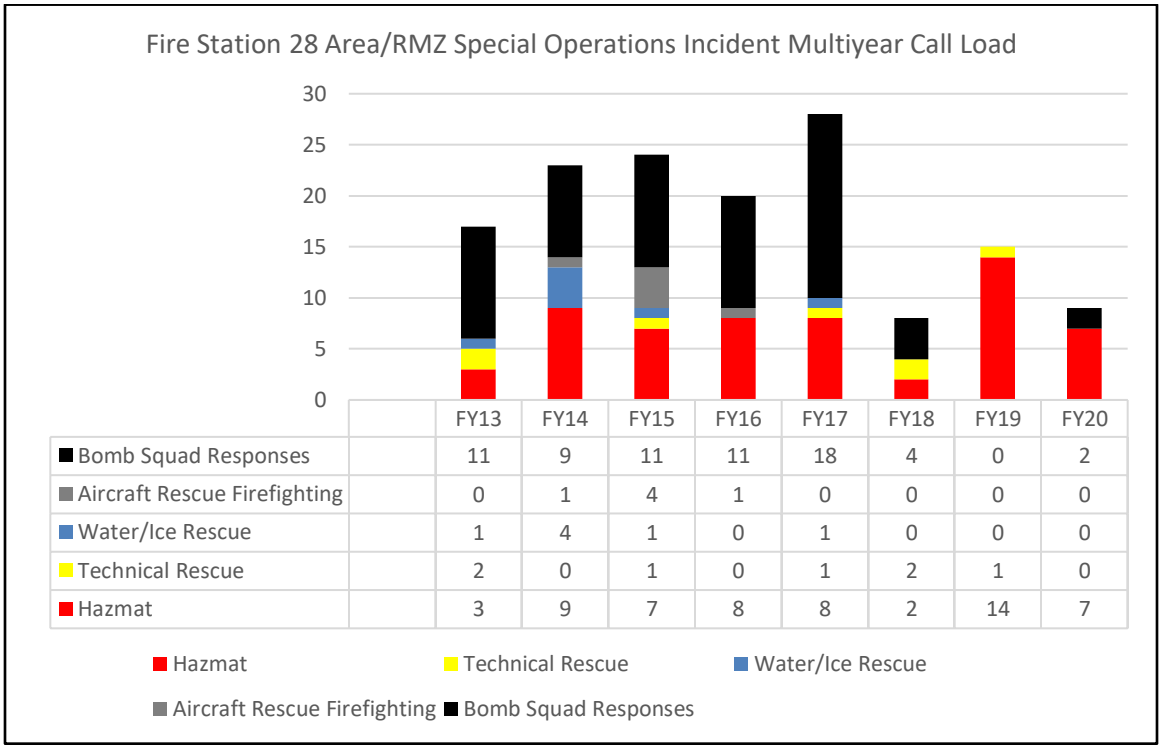
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance, HazMat Unit
- Specialty Team: Hazmat
- First Due Area: 16.35 mi^2
- Number of Unique Risk Management Zones (box areas): 29
- Predominant Population Density Zone: Suburban



Fire Station 28 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	757	721	742	788	851	882	919	957
ALS2	HR	141	160	139	152	125	122	128	144
BLS	LR	1165	1124	1058	1101	1206	1278	1277	1197
Fire Full Assignment Hydranted	HR	32	28	27	22	11	22	20	20
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	0	1	2	3	0	0	1	0
Adaptive-1F	LR	62	63	58	58	57	64	48	47
Adaptive-1N	LR	279	260	249	220	265	297	274	280
Adaptive-2-3	MR	47	52	43	47	69	57	55	52
Hazmat Low Risk	LR	0	0	0	2	1	0	0	4
Hazmat Moderate Risk	MR	0	1	2	3	2	1	12	1
Hazmat High Risk	HR	2	3	4	0	1	1	1	0
Hazmat Special Risk	SR	1	5	1	3	4	0	1	2
Technical Rescue	SR	2	0	1	0	1	2	1	0
Water/Ice Rescue Moderate	MR	1	4	1	0	1	0	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	1	3	0	0	0	0	0
ARFF Special Risk	SR	0	0	1	1	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		11	9	11	11	18	4	0	2
Non-Accreditation Counts									
Service Call		158	123	125	129	101	124	159	136
Special Event							1	0	0
Mutual Aid									
Total Incident Counts		2658	2555	2467	2540	2713	2855	2896	2842
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		898	881	881	940	976	1004	1047	1101
BLS		1165	1124	1058	1101	1206	1278	1277	1197
Fire Full Assignment		32	29	29	25	11	22	21	20
Adaptive		388	375	350	325	391	418	377	379
Hazmat		3	9	7	8	8	2	14	7
Technical Rescue		2	0	1	0	1	2	1	0
Water/Ice Rescue		1	4	1	0	1	0	0	0
Aircraft Rescue Firefighting		0	1	4	1	0	0	0	0
Bomb Squad Responses		11	9	11	11	18	4	0	2







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	11	9	11	11	18	4	0	2
Aircraft Rescue Firefighting	0	1	4	1	0	0	0	0
Water/Ice Rescue	1	4	1	0	1	0	0	0
Technical Rescue	2	0	1	0	1	2	1	0
Hazmat	3	9	7	8	8	2	14	7

Fire Station 29

Battalion 5

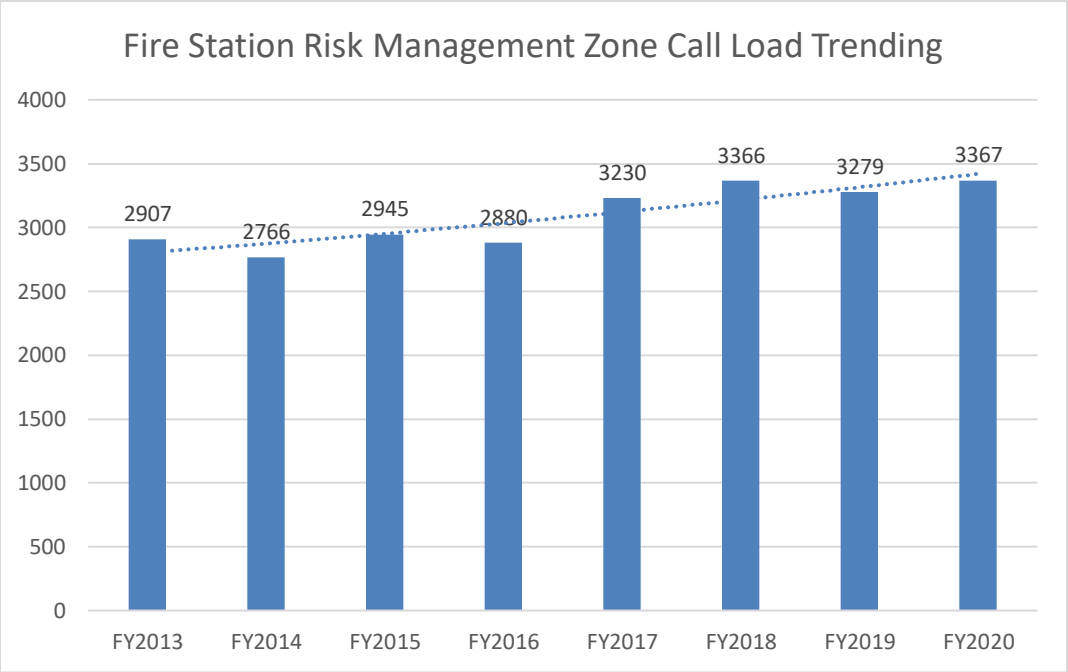
Germantown Station

20001 Crystal Rock Drive, Germantown

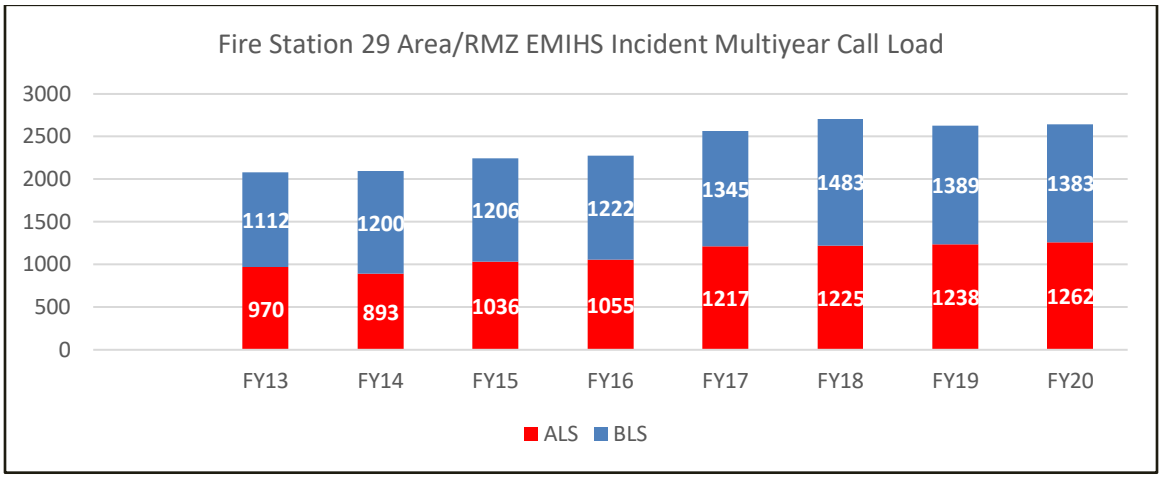
Description

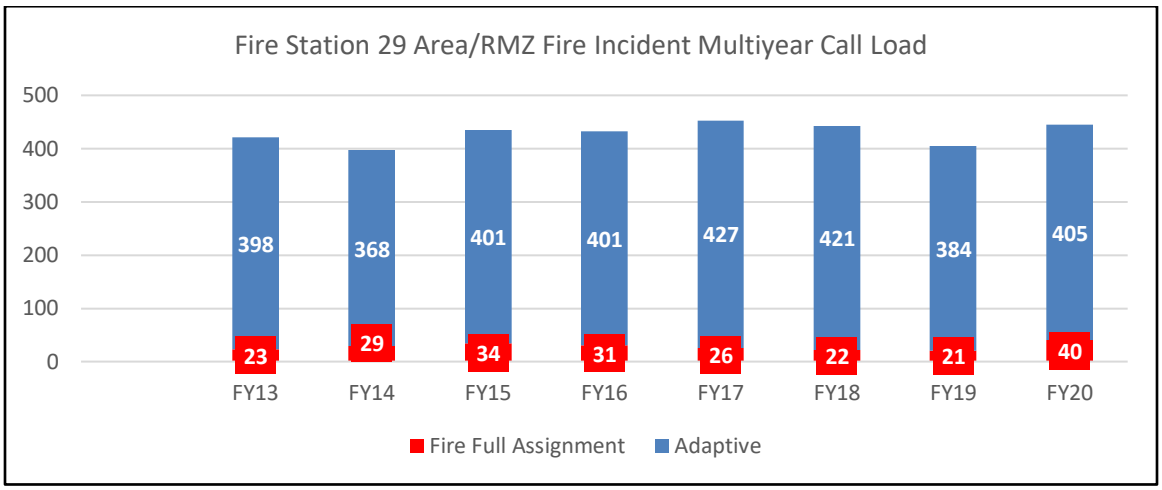
- Ownership: County
- Apparatus Housed: Paramedic Engine, Rescue Squad, Medic, Ambulance*, Boat
- First Due Area: 4.68 mi^2
- Number of Unique Risk Management Zones (box areas): 11
- Predominant Population Density Zone: Metropolitan

