



Montgomery County Maryland Fire and Rescue Services

Accreditation

Fire and Emergency Services Self-Assessment Manual Third Accreditation Cycle 2018



Commission on
Fire Accreditation
International

MCFRS
STANDARDS OF COVER

Montgomery County Fire and Rescue Services

Fire Chief

Scott E. Goldstein

**Fire and Emergency Services Self-Assessment and
Community Risk Assessment - Standards of Cover Team**

Operations Division Chief John Kinsley

Human Resources Division Chief Diane Zuspan

Support Services Division Chief David Steckel

Volunteer & Community Services Division Chief Alan Hinde

Fiscal Management Division Chief Dominic Del Pozzo

Planning & Accreditation Section Manager 3 Mr. Scott Gutschick

Assistant Chief John Dimitriadis

Battalion Chief Peter Friedman

Mr. Po Kar Chu, IT/Data Manager 3

Ms. Lucy Song, IT Data Specialist

Ms. Sarah Ierley, GIS Specialist

Ms. Beth Ann Nesselt, Manager 3

Assistant Chief Maurice Witt

Captain Paul Lancaster

Captain Frantz Pinthiere

Captain Don Mandeville

Captain Robert Lindsey

Assistant Chief Charles Bailey

Assistant Chief John Van Gieson

Ms. Pastora Warnick., DPS Sr. Permitting Spec.

Assistant Chief Barry Reid

Battalion Chief Alan Butsch

Mr. Robert Stojinski, US&R Program Manager

Ms. June Evans, Manager 3

Ms. Leslie Maxim, Manager 3

Mr. Steven Lamphier, Manager 2

Assistant Chief John Gallo

Battalion Chief Tony Coleman

Battalion Chief Michael Baltrotsky

Battalion Chief Mark Davis

Mr. Pete Piring, PIO

Mr. Rick Merck, DPS Manager 3

Mr. George Giebel Program Manager 2

Demetrios Vlassopoulos
Accreditation Manager, Contractor
2018

Vlassopoulos, Demetrios (Jim)

From: Steve Olson <solson@cpse.org>
Sent: Friday, February 02, 2018 4:51 PM
To: Vlassopoulos, Demetrios (Jim)
Cc: resign@glenview.il.us
Subject: CFAI peer team announcement for the Montgomery County Fire and Rescue Services

Good Afternoon Jim:

I am writing today to congratulate you and the department in reaching the significant milestone of moving to Candidate status and announce the appointment of a peer team to verify and validate your documents and references. The internal procedures used by the Commission were recently changed to allow for the appointment of a peer team in advance of the department posting the required documentation. You, as the Accreditation Manager, **are required to notify the CFAI Program Director Karl Ristow, the team leader, and me via email when all the documents have been posted to the Candidate Agency SharePoint site.** Earlier communication with you indicated the intent to post by the middle of February. The deadline for posting agency documents is March 31, 2018.

Whether this is the first-time or the fifth, it represents a commitment to excellence as a leader in the fire service. To that end, Chief Ralph Ensign has agreed to volunteer his time to lead the peer team. I believe you will find him to be thoughtful and detailed in his approach to this critical position. Below are the names of the balance of the team:

L1 Chief Steve Olson Center For Public Safety Excellence
L1 Chief Jake Rhoades Kingman Fire Department, AZ
L1 Chief William Hunt Shelby Fire & Rescue Department, NC
L1 AM Candy Fontecchio Colorado Springs Fire Department, CO
L2 DC Joe Zatylny Calgary Fire Department, CA [Vlassopoulos comment: Chief Zatylny was replaced by Lt. Jason Butts of the Castle Rock, CO FD as Chief Zatylny was unavailable for the April site visit]

Contact information:

TL Chief Ralph Ensign resign@glenview.il.us (847) 878-7823
AM Demetrios (Jim) Vlassopoulos Demetrios.Vlassopoulos@montgomerycountymd.gov (240) 777-2405

Chief Ensign will be in touch to make introductions, talk about potential travel dates and issues related to the work of the peer team. If I can be of any assistance, please do not hesitate to contact me at your convenience.

Warm Regards

Steve



Steve Olson, CFO, MPA

CFAI Coordinator

Mobile: 630-768-0661

Email: solson@cpse.org

www.cpsc.org



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9 April 2018

Scott E. Goldstein
Fire Chief
Montgomery County Fire Rescue Service
100 Edison Park Drive, 2nd Floor
Gaithersburg, MD 20878

Subject: Assigned CFAI Peer Assessors

Dear Chief Goldstein,

On 8 August 2017 the Montgomery County Fire Rescue Service declared themselves candidates for re-accreditation. This coupled with the loading of final accreditation documents to your SharePoint site on 8 March 2018 allowed a CFAI peer assessment team to be developed and assigned for review. They are:

Ralph Ensign – Team Leader
Steve Olson – Level 1 Peer Assessor
Candy Fontecchio – Level 1 Peer Assessor
William Hunt – Level 1 Peer Assessor
Jake Rhoades – Level 1 Peer Assessor
Jason Butts – Level 2 Peer Assessor

Their job will be to represent the Commission on Fire Accreditation International in verifying and validating your documents to ensure you are credible in your self-assessment. If credible they will make a recommendation to the full commission for consideration of you being accredited for another 5 year term.

All agencies are responsible, per CFAI policy and procedures, to cover all reasonable costs for the peer team as it relates to air travel, lodging, transportation, and meals while on travel for verification and validation. Additionally, your agency, if successful, will be required to provide the same level of support for the peer team leader to represent your agency at the next scheduled hearings.

Please let me know if you have any questions or need further information.

Sincerely,

Karl E. Ristow, CFO, MIFireE
CFAI Program Director



Commission on
Fire Accreditation
International



Commission on
Professional
Credentialing



Technical
Advisor
Program

 Montgomery County FR, MD

Revised 1/10/11

Announcements ▼

Welcome to your Candidate Agency Site 10/15/2017 2:01 PM
 by cpse.admin

Please set your alerts for immediate notification to all folders on this site. You can edit alerts by selecting your name in the top right corner and then site settings. Also review your information and ensure it is up-to-date.



Contact Information ▼

<input type="checkbox"/>		Last Name	First Name	Company	Business Phone	Home Phone	E-mail Address
		Butts	Jason	Castle Rock Fire and Rescue Department	303-947-3882		jbutts@crgov.com
		Ensign	Ralph	Glenview Fire Department	847-657-6785		rensign@glenview.il.us
		Fontecchio	Candy	Colorado Springs Fire Department	719-385-7204		cfontecchio@springsgov.com
		Gutschick	Scott	Montgomery County Fire Rescue Service	240-777-2417		Scott.Gutschick@montgomerycountymd.gov
		Hunt	William	Shelby Fire & Rescue	704 669-6602		william.hunt@cityofshelby.com
		Olson	Steve	CPSE	630-768-0661		solson@cpse.org
		Rhoades	Jake	Kingman Fire Department	928-753-2891		jrhoades@cityofkingman.gov
		Vlassopoulos	Demetrios "Jim"	Montgomery County Fire Rescue Service	240-777-2405		Demetrios.Vlassopoulos@montgomerycountymd.gov

Links ▼

- [CPSE Web Site](#)
- [MCFRS Quicklinks Site](#)
- [CountyStat Site PI 2D.8 & 2D.9](#)
- [FireCares Site for Montgomery County, MD](#)
- [MCFRS 2018 ARC Online GIS CRA](#)
- [MCFRS ARC Online GIS CRA Critical Infrastructure](#)
- [2016-Aug - Fire Chief's Monthly Video Message - Accreditation](#)
- [MCFRS 2017 ACR with Data Tables](#)

[Add new link](#)

[Add new item](#)

The MCFRS Peer Assessment Team was led by the Glenview, IL FD Chief Ralph Ensign. The team began their assessment via SharePoint review of the MCFRS Self-Assessment Manual, Community Risk Assessment: Standards of Cover, and Master and Strategic Plans between early February and March 31st.

The team arrived and began their site visit on 4/15/18 and completed it on 4/19/18. At the end of the site visit, the team recommended MCFRS for another five-year's of agency accredited status. The Commission on Fire Accreditation International will be voting to accept the team's recommendation in August 2018 at the IAFC Fire Rescue International Conference in Dallas.

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE, MONTGOMERY COUNTY, MARYLAND

SELF-ASSESSMENT MANUAL 9TH EDITION - PEER ASSESSOR TEAM ASSIGNMENTS

CATEGORY	CRITERIA	TEAM ASSIGNMENT	MCFRS CONTACT	MEETING	
				DATE	TIME
I	Governance and Administration	Ralph Ensign	Div. Chief Alan Hinde		
II	Assessment and Planning	Candy Fontecchio	Planning & Accreditation Section Mngr. Scott Gutschick		
III	Goals and Objectives	William Hunt	Planning & Accreditation Section Mngr. Scott Gutschick		
IV	Financial Resources	Ralph Ensign	Div. Chief Dominic Del Pozzo		
V	A	Community Risk Reduction Program	William Hunt	Mngr. Rick Merck (DPS)	
	B	Public Education Program	William Hunt	Mngr. Beth Anne Nesselt	
	C	Fire Investigation, Origin, and Cause Program	Candy Fontecchio	B/C Dan Ogren/Capt. DJ Mandeville	
	D	Domestic Preparedness, Planning, and Response	Candy Fontecchio	A/C Mo Witt	
	E	Fire Suppression	Steve Olson	A/C DOCs	
	F	Emergency Medical Services (EMS)	Steve Olson	A/C Reid / B/C Butsch	
	G	Technical Rescue	Steve Olson	B/C Hinkle / Capt. Lancaster	
	H	Hazardous Materials (Haz-Mat)	Ralph Ensign	B/C Ogren / Capt. Lancaster	
	I	Aviation Rescue and Firefighting Services	Steve Olson	No indexed airport	
	J	Marine and Shipboard Rescue and Firefighting Services	N/A		
	K	Wildland Fire Services	Jake Rhoades	Program just began	
VI	Physical Resources	Ralph Ensign	Div. Chief Steckel		
VII	Human Resources	Jake Rhoades	Div. Chief Zuspan		
VIII	Training and Competency	Jake Rhoades	Div. Chief Zuspan		
IX	A	Essential Resources - Water Supply	Steve Olson	B/C Mark Davis	
	B	Essential Resources - Communications	Steve Olson	B/C Mike Baltrosky	
	C	Essential Resources - Administrative Support Services & Office Systems	Jason Butts	Several	
X	External Systems Relationships	Jason Butts	A/C John Dimitriadis		

SOC	Standard of Cover	All Assessors	AM Vlassopoulos	
SP	Strategic Plan	All Assessors	Planning & Accreditation Section Mngr. Scott Gutschick	

TL: Ralph Ensign	L1: Steve Olson	L1: Jake Rhoades	L1: Candy Fontecchio	L1: William Hunt	L2: Jason Butts
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Category I: Governance and Administration (Authors: D/C Hinde & Program Manager Giebel)

Criterion 1A: Governing Body

The governing body and/or agency manager is legally established to provide general policies to guide the agency, approved programs and services, and appropriated financial resources.

Summary:

The Montgomery County Council promulgates Charter Law for this jurisdiction in Maryland. This includes Charter Laws that establish and direct the overall scope of fire and rescue service delivery in the jurisdiction.

Performance Indicators:

CC 1A.1 The agency is legally established.

Description

The Montgomery County Fire and Rescue Service is a legally established public service under County Code. The Montgomery County Council, under the County Charter, Section 101 as well as Part II, Chapter 21 provides for the adequate delivery of fire and rescue services to the citizens of Montgomery County.

In January 2005, the County Council promulgated and enacted Bill 36-03; thus, changing the Charter Law under Part II, Chapter 21 providing for a single Fire Chief for the County who was authorized and responsible for all entities providing emergency fire and rescue services in the jurisdiction. The outcome was the creation of one of the largest combination fire and rescue departments in the nation.

Appraisal

The agency has been legally established by Montgomery County. By being legally established, the MCFRS has been able to provide services to the citizenry without concern for anyone questioning its legal right and responsibility to provide such services.

Plan

There is no known reason nor plan for the Montgomery County Council or the Montgomery County Fire and Rescue Service to make changes to Part II, Chapter 21 of the Charter Law.

References

[Article 1., Sec. 101. County Council](#)

[Chapter 21, Fire and Rescue Services](#)

[Bill 36-03](#)

CC 1A.2 The agency complies with legal requirements of local, state/provincial, and federal governments (i.e. inspection reports, regulatory references, meeting minutes, and legal opinions).

Description

The Montgomery County Fire and Rescue Service (MCFRS) complies with all federal, State and local legal requirements (i.e., laws, statutes). The department also follows voluntary standards (e.g., NFPA standards) that the Authority Having Jurisdiction (AHJ) has adopted such as NFPA 1, NFPA 101 and others.

Appraisal

During this 5-year accreditation cycle, the due diligence of our Division Chiefs and their Section Managers concerning the tracking of legal requirements has assured that MCFRS has remained in compliance with federal, State, and local laws as well as voluntary industry standards that have been adopted by the AHJ. Preparation and amendment of the Master Plan has also served to trigger periodic review of applicable laws to determine and ensure agency compliance.

Plan

The plan moving forward is to continue utilizing MCFRS managers and the planning process to evaluate and ensure the department’s compliance with all legal requirements.

References

[Master Plan 2016 to 2022](#), (see PDF page 32 / paper pages 1-9 through 1-11)

[Master Plan Appendix A](#)

1A.3 The agency has a methodology to monitor and track applicable local, state/provincial, and federal requirement changes.