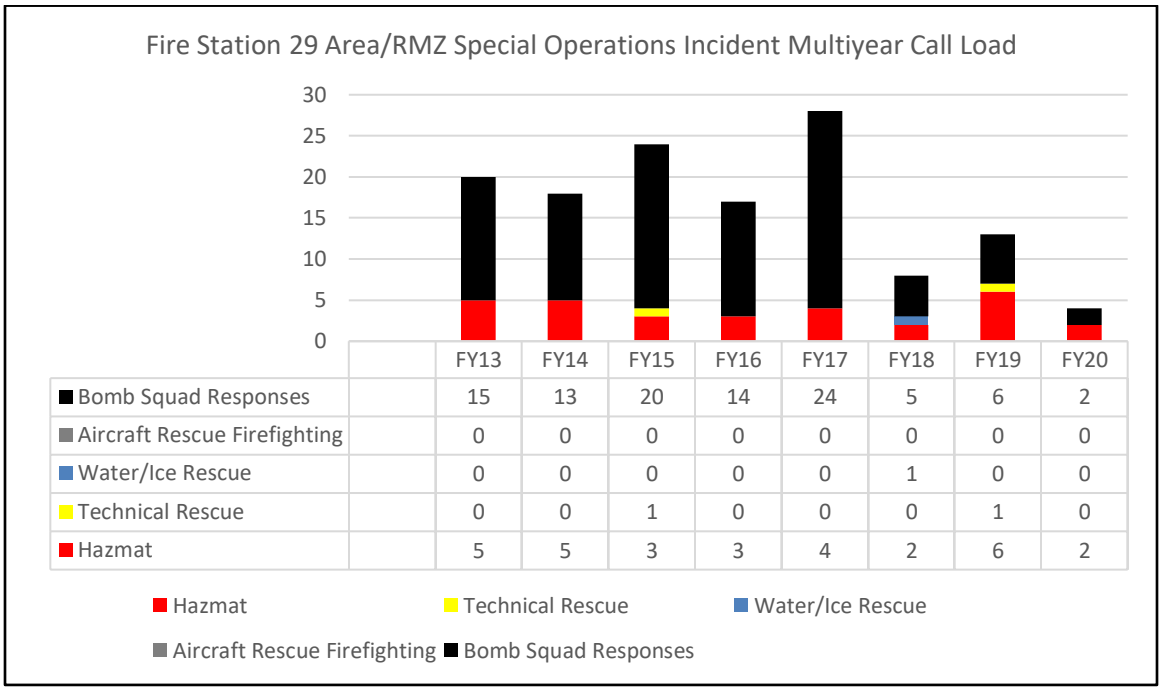
*Only staffed when volunteer personnel are in the station



Fire Station 29 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	791	739	867	889	1066	1071	1074	1134
ALS2	HR	179	154	169	166	151	154	164	128
BLS	LR	1112	1200	1206	1222	1345	1483	1389	1383
Fire Full Assignment Hydranted	HR	23	29	34	31	26	19	21	40
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	3	0	0
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	76	45	58	50	75	61	36	46
Adaptive-1N	LR	255	272	287	286	286	276	289	304
Adaptive-2-3	MR	67	51	56	65	66	84	59	55
Hazmat Low Risk	LR	0	0	0	0	0	0	0	2
Hazmat Moderate Risk	MR	1	0	1	1	4	2	4	0
Hazmat High Risk	HR	4	3	1	1	0	0	1	0
Hazmat Special Risk	SR	0	2	1	1	0	0	1	0
Technical Rescue	SR	0	0	1	0	0	0	1	0
Water/Ice Rescue Moderate	MR	0	0	0	0	0	1	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		15	13	20	14	24	5	6	2
Non-Accreditation Counts									
Service Call		384	258	244	154	187	207	234	273
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		2907	2766	2945	2880	3230	3366	3279	3367
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		970	893	1036	1055	1217	1225	1238	1262
BLS		1112	1200	1206	1222	1345	1483	1389	1383
Fire Full Assignment		23	29	34	31	26	22	21	40
Adaptive		398	368	401	401	427	421	384	405
Hazmat		5	5	3	3	4	2	6	2
Technical Rescue		0	0	1	0	0	0	1	0
Water/Ice Rescue		0	0	0	0	0	1	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		15	13	20	14	24	5	6	2







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	15	13	20	14	24	5	6	2
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	0	0	0	0	1	0	0
Technical Rescue	0	0	1	0	0	0	1	0
Hazmat	5	5	3	3	4	2	6	2

Fire Station 30

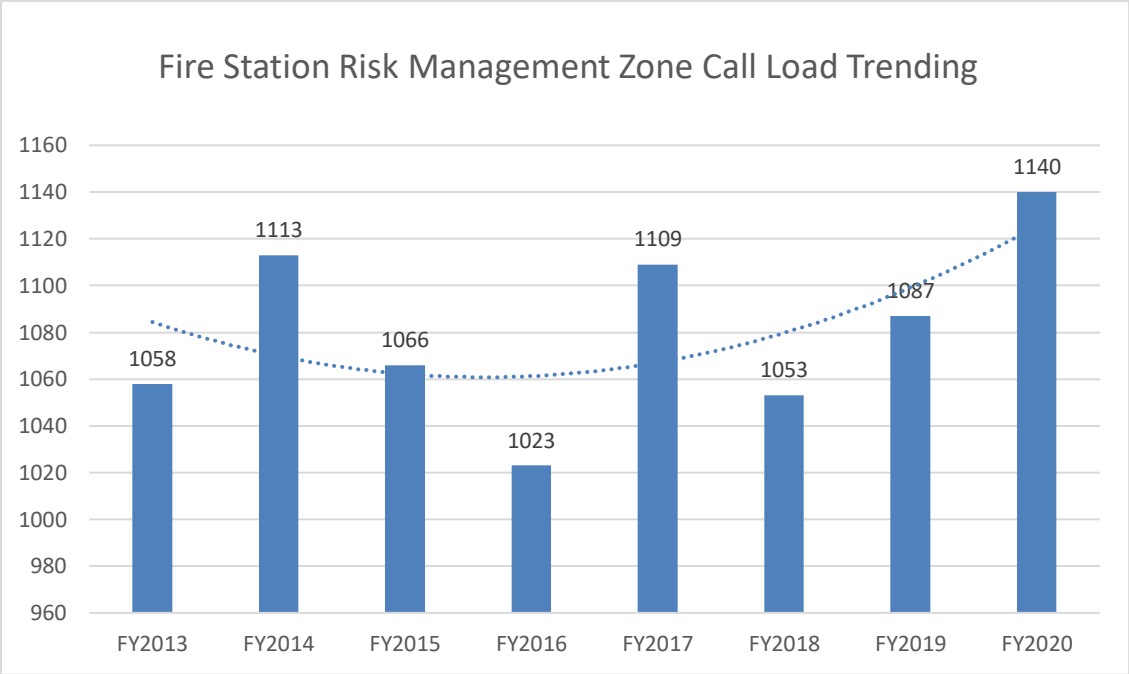
Battalion 2

Cabin John Station

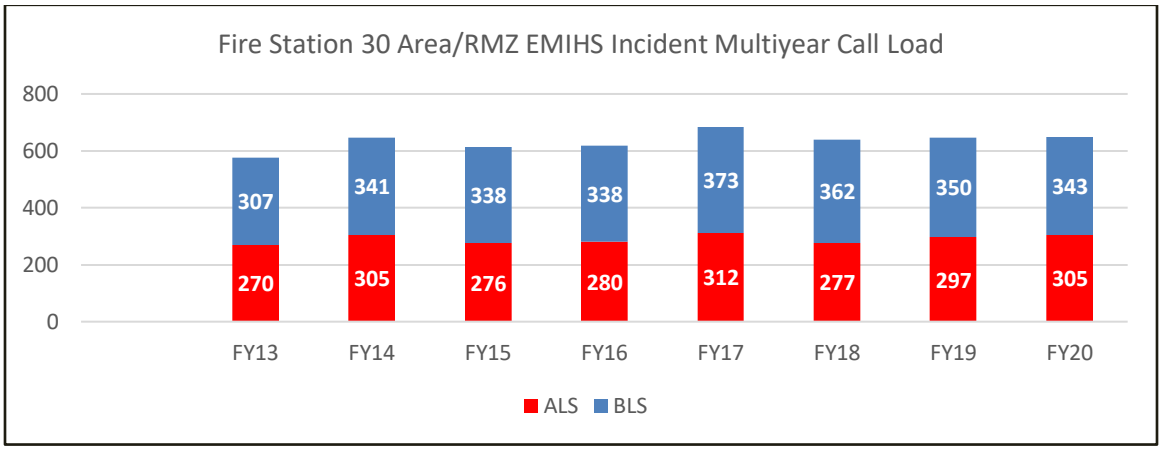
9404 Falls Road, Potomac

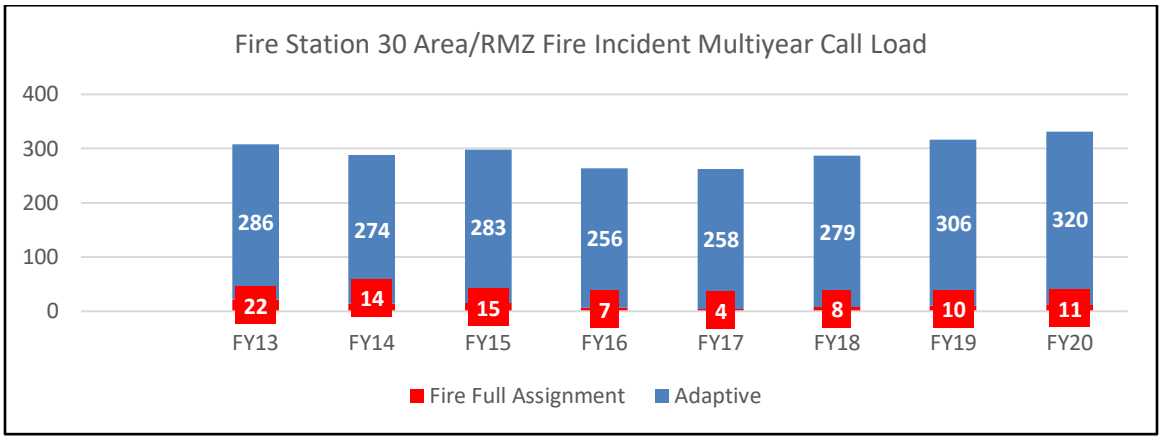
Description

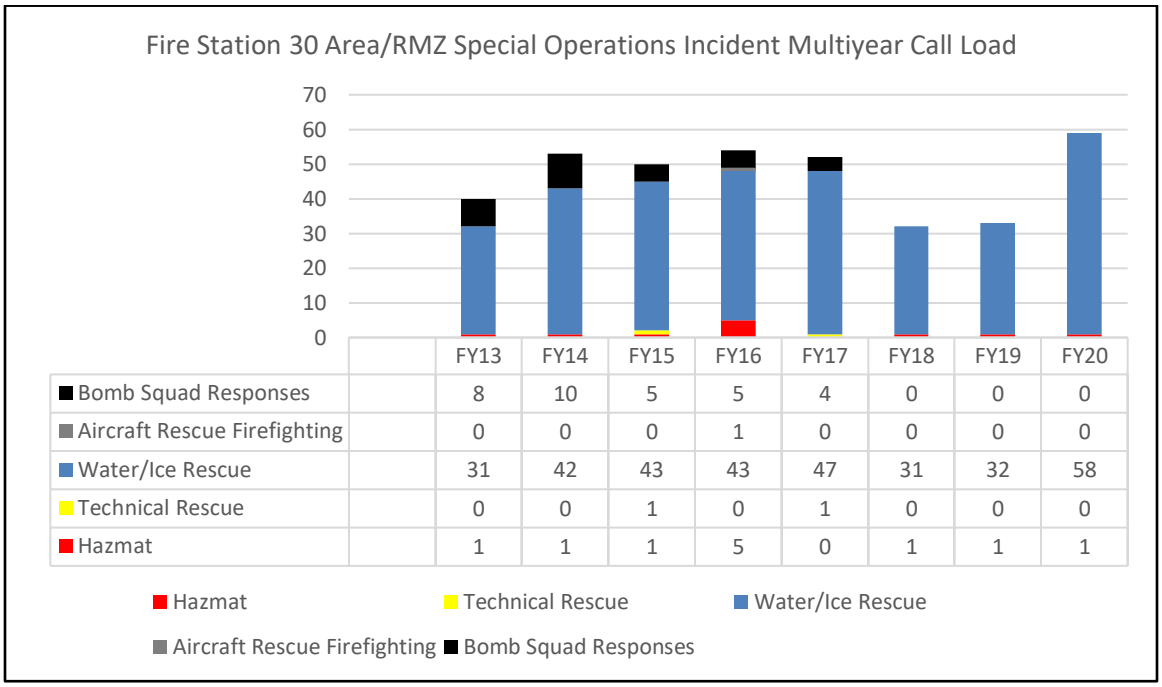
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance, Tanker, 2-Boats
- Specialty Team: Swift Water Rescue
- First Due Area: 17.21 mi^2
- Number of Unique Risk Management Zones (box areas): 22
- Predominant Population Density Zone: Rural



Fire Station 30 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	231	256	233	227	270	240	251	247
ALS2	HR	39	49	43	53	42	37	46	58
BLS	LR	307	341	338	338	373	362	350	343
Fire Full Assignment Hydranted	HR	20	12	13	7	4	7	5	9
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	2	2	2	0	0	1	5	2
Adaptive-1F	LR	16	21	10	18	13	22	19	20
Adaptive-1N	LR	253	234	251	218	219	230	257	268
Adaptive-2-3	MR	17	19	22	20	26	27	30	32
Hazmat Low Risk	LR	0	0	0	0	0	0	0	0
Hazmat Moderate Risk	MR	0	0	1	2	0	0	0	1
Hazmat High Risk	HR	1	1	0	0	0	0	0	0
Hazmat Special Risk	SR	0	0	0	3	0	1	1	0
Technical Rescue	SR	0	0	1	0	1	0	0	0
Water/Ice Rescue Moderate	MR	0	6	1	1	1	1	0	11
Water/Ice Rescue High	HR	0	0	0	0	1	0	0	0
Water/Ice Rescue Special	SR	31	36	42	42	45	30	32	47
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	1	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		8	10	5	5	4	0	0	0
Non-Accreditation Counts									
Service Call		119	121	101	87	104	89	90	99
Special Event		14	5	3	1	6	6	1	3
Mutual Aid									
Total Incident Counts		1058	1113	1066	1023	1109	1053	1087	1140
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		270	305	276	280	312	277	297	305
BLS		307	341	338	338	373	362	350	343
Fire Full Assignment		22	14	15	7	4	8	10	11
Adaptive		286	274	283	256	258	279	306	320
Hazmat		1	1	1	5	0	1	1	1
Technical Rescue		0	0	1	0	1	0	0	0
Water/Ice Rescue		31	42	43	43	47	31	32	58
Aircraft Rescue Firefighting		0	0	0	1	0	0	0	0
Bomb Squad Responses		8	10	5	5	4	0	0	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	8	10	5	5	4	0	0	0
Aircraft Rescue Firefighting	0	0	0	1	0	0	0	0
Water/Ice Rescue	31	42	43	43	47	31	32	58
Technical Rescue	0	0	1	0	1	0	0	0
Hazmat	1	1	1	5	0	1	1	1

Fire Station 31

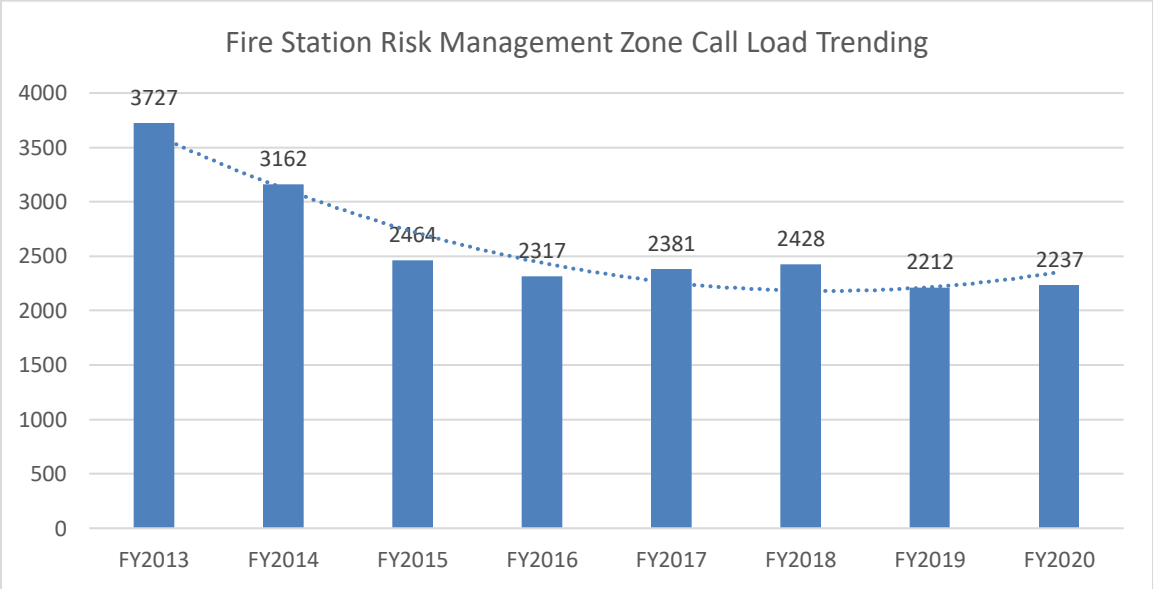
Battalion 3

Rockville Station

12100 Darnestown Road, North Potomac

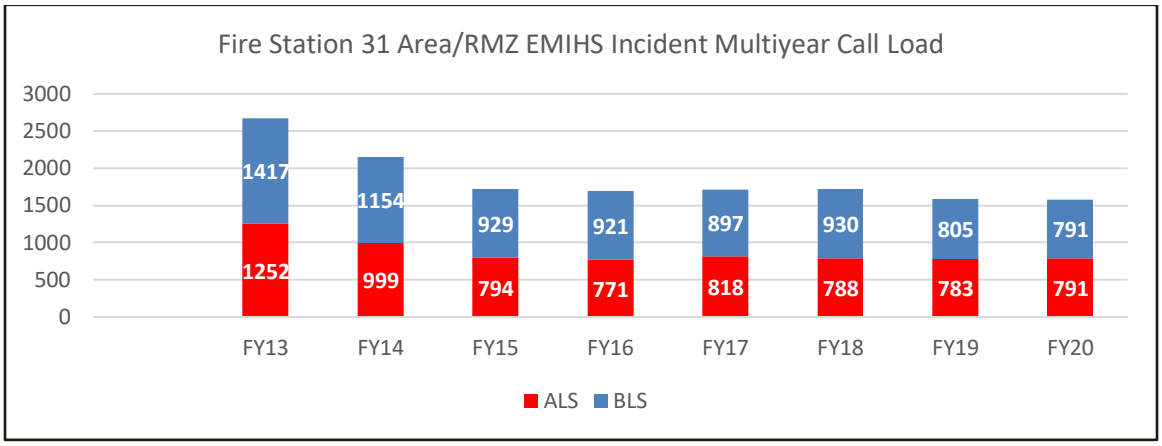
Description

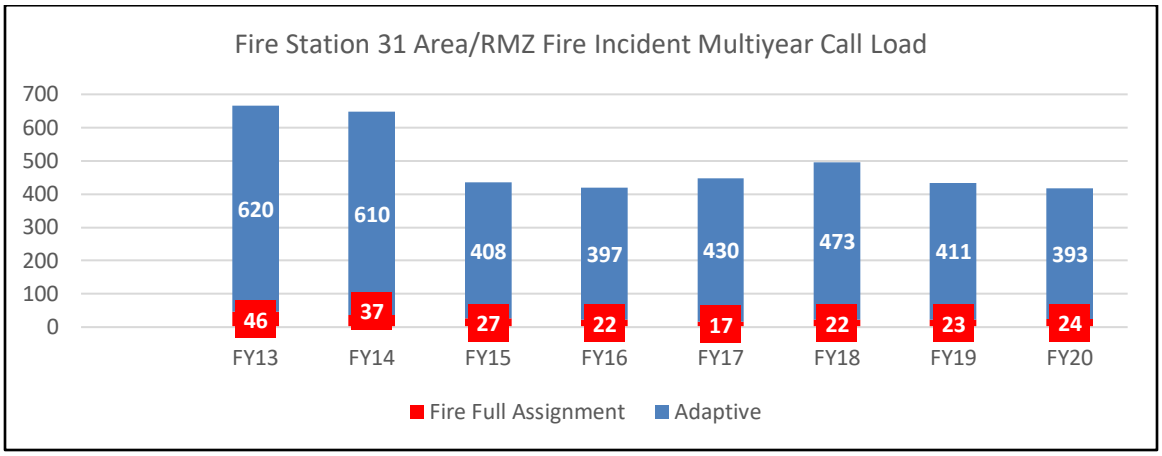
- Ownership: County
- Apparatus Housed: Paramedic Engine, Truck, Medic Unit, Tanker, Boat, ATV, Technical Rescue Unit 700
- Specialty Team: Technical Rescue
- First Due Area: 38.49 mi^2
- Number of Unique Risk Management Zones (box areas): 32
- Predominant Population Density Zone: Suburban
-

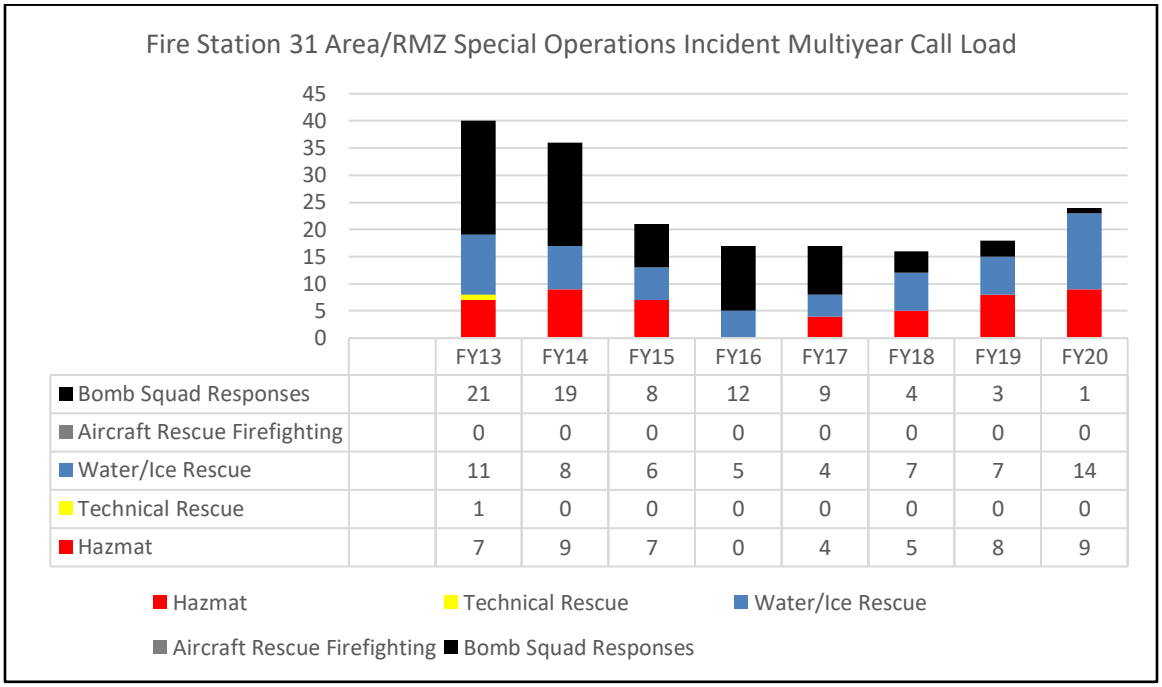


Note: Fire Station 32 opened for the first time on 2/27/14 which explains the decrease in runs in Station 31's area beginning in FY15.