Description

Each year the Fire Chief assigns a staff-level chief officer to attend the Maryland House of Delegates when in session. The Maryland State House of Delegates holds briefings every Friday during these sessions. The assigned chief officer attends these sessions in Annapolis to keep abreast of the pending legislation that could affect the fire-rescue service in Maryland and specifically Montgomery County. The County Executive's Office as well as the County Council have a joint team of personnel that attend as well.

Appraisal

MCFRS has had many successful efforts in lobbying for and securing legislation that has improved risk reduction services and programs for the citizens we are sworn to protect. The last notable legislation was the passage of the new Maryland Smoke Detector Law that became effective January 1, 2018. This legislation requires that all battery-operated smoke alarms in use in Maryland be replaced with 10-year, sealed battery units, thus reducing the “dead battery syndrome” that MCFRS has encountered in previous years through its home inspection program.

Plan

The plan is to continue with our current approach of teaming with our partners within County Government to continue lobbying our legislators to pass regulations and laws that benefit our citizens by reducing risk associated with fire dynamics and cardiac arrest.

References

[New Smoke Alarm Law](#)

1A.4 The governing body of the agency periodically reviews and approves services and programs.

Description

Montgomery County Code requires that the Fire Chief must draft a master fire, rescue, and emergency medical services plan and must propose any appropriate amendments to the Executive and Council. The Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan (Master Plan) contains all of the MCFRS services and programs. The Master Plan is currently on a six-year cycle and at the end of each cycle the governing body must review and approve the new plan.

Appraisal

During the rating period (last five years since the last accreditation) MCFRS submitted a completely updated master plan, which was fully vetted first through community comment and approved by the County Council.

Plan

MCFRS will continue using the current process for monitoring successes and opportunities within the department. The current master plan will sunset in 2022 and the department’s planning manager will develop a replacement plan per Section 21-12 of the County Code by that time.

References

[Montgomery County Code Chapter 21, Section 12](#) (requirement to produce a Master Plan)

[Master Plan 2016 - 2022](#)

1A.5 The method used to select the agency's chief fire officer/chief executive officer includes evaluation of candidate qualifications and credentials.

Description

The process for selecting a Fire Chief for MCFRS is dictated by several sections of the Montgomery County Code. This process is managed by the County's Chief Administrative Officer under direction of the County Executive. They select the candidate and then present that selection for confirmation by the County Council.

Appraisal

MCFRS has had four different individuals serve as County Fire Chief and each was selected as described above. Each of these individuals were among the best qualified and highest trained in the industry and have served with distinction within the current MCFRS structure.

Plan

Montgomery County will continue to utilize the current process for hiring the Fire Chief position going forward as it is the current code requirement. The County does not see a need to make any changes at this time.

References

[Montgomery County Personnel Regulations Section 6](#)

[Montgomery County MC Code 2 39A](#)

[Charter 215 and 216](#)

[MCFRS Fire Chief Position Description](#)

1A.6 The role and composition of various policy making, planning, and special purpose bodies are defined by the governing body in an organization chart.

Description

Bill 36-03 enacted in 2004 created one uniform fire chief for the Montgomery County Fire Rescue Service. Section 21-3 of the Montgomery County Code states that the Fire Chief is the uniformed department head of the Montgomery County Fire and Rescue Service and has all the powers of a department director. The Chief has full authority over all fire, rescue, and emergency services in the County. The Chief must implement County law, regulations, and policies to effectively administer the Fire and Rescue Service.

Each Division Chief of MCFRS is responsible to monitor policies, regulations and orders in their sections; to add, delete or promulgate new policies to meet current federal, State and local/County laws; and to report those proposals to the Fire Chief for his/her approval. Each Section Chief under his/her Division Chief is responsible to report on current policies and recommendations periodically throughout the year. This is illustrated in the MCFRS organizational flow chart.

Appraisal

MCFRS has been mandated by County Code Chapter 21-2 to interact and collaborate with the Fire and Emergency Services Commission (FESC). The responsibilities of this Commission have been outlined within the aforementioned County Code and were placed within the MCFRS Master Plan. The Fire Chief or his designee, during the rating period, routinely met with the Commission as mandated as well as County Citizen Advisory Boards. The Commission (FESC, Policy & Legislation) has been included in the org chart.

Plan

MCFRS will continue to abide by County Law/Code requiring collaboration with the FESC and other community stakeholders.

References

[Bill 36-03](#)

[County Code Section 21-3](#) (see PDF page 8)

[Document Supporting 9th Edition FESSAM PI 2D.10 Interacts with External Stakeholders and AHJ](#)

[MCFRS Org Chart](#)

[County Stat Fire Chief Performance Plan](#)

[Master Plan 2016 - 2022](#) (see Section 2 Pages 17 and 18)

1A.7 The governing body or designated authority approves the organizational structure that carries out the agency's mission.

Description

Chapter 21 of the County Code specifically stipulates and defines the organizational structure of the fire service in the County, but it allows for the Fire Chief to determine how many divisions and sections he or she sees fit to properly achieve the goals and objectives of the department.

The Chief is mandated to implement County law, regulations, and policies to effectively administer the Fire and Rescue Service. The Fire Chief has been given full authority over all fire, rescue, and emergency medical services in the County.

The Fire Chief engages with his/her Division Chiefs on a bi-weekly basis to discuss all pertinent and current issues which pertain to the overall operational and administrative functions of the organization. During these meeting, any proposed polices, orders, and policies are vetted for accuracy, financial impact and implementation. Once the items are approved, and if they fall under the County collective bargaining agreements, the proposals will be advertised, as required, through the process as required by law.

Appraisal

The department has followed the requirements of County Code, Chapter 21-3, which describes the Fire Chief as the uniformed department head of the Montgomery County Fire and Rescue Service, having all the powers of a department director. The Chief has amended and improved the effectiveness of the department through the chain-of-command and his/her organizational chart, which is designed to address the on-going needs of the department and effectively carry out its mission.

Plan

The MCFRS will continue to follow County Code, Section 21-3 as it pertains to approving the organizational structure that allows for the agency's mission to be met.

Reference

[Montgomery County Code Chapter 21](#)

1A.8 The governing body has policies to preclude individual participation of governing board members and staff in actions involving possible conflict of interest.

Description

Montgomery County Government maintains a conflict of interest law in Chapter 19A, *Public Ethics Law, Article III. Conflicts of Interest*. This law pertains to all merit system employees and volunteers of the local fire and rescue departments in Montgomery County.

Appraisal

The Fire Chief, Division Chiefs and the chain-of-command officers have continuously monitored the work force and instilled in them the requirement to adhere to the County Public Ethics Law. The law requires all individuals to apply for and be granted approval by the Fire Chief for any request for outside employment that may be related to their job description within the Montgomery County Fire and Rescue Service (MCFRS).

Plan

The Fire Chief will continue to follow the requirements outlined in Chapter 19A – *Public Ethics Law* and emphasize to all personnel in the MCFRS the importance of following the conflicts of interest law when seeking alternative employment opportunities or when considering appointments to boards or commissions that may have a connection with fire and rescue service classifications.

References

[Montgomery County Code Chapter 19A - Public Ethics Law](#)

1A.9 A communication process is in place between the governing body and the administrative structure of the agency.

Description

The communication process between the County Executive and the Fire Chief is outlined in the Montgomery County Code. The Fire Chief reports to the Chief Administrative Officer (CAO) within the Office of the County Executive. The Fire Chief and the CAO meet regularly to discuss high level issues facing the department.

Appraisal

The Fire Chief has met regularly with the County Executive’s staff and department directors to meet the expectations of the County Executive. The Fire Chief has communicated regularly with the County Executive and Chief Administrative Officer (CAO) by email, phone or through meetings to perform his/her duties as prescribed by the County Charter. This communication process has worked well and to the benefit of both the Fire Chief and these County officials comprising the governing body.

Plan

The County Executive and CAO will continue communicating their expectations to the Fire Chief concerning policy decisions, the budget, and his/her desires to enhance fire and rescue services with new facilities, apparatus, personnel, and related needs for the MCFRS. Concurrently, the Fire Chief will continue regular communication with the County Executive, CAO and fellow department heads to discuss MCFRS needs, policies and emergent issues or concerns.

References

[Montgomery County Code Chapter 21](#)

1A.10 The governing body publishes a mission statement.

Description

The mission statement of Montgomery County Government, as published by the County Executive’s Office, is as follows:

We pursue the common good by working for and with Montgomery County’s diverse community members to provide:

- *A Responsive and Accountable County Government*
- *Affordable Housing in an Inclusive Community*
- *An Effective and Efficient Transportation Network*
- *Children Prepared to Live and Learn*
- *Healthy and Sustainable Communities*
- ***Safe Streets and Secure Neighborhoods***
- *A Strong and Vibrant Economy*
- *Vital Living for All of Our Residents*

MCFRS personnel, as dedicated public servants, strive to embody in their work the following essential values that go together with the County’s mission statement:

- *Collaboration*
- *Inclusiveness*
- *Knowledge*
- *Competence*
- *Innovation*
- *Respect for the Individual*
- *Fiscal Prudence*
- *Integrity*
- *Transparency*

MCFRS works collaboratively with its law enforcement partners to ensure “Safe Streets and Secure Neighborhoods.” MCFRS’ published mission statement is as follows:

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.

MCFRS has its own set of values (a.k.a., guiding principles) that complement the County's essential values as follows:

- *Deliver services to our customers with impartiality and excellence*
- *Promote the highest standards of safety and welfare*
- *Serve with integrity and mutual respect*
- *Promote the efficient and effective utilization of our resources*
- *Promote the efficient and effective utilization of our resources*
- *Continuously improve our skills and capabilities*
- *Be responsible for the honor of our profession and public service*
- *Recognize the importance of diversity of our workforce and communities*
- *Promote equity and harmony among career and volunteer personnel*
- *Maintain and promote open honest communication, creativity, and competence*
- *Continuously improve public confidence and trust*
- *Be accountable and ethical*

Appraisal

The MCFRS, through the Fire Chief's leadership, has successfully supported the Montgomery County Government's mission statement and values, as well as its own mission statement and guiding principles. This success has occurred through the department's everyday services/programs and interactions with its customers.

Plan

The plan is to continue supporting and following the County's published mission statement and essential values as well as following our own agency mission statement and guiding principles that are published in the MCFRS Master Plan.

References

<http://montgomerycountymd.gov/government/missionStatement.html>

[2016-2022 Master Plan](#), Section 2, pages 2 and 3

Criterion 1B: Agency Administration

The organizational structure aligns with or supports the agency's mission, purposes, goals, strategies, and objectives.

Summary:

The Fire Chief has developed an organizational structure that is designed to manage the major areas of focus in the department. There are five divisions, each Division is led by a Division Chief with subordinate uniform and civilian personnel to carry out the assigned areas of the department. Each Division Chief reports directly to the Fire Chief.

Performance Indicators:

CC 1B.1 The administrative structure reflects the agency’s mission, goals, objectives, size, and complexity.

Description

MCFRS is structured into five divisions under a single Fire Chief. These divisions are staffed to manage the challenges and opportunities before the department. Each of the division’s responsibilities are outlined in the Master Plan. The approved Master Plan confirms the appropriate administrative structure for this agency.

Appraisal

The Master Plan was completed and approved per County Code. The County Government, i.e., Authority Having Jurisdiction, has approved the Master Plan and subsequently the agency’s administrative structure. During the rating period, the Fire Chief undertook a “mini-restructuring” of MCFRS to better align with the ever-changing complexity of its mission, goals, objectives and responsibilities. Through past biweekly Division Chiefs meetings, the restructuring effort have been confirmed to improve managerial efficiencies.

Plan

The plan is to continue what the agency is doing. This process has brought to our department steady improvements over time. This process has also provided for constructive budget planning in restrictive budget cycles.

References

[Org Chart](#)

[Division/Section Goals and Objectives](#)

[2016-2022 Master Plan](#) (see Division Responsibilities beginning on PDF page 48 / paper page 2-8)

[MCFRS CFAI 2017 Annual Compliance Report](#) (see beginning on PDF page 50)

1B.2 Financial, equipment, and personnel resource allocation reflects the agency's mission, goals, and objectives.

Description

MCFRS is provided with a budget derived from tax funds, Emergency Medical Service Transport Fees, grant funding and citizen donations. These resources provide for funding of personnel and equipment to meet the challenges of the vision and mission statements of the department. The Fire Chief is responsible for submitting an annual requested budget to the County Executive through the County's Office of Management and Budget (OMB). The Fire Chief leverages the approved Master Plan and annual Strategic Plans to guide the formulation of the most critical needs and goals.

Appraisal

The approved Master Plan and the agency's annual Strategic Plan and planning processes have proven to be an invaluable asset to agency leadership in projecting budget, resource allocations and requests, and tying everything to its mission, goals, and objectives.

During the last few years, and in-line with Department critical initiatives outlined in the Master Plan, multiple enhancements have been realized through effective utilization of resources.

Plan

MCFRS will continue to utilize the Master Plan and the annual Strategic Planning processes to bring focus to the most critical initiatives requiring priority resource allocation while always focusing on its mission, goals, and objectives.

References

[MCFRS Approved FY18 Operating Budget Document](#)

[Master Plan](#) (Goals and Objectives, Section 2, beginning on PDF page 42 / paper pages 2-2 through 2-5 and Initiatives beginning on PDF page 179 / and on paper pages 6-1 through 6-39)

[Master Plan Appendix H](#)

[Master Plan Appendix I](#)

[2018 Strategic Plan](#)

[FY18 Operating Budget and FY17-FY22 Proposed Capital Improvements Program Work Session](#)

1B.3 Personnel functions, roles, and responsibilities are defined in writing and a current organization chart exists that includes the agency's relationship to the governing body.

Description

The Montgomery County Fire Chief position and responsibilities are dictated in Chapter 21 of the Code. This was discussed during the self-assessment within performance indicator 1A.5. The Fire Chief has the authority to determine the adequate resource staffing needed for the agency to meet its mandates and core mission responsibilities.

As such, the agency, through the Fire Chief, maintains an organizational structure which assigns functions, roles and responsibilities to appropriate managers to balance span-of-control and enable the agency to meet its core mission.

Every position within the organization has an assigned (in writing) job description, which outlines functions, roles, and responsibilities of the positions. These position descriptions are developed and updated as needed through a joint process involving MCFRS Human Resources Division and the Montgomery County Office of Human Resources.

Appraisal

During the rating period, MCFRS has successfully filled vacancies, both internally and when new hires are needed, utilizing appropriate written and approved position descriptions. The system has worked effectively and has been appraised more completely within Category VII of the MCFRS 2018 Self Assessment Manual.

Plan

MCFRS will continue to follow the plan as outlined within Category VII and more specifically Performance Indicator 7D.2.

References

[Org Chart](#)

MCFRS 2018 FESSAM Category VII

Category II: Assessment and Planning (Author: Planning/Accreditation Section Mngr. Gutschick)

Assessment and planning are defined as the processes used to identify the community's fire protection and other emergency service needs to identify potential goals and objectives. All agencies should have a basic source of data and information to logically and rationally define the organization's mission. Assessment and planning is critical to the establishment of service level objectives, standards of cover, and ultimately, the quality of program outcomes.

The overall purpose of using these processes is to establish a long-range general strategy for the operation of the system.

Criterion 2A: Documentation of Area Characteristics

The agency collects and analyzes data specific to the distinct characteristics of its legally defined service area(s) and applies the findings to organizational services and services development.

Summary:

MCFRS collects and analyzes a considerable amount and variety of data specific to its legally defined service area (i.e., Montgomery County, Maryland) which includes nineteen municipalities and a large unincorporated area comprising over 93.2% of the County's land area. MCFRS also provides automatic aid to all federal installations and facilities located within the County – five of which have their own fire departments.

MCFRS has organized the County into geographic planning zones, including 35 fire station areas and 850 risk management zones (i.e., fire box areas). For the purpose of developing response time goals, MCFRS has established four population density zones - Metropolitan, Urban, Suburban and Rural.

The following broad categories of data are regularly collected and analyzed by MCFRS:

- Incident frequency
- Incident concentration (as depicted in maps)
- Response time (call processing, turnout, travel, and total response time) – 90th percentile and, to a lesser degree, 50th percentile (as requested by CountyStat)
- Civilian fire fatalities and injuries
- ALS patient care – STEMI¹, ROSC², stroke
- BLS patient care
- EMS super-users
- Fire loss (property damage due to fire)
- Fire confinement
- Demographics

¹ STEMI: ST-segment elevation myocardial infarction (i.e., heart attack patients)

² ROSC: return of spontaneous circulation (for cardiac arrest patients)

- Housing
- Growth and development
- Median household income

The department applies the findings and conclusions of its data analyses to the spectrum of services (i.e., fire suppression, emergency medical services, hazardous materials response, water-ice rescue, technical rescue, bomb response, aircraft rescue/ firefighting, and community outreach) provided to our customers.

Performance Indicators:

2A.1 Service area boundaries for the agency are identified, documented, and legally adopted by the authority having jurisdiction.

Description

The service area for which MCFRS is responsible for providing fire, rescue and emergency medical services is Montgomery County, Maryland, in its entirety, including the Potomac River and other bodies of water. This service area has been identified, documented and legally adopted by Montgomery County - the authority having jurisdiction. The County's 507 square miles are bound by Fairfax and Loudoun Counties (Virginia) to the southwest and west, Frederick County, Maryland (MD) to the northwest and north, Carroll County, MD to the north, Howard County, MD to the northeast, Prince George's County, MD to the east and southeast, and Washington, D.C. (District of Columbia) to the south. Rivers form two of the County's boundaries – the Potomac River forms the boundary between Montgomery County and both Fairfax and Loudoun Counties, and the Patuxent River forms the boundary between Montgomery County and Howard County. All other boundaries are land-based.

Appraisal

The established service area boundaries of MCFRS have been in place for over 120 years. The fire and rescue services of Montgomery County have operated successfully within those boundaries since the 1890s.

Plan

Montgomery County, as the authority having jurisdiction, has no reason or intention of making changes to MCFRS' service area boundaries; therefore, our plan is for the service area boundaries to remain unchanged.

References

[Chapter 21- County Code](#), Section 10.

2A.2 Boundaries for other service responsibility areas, such as automatic aid, mutual aid, and contract areas, are identified, documented, and appropriately approved by the authority having jurisdiction.

Description

MCFRS provides automatic aid and mutual aid to jurisdictions within the National Capital Region (NCR) through the National Capital Region Mutual Aid Agreement (NCR-MAA) plus other jurisdictions adjacent to Montgomery County that are not within the NCR.

Automatic aid is provided by MCFRS to Frederick, Carroll, Howard and Prince George's Counties in Maryland and to Fairfax and Loudoun Counties in Virginia. MCFRS also provides automatic aid to federal facilities located within Montgomery County through individual mutual aid agreements, including the Walter Reed National Military Medical Center, National Institutes of Health, Naval Service Warfare Center, National Institutes of Standards and Technology, and Ft. Detrick Army Garrison – each of which operates an on-site fire department. Mutual aid is provided to the District of Columbia and to the City of Alexandria, Arlington County and Prince William County in Virginia. The boundaries for these mutual/automatic aid service areas are identified in a map of the NCR and in a map of Montgomery County fire station response areas, including federal stations.

Approval for these agreements was granted by the authority having jurisdiction (i.e., Montgomery County Council, County Executive, or Chief Administrative Officer) on various dates - see individual agreements.

Appraisal

Boundaries for MCFRS' automatic/mutual aid service areas, as well as the associated automatic/mutual aid agreements, have been in place for many years. The boundaries and agreements have worked well for MCFRS in terms of provision of services to nearby jurisdictions as well as receiving services from these jurisdictions.

Plan

Based upon the effectiveness and success of MCFRS' automatic/mutual aid service areas and related agreements, the plan is for their continuation for the long-term future.

References

See CRA-SOC, Section 2A.2.

CC 2A.3 The agency has a documented and adopted methodology for organizing the response area(s) into geographical planning zones.

Description

MCFRS has 35 first-due response areas further broken down into 850 risk management zones (i.e., fire box areas) that are used for risk assessment, analysis of service needs, and for operational and statistical reporting purposes. For planning purposes, MCFRS has eight planning zones, each of which is addressed in an 8-phase planning study on station location and resource allocation. The eight zones are comprised of various combinations of station first-due areas and, in some cases, are defined partially by geographic features such as major highways, rail lines, and/or waterways.

Appraisal

Use of station first-due areas, risk management areas (i.e., fire box areas) and the eight designated planning zones for analyzing risk, service needs, and resource allocation has worked well for the department. Studies and analyses conducted over the past ten years based upon these geographical areas have resulted in key resource deployment decisions (e.g., placing an aerial tower at Hillandale Station 24), opening of an additional fire station (i.e., Travilah Station 32), and have resulted in plans to build another station (i.e., Montgomery Village Station 39) and to relocate Rockville (Twinbrook) Station 23 approximately 0.6 mile south along the Rockville Pike corridor.

Plan

MCFRS will continue using the geographic planning areas described above in its future risk assessment, planning studies, resource deployment analyses, and statistical reporting.

References

See CRA-SOC, Section 2A.3.

CC 2A.4 The agency assesses the community by planning zone and considers the population density within planning zones and population areas, as applicable, for the purpose of developing total response time standards.

Description

MCFRS uses three levels of planning zones to assess the 500-square mile County, including 850 fire box areas (a.k.a., “risk management zones” or RMZs), 35 fire station first-due areas, and eight designated strategic planning zones comprised of multiple station areas, used collectively for analyzing risk, service needs, and resource allocation.

MCFRS also has population density zones (i.e., Metropolitan, Urban, Suburban and Rural) upon which our response time goals are based. Response time goals are lowest (shortest) within the Metropolitan density zone where station distribution and resource concentration are highest within the County. Response time goals become gradually higher (longer) as population density progressively decreases across the Urban, Suburban and Rural density zones where station distribution and resource concentration are at reduced levels compared with those of the Metropolitan Zone.

Appraisal

MCFRS has effectively assessed the 500-square mile County through use of its 850 RMZs and 35 fire station areas for assessing risk as well as its eight larger strategic planning zones used for determining station distribution and resource allocation. Having utilized the four population density zones for developing our response time goals has also worked well for the department dating back to 2005 when population density-based goals were first published in our master plan; although the goals have been revised/updated several times since 2005 as the County and MCFRS have evolved.

Plan

Based upon past success, MCFRS will continue assessing the County by established Risk Management Zones, as well as the department’s other planning zones, and will continue refining its population density-based response time goals as the department and the overall

County evolve and adjust to changes in demographics, service delivery demands, and political influences.

References

See CRA-SOC, Section 2A.4.

[Phase 4 Study Area.pdf](#) (Sample map of a strategic planning zone).

[Appendices\Appendix G](#), *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, MCFRS Population Density Zones map, and Tables 3 and 4 with response time benchmarks for 2022.

2A.5 Data that includes property, life, injury, environmental, and other associated losses, as well as the human and physical assets preserved and or saved, are recorded for a minimum of three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.

Description

Data is recorded by MCFRS for property loss due to fire, civilian fatalities and injuries due to fire, firefighter-rescuer fatalities and injuries due to firefighting and/or other job-related activities (e.g., performing EMS services, vehicular collisions, training, physical fitness, etc.), and return-of-spontaneous-circulation (ROSC) for cardiac arrest patients. Fire-related loss data is available for the past five years. ROSC data is available from FY15 through FY18Q2, as it was not recorded/tracked before FY15. MCFRS does not record environmental loss data or any other type of loss data. ROSC data is the only type of human or physical assets preserved (saved) data that is recorded by the department. The department is researching and assessing the feasibility of calculating and recording property preserved (“saved”) data related to structure fire incidents – see “Plan” heading below.

Appraisal

MCFRS has adequately recorded fire-related loss data for the past five fiscal years and ROSC data for the past three and one-half fiscal years during the present 5-year accreditation cycle. There has been no process in place for recording any other type of loss or “saves” data.

Plan

MCFRS will continue its current processes for the recording of loss data pertaining to structure fires and lives-saved (“saves”) data for ROSC regarding cardiac-arrest patients. The department will continue researching and assessing the feasibility of calculating and recording property-saved data related to structure fire incidents. To record property-saved data, we will need to establish a methodology and process (likely involving enhancements to MCFRS’ Fire App) as well as a policy or FCGO, plus training for uniformed personnel who will be responsible for calculating, recording and reporting property-saved data.

References

CRA-SOC, Section 2A.5.

[Firefighter Injuries 2013-2017 screen shot](#) (source: MCFRS Risk Management Accountability Program – “RMAP”)

2A.6 The agency utilizes its adopted planning zone methodology to identify response area characteristics such as population, transportation systems, area land use, topography, geography, geology, physiography, climate, hazards and risks, and service provision capability demands.

Description

MCFRS utilizes geographic information system (GIS) technologies and datasets to geospatially identify response area characteristics (e.g., population, transportation systems, land-use, topography, etc.) within its adopted planning zones. These planning zones (i.e., fire station response areas and fire box areas) are included as geospatial layers within GIS; thus, many naturally occurring (e.g., bodies of water, topography) and human-made characteristics (e.g., roadways, railways, pipelines) are identified within them. In addition, several of these characteristics and features within planning zones have been used to develop the updated, all-hazards, community risk assessment. The MCFRS GIS allows for a robust analysis of these characteristics, both countywide and by risk management zone (i.e., fire box area).

Appraisal

MCFRS has successfully used its planning zone methodology in combination with its GIS technology to identify response area characteristics as described above. This blending of methodology and technology has been very beneficial to the department's efforts to identify and analyze key characteristics that influence community risk, service demands, resource deployment, and emergency response.

Plan

Our plan is to continue our current approach of using the department's adopted planning zones in combination with the GIS to identify response area characteristics. As GIS enhancements come onto the marketplace and are acquired and put into use by MCFRS, improved identification of response area characteristics by planning zone can be realized.

References

See CRA-SOC, Section 2A.6.

Map6 - Railroads and Pipelines 2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan, Appendix D. (Confidential-See Planning and Accreditation Section Manager to review)

[Map10 - Population Density](#). *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan, Appendix E.*

[CCT Planned Route](#) *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan, Appendix F.*

2A.7 Significant socio-economic and demographic characteristics for the response area are identified, such as key employment types and centers, assessed values, blighted areas, and population earning characteristics.

Description

Socio-economic and demographic characteristics of Montgomery County are identified in the MCFRS' *Community Risk Assessment-Standards of Cover* (CRA-SOC) document as well as in the department's Master Plan. Characteristics including building/housing stock, assessed values of properties, and major employers (private sector and public sector) are identified/discussed in these documents. There are maps in the Master Plan that address median household income levels throughout the County and the percentage of non-English speaking residents within various areas of the County. Regarding the latter map, there is a significant correlation between non-English speaking residents (of which there are many residing in minority-majority Montgomery County) and lower levels of income. Due to a strong regional economy in the Washington Metropolitan Area as well as a strong local area economy within Montgomery County, the unemployment rate within the County is very low. Montgomery County is fortunate to have no blighted areas. Empty store fronts and abandoned commercial or residential buildings are rarely present in the County and, when infrequently present, are typically reoccupied or redeveloped quickly.

Appraisal

MCFRS has adequately identified and described within its CRA-SOC and its Master Plan the County's socio-economic and demographic characteristics pertaining to its level of prosperity and its population's earning capability.