Fire Station 31 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	1012	851	649	662	708	699	688	696
ALS2	HR	240	148	145	109	110	89	95	95
BLS	LR	1417	1154	929	921	897	930	805	791
Fire Full Assignment Hydranted	HR	43	35	24	18	16	18	19	19
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	3	2	3	4	1	4	4	5
Adaptive-1F	LR	75	72	36	62	49	50	29	43
Adaptive-1N	LR	459	471	318	287	318	353	316	297
Adaptive-2-3	MR	86	67	54	48	63	70	66	53
Hazmat Low Risk	LR	1	1	1	0	1	0	1	5
Hazmat Moderate Risk	MR	0	2	1	0	1	3	4	4
Hazmat High Risk	HR	4	3	2	0	0	1	1	0
Hazmat Special Risk	SR	2	3	3	0	2	1	2	0
Technical Rescue	SR	1	0	0	0	0	0	0	0
Water/Ice Rescue Moderate	MR	3	4	2	0	0	0	3	8
Water/Ice Rescue High	HR	5	3	2	1	1	1	0	3
Water/Ice Rescue Special	SR	3	1	2	4	3	6	4	3
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		21	19	8	12	9	4	3	1
Non-Accreditation Counts									
Service Call		345	320	277	181	199	197	171	213
Special Event		7	6	8	8	3	2	1	1
Mutual Aid									
Total Incident Counts		3727	3162	2464	2317	2381	2428	2212	2237
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		1252	999	794	771	818	788	783	791
BLS		1417	1154	929	921	897	930	805	791
Fire Full Assignment		46	37	27	22	17	22	23	24
Adaptive		620	610	408	397	430	473	411	393
Hazmat		7	9	7	0	4	5	8	9
Technical Rescue		1	0	0	0	0	0	0	0
Water/Ice Rescue		11	8	6	5	4	7	7	14
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		21	19	8	12	9	4	3	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	21	19	8	12	9	4	3	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	11	8	6	5	4	7	7	14
Technical Rescue	1	0	0	0	0	0	0	0
Hazmat	7	9	7	0	4	5	8	9

Fire Station 32

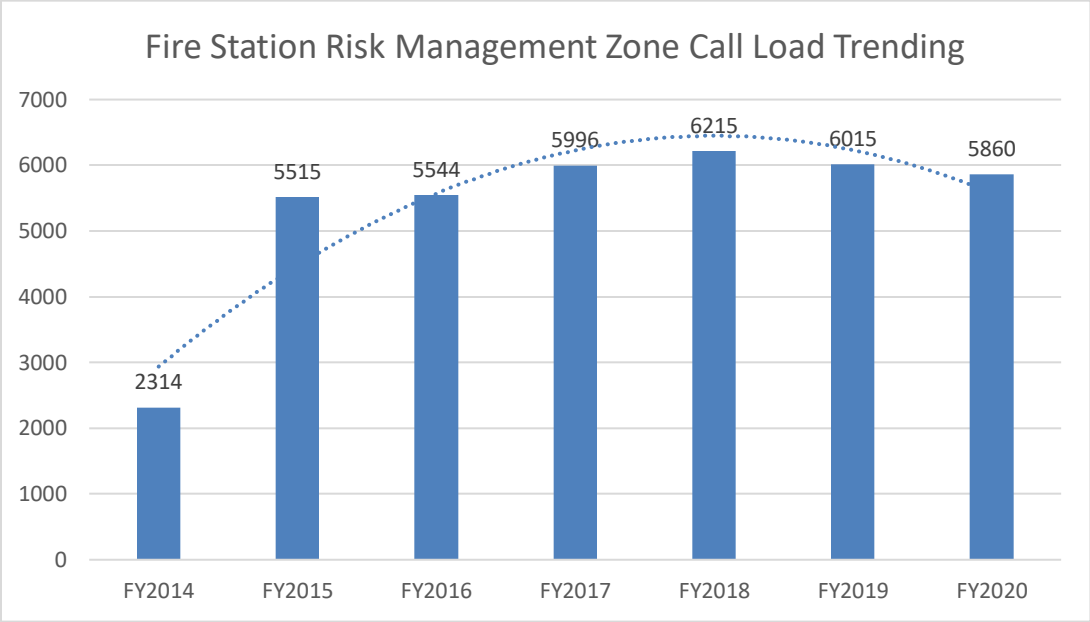
Battalion 3

Travilah Station

9615 Darnestown Road, Rockville

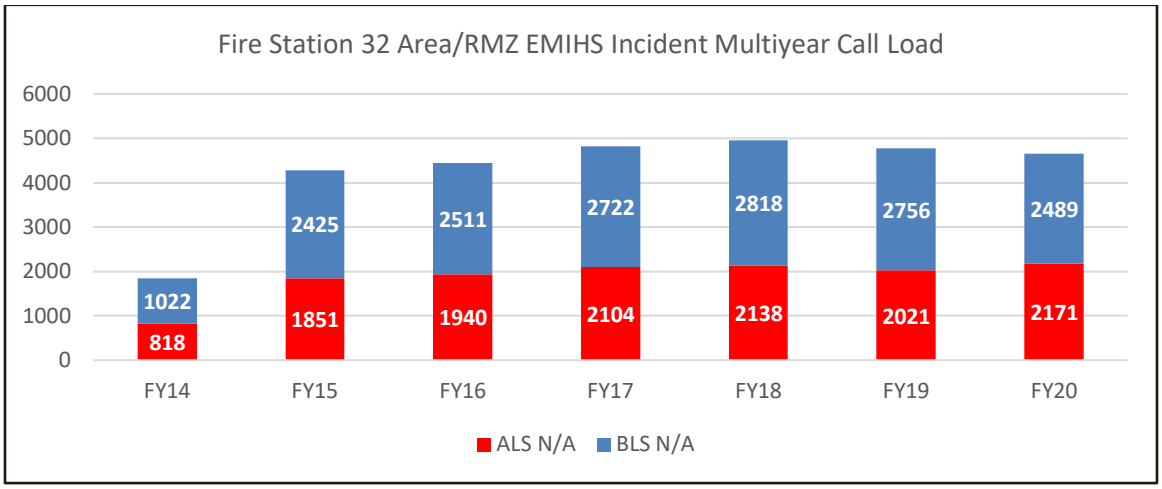
Description

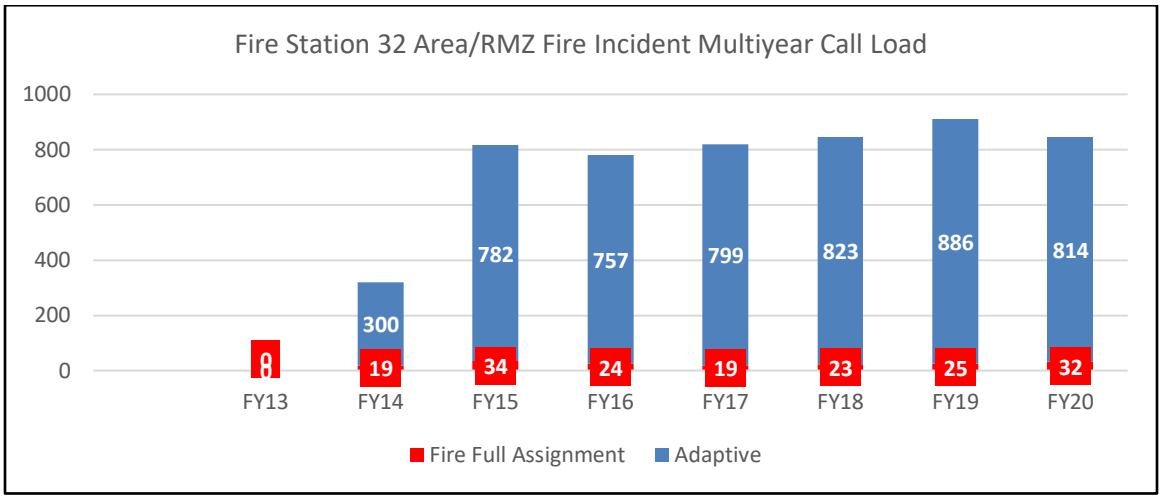
- Ownership: County
- Apparatus Housed: Paramedic Engine, Ambulance, Battalion Chief, Duty Operations Chief (Assistant Chief), EMS Supervisor, Safety Officer, Mobile Command Unit
- First Due Area: 13.00 mi^2
- Number of Unique Risk Management Zones (box areas): 39
- Predominant Population Density Zone: Metropolitan

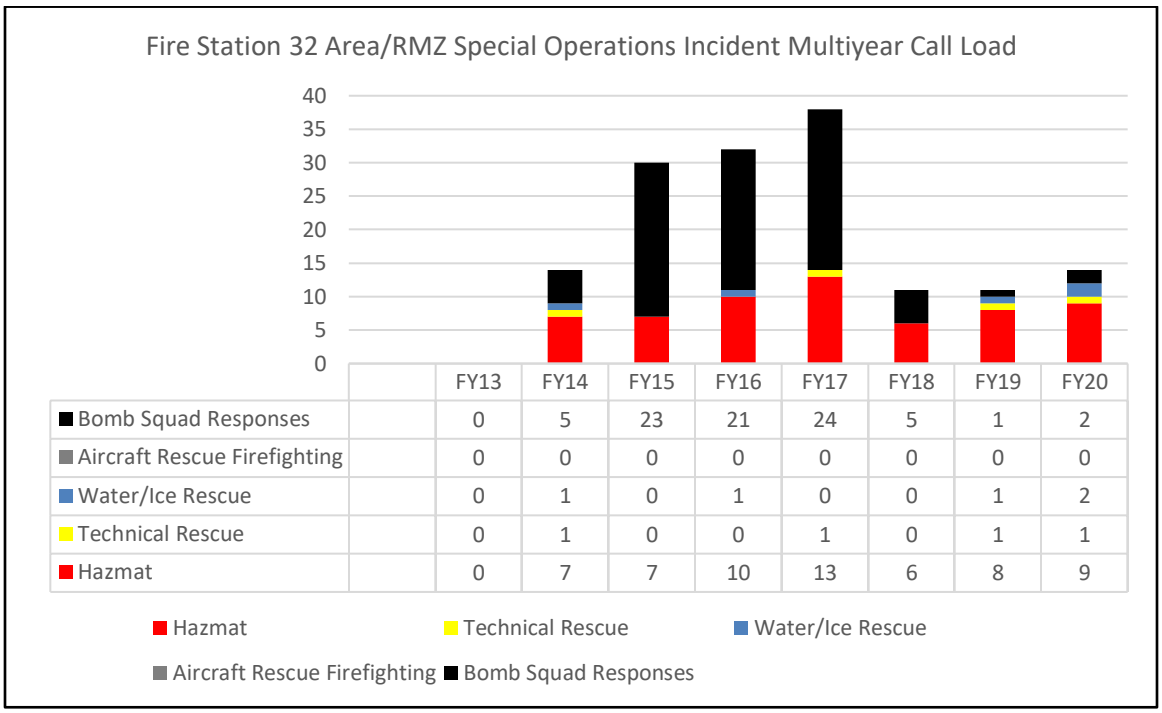


Note: FS32 opened for the first time on 2/27/14 which explains low FY14 counts (FY14 ended on 6/30/14). In addition, prior to the anticipated opening, the FS32 box areas were enabled in CAD and incidents in FY14 prior to the actual opening were logged and handled by surrounding stations.