Plan

MCFRS will periodically reassess whether its Master Plan and CRA-SOC have adequately identified the significant socio-economic and demographic characteristics of Montgomery County. If updated information of this type is needed, the department will compile such information and update these documents accordingly.

References

See CRA-SOC, Section 2A.7.

[2016-2022 MCFRS Master Plan - Final Approved Plan](#) Section 4, pages 30-36.

2A.8 The agency identifies and documents all safety and remediation programs, such as fire prevention, public education, injury prevention, public health, and other similar programs, currently active within the response area.

Description

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. The department has an expansive list of programs that address fire safety, injury prevention, and risk reduction programs, with programs tracked and reviewed annually, quarterly and daily. The programs build upon existing efforts to reduce fire loss and deaths/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. Training of community leaders to partner with fire department subject matter experts has been a simple strategy that is resulting in significant impact and evidence of CRR program success. Examples include programs in collaboration with Meals on Wheels; Department of Health, Aging and Disability Services; and visiting nurse organizations.

While fire prevention and public education remain integral parts of CRR, the concept extends much further. CRR involves identifying and prioritizing risks; selecting and implementing strategies; monitoring, documenting and evaluating activities; and involving community partners and stakeholders through an integrated approach that protects both residents and firefighters. For example, the department has adopted an "Every Call/Every Alarm" initiative that directs first responders to check residential smoke alarms before clearing incidents, as time and nature of the emergency permits, and document findings on incident reports. MCFRS has a program manager dedicated to leading Senior Outreach initiatives, a program manager dedicated to managing the department's nationally

recognized Child Safety Seat program, and the department collaborates daily with its partners to engage the community and maximize impact.

Delivering fire safety education and community risk reduction programs is a top priority of the department. To reduce the overall risk within the community and within specific audiences, the department has established several educational and risk reduction programs dedicated to improving the safety of County residents. These programs are documented and tracked and include:

- Home Safety Visit & Smoke Alarm Check Program
- Safe Smart Seniors Program
- Elementary School programs featuring NFPA's Risk Watch™ curriculum
- Child Passenger Safety Seat Program
- National Safe Kids™ Program
- "After the Fire" proactive door-to-door outreach initiative following major fires
- "Safety in Our Neighborhood" community-wide safety and educational outreach program conducted primarily by fire station personnel
- Community Emergency Response Team (CERT) Program
- "Every Call/Every Alarm" Program
- 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.

Data from these programs is used to determine impacts, improvements in safety knowledge, and changes to behavior, ultimately aligning with the USFA's "Fire is Everyone's Fight" campaign for safer communities and the goal of zero fire deaths.

Program content and presentation methodology are identified through incident, demographic, and programmatic data analysis. Data is supplemented through analysis of local fire incident reports, State trends and national statistics. The department continues to implement the methodology of "Vision 20" to improve data collection and measurement.

Appraisal

A strong, effective and efficiently operated public education program has been in place within MCFRS and directed toward identifying and reducing specific risks in the community consistent with its mission. Through a consistent review process, performance in meeting fire prevention goals has been evaluated monthly. Formal and documented appraisals have been conducted quarterly and annually to determine the impact of public education programs and to ensure they are meeting or exceeding program performance indicators. Many programs and initiatives have been evaluated more frequently to incorporate best practices and recommendations from evaluations. Our programs have typically been rated 5 out of 5 and have a satisfaction rating over 95%.

As a good example, the department 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. Use of the data/metrics has been instrumental in directing efforts to those residents most at risk.

Despite successes, current staffing levels are severely inadequate to meet the demands for our programs. The Home Safety Visit program has quickly become one of the most popular and effective CRR programs the department offers; however, the growing demand far exceeds current department capacity. MCFRS uses a collaborative approach and partners with organizations such as "Meals on Wheels" and "Rebuilding Together," Senior Villages, faith-based organizations and other agencies and organizations that routinely serve seniors and have trusted, well-established relationships with them. MCFRS has also done extensive work to prepare for the future of paramedicine by training Montgomery County's personnel on conducting Home Safety Checks as well as

social workers who are frequently “first-responders” in situations that require assessments of senior citizens and fire safety behaviors. Department efforts to augment and meet the demand for home safety checks with on-duty firefighters has been unsuccessful due to the frequency and unpredictability of emergency calls which interrupt scheduled and in-progress home safety checks, safety education, and smoke alarm installations.

Plan

Our plan is to continue all ongoing programs and efforts. Hiring of additional staff, including multi-lingual staff, dedicated solely to CRR will be critical in meeting the growing demand for CRR in the County considering the County’s growing population as well as its steadily growing at-risk population.

References

See CRA-SOC, Section 2A.8.

[MCFRS PIO Twitter Account](#)

[MCFRS Twitter Account](#)

[MCFRS Blogspot](#)

[MCFRS Public Education & Safety in Our Neighborhood Webpage](#)

[Home Safety Check Link](#)

[Data Montgomery stats](#)

[2015-2017 Car Seat Customer Satisfaction Survey Results](#)

2A.9 The agency identifies critical infrastructure within the planning zones.

Description

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 locations of highest risk.

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).

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

- Highway/street network
- Utilities: water
- Communication systems:
 - County radio sites
 - Data centers (“server farms”)

Appraisal

MCFRS has adequately identified and documented (by map and/or tabular format) critical infrastructure locations and coverage within Montgomery County by planning zone (for location-specific infrastructure) and county-wide (for widespread infrastructure not limited to a specific planning zone). The department has satisfactorily updated its maps and listings/spreadsheets of critical infrastructure as needed.

Plan

MCFRS will continuously seek to identify new or changed locations/coverage of critical infrastructure that the department relies upon to reach, control, and terminate incidents involving all types of hazards and risks within Montgomery County. Any needed updates to our maps and other forms of documentation of critical infrastructure will be made.

References

See CRA-SOC, Section 2A.9.

Criterion 2B: All-Hazard Risk Assessment and Response Strategies

The agency identifies and assesses the nature and magnitude of all hazards and risks within its jurisdiction. Risk categorization and deployment impact considers such factors as cultural, economic, historical, and environmental values, and operational characteristics.

Summary:

MCFRS continuously reviews, identifies and assesses the type and magnitude of all hazards and risks within Montgomery County. MCFRS has a documented and adopted methodology for identifying, assessing, categorizing, and classifying the multiple categories of risk present throughout the County. This methodology addresses all categories of risk for which the department has primary responsibility and capabilities for incident response.

As part of its risk assessment, MCFRS regularly identifies and documents historical service demand frequency as well as projections for the upcoming years. This data is captured by planning zone as well as county-wide. Incident-related loss and “save” data is also collected and analyzed by the department. The department’s online county-wide risk maps allow personnel to drill down to individual risk management zones (RMZs) to view specific data related to a given risk category.

Fire protection systems are incorporated into the MCFRS risk assessment as one of several elements of risk comprising the overall fire risk within each RMZ. The department also assesses critical infrastructure within planning zones for capabilities and capacities to meet the service demands posed by the various risks.

Performance Indicators:

CC 2B.1 The agency has a documented and adopted methodology for identifying, assessing, categorizing, and classifying risks throughout the community or area of responsibility.

Description

MCFRS has a documented and adopted methodology for identifying, assessing, categorizing, and classifying the many categories of risk present throughout Montgomery County. The methodology addresses all categories of risk for which the department has primary responsibility and capabilities for incident response, including fire, emergency medical, hazmat, bomb, water/ice, technical rescue-related risk, and aviation-related risk. The methodology is based upon data collection, mining and analysis; risk categorization; a risk scoring system; and Geographic Information System (GIS) analysis and mapping. It is heavily dependent upon the department's GIS capabilities and the specialized GIS and data analysis skills of the MCFRS GIS Manager.

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 vs. 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 county-wide 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 (i.e., residents ≥ 65 years of age), number of health care facilities (assisted-living, skilled nursing), and education level of residents (i.e., high school graduates and above).

Appraisal

The methodology described above for this core competency has served the MCFRS needs very well. The current methodology replaced the methodology used during the previous accreditation cycle. The current methodology was developed to improve upon the previous methodology by addressing additional risk-related factors within many of the risk categories; thus, creating a more comprehensive and all-encompassing depiction of risk

and allowing for an enhanced analysis of risk. For example, fire risk now includes additional contributing factors including the following (each per RMZ): travel time for first-arriving engine and for ERF, total fire loss, percentage of non-sprinklered residences, number of high-rises, median household income, percent of population ≥ 25 years of age having at least a high school education, and percent of population ≥ 65 years of age. With these enhancements in place, the department has had a more complete depiction of fire risk throughout Montgomery County.

Plan

Our plan is to continue using the successful methodology that is currently used and to periodically update the data so that updated risk maps can be created and viewed. The latest version of the maps will be compared to the previous version to show where risk levels have changed throughout the County. We will also determine whether additional risk factors should be incorporated into the methodology and whether the risk scoring system requires any modifications.

References

[Example of Community Risk Assessment Maps from MCFRS ARC Online GIS](#)

CRA-SOC, Section CC 2B.1

[Actual MCFRS Community Risk Assessment in ARC Online GIS](#)

2B.2 The historical emergency and non-emergency service demands frequency for a minimum of three immediately previous years and the future probability of emergency and non-emergency service demands, by service type, have been identified and documented by planning zone.

Description

MCFRS identifies and documents historical service demand frequency and future probability of service demand, by service type, on an as-needed basis; at least annually. The historical data is queried, as well as documented, by fire station response area (i.e., first-due area) and by county-wide. Future probability (i.e., projections) data is calculated by county-wide as well as by station area for specific station areas of concern.

Historical demand frequency is queried using a Crystal Report developed 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 timeframe of interest – typically a fiscal year, calendar year, or quarter – and then selects the station response area(s) of interest. County-wide frequency data (i.e., all station areas combined) is queried likewise.

The projection of future service demand is based upon examining past annual demand to identify trends that are 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 annual percent change for ALS incidents is found to be 3.4%, then the projected demand for the upcoming year would be the service demand frequency for the most recent year plus a 3.4% increase. The service demand for the out years (e.g., 2-3 years into the future) can be calculated similarly using the most recent five years of data (e.g., for the FY20 projection, FY15-FY19 data would be used) which will be a combination of historical (actual) service demand frequency for FY15-17 and projected demand frequency for FY18 and FY19. MCFRS has partially automated the mathematical process of calculating projections to make them easier and faster to calculate.

Appraisal

The process described above has served the department's needs well during the current 5-year accreditation cycle. By using the tailored Crystal Reports created by the MCFRS IT Section, the querying of historical data and the calculation of service demand projections have been simplified. A fully automated approach for calculating incident frequency projections, if feasible, is needed.

Plan

Based upon the above appraisal, our plan is to continue using the existing mathematical and administrative processes to identify and document historical service demand frequency, as well as projections, for our emergency programs. Fully automating the calculation of incident frequency projections will be pursued during the next accreditation cycle. Should a more effective mathematical process be found or devised for calculating probabilities/projections, that process would then replace the existing process used by the department.

References

CRA-SOC, Section 2B.2.

[FY18 – FY20 Example of Incident Frequency Projections by Top 10 Busiest Station Area](#)

2B.3 Event consequence loss and save data that includes property, life, injury, environmental, and other losses and saves are assessed for three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.

Description

All loss-related and save-related data that is recorded by MCFRS (identified in PI 2A.5) is also assessed/analyzed by the department at least annually, with most done quarterly and/or monthly and some daily.

Cardiac-arrest “saves” (return-of-spontaneous-circulation, a.k.a., “ROSC”) data is assessed daily as well as monthly, quarterly and annually by the EMS Section. This data is reported monthly to all ALS providers within MCFRS and quarterly to both CountyStat and MCFRS management. For each cardiac arrest event, the EMS Quality Improvement Officer emails to the EMS Duty Officer a comprehensive evaluation (see referenced report below) of the ALS providers’ performance in administering high-performance CPR to the patient. The EMS Duty Officer then meets in person with those same ALS providers to review the report and discuss performance.

Civilian fire-related injury and fatality data is assessed quarterly and annually and reported to CountyStat. Data concerning fire fatalities and major injuries are assessed as they occur and reported to the State Fire Marshal. Additionally, fire damage (i.e., dollar loss) data is assessed annually and reported to NFPA via their annual survey. Fire loss data pertaining to arson is analyzed and reported monthly to the Maryland State Police (MSP) via the MSP Uniform Crime Reporting system.

The MCFRS Health & Safety Section investigates and documents all occurrences of on-duty injuries and any fatalities involving MCFRS personnel, some of which occur during incident response and operations. The Safety Officer or Battalion Chief performing the investigation completes an online report in the County’s Risk Management Accountability Program application. Canned reports of data are produced within RMAP (e.g., tabular data, graphs) and are analyzed by the MCFRS Health & Safety Section along with a third-party vendor. From the data analysis, Health & Safety Section managers can glean useful

information such as causal factors for injuries/fatalities and time lost due to injuries. Aggregated data is reported periodically to the Fire Chief, Human Resources Division Chief, and IAFF Local 1664 President and to MCFRS section managers during quarterly administrative management briefings.

Appraisal

MCFRS' efforts to assess event consequence loss and "save" data have increased in scope during the past five years and have proven beneficial to the department in quantifying the magnitude of human and property-related losses as well as the positive impacts associated with "saves" data (e.g., lives saved; injuries prevented or minimized).

Plan

MCFRS will continue its current efforts in assessing and analyzing loss data concerning structure fires and lives-saved data regarding successful resuscitation of cardiac-arrest patients. The department, with guidance provided by the CountyStat Office, will also continue researching and assessing the feasibility of calculating, recording, and analyzing property-preserved (saved) data related to structure fire incidents.

References

CRA-SOC, Sections 2A.5 and 2B.3

[Performance Update FY18Q2](#)

[EMS Section Dashboard - October 2017 - Screenshot](#)

CC 2B.4 The agency’s risk identification, analysis, categorization, and classification methodology has been utilized to determine and document the different categories and classes of risks within each planning zone.

Description

As described within the Description section of PI 2B.1, the department’s methodology is used to determine and document the various categories and classes of risk within each planning zone. The department’s online county-wide risk maps allow the user to drill down to individual planning zones (i.e., “risk management zones,” a.k.a., “fire box areas”) to view specific data for each RMZ related to the selected risk category. The different levels of risk are color-coded, corresponding to “Special, High, Moderate” and “Low” risk levels. These risk maps can be viewed online or printed; however, to drill down to the detailed risk data embedded within each RMZ, the online version must be used.

Appraisal

The approach described above has met MCFRS needs very well. Having the interactive maps online has been particularly beneficial, having allowed MCFRS planners, analysts, and Operations personnel the opportunity to pull up detailed risk data specific to each RMZ.

Plan

Our plan is to continue using the successful approach that is currently used and to periodically update the data so that updated risk maps can be created and viewed holistically or by individual planning areas (i.e., RMZs). The latest version of the maps will be compared to the previous version to show where risk levels have changed within individual RMZs or county-wide.

References

[Example of Community Risk Assessment Maps from MCFRS ARC Online GIS](#)

CRA-SOC, Section 2B.4

2B.5 Fire protection and detection systems are incorporated into the risk analysis.

Description

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).

Appraisal

MCFRS has adequately incorporated fire protection systems into its fire risk assessment. Sprinkler protection is lacking in residential high-rises built before 1974, garden apartments and townhouses built before 1988, and single-family homes built before 2004 in Montgomery County; therefore, the department's fire risk assessment identified that most RMZs lack sprinkler protection. These RMZs have typically received a higher fire risk score for this reason (and possibly for other reasons) and have been assigned a higher level of overall fire risk as depicted in the department's fire risk map. This situation has placed many residents at risk from escaping uninjured from their homes during fires and has placed firefighters at risk while searching and rescuing residents and suppressing fires in unsprinklered homes. While fire detection systems have not been specifically addressed in the department's risk assessment, it has been recognized that smoke alarms are prevalent in County residences, businesses, offices and institutions and offer occupants early warning of fire; thus, prompting evacuation and preventing injuries and deaths.

Plan

The plan is to continue the existing practice of incorporating fire protection systems into the department's fire risk assessment methodology. The plan also includes exploring ways, as feasible, in which to incorporate non-water based suppression systems as well as fire detection systems into our risk assessment methodology.

References

CRA-SOC, Section 2B.5

[Screenshot of CRA Fire RMZ 0823 Displaying Fire Risk Dialog Box](#) (see sprinkler category)

2B.6 The agency assesses critical infrastructure within the planning zones for capabilities and capacities to meet the demands posed by the risks.

Description

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 and dry hydrants
- Hospitals and the Adventist HealthCare Germantown Emergency Center (GEC)

Appraisal

The MCFRS assessment has appropriately acknowledged its agency position within the Emergency Services Sector (ESS), which is one of 16 Sectors defined in the DHS 2013 National Infrastructure Protection Plan (NIPP), beginning on page 10.

The 2015 ESSSP outlined Critical Sector Interdependencies as Energy, Communications, Transportation Systems, Water, Healthcare and Public Health, and Information Technology. The NIPP considers communications, energy, transportation, and water as lifeline functions essential to the operation of most critical infrastructure sectors.

MCFRS understands how critical these systems, and the infrastructure that support them, are to its ability to effectively meet its mission and acknowledged during this appraisal these systems are not linked to planning zones but are system-wide. Nevertheless, MCFRS has partnered with local, State, and federal agencies and private businesses that maintain these interdependent critical systems to assure they are not only documented but hardened and redundant and that continuity of operations plans exist to address system failure(s).

The Montgomery County Office of Emergency Management and Homeland Security (OEMHS) developed a Critical Infrastructure and Key Resource Assessment in 2014. The purpose of this plan, as documented on page 3, was to provide a resource to County

leadership to manage and sustain the level of preparedness in an all-hazards environment and provide guidelines to minimize the loss of life, injury, and property damage. MCFRS is listed within this document as a supporting agency to numerous critical infrastructure sectors.

In addition, MCFRS served as a stakeholder in the development of the 2013 OEMHS Hazard Mitigation Plan, as documented on page 20. This comprehensive plan, while not specific to critical infrastructure, addresses threats (natural and manmade) that could greatly affect critical infrastructure negatively which would degrade MCFRS' capabilities to respond to and effectively mitigate the risks.

Plan

MCFRS understands the many tentacles of critical infrastructure and will continue to not only document but assess this infrastructure as it is essential to reaching, controlling, and terminating incidents involving risks. This assessment will, where appropriate, document these critical assets within planning zones.

Also, and as documented in Category 10 of this Self-Assessment Manual, MCFRS will maintain a culture of collaboration and will continue building upon its community, regional, State, federal, and non-governmental organizational relationships. Maintaining these relationships are critical to building the trust to assure critical sector infrastructure interdependencies are jointly assessed, hardened, and made redundant so they are as reliable as possible and meet the demands posed by the risks in the community.

References

[Excerpt from the CFAI 9th Edition FESSAM Interpretation Guide related to 2B.6](#)

[DHS National Infrastructure Protection Plan 2013](#)

[DHS 2015 Emergency Services Sector Specific Plan \(ES SSP\)](#)

[OEMHS 2014 Critical Infrastructure and Key Resource Assessment](#)

[2013 OEMHS Hazard Mitigation Plan](#)

Criterion 2C: Current Deployment and Performance

The agency identifies and documents the nature and magnitude of the service and deployment demands within its jurisdiction. Based on risk categorization and service impact considerations, the agency's deployment practices are consistent jurisdictional expectations and with industry research. Efficiency and effectiveness are documented through quality response measurements that consider overall response, consistency, reliability, resiliency, and outcomes throughout all service areas. The agency develops procedures, practices, and programs to appropriately guide its resource deployment.

Summary:

Based upon risk categorization and service delivery factors, MCFRS has an 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 methodology ensures that the department's community risk assessment is periodically updated and verifies and validates that resources are optimally deployed to provide consistent service levels throughout the County through response coverage strategies.

Emergency response effectiveness, efficiency and quality are documented and monitored within MCFRS' performance measurement system, including the tracking of "headline" and "supporting" measures (reported to the CountyStat Office) and the tracking of performance within divisions/sections via dashboards (reported to MCFRS management during quarterly briefings). Other methods of performance measurement include monitoring of daily response time reports concerning critical incidents (i.e., fire-full assignment and ALS2 incidents), regular monitoring of 90th percentile response times by emergency program in comparison to baselines and benchmarks, and regular monitoring of unit availability/reliability.

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 peak demand call load, concurrent major incidents, and severe weather events as well as during planned special events (e.g., charity walkathons, Professional Golfers' Association tournaments) occurring in the County.

Performance Indicators:

CC 2C.1 Given the levels of risks, area of responsibility, demographics, and socio-economic factors, the agency has determined, documented, and adopted a methodology for the consistent provision of service levels in all service program areas through response coverage strategies.

Description

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.

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 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. A document further describing this second methodology is referenced below (first reference listed).

The department's strategy for response coverage is based on an all-hazards approach involving emergency response throughout Montgomery County to fires and fire-related incidents, emergency medical incidents, hazmat incidents, water-ice incidents, technical rescue incidents, bomb incidents and aviation incidents. With almost 80% of our incidents involving the need for emergency medical services, the department operates the following frontline EMS assets: 12 medic units, one paramedic chase unit, 28 BLS ambulances, 2 ambulance buses, and 2 medical support units. Additionally, every MCFRS unit can serve as a BLS first-responder unit, and 33 of 35 engines, one aerial unit and two EMS Duty Officers serve as ALS first-responder units. Frontline fire suppression resources include the 35 engines plus 16 aerial units, 11 brush trucks, 8 water tankers, and 6 heavy rescue squads (equipped for fire suppression, auto extrication and technical rescue). The department also operates a fleet of special operations units, including swift water rescue boats and boat support units, hazmat units, bomb response units, technical rescue units, and special operations support units.

Apparatus response plans/assignments are in place which Emergency Communications Center personnel reference to dispatch the appropriate number and type of resources for each incident type. Each of these response assignments has been carefully determined based upon the specific hazards/risks involved in each emergency event and the personnel and equipment required to execute the critical tasks to mitigate the incidents effectively, efficiently and safely. Response assignments are reviewed periodically for compliance with State-mandated protocols as well as fire-rescue service best practices and are modified as needed. For example, for a reported incident involving light smoke conditions inside a structure (exclusive of a high-rise/high hazard occupancy), the response assignment has been reduced in 2016 to a fire-adaptive call type (A2-3) with the dispatch of two engines and special service (i.e., aerial unit or rescue squad), versus a fire-full assignment (i.e., box alarm) comprised of 5 engines, 2 aerial units, 1 rescue squad, 1 EMS transport unit, and 2 command officers. Based upon an on-scene assessment provided by the first-arriving unit, this assignment can be upgraded to a full box alarm as needed.

Response time objectives and benchmarks as well as minimum staffing standards are in place to ensure that all areas of the County receive timely and effective, all-hazards emergency services. When planning and data analyses indicate that resources are, or will become, insufficient to meet the service demand, steps are taken (as funding allows) to add resources to address distribution and concentration needs. Innovative approaches are also employed to maximize existing resources such as modifying the department's ALS service delivery model to replace most two-person medic units with one-person paramedic chase units and to reassign other firefighter-paramedics from medic units to paramedic engines which has the dual benefit of upgrading 3-person engines to 4-person engines with a firefighter-paramedic on board.

Appraisal

The department has been successful in meeting the intent of this core competency as it has determined, documented, adopted and employed a two-part methodology for response strategies for the provision of consistent service levels throughout the County. Service levels across all emergency programs have consistently met the needs of our diverse and growing County during the current 5-year accreditation cycle. MCFRS has devised and implemented innovative approaches to service delivery such as leveraging our limited ALS resources and expanding our EMS transport capabilities to better meet the County's growing EMS demand.

Plan

While the department's methodology for this core competency is sound, the plan for improvement includes the following enhancements:

- Develop an internal policy that specifically directs the GIS Specialist to update the GIS-based CRA for the previous fiscal year within three months of the beginning of a new fiscal year and to denote any significant changes in risk, by program, within the RMZs.
- Upon the updated 2020 U.S. Census data becoming available, the GIS Specialist will update demographic and socioeconomic information within our CRA GIS-based framework.

- Develop an internal policy specifically directing the Accreditation Manager to keep the CRA-SOC document up-to-date and incorporate the updated fiscal year CRA maps and data into the document. This will ensure the most updated version of the CRA-SOC document is available for use by MCFRS decision-makers.

References

[PROVISION OF SERVICE LEVELS DOC](#)

[2016-2022 MCFRS Master Plan - Final Approved Plan](#), Section 4, pages 26-57.

[Appendices\Appendix G](#), *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, **Table 3** with first-arriving unit and ERF response time benchmarks for 2022.

[2016-2022 MCFRS Master Plan - Final Approved Plan](#), Section 4, pages 26-57.

[Appendices\Appendix G](#), *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, **Table 4** with first-arriving unit and ERF response time benchmarks for 2022.

CC 2C.2 The agency has a documented and adopted methodology for monitoring its quality of emergency response performance for each service type within each planning zone and total response area.

Description

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.

Appraisal

Collectively, this documented and adopted methodology has provided the department an effective and thorough methodology to monitor the quality of its emergency response performance. This allows MCFRS managers to not only track quality of performance for internal purposes but, in the name of transparency, making it available to elected officials, other County departments and to the public for their information and scrutiny through the CountyStat web page. Within the past two years, the department added several new ALS-related performance measures to expand the scope of its monitoring efforts, and these additional measures have aided the department in monitoring the quality of its ALS services.

Plan

The department's plan is to continue the existing monitoring methodology while looking for viable opportunities for improvement. Additionally, it will be beneficial to check with other large fire departments serving a large population spread across hundreds of square miles within their jurisdiction to see what methodology they use, including the size of the planning area by which they monitor and total number of planning areas.

References

[Performance Update FY18Q2](#)

[EMS Section Dashboard - October 2017 - Screenshot](#)

[ALS2-Echo Response Time Report 8-22-17 screenshot](#)

[FFA Response Time Report 1-1-17 screenshot](#)

CRA-SOC. Section CC 2C.2.

2C.3 Fire protection systems and detection systems are identified and considered in the development of appropriate response strategies.

Description

During the Fall of 2014, MCFRS conducted the “Multi-Family Occupancy Initiative” wherein garden apartments and mid-rise apartment buildings in the County were visited by firefighters, and information concerning the presence of sprinklers, standpipes and fire alarms was documented in a database. Similar information concerning residential high-rises had been collected several years ago and is documented in a separate database. In addition, MCFRS captures within its fire risk map whether residences are equipped with sprinkler systems.

In accordance with County Code, many institutional, office and commercial occupancies are equipped with fire suppression and detection systems. Presence of these systems; however, does not result in a reduced apparatus assignment for reported fires, as it has been determined by the MCFRS leadership that the full complement of resources may, nonetheless, be required to perform the defined critical tasks. It is also possible that the sprinkler system in the fire building may have been disabled or may have malfunctioned, or that the fire is burning in an unprotected portion of the structure such as the roof, siding and/or deck; thus, requiring the response of the full structure fire apparatus assignment (i.e., “fire-full assignment” or “FFA”).

Appraisal

MCFRS has achieved success in identifying and documenting data concerning fire protection and detection systems in multi-family residential as well as other types of occupancies and data concerning sprinkler protection in single-family homes and townhouses. While this information has been considered in the development of appropriate response strategies, it has not resulted in a reduced assignment of fire suppression resources for reported structure fires for the reasons described above.