Fire Station 32 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	N/A	726	1627	1656	1877	1904	1773	1920
ALS2	HR	N/A	92	224	284	227	234	248	251
BLS	LR	N/A	1022	2425	2511	2722	2818	2756	2489
Fire Full Assignment Hydranted	HR	N/A	19	34	22	17	21	24	28
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	2	1	1	0	3
FFA-Non-hydranted Area	SR	N/A	0	0	0	1	1	1	1
Adaptive-1F	LR	N/A	29	57	63	78	61	65	68
Adaptive-1N	LR	N/A	240	640	604	609	646	699	652
Adaptive-2-3	MR	N/A	31	85	90	112	116	122	94
Hazmat Low Risk	LR	N/A	0	0	0	1	0	2	5
Hazmat Moderate Risk	MR	N/A	2	3	6	5	2	5	4
Hazmat High Risk	HR	N/A	1	2	2	1	1	1	0
Hazmat Special Risk	SR	N/A	4	2	2	6	3	0	0
Technical Rescue	SR	N/A	1	0	0	1	0	1	1
Water/Ice Rescue Moderate	MR	N/A	1	0	1	0	0	1	2
Water/Ice Rescue High	HR	N/A	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	N/A	0	0	0	0	0	0	0
ARFF High Risk	HR	N/A	0	0	0	0	0	0	0
ARFF Special Risk	SR	N/A	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR	N/A							
Bomb Squad High Risk	HR	N/A							
Bomb Squad Special Risk	SR	N/A							
Bomb Squad TOTAL		N/A	5	23	21	24	5	1	2
Non-Accreditation Counts									
Service Call		N/A	141	393	280	314	401	315	339
Special Event							1	1	1
Mutual Aid									
Total Incident Counts		0	2314	5515	5544	5996	6215	6015	5860
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		N/A	818	1851	1940	2104	2138	2021	2171
BLS		N/A	1022	2425	2511	2722	2818	2756	2489
Fire Full Assignment		N/A	19	34	24	19	23	25	32
Adaptive		N/A	300	782	757	799	823	886	814
Hazmat		N/A	7	7	10	13	6	8	9
Technical Rescue		N/A	1	0	0	1	0	1	1
Water/Ice Rescue		N/A	1	0	1	0	0	1	2
Aircraft Rescue Firefighting		N/A	0	0	0	0	0	0	0
Bomb Squad Responses		N/A	5	23	21	24	5	1	2







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	0	5	23	21	24	5	1	2
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	1	0	1	0	0	1	2
Technical Rescue	0	1	0	0	1	0	1	1
Hazmat	0	7	7	10	13	6	8	9

Fire Station 33

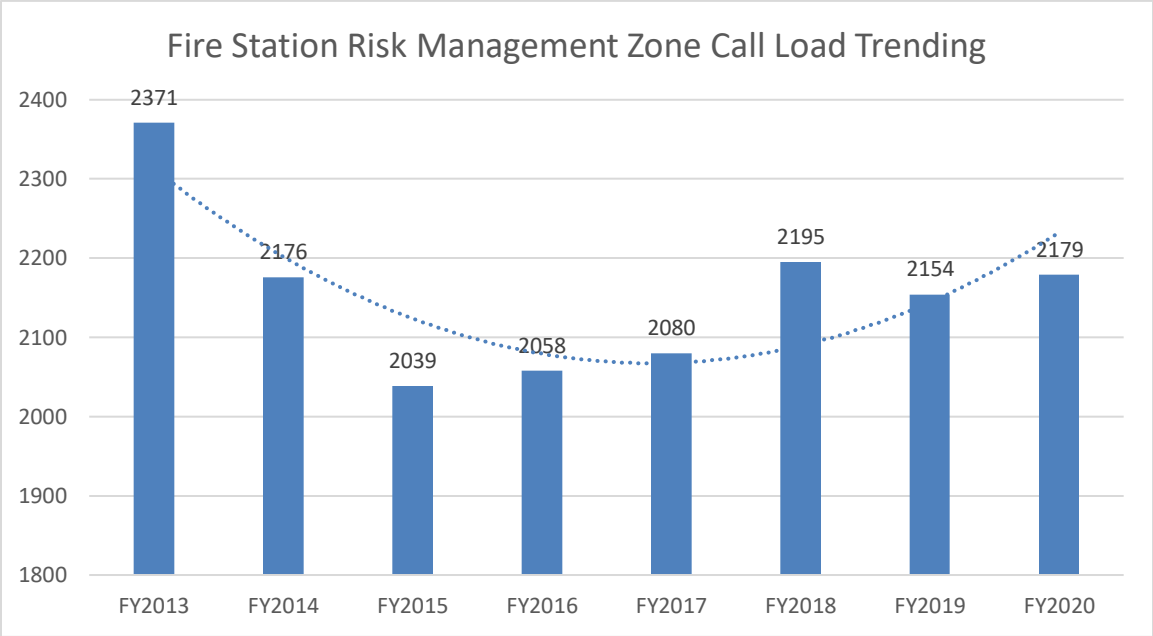
Battalion 3

Rockville Station

11430 Falls Road, Potomac

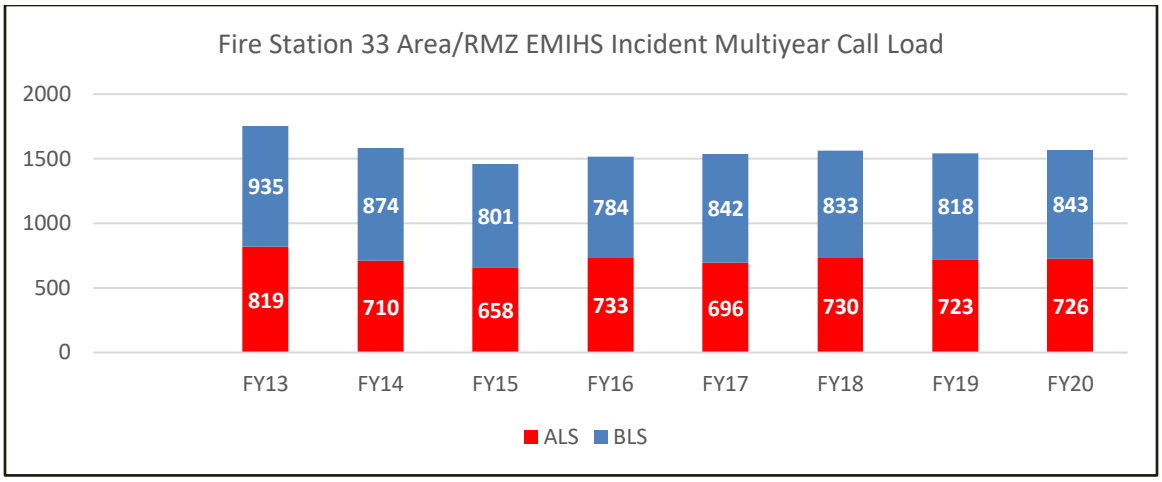
Description

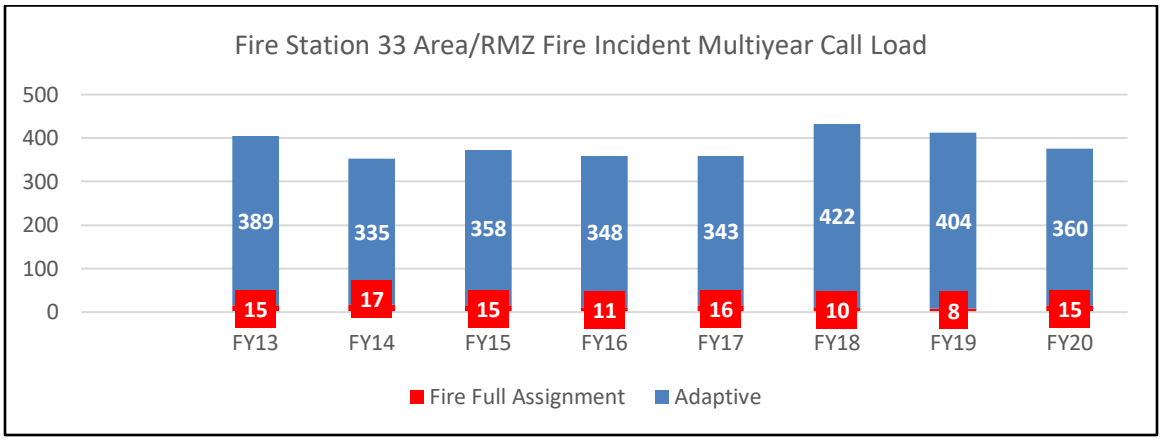
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Ambulance, Air Unit, Brush Truck
- First Due Area: 15.09 mi^2
- Number of Unique Risk Management Zones (box areas): 19
- Predominant Population Density Zone: Urban

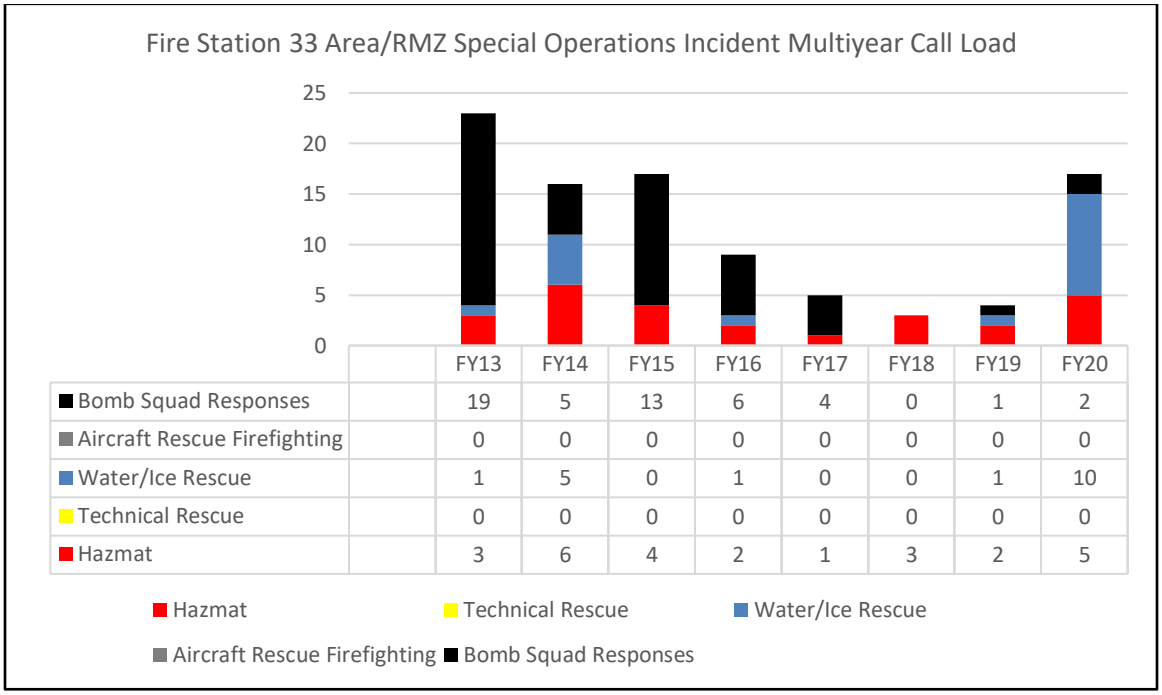


Note: Fire Station 32 opened for the first time on 2/27/14 which explains the decrease in runs in Station 33's area beginning in FY15

Fire Station 33 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	705	616	551	625	600	625	614	634
ALS2	HR	114	94	107	108	96	105	109	92
BLS	LR	935	874	801	784	842	833	818	843
Fire Full Assignment Hydranted	HR	15	17	15	10	15	10	8	15
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	1	1	0	0	0
FFA-Non-hydranted Area	SR	0	0	0	0	0	0	0	0
Adaptive-1F	LR	38	25	22	26	30	26	24	32
Adaptive-1N	LR	311	272	290	285	278	339	333	282
Adaptive-2-3	MR	40	38	46	37	35	57	47	46
Hazmat Low Risk	LR	0	0	1	0	0	0	2	2
Hazmat Moderate Risk	MR	0	1	0	0	1	2	0	2
Hazmat High Risk	HR	3	2	2	1	0	0	0	0
Hazmat Special Risk	SR	0	3	1	1	0	1	0	1
Technical Rescue	SR	0	0	0	0	0	0	0	0
Water/Ice Rescue Moderate	MR	1	5	0	1	0	0	1	10
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		19	5	13	6	4	0	1	2
Non-Accreditation Counts									
Service Call		190	224	190	173	178	197	196	218
Special Event							0	1	0
Mutual Aid									
Total Incident Counts		2371	2176	2039	2058	2080	2195	2154	2179
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		819	710	658	733	696	730	723	726
BLS		935	874	801	784	842	833	818	843
Fire Full Assignment		15	17	15	11	16	10	8	15
Adaptive		389	335	358	348	343	422	404	360
Hazmat		3	6	4	2	1	3	2	5
Technical Rescue		0	0	0	0	0	0	0	0
Water/Ice Rescue		1	5	0	1	0	0	1	10
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		19	5	13	6	4	0	1	2







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	19	5	13	6	4	0	1	2
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	1	5	0	1	0	0	1	10
Technical Rescue	0	0	0	0	0	0	0	0
Hazmat	3	6	4	2	1	3	2	5

Fire Station 34

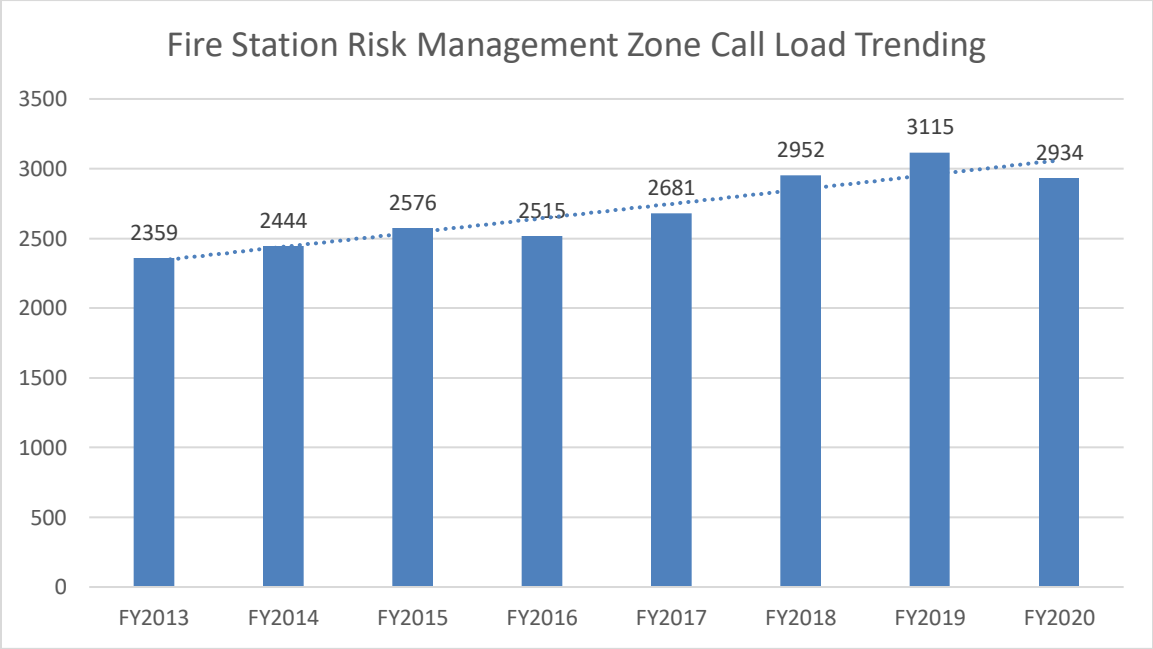
Battalion 5

Germantown (Milestone) Station

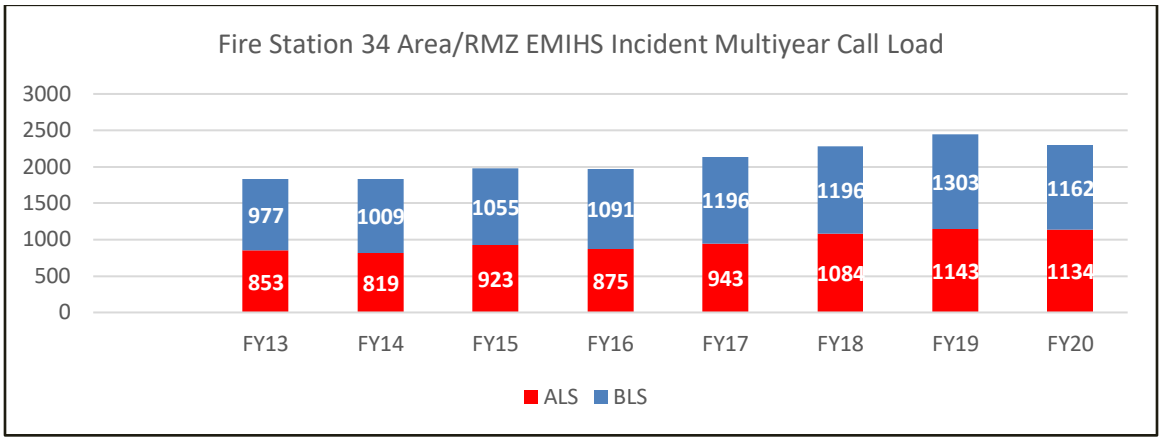
20633 Boland Farm Road, Germantown

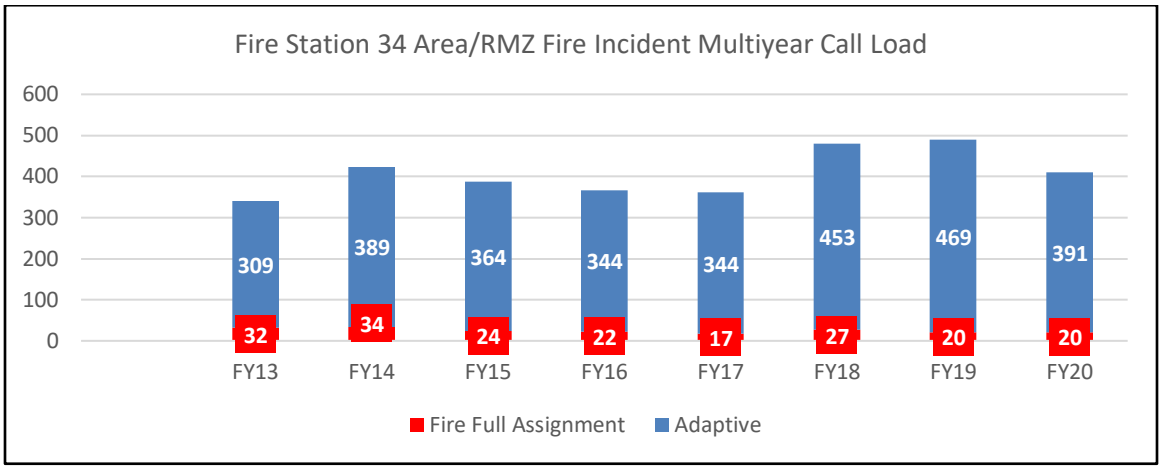
Description

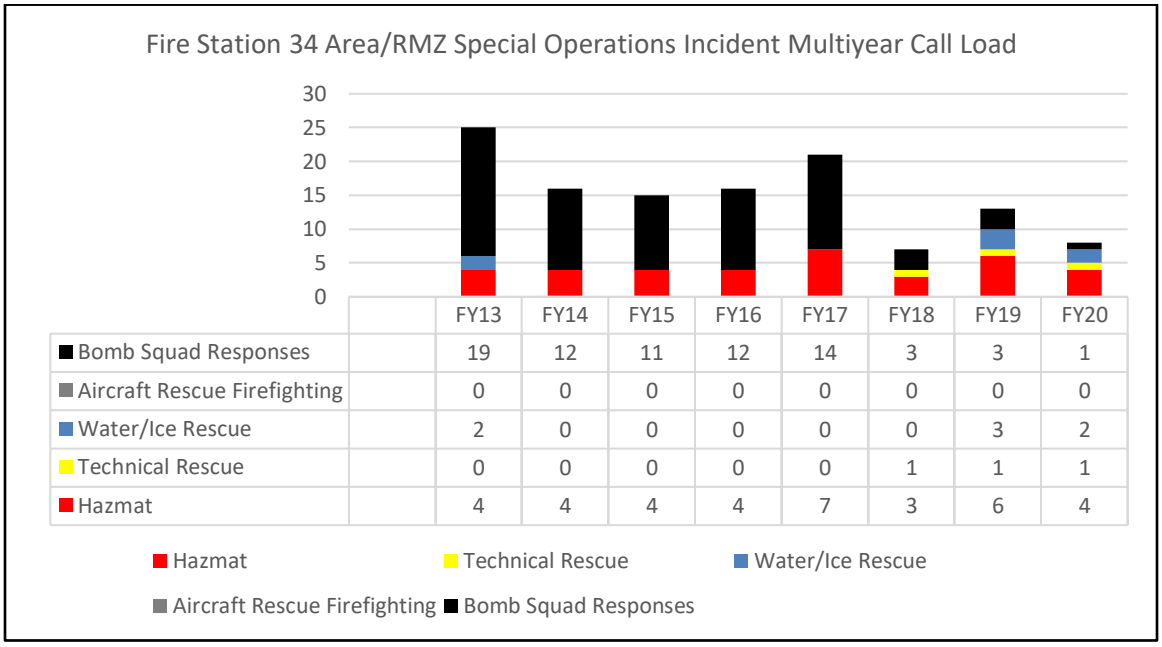
- Ownership: County
- Apparatus Housed: Paramedic Engine, Truck, Ambulance, Battalion Chief
- First Due Area: 13.26 mi^2
- Number of Unique Risk Management Zones (box areas): 26
- Predominant Population Density Zone: Urban



Fire Station 34 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	684	673	793	722	832	935	996	994
ALS2	HR	169	146	130	153	111	149	147	140
BLS	LR	977	1009	1055	1091	1196	1196	1303	1162
Fire Full Assignment Hydranted	HR	32	31	23	17	16	25	17	15
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	1	0	1	1
FFA-Non-hydranted Area	SR	0	3	1	5	0	2	2	4
Adaptive-1F	LR	55	58	55	47	49	52	47	36
Adaptive-1N	LR	215	298	269	252	240	342	339	285
Adaptive-2-3	MR	39	33	40	45	55	59	83	70
Hazmat Low Risk	LR	0	0	0	0	0	0	2	2
Hazmat Moderate Risk	MR	1	0	0	2	2	2	2	2
Hazmat High Risk	HR	1	3	2	2	3	0	0	0
Hazmat Special Risk	SR	2	1	2	0	2	1	2	0
Technical Rescue	SR	0	0	0	0	0	1	1	1
Water/Ice Rescue Moderate	MR	2	0	0	0	0	0	3	2
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		19	12	11	12	14	3	3	1
Non-Accreditation Counts									
Service Call		163	177	195	167	160	185	167	219
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		2359	2444	2576	2515	2681	2952	3115	2934
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		853	819	923	875	943	1084	1143	1134
BLS		977	1009	1055	1091	1196	1196	1303	1162
Fire Full Assignment		32	34	24	22	17	27	20	20
Adaptive		309	389	364	344	344	453	469	391
Hazmat		4	4	4	4	7	3	6	4
Technical Rescue		0	0	0	0	0	1	1	1
Water/Ice Rescue		2	0	0	0	0	0	3	2
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		19	12	11	12	14	3	3	1







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	19	12	11	12	14	3	3	1
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	2	0	0	0	0	0	3	2
Technical Rescue	0	0	0	0	0	1	1	1
Hazmat	4	4	4	4	7	3	6	4