Plan

MCFRS will continue to identify the presence of water-based fire protection systems and, in the future, non-water based fire protection systems as well as fire detection systems in residential and other types of occupancies; focusing on new construction and major building renovation projects involving installation of these systems. This information will be documented, stored, and considered in the development of appropriate response strategies for the future.

References

CRA-SOC. Section CC 2C.3.

CC 2C.4 **A critical task analysis of each risk category and risk class has been conducted to determine the first-due and effective response force capabilities, and a process is in place to validate and document the results.**

Description

MCFRS has performed a critical task analysis of each of its emergency response programs - encompassing both risk category and risk class - to determine first-due unit and emergency response force (ERF) capabilities. For MCFRS, that involves 21 individual critical task analyses to address the all-hazards emergency services provided to our customers (i.e., fire suppression; emergency medical services – ALS and BLS; special operations – hazmat, water/ice, bomb, technical rescue); aircraft fire-rescue; and corresponding risk classes (i.e., “Low, Moderate, High,” and “Special,” as applicable, per emergency service). Critical tasks are identified and analyses are conducted by the individual Sections comprising the Operations Division. Critical tasks must be compatible with and based upon applicable MCFRS policies and SOPs.

The department has a process/methodology in place to validate and document the results of its first-due unit and ERF capabilities, consisting of incident-related validation (i.e., ALS performance measures, ALS patient outcomes, and fire confinement measures) and simulation-related validation via training evolutions, drills and emergency exercises. MCFRS hosted (at its Training Academy) and participated (along with Fairfax County, VA Fire & Rescue Department) in a 2010 NIST-sponsored study of the impact of fire suppression apparatus crew size on the effective, safe and timely achievement of critical tasks on the fireground. The study’s far-reaching findings and conclusions for the nation’s fire service also serve to validate MCFRS’ deployment strategy of [eventually] staffing all of its engines, aerial units and rescue squads with a minimum of four firefighters to handle critical fire suppression tasks quickly, effectively, and safely. MCFRS also co-hosted and participated (along with Fairfax County Fire & Rescue) in a 2010 NIST-sponsored study of the impact of EMS providers’ crew size on effective, safe and timely achievement of critical ALS and BLS tasks. This study’s far-reaching findings and conclusions also serve to validate MCFRS’ ALS deployment strategy of [eventually] staffing all of its engines,

aerial units and rescue squads with a minimum of four personnel, including one firefighter-paramedic, to handle critical ALS tasks quickly, effectively, and safely.

Appraisal

MCFRS has conducted a comprehensive task analysis for each of its 21 emergency response programs to ensure that all required tasks have been identified and an appropriate number of personnel have been assigned to each task to achieve that task in an effective, safe and timely manner. These task analyses have been instrumental in determining first-due unit and ERF capabilities throughout the County. The process/methodology of validating and documenting results has been satisfactory; however, additional forms of validation would be beneficial and improved documentation is needed.

Plan

The Operations Division will periodically review, validate and update (as needed) the critical tasks and number of personnel assigned to each task for each of the department's 21 emergency response services/programs. The Division will also work to identify and develop additional forms of validation and to improve documentation of results/outcomes.

References

SOC-CRA, Section CC 2C.4.

CC 2C.5 The agency has identified the total response time components for delivery of services in each service program area and found those services consistent and reliable within the entire response area.

Description

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 ALS and Fire-Full Assignment programs due to the corresponding high level of risk to life and property.

Appraisal

MCFRS had begun the practice of identifying and defining the three components of TRT in the mid-1990s, approximately 10 years prior to earning its initial accreditation status. During the current 5-year accreditation cycle (i.e., FY14-18), MCFRS has found its emergency services to be consistent (i.e., within an acceptable range of deviation when comparing one time frame to others) and reliable (i.e., dependable from year to year) throughout the County regarding 90th percentile response times for first-arriving unit and for ERF. Travel times and TRTs, for the most part, have been consistently lowest in Metropolitan areas (where station distribution and resource concentration are highest) and consistently highest in Rural areas (where station distribution and resource concentration are lowest). Travel times and TRTs within Urban and Suburban areas (where station distribution and resource concentration are lower than in Metropolitan areas but higher than in Rural areas) have generally fallen in between the travel times and TRTs for Metropolitan and Rural areas. Call processing and turnout times have been consistent

throughout the County regardless of population density zone, as these two components of TRT, unlike travel time, are not impacted by the location of stations and resources.

Plan

The plan is to continue the same approach as that used during the past five years concerning this core competency. Response time data will be regularly analyzed (i.e., at least quarterly) for consistency and reliability across the entire response area (i.e., the County) during the next 5-year accreditation cycle.

References

CRA-SOC, Section CC 2C.5.

2C.6 The agency has identified the total response time components for delivery of services in each service program area and assessed those services in each planning zone.

Description

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.

Appraisal

MCFRS had begun the practice of identifying and defining the three components of TRT in the mid-1990s, approximately 10 years prior to earning its initial accreditation status in 2007. During the current 5-year accreditation cycle (i.e., FY13-17), MCFRS has successfully assessed its 90th percentile response times across 21 emergency programs in terms of several different types of geographical areas, including population density zone, fire station area, risk management zone, and the entire County. Use of risk management zones has been limited for response time assessments for the reasons and specific purposes described above.

Plan

MCFRS will, for the most part, continue the same approach as that used during the past five years concerning this competency; although the department will look to expand the use of response time assessment by RMZ to the greatest extent practicable. For example, the department may examine ALS response time by RMZs to assess ALS performance with respect to the implementation of paramedic chase units as they are gradually and strategically deployed.

References

CRA-SOC, Section 2C.6.

CC 2C.7 The agency has identified efforts to maintain and improve its performance in the delivery of its emergency services for the past three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.

Description

[Note: This cannot be written in present tense because of how the PI is worded]

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, Trville, 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 & 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.

Appraisal

MCFRS has put forth considerable effort during the past five years to maintain and, to a much greater extent, improve its performance in emergency services delivery related to the initiatives highlighted above. These initiatives, identified in the *2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan*, have largely been implemented while others remain in progress. These initiatives have already improved our overall emergency services' performance and are expected to result in additional improvements to performance in the future.

Plan

The plan is to continue implementing those initiatives listed above under "Description" that have not been fully implemented. Concurrently, the department will begin working

on additional initiatives identified in the Master Plan that should result in further improvements to emergency services' performance.

References

[2016-2022 MCFRS Master Plan - Final Approved Plan](#), Section 6 (pages 2-8, 11-14, 19-28, 38-39) and Appendix I.

[MCFRS GOALS & OBJECTIVES 2016-2022.pdf](#)

[Incident Response Policy 24-01.pdf](#)

[Apparatus Staffing Policy 25-08AMII.pdf](#)

[MCFRS CFAI 2017 Annual Compliance Report Agency/Jurisdiction Changes](#) (see PDF pages 16-17 / hard copy pages 5-6)

2C.8 The agency's resiliency has been assessed through its deployment policies, procedures, and practices.

Description

MCFRS demonstrates its resiliency through execution of comprehensive departmental policies, procedures and best practices and then assesses this resiliency. MCFRS' 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 by ECC 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 with the expectation of quick and reliable response, with occasional exceptions (e.g., major winter storm impacting entire region limiting 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 thunderstorms), 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.

Appraisal

The department believes that it has had a high level of resiliency due to existing resource levels as well as policies, procedures and practices that have accommodated for times when the service delivery system was being stressed beyond normal circumstances. Having the ability to transfer resources, call upon automatic/mutual aid resources, reduce apparatus assignments and/or increase on-duty staffing as needed has contributed to the department's resiliency.

Plan

MCFRS will address its resiliency by continuing to increase resources (i.e., new stations, apparatus, equipment and personnel) as funding allows and by executing, reassessing and improving, as needed, its policies, procedures and practices that impact resiliency.

References

CRA-SOC, Section 2A.2.

[Policy 22-03AM.pdf](#), Communications Manual, p.38, "Condition Red."

[Policy 25-04](#)

[Command Action Guide](#) (see page 4-5)

Criterion 2D: Plan for Maintaining and Improving Response Capabilities

The agency has assessed and provided evidence that its current deployment methods for emergency services appropriately address the risk in its service area. Its response strategy has evolved to ensure that its deployment practices have maintained and/or made continuous improvements in the effectiveness, efficiency, and safety of its operations, notwithstanding any outside influences beyond its control. The agency has identified the impacts of these outside influences to the authority having jurisdiction.

Summary:

MCFRS regularly assesses its emergency services deployment methodology to determine whether fire/rescue-related risk with Montgomery County is being appropriately addressed. The department utilizes “headline” and “supporting” performance measures (reported to CountyStat), response time performance objectives, performance dashboards, and program appraisals to assess the ability of the service delivery system to meet expected outcomes, including assessment of its deployment methodology for provision of emergency services. Despite outside influences such as budget limitations, a steady influx of immigrants from around the world, and national health care regulatory impacts, MCFRS’ deployment strategies have led to improvements in the effectiveness, efficiency and safety of its operations. Primary examples include phased-in implementation of four-person staffing of frontline engines, maximized utilization of a limited number of ALS providers, expansion of ALS resources to include paramedic engines and paramedic chase cars, and expansion of BLS transport capabilities.

Through the Planning and Accreditation Section, 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. Of considerable importance, the department’s community outreach efforts have a positive impact on risk reduction which keeps our call load from being even higher at the same time that the County’s at-risk populations (e.g., immigrants, seniors) are increasing steadily.

MCFRS determines gaps in performance at least annually, and the authority having jurisdiction (i.e., County Council), as well as the County Executive, are notified of these gaps so that strategies can be identified to address them. Gap analyses are focused on negative trends, inconsistencies, and inadequacies; however, positive performance and trends are seen and noted as well. From these analyses, the department's continuous improvement "plan" is created; although, it is several integrated documents collectively that serve as our "plan," including initiatives captured in our master plan, annual strategic plan, and in our goals and objectives.

Performance Indicators:

CC 2D.1 The agency has documented and adopted methodology for assessing performance adequacies, consistencies, reliabilities, resiliencies, and opportunities for improvement for the total response area.

Description

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.

Headline and supporting measures, reported quarterly and annually to CountyStat, address: 90th percentile response time to critical incidents (i.e., advanced life support and fire-full assignment incidents), advanced life support services, civilian fire-related casualties, fire confinement, child injury prevention, and compliance with accreditation core competencies. MCFRS prepares and submits a statistical report to CountyStat quarterly using a spreadsheet template developed by CountyStat. The template is designed to retain the performance figures for the past three quarters while capturing the most recent quarter’s performance; thus, allowing for comparison of performance and analysis of trends across four quarters. Performance is also compared to our past fiscal year’s baselines as well as to our established benchmarks to determine progress in closing the delta (gap) between baselines and benchmarks.

The department also prepares and submits online annual performance information³ to CountyStat addressing our headline/supporting measures and “Responsive and Sustainable Leadership (RSL) performance measures.” Along with the latest fiscal year’s statistics,

³ The online annual performance information is uploaded into the County’s Budget Analysis and Submission Input System (“BASIS”) but was formerly captured in a stand-alone document known as the “Fiscal Year 20xx Performance and Accountability Report,” a title still used by some to identify the compilation of annual performance information in BASIS.

MCFRS must provide narratives for each headline measure explaining factors contributing to current performance and factors restricting performance improvement. A brief performance improvement plan is also required. Less-structured narratives explaining performance must also be provided for each RSL measure.

90th percentile response time performance objectives have been established by MCFRS that are used to gauge acceptable performance across our key emergency response programs as the department moves toward achieving our 2022 benchmark goals. A pair of tables is used to track whether our performance objectives are being met. Another pair of tables is used to track the delta (gap) between our most recent fiscal year's baselines and our 2022 benchmarks. These tracking tables are for internal purposes only. They are updated by the Planning and Accreditation Section and shared with the Operations Division and Fire Chief.

Performance dashboards are prepared by each Section on at least a quarterly basis, with some Sections doing so more frequently. There is not a standardized template, as each Section Manager develops and updates a customized dashboard unique to their Section's functions, services, programs and organizational responsibilities. Data for the dashboards is compiled by the Section Manager, or staff, from databases or other records maintained by the Section or from the department's data warehouse maintained by the IT Section. Section Managers compare recent program performance with that of past time frames to assess progress (or declined performance), analyze trends, identify outliers/anomalies, and to compare performance to goals/benchmarks.

Program appraisals for Category 5 programs are conducted annually by program managers and submitted to the Operations Division Chief, Planning & Accreditation Section Manager, and the MCFRS Accreditation Manager for feedback. A standard template designed by the Planning and Accreditation Section is used for performing and documenting these program appraisals.

Opportunities for improvement are documented in the MCFRS SAM (i.e., "Plan" section of applicable performance indicators), Division/Section goals and objectives, and in the

Initiatives and Priorities Section of the *2016-2022 Fire, Rescue Emergency Medical Services and Community Risk Reduction Master Plan*.

Appraisal

MCFRS has been successful in creating a documented and adopted methodology for assessing performance adequacies, consistencies, reliabilities, resiliencies, and opportunities for improvement. Our methodology has been based upon performance objectives, “headline” and “supporting” performance measures, section dashboards, and Category 5-related program appraisals.

Plan

The department will develop several additional performance measures to expand the scope of its monitoring efforts. Development of additional EMS, community outreach, and fire investigations-related performance measures is planned. Other focus will be placed upon development of performance measures for Special Operations programs. More frequent utilization and analysis of customer service surveys will be employed when feasible.

References

[Performance Update FY18Q2](#)

[EMS Section Dashboard - October 2017 - Screenshot](#)

[FY17 Technical Rescue Formal Program Appraisal](#)

[2017 BASELINES VS 2022 BENCHMARKS FOR FAU & ERF](#)

2D.2 The agency continuously monitors, assesses, and internally reports, at least quarterly, on the ability of the existing delivery system to meet expected outcomes and identifies the remedial actions most in need of attention.

Description

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., 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.
- 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 has four daily response time-related reports that are generated and emailed to senior management, including:
 - Response times for ALS2/Echo incidents (7 a.m. to 7 a.m.)
 - Response times for Fire Full Assignment incidents (7 a.m. to 7 a.m.)

- 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. Response times that are noticeably long are investigated by the Duty Operations Chief to identify the cause(s) and to initiate corrective action(s) as appropriate.

- As described in PI 2D.1, but also applicable under PI 2D.2, MCFRS uses customized tables to monitor whether our response time performance objectives are being met.

Appraisal

The department's methodology and efforts described above to address this performance indicator have been satisfactory. Improvement is needed; however, in recording the remedial actions that have been identified along with tracking those actions from initiation through implementation.

Plan

Our plan is to continue the approach currently used; however, the department will take steps to better record the remedial actions that have been identified and tracking those actions upon initiation. It should be noted that many remedial actions will be dependent upon the availability of funds for implementation; therefore, the plan must include efforts to obtain the necessary funding via the budgetary process, via grants, or through alternate funding sources.

References

[Performance Update FY18Q2](#)

[EMS Section Dashboard - October 2017 - Screenshot](#)

[2017 BASELINES VS 2022 BENCHMARKS FOR FAU & ERF](#)

[FY17 VS FY16 BASELINES FOR FAU & ERF](#)

[Ops Briefing 11-09-17](#)

CC 2D.3 The performance monitoring methodology identifies, at least annually, future external influences, altering conditions, growth and development trends, and new or changing risks, for purposes of analyzing the balance of service capabilities with new conditions or demands.

Description

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:

- 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 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 master/sector 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 new 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 and Montgomery County.

Appraisal

MCFRS has adequately met this core competency through the department’s continuous participation in the County’s community master planning process, monthly interaction with the five Citizens Advisory Boards, periodic meetings with the County Executive’s planning staff, attendance at the County Council’s PHED Committee work sessions, and continuous monitoring of national security threat assessments issued by the federal government. The approach/methodology that has been used has proven adequate and beneficial to the department in analyzing the balance of new/changing conditions and demands with service delivery capabilities.

Plan

Our plan is to continue the current approach while increasing efforts to identify and factor-into the planning process additional types of external influences that impact, or could impact, the balance between new or changing conditions/demands and service delivery capabilities.

References

Sample correspondence with County planners:

- [Email from MNCPPC Planner re WF2 Sector Plan](#)
- [Email from MNCPPC Planner re Veirs Mill Road Corridor MP](#)

[MNCPPC InfoShare online newsletter 1-26-18 - screenshot](#) (sample MNCPPC weekly newsletter re County planning)

[CAB Agendas and Minutes\MCCAB agenda March2017](#)

[Planning, Housing & Economic Development Committee work session 10-23-17](#), [PHED Committee agenda packet (memo) for 10/23/17 session on White Flint 2 Sector Plan]

[WOSG PowerPoint Presentation](#) (Briefing by County Executive's Planning Coordinator concerning White Oak Science Gateway Master Plan implementation)

2D.4 The performance monitoring methodology supports the annual assessment of the efficiency and effectiveness of each service program at least annually in relation to industry research.

Description

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:

- 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.]
- 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.]
- 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.]

- 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 (MCNIC³).” The program is provided by MCFRS paramedics in partnership with the County’s Department of Health & Human Services and area hospitals. MCNIC³ 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.]

Appraisal

MCFRS has successfully met the intent of this performance indicator. The department has remained abreast of Fire/EMS industry research that positively impacts the department’s effectiveness and efficiency as well as the safety of its personnel. Participation in the 2010 NIST field experiments allowed MCFRS the unique opportunity to experience firsthand the benefit and importance of adequate crew size in relation to the performance of critical tasks on the fireground and on the scene of EMS events. MCFRS has likewise benefitted from its initial use of FireCARES and First Watch. The department has also benefitted significantly from the MCNC³ program which has resulted in a 55% decrease since inception in the number of emergency responses involving the County’s top EMS super-users enrolled in the program.

Plan

Our plan for the next 5-year accreditation cycle is to continue leveraging the industry research (i.e., studies, software, programs) described above that has greatly benefitted the department. Our plan also includes staying abreast of new industry research that will allow the department to improve its effectiveness and efficiency in service delivery. As in past years, we will welcome any opportunity to participate in industry studies/experiments

and pilot tests of new tools and innovative approaches that may result in improved effectiveness and efficiency for the department.

References

[NIST Studies\Report-on-Residential-Fireground-Field-Experiments](#)

[NIST Studies\ems-nistdeploymentreportems](#)

[NIST Studies\Report-on-Highrise-Fireground-Field-Experiments](#)

[MCFRS MCNIC3 Community Paramedicine Program](#)

2D.5 Impacts of incident mitigation program efforts, (such as community risk reduction, public education, and community service programs), are considered and assessed in the monitoring process.

Description

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.

Appraisal

In 2016, MCFRS piloted a “Home Safety Visit” program and it quickly became a best practice within the department. Data from thousands of scheduled home safety visits have been recorded in the CRR database. Key components of the Home Safety Visit program include: pre- and post-visit questions to assess knowledge gained, installation of smoke alarms, education on exit drills and surveying the home for hazards (which are often able to be corrected during the visit with the potential of proactively preventing or mitigating future incidents). A written summary of each visit was/is provided directly to the homeowner and was/is also mailed to a family member so they can continue to reinforce the safety education that had been provided. This has been an invaluable tool, particularly in our Senior Outreach program. The number of fire fatalities involving seniors (≥ 65 y.o.) has decreased in recent years while the number of senior residents in the County has increased, and that reduction is believed to be attributed, in part, to the Home Safety Visits program. The overall success of the Home Safety Visit program is reflected in the many letters and phone calls/voicemails to the department in which residents – both seniors and non-seniors – have expressed their gratefulness for the risk reduction services received and show evidence of knowledge gained from the interactions with fire-rescue personnel. Satisfied customers have often referred relatives and neighbors to the Home Safety Visit program. The program’s popularity has increased significantly among residents over the past year. From October 2017 through January 2018, over 1400 requests for home safety visits had been received by MCFRS, many related to a new smoke alarm mandate by the State requiring the replacement of battery-operated smoke alarms with units equipped with a 10-year, sealed, lithium battery. During a 13-day period in January (1/15/18 – 1/27/18), 115 homes had been visited by MCFRS personnel, resulting in the installation of 160 new 10-year smoke alarms.

As part of the department's commitment to incident mitigation and creating a culture of community risk reduction, two new programs were piloted in 2017 in addition to the programs listed in PI 2A.8. The department implemented a Company Officer Leadership Academy (COLA) class addressing, in part, CRR initiatives to rising and newly promoted MCFRS officers to build organizational knowledge, capacity and support for CRR. The second program was the implementation of a six-week "CRR boot camp" where MCFRS recruits conducted home safety checks, checked/installed smoke alarms, participated in CRR events and presentations in the community, and received technical training on entering CRR activities into the CRR database. These programs were very successful and began changing the culture of the department to readily accept and promote CRR. "Preventing the 911 call" has been, and remains, one of the top priorities of the department and has been instilled within our personnel from the Fire Chief down through the ranks to the firefighter-rescuer recruits. This has largely been achieved through the success of these two programs. To further illustrate the importance of CRR throughout the department and the growing level of participation, the Operations Division participated during a two-week CRR/smoke alarm effort in January 2018 whereby in-service resources, between emergency responses, assisted Community Outreach Section personnel with the surge in home safety visit requests related to the new Maryland smoke alarm law (see above). Additionally, firefighters on light duty have regularly been utilized in the delivery of the Home Safety Visits program to supplement Community Outreach Section personnel. This direct exposure to CRR, sometimes lasting up to several months, has allowed firefighters on light duty to carry a good understanding of CRR and a firm commitment to it back into the field upon returning to full duty which has positive influence on other firefighters regarding the importance of CRR.

Plan

The department will continue to monitor socio-economic factors, incident data and FEI reports. Mapping of data from home safety visits coupled with reviews of program data will provide the framework for tailored, cost-effective and impactful fire and life safety education with a net result of improved risk reduction within the community. Also,

MCFRS will examine additional ways in which to measure the success of its CRR programs with emphasis on quantitative performance measures.

References

[MCFRS 2-13-18 Leadership Briefing – Operations Div. Dashboard \(slides 21-22\)](#)

[Home Safety Check Trending 2015-2018](#)

CC 2D.6 Performance gaps for the total response area, such as inadequacies, inconsistencies, and negative trends, are determined at least annually.

Description

MCFRS determines gaps in performance for the total response area (i.e., the County) at least annually, with gap analyses of many programs conducted quarterly and/or monthly by Section Managers. Analyses are focused on negative trends, inconsistencies and inadequacies.

Annually, an analysis is conducted of gaps in response time performance for each emergency program, broken down by population density zone, by comparing the previous fiscal year's performance to the benchmark goals established within the department's *2016-2022 Fire, Rescue Emergency Medical Services and Community Risk Reduction Master Plan*. In the "gaps table" referenced below, 90th percentile response times for FY2017 (i.e., 7/1/16 – 6/30/17) that are higher than the department's benchmark goals (i.e., positive gaps) are shown in red font to indicate gaps requiring attention and resolution. FY17 response times that are below our benchmark goals (i.e., negative "gaps") are shown in blue font to signify that goals are being met or exceeded (bettered).

Quarterly, the MCFRS' headline performance measures are updated and reported to the CountyStat Office (see sample report below). Included in the report template is performance for the most recent quarter plus the three previous quarters, each shown separately. This allows for comparison between quarters, including trending (positive or negative) as well as any inconsistencies or inadequacies requiring attention/resolution. Within each performance measure, the performance between the most recent quarter and the previous quarter is described and color-coded (i.e., "improved" as green, "steady" as yellow, or "declined" as red); thus, allowing the reader to easily observe the direction of the most recent performance. Additionally, and more importantly, the most recent quarter's performance is shown in bold font if it has met or exceeded the comparative goal or target level embedded in the first column of the report along with the performance measure text.

Performance dashboards are also maintained/updated by Section Managers on a quarterly and/or monthly basis; thus, allowing them to track and identify any inconsistencies, inadequacies or negative (or positive) trends. MCFRS does not have a standard dashboard template; instead, allowing each Section Manager to develop one of their own tailored to their Section's mission and services. Sample dashboards are referenced below. While dashboards are primarily used internally within Sections for management purposes, they are also reviewed periodically by Division Chiefs and are presented to the Fire Chief, Division Chiefs and Section Managers during quarterly management team briefings hosted by the Fire Chief.

In addition to maintaining dashboards, some Section Managers conduct regular or periodic analyses of performance using tools (e.g., graphs, spreadsheets, databases) developed by them or their staff, or by using commercial off-the-shelf applications. For example, the Communications Section has developed and uses graphs that allow easy identification of phone-to-pending, pending-to-dispatch, and phone-to-dispatch times that are above thresholds established by the department. This information assists the Section Chief and her ECC supervisors to identify and resolve problems involving systems, software, protocols, and/or personnel errors. As another example, the EMS Section uses First Watch™ to identify and track EMS “super users,” so that their needs can be met, to the greatest extent, outside of the traditional EMS system which, in turn, improves availability and reliability of EMS units by reducing their overall call loads.

Appraisal

The department's efforts in determining gaps in performance have been successful and beneficial as described above; however, improvements are needed in terms of expanding the scope of gap analyses to include analyses at the station response area and, ideally, at the fire box area level. Presently, most of the gap determination involving 90th percentile response time performance has been conducted at the population density level which, by itself, is useful, but expanding the scope to include smaller geographic areas would be of additional benefit.

Plan

MCFRS will expand its efforts to determine gaps in performance by conducting additional gap analyses to be done at the station response area level and eventually at the fire box area level. Furthermore, the Operations Division will work with the vendor to customize and expand the development of First Watch™ to meet many operational needs that could lead to improved performance across all emergency response services/programs provided by MCFRS.

References

[FY17 VS FY16 BASELINES FOR FAU & ERF](#)

[Performance Update FY18Q2](#)

[EMS Section Dashboard - October 2017 - Screenshot](#)

CRA-SOC, Section CC 2C.2.

CC 2D.7 The agency has systematically developed a continuous improvement plan that details actions to be taken within an identified timeframe to address existing gaps and variations.

Description

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 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 (numbering over 130), 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.

Appraisal

MCFRS has developed a very complete and detailed continuous improvement plan (i.e., portions of three documents serving collectively as the "plan") that fully meets the intent of this core competency. This approach has successfully served the department over the past five years.

Plan

Our plan is to continue with the existing approach while making periodic updates to the three documents comprising our "continuous improvement plan." A new six-year Master Plan, with a new set of initiatives for continuous improvement, will be developed during 2020-21 and will be completed during 2022 to be in place for the 2023-2028 timeframe.

References

[2016-2022 MCFRS Master Plan - Final Approved Plan, Section 6 \(PDF page 178\)](#)

[2016-2022 MCFRS Master Plan – Final Approved Plan, Appendix I](#)

[FY2018 STRATEGIC PLAN - Final](#)

[MCFRS GOALS & OBJECTIVES 2016-2022](#)

2D.8 On at least an annual basis, the agency formally notifies the authority having jurisdiction (AHJ) of any gaps in the operational capabilities and capacity of its current delivery system to mitigate the identified risks within its service area, as identified in its standards of cover.