Fire Station 35

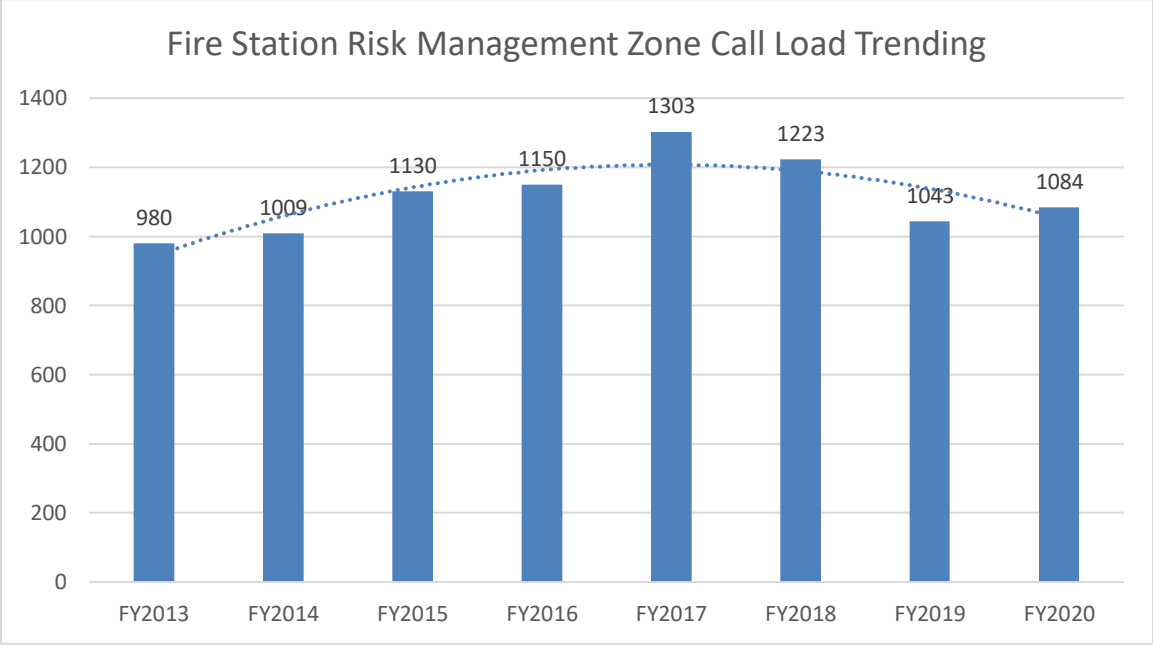
Battalion 5

Clarksburg Station

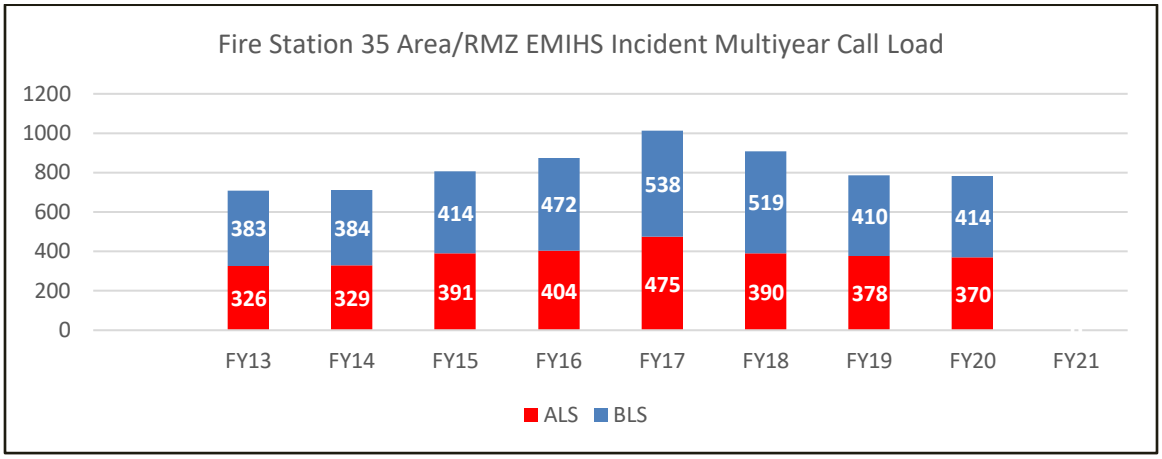
22610 Gateway Center Drive, Suite 300, Clarksburg

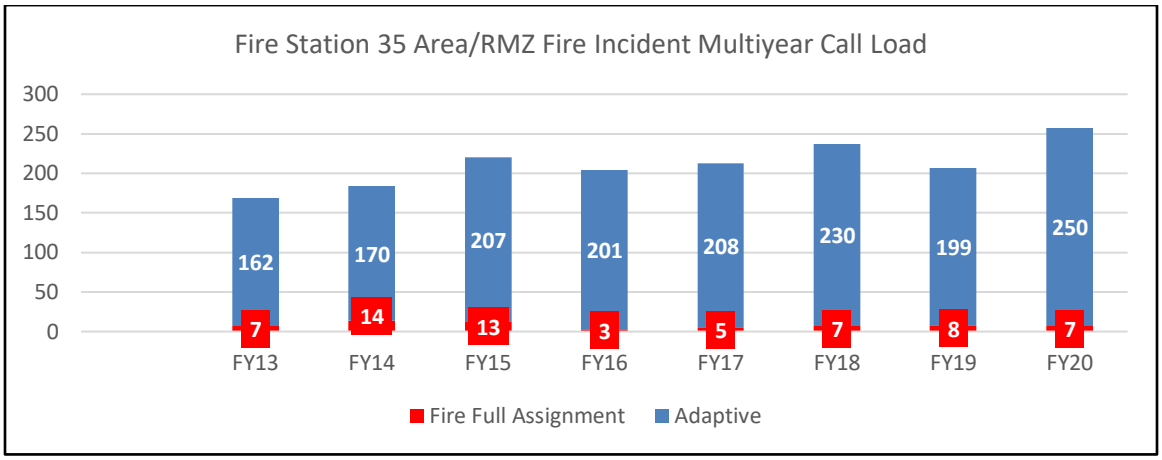
Description

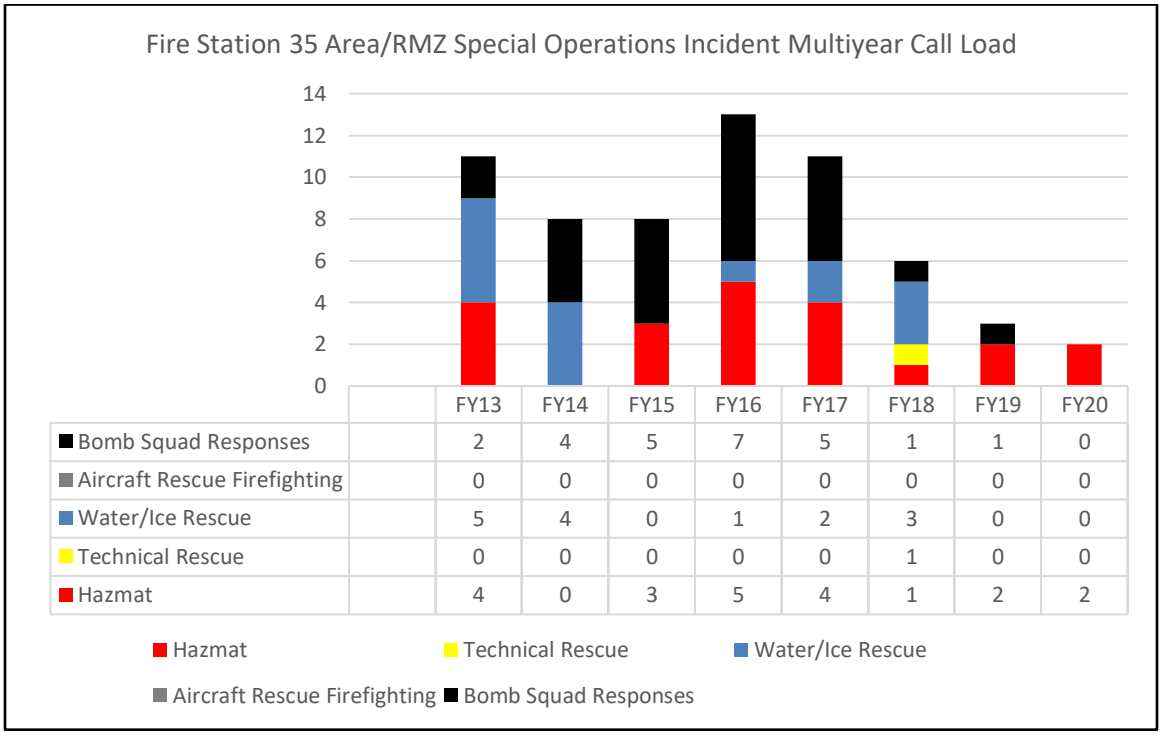
- Ownership: County (Leased Interim facility)
- Apparatus Housed: Paramedic Engine, Aerial Tower, Ambulance
- First Due Area: 21.47 mi^2
- Number of Unique Risk Management Zones (box areas): 19
- Predominant Population Density Zone: Rural



Fire Station 35 (Rural Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	279	279	341	346	426	343	322	331
ALS2	HR	47	50	50	58	49	47	56	39
BLS	LR	383	384	414	472	538	519	410	414
Fire Full Assignment Hydranted	HR	7	11	11	2	5	5	5	6
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	0	3	2	1	0	2	3	1
Adaptive-1F	LR	37	27	19	23	27	21	22	25
Adaptive-1N	LR	98	110	158	141	146	169	157	184
Adaptive-2-3	MR	27	33	30	37	35	40	20	41
Hazmat Low Risk	LR	0	0	0	0	1	0	0	0
Hazmat Moderate Risk	MR	0	0	0	1	0	0	0	1
Hazmat High Risk	HR	1	0	0	1	0	0	1	0
Hazmat Special Risk	SR	3	0	3	3	3	1	1	1
Technical Rescue	SR	0	0	0	0	0	1	0	0
Water/Ice Rescue Moderate	MR	5	4	0	1	2	3	0	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		2	4	5	7	5	1	1	0
Service Call		91	104	97	57	66	71	45	41
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		980	1009	1130	1150	1303	1223	1043	1084
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		326	329	391	404	475	390	378	370
BLS		383	384	414	472	538	519	410	414
Fire Full Assignment		7	14	13	3	5	7	8	7
Adaptive		162	170	207	201	208	230	199	250
Hazmat		4	0	3	5	4	1	2	2
Technical Rescue		0	0	0	0	0	1	0	0
Water/Ice Rescue		5	4	0	1	2	3	0	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		2	4	5	7	5	1	1	0







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	2	4	5	7	5	1	1	0
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	5	4	0	1	2	3	0	0
Technical Rescue	0	0	0	0	0	1	0	0
Hazmat	4	0	3	5	4	1	2	2

Possible Future Fire Station 36

2016-2022 FIRE, RESCUE, EMERGENCY MEDICAL SERVICES, AND COMMUNITY RISK REDUCTION MASTER PLAN

SITE EVALUATION/SELECTION

[PRIORITY A/B–As shown below] Participate in site evaluation/selection for the following new-additional fire stations:

- [B] Station 36 – "Shady Grove" – in the vicinity of Shady Grove and Frederick Roads

Possible Future Fire Station 37

2016-2022 FIRE, RESCUE, EMERGENCY MEDICAL SERVICES, AND COMMUNITY RISK REDUCTION MASTER PLAN

SITE EVALUATION/SELECTION

[PRIORITY A/B–As shown below] Participate in site evaluation/selection for the following new-additional fire stations:

- [B] Station 37 – "East County" – in the vicinity of Columbia Pike and Tech Road

Possible Future Fire Station 38

2016-2022 FIRE, RESCUE, EMERGENCY MEDICAL SERVICES, AND COMMUNITY RISK REDUCTION MASTER PLAN

SITE EVALUATION/SELECTION

[PRIORITY A/B–As shown below] Participate in site evaluation/selection for the following new-additional fire stations:

- [B] Station 38 – "Norbeck" – along the Norbeck Road corridor at a site to be determined

Possible Future Fire Station 39

2016-2022 FIRE, RESCUE, EMERGENCY MEDICAL SERVICES, AND COMMUNITY RISK REDUCTION MASTER PLAN

SITE EVALUATION/SELECTION

[PRIORITY A/B–As shown below] Participate in site evaluation/selection for the following new-additional fire stations:

- [A] Station 39 – "Montgomery Village" – in the vicinity of Goshen Road and Rothbury Drive.

Fire Station 40

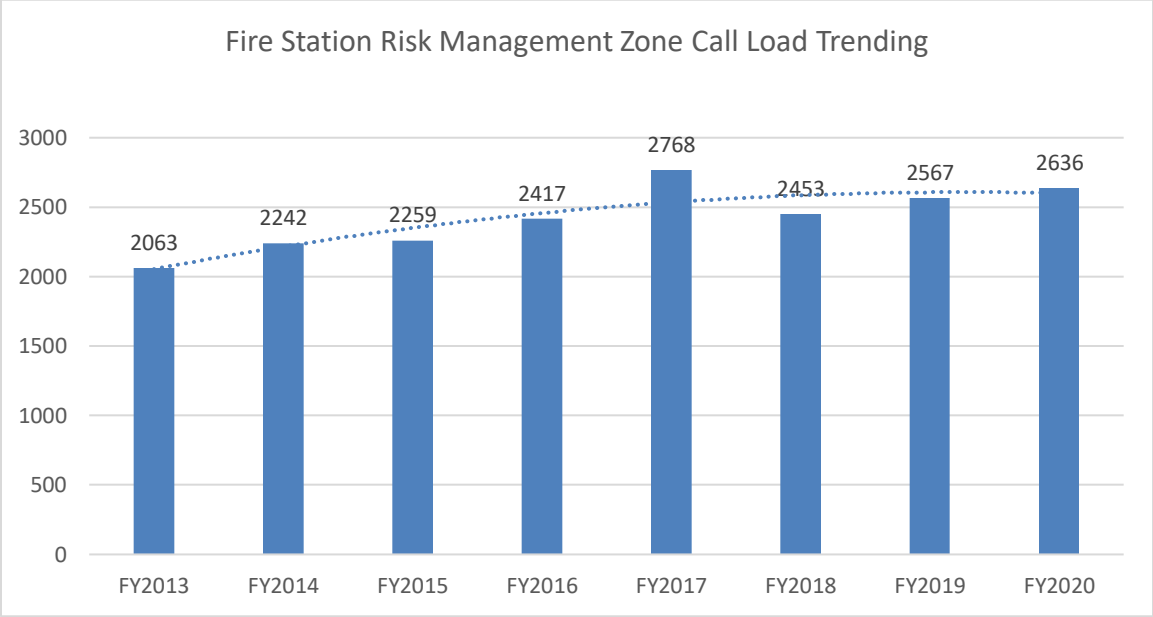
Battalion 4

Sandy Spring Station

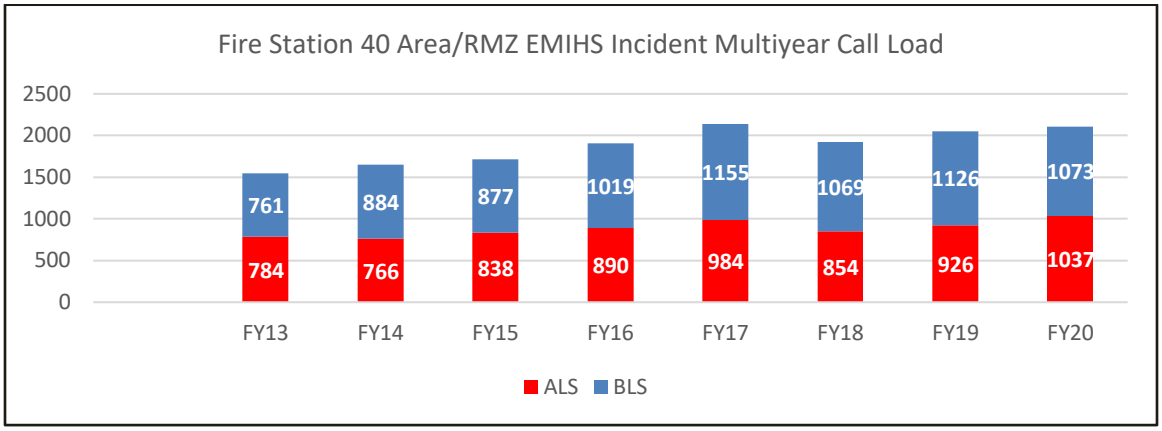
16911 Georgia Avenue, Olney

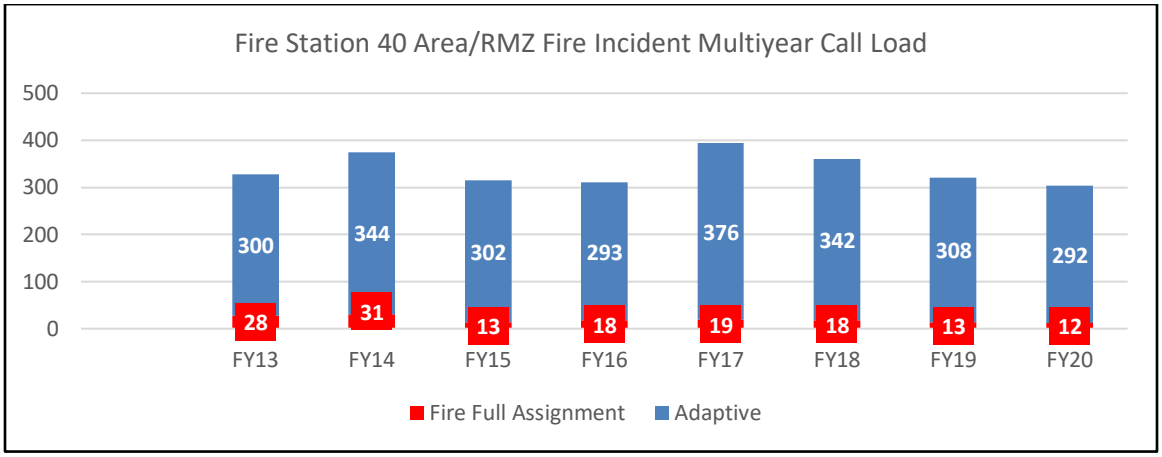
Description

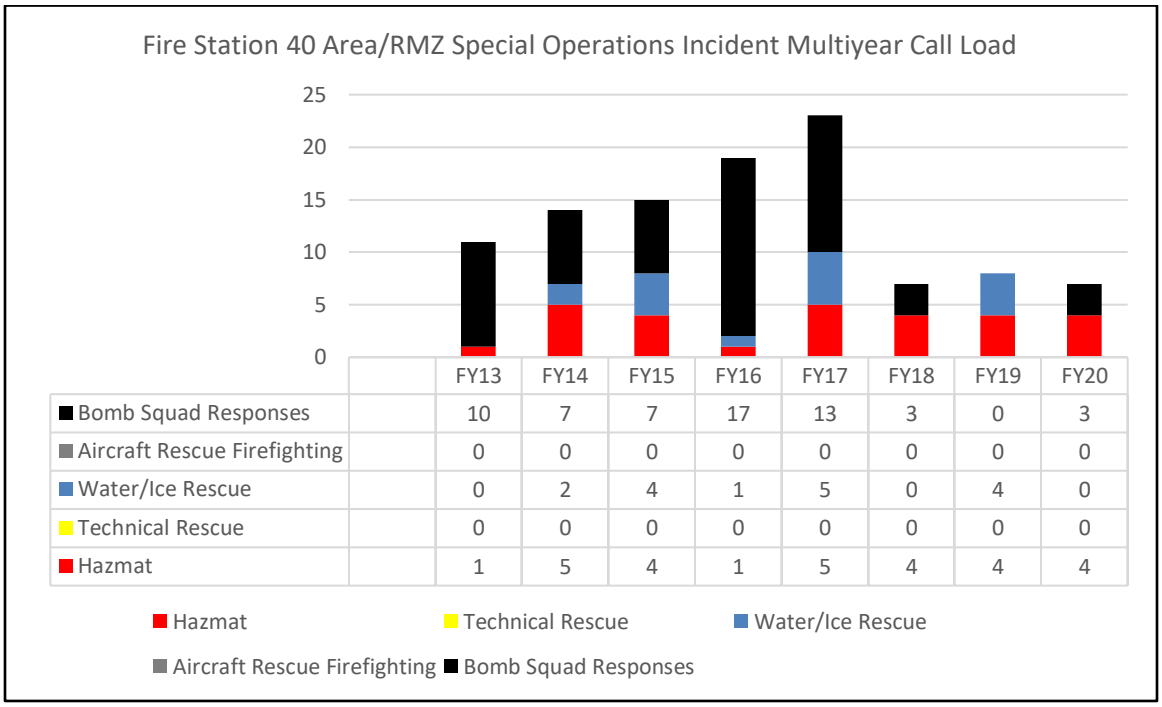
- Ownership: Volunteer
- Apparatus Housed: Paramedic Engine, Aerial Tower, Ambulance, Brush Truck, ATV, Boat
- First Due Area: 16.79 mi^2
- Number of Unique Risk Management Zones (box areas): 27
- Predominant Population Density Zone: Suburban



Fire Station 40 (Urban Density Zone) Fiscal Year Response Area: Number of DISPATCHED Incidents Aggregated by Accreditation Program									
Accreditation Program	Risk	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS1	MR	671	637	716	748	843	745	803	914
ALS2	HR	113	129	122	142	141	109	123	123
BLS	LR	761	884	877	1019	1155	1069	1126	1073
Fire Full Assignment Hydranted	HR	28	30	13	17	19	18	12	11
FFA-Highrise (FFA-SRHR)	SR	N/A	N/A	N/A	0	0	0	0	0
FFA-Non-hydranted Area	SR	0	1	0	1	0	0	1	1
Adaptive-1F	LR	49	62	37	36	59	40	29	34
Adaptive-1N	LR	220	227	212	205	252	243	231	218
Adaptive-2-3	MR	31	55	53	52	65	59	48	40
Hazmat Low Risk	LR	0	1	1	0	0	0	0	3
Hazmat Moderate Risk	MR	0	0	1	0	4	4	3	1
Hazmat High Risk	HR	0	2	2	0	0	0	1	0
Hazmat Special Risk	SR	1	2	0	1	1	0	0	0
Technical Rescue	SR	0	0	0	0	0	0	0	0
Water/Ice Rescue Moderate	MR	0	2	4	1	5	0	4	0
Water/Ice Rescue High	HR	0	0	0	0	0	0	0	0
Water/Ice Rescue Special	SR	0	0	0	0	0	0	0	0
ARFF High Risk	HR	0	0	0	0	0	0	0	0
ARFF Special Risk	SR	0	0	0	0	0	0	0	0
Bomb Squad Moderate Risk	MR								
Bomb Squad High Risk	HR								
Bomb Squad Special Risk	SR								
Bomb Squad TOTAL		10	7	7	17	13	3	0	3
Non-Accreditation Counts									
Service Call		179	203	214	178	211	163	186	215
Special Event							0	0	0
Mutual Aid									
Total Incident Counts		2063	2242	2259	2417	2768	2453	2567	2636
Aggregated by Overarching		FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
ALS		784	766	838	890	984	854	926	1037
BLS		761	884	877	1019	1155	1069	1126	1073
Fire Full Assignment		28	31	13	18	19	18	13	12
Adaptive		300	344	302	293	376	342	308	292
Hazmat		1	5	4	1	5	4	4	4
Technical Rescue		0	0	0	0	0	0	0	0
Water/Ice Rescue		0	2	4	1	5	0	4	0
Aircraft Rescue Firefighting		0	0	0	0	0	0	0	0
Bomb Squad Responses		10	7	7	17	13	3	0	3







	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Bomb Squad Responses	10	7	7	17	13	3	0	3
Aircraft Rescue Firefighting	0	0	0	0	0	0	0	0
Water/Ice Rescue	0	2	4	1	5	0	4	0
Technical Rescue	0	0	0	0	0	0	0	0
Hazmat	1	5	4	1	5	4	4	4

Rescue Station 1

(MCFRS Station #41)

Battalion 2

Bethesda Chevy Chase Rescue Squad Station

5220 Battery Lane, Bethesda

Description

- Ownership: Volunteer
- Apparatus Housed: Rescue Squad, ALS chase car/unit, 2 ambulances*
- Number of Unique Risk Management Zones (box areas): N/A: RMZs based on the engine company fire station that encompasses the area
- Predominant Population Density Zone: Metropolitan

*BCCRS ambulances can operate as medic units when a paramedic is on board. A minimum of two ambulances are staffed 24/7, with additional ambulances placed in service as volunteer staffing is available.

Rescue Station 2

(MCFRS Station #42)

Battalion 4

Wheaton Volunteer Rescue Squad Station

2400 Arcola Avenue, Wheaton

Description

- Ownership: Volunteer (51%), County (49%)
- Apparatus Housed: Rescue Squad, ALS chase car, 2 ambulances*
- Number of Unique Risk Management Zones (box areas): N/A: RMZs based on the engine company fire station that encompasses the area
- Predominant Population Density Zone: Metropolitan

*WVRS ambulances can operate as medic units when a paramedic is on board. A minimum of two ambulance are staffed 24/7, with additional ambulances placed in service as volunteer staffing is available.

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