Description

The AHJ in Montgomery County is the County Council which has several standing committees, including the 3-member Public Safety Committee (PSC). MCFRS leadership typically meets quarterly with the PSC, wherein Councilmembers Elrich, Katz and Hucker are apprised of gaps in operational capabilities and capacity of the current fire-rescue delivery system to mitigate risks that have been identified in the *MCFRS Community Risk Assessment: Standards of Cover* document. This notification occurs during broader discussions concerning fire-rescue issues, needs and proposed solutions. PSC members often raise specific issues of interest to them, some pertaining to actual or perceived gaps in operational capabilities/capacity.

Additionally, MCFRS meets with the PSC, and then the full 9-member County Council, during proposed fiscal year budget work sessions to discuss gaps in operational capabilities and capacity, among other topics, as documented in the Council's agenda packets (see sample packet below). Along with the discussions concerning gaps in operational capabilities/capacity are discussions of proposed strategies for addressing those gaps with needed resources and programmatic enhancements.

Appraisal

The process used by the MCFRS leadership to notify and inform the AHJ (i.e., the Montgomery County Council) of gaps in operational capabilities/capacity of the current service delivery system has been satisfactory. Discussions have led to County Council approval of several significant service delivery enhancements addressing gaps in operational capabilities and capacities. Examples of major enhancements that have occurred during the past five years have included continued upgrading of 3-person engines to 4-person paramedic engines, introduction of paramedic chase units to the ALS delivery system, and increasing the number of BLS transport units.

Plan

MCFRS intends to continue the current practice of meeting regularly (approximately quarterly) with the County Council's Public Safety Committee and at least annually with the full 9-member Council to apprise Councilmembers of gaps in operational capabilities and capacity of the current fire-rescue delivery system and to discuss needed resources and programmatic enhancements to address those gaps. When necessary, the Fire Chief will request additional meetings with the PSC and/or full Council to discuss emergent gaps in operational capabilities/capacity requiring resolution.

References

[2017 MCFRS Annual Compliance Report](#) (see pages 22 and 65-66)

2D.9 On at least an annual basis, the agency formally notifies the AHJ of any gaps between current capabilities, capacity, and the level of service approved by the AHJ.

Description

In addition to that described in 2D.8 (likewise applicable to 2D.9) pertaining to notification of the AHJ (i.e., County Council), MCFRS provides quarterly reports of operational performance data to the CountyStat Office where the data is posted online and compared to prior quarters. Like other County agencies, MCFRS also provides a performance and accountability update to the CountyStat Office annually that includes headline performance measures' data for the past fiscal year compared to the previous three years (i.e., indicating performance trends), factors contributing to current performance, factors restricting performance improvement, and, in the spirit of continuous improvement, a performance improvement plan for each headline measure. The same information is also posted online by CountyStat; thus, making it available to the AHJ as well as other County agencies and the public. These updates offer a transparent manner for the County Council, as well as County residents and businesses, to be made aware of gaps between current capabilities/capacity and the level of service that had been approved by the County Council through their approval of the *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan* and the previous 2005-2015 version of the Master Plan.

Appraisal

The process to formally notify the AHJ (i.e., County Council) of gaps between current capabilities/capacity and the approved level of service has been successful as it combines discussions with Councilmembers along with information that is available to them through online performance data.

Plan

While the current process has generally been successful, MCFRS will approach the County Council, beginning with the Public Safety Committee, with the proposal to meet with them at least annually to provide a briefing that will focus directly and solely on gaps

between current capabilities/capacity and the level of service that had been approved by the Council. Performance data, including data identifying gaps in service levels, will be referenced during these meetings.

References

[2017 MCFRS Annual Compliance Report](#) (see page 22 and page 67)

[Performance Update FY17Q4](#)

[Performance and Accountability Report screenshot](#)

2D.10 The agency interacts with external stakeholders and the AHJ at least once every three years, to determine the stakeholders' and AHJ's expectations for types and levels of services provided by the agency.

Description

MCFRS routinely interacts with external stakeholders and the AHJ (i.e., Montgomery County Council). These interactions provide effective feedback on expectations regarding service delivery programs and types/levels of service. Several examples of interaction are described below.

- The Fire Chief and Division Chiefs serve as liaisons to the County's five regional Citizen Advisory Boards (CABs) by periodically attending meetings and providing briefings, answering questions, and seeking citizens' input on expectations of the Fire-Rescue Service. Handouts are provided to CAB members, as appropriate, such as the flyer explaining the new State smoke alarm law requiring replacement (by 1/1/18) of 10-year old battery-only alarms with new models having 10-year, sealed batteries.
- D/C Steckel (Support Services Division) attends monthly meetings of the Bethesda Urban District which includes the Bethesda Urban Partnership, Greater Bethesda Chamber of Commerce, Bethesda-Chevy Chase Regional Services Center, and other community groups. He also serves as co-chair of the Chamber's Public Safety Committee which meets quarterly.
- While periodically updating the *Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, the MCFRS Planning & Accreditation Section Manager attends meetings of the five regional Citizens Advisory Boards to solicit input. The MCFRS master planning process also requires that a public hearing, led by the Fire Chief, be held per County Code, Section 21-12(b). At the hearing, the public is given the opportunity to comment on the draft master plan, and their feedback typically results in additions and/or modifications to the plan.

- MCFRS is a member of the Washington Metropolitan Council of Governments (WMCOG). As such, MCFRS participates in the Human Services and Public Safety Policy Committee as well as the Fire Chief's Committee, interacting and collaborating with other regional public safety agencies each month to develop synergistic solutions to complex regional issues and challenges facing fire-rescue departments. Chief Goldstein is currently the Vice Chairman of the Fire Chief's Committee.
- The County's Fire and Emergency Services Commission (FESC) holds monthly meetings as required by Chapter 21 of the County Code. These meetings are attended by the Fire Chief and are open to the public. The 7-member FESC is comprised of two career and two volunteer representatives plus three County residents having no fire-rescue department affiliation. The FESC is charged with advising the Fire Chief, County Executive and County Council on policies, standards, procedures, plans and programs pertaining to fire, rescue and EMS services within Montgomery County.
- Interaction with the AHJ (i.e., County Council), addressed above in PI 2D8., consists of quarterly meetings with the Council's 3-member Public Safety Committee and work sessions (at least once annually) with the full 9-member Council. These interactions, in part, address the Council's expectations for types and levels of service to be provided by MCFRS.

Appraisal

MCFRS' routine/periodic interactions with external stakeholders and the AHJ each year to determine their expectations concerning types and levels of fire-rescue services have been successful, benefiting both the MCFRS and its external stakeholders. The two-way interaction has served to identify and clarify expectations of the AHJ as well as external stakeholders and has produced goodwill between MCFRS and these entities.

Plan

MCFRS will continue its current interactions with external stakeholders and the AHJ to determine their expectations of the MCFRS concerning types and levels of services to be

provided. MCFRS will also seek other potential opportunities for further interactions with external stakeholders in the future as such opportunities are identified.

References

[CAB Agendas and Minutes\MCCAB_Meeting_Minutes_092016](#)

[CAB Agendas and Minutes\Guest Speaker](#)

[CONSOLIDATED INPUT FROM CABs](#)

[FESC Meeting Minutes 5-15-15](#)

[2017 MCFRS Annual Compliance Report](#) (see pages 22-23)

Category III: Goals and Objectives (Author: Planning/Accreditation Section Mngr. Gutschick)

Agencies should establish general organizational goals designed to implement their assigned mission and short-range plans. Additionally, agencies should establish goals and objectives to direct the priorities of operational programs (to include at least those outlined in Category V) and support services. All goals and objectives should be developed consistent with the elements of the published Strategic and Capital Improvement Plans.

Objectives are specific statements designed to document the steps necessary to achieve the agency's goal statements and apply to a specific time period. For purposes of accreditation, objectives should be consistent with the elements of the acronym "S.M.A.R.T."

Specific

Measurable

Attainable

Realistic

Time-bound

Criterion 3A: Strategic Planning

A strategic plan (3 [initial accreditation candidates] to 5 [currently accredited agencies] years in the future) is in place, and along with the budget is guiding the activities of the agency. The plan is submitted to the appropriate authority having jurisdiction (AHJ).

Summary:

MCFRS has a six-year master plan titled “*2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*,” adopted by the Montgomery County Council. The previous plan was a 10-year plan titled “*2005-2015 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*,” previously adopted by the County Council. MCFRS also has an annual Strategic Plan of which the most recent adopted edition is the *FY2018 Strategic Plan for the Implementation of Master Plan Priorities*.

Together, the Master Plan and annual strategic plan have served the MCFRS well. Several high-priority initiatives in these plans have been implemented, and the plans have assisted the department in securing appropriations for high-priority initiatives such as four-person staffing, ALS first-responder units, and opening of additional fire stations and a new multi-agency Public Safety Training Academy. MCFRS will continue implementing initiatives presented in these plans over the next five years of our accreditation cycle.

Performance Indicators:

CC 3A.1 The fire service agency has a published strategic plan.

Description

MCFRS publishes both a six-year master plan and an annual strategic plan. The *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan* was published in June 2016. Its predecessor master plan had been published in October 2005. The *FY2018 Strategic Plan for Implementation of Master Plan Priorities* was approved and published in June 2017. Predecessor versions of the strategic plan had been published in 2013, 2014, 2015 and 2016 during the present five-year accreditation cycle.

Appraisal

The 2016-2022 Master Plan as well as the earlier 2005-2015 Master Plan have served the MCFRS well over the 5-year cycle (2013-2018) of our agency accreditation. Several high-priority recommendations have been implemented or, in some cases partially implemented, to date. In addition to serving as the department's blueprint for the future, the Master Plan has assisted the department annually in securing appropriations from the County Council for high-priority initiatives and projects. Notable examples include ongoing implementation of the four-person staffing initiative, ongoing implementation of ALS first-responder units (i.e., paramedic engines; paramedic chase units), and opening of an additional station (Travilah Station 32) and a new multi-agency training academy (a.k.a., Public Safety Training Academy).

Plan

MCFRS will continue implementing initiatives identified and described in the *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, focusing on those having highest priority. A replacement Master Plan will be written during 2021-22 for the six-year period beginning in 2023 and will be published in 2023. A new strategic plan will be written and published annually.

References

[2016-2022 MCFRS Master Plan - Final Approved Plan](#)

[FY2018 STRATEGIC PLAN - Final](#)

[Info Bulletin 17-04, FY18 Strategic Plan](#)

3A.2 The strategic plan is approved within the agency and submitted to the governing body or administrative officer with responsibility over the fire agency and to whom the chief fire officer/chief executive officer reports.

Description

The *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan* was approved by the Fire Chief and County Executive during Fall 2015 and then formally adopted by the County Council on June 28, 2016. Until this date, MCFRS was using the previous version of the Master Plan approved by the Fire Chief and County Executive in 2005 and then adopted by County Council on October 11, 2005. Council resolutions for these plans are included below as references. MCFRS’ annual Strategic Plan for Implementation of Master Plan Priorities is approved by the Fire Chief but does not require any further approval /adoption by County elected officials.

Appraisal

The *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan* was adopted by the County Council, via Council Resolution 18-546, on June 28, 2016; thus, it was in effect during the final two years of the current 5-year accreditation cycle. The previous version of the Master Plan (in effect during the initial three years of the current 5-year accreditation cycle) was adopted by County Council via Resolution 15-1169 on October 11, 2005. The plan’s approval/adoption process works well and is, in fact, mandated by County Code. The approval/adoption process ensures the Executive and Legislative bodies of County Government have familiarity with and support for the MCFRS Master Plan. This support benefits the department in the annual Operating Budget and biennial CIP Budget.

Plan

MCFRS will continue to follow this established approval/adoption process when the Master Plan is rewritten during 2021-22, approved [presumably] by the Fire Chief and County Executive during 2022, and adopted [presumably] by the County Council during 2022-23.

References

[2016-06-28 Council Resolution 18-546 Approving 2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan](#)

[2005-02-08 Council Resolution 15-1169 Approving 2005-2015 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan](#)

Criterion 3B: Goals and Objectives

The agency's general goals and specific objectives direct its priorities in a manner consistent with its mission and are appropriate for the community it serves.

Summary:

The Montgomery County Fire and Rescue Service (MCFRS) is guided by a philosophy that is appropriate for the community served and consistent with the department's vision, mission, and guiding principles. The department's general goals and specific objectives are derived from this philosophy.

MCFRS goals are found in the 2016-2022 *Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, approved by the Montgomery County Council on June 28, 2016. An updated, slightly modified set of departmental goals resulted from the Annual Planning meeting held on March 23, 2017. Specific goals and objectives of the Divisions and Sections related to the department's general goals are published separately and updated annually.

Performance Indicators:

CC 3B.1 The agency publishes general organizational goals directed toward achieving its long-range plans. The agency publishes corresponding specific objectives to implement these goals and incorporate the measurable elements of time, quantity, and quality.

Description

Published within the *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan* are 16 general organizational goals that address the department's long-range plans. A slightly modified and renumbered set of departmental goals (see reference below) resulted from the Annual Planning meeting held on March 23, 2017. Specific goals and objectives of the Divisions and Sections related to the department's general goals are published in a Word document (table) and made available to all MCFRS personnel via Quicklinks (see MCFRS Information Bulletin 16-03 referenced below). These goals and objectives are written, to the greatest extent, in accordance with the "SMART" paradigm, incorporating the measurable elements of time, quantity, and quality, and they reflect the department's vision and mission.

Appraisal

The department's general goals as well as the specific goals and objectives of the Divisions and Sections have been published and made available to all MCFRS personnel. These goals and objectives have adequately served the needs of our department as has the method of dissemination to our personnel via MCFRS Quicklinks.

Plan

The department will assess and update these goals and objectives annually and continue to publish them annually as well. After each set of updates and associated publishing, all MCFRS personnel will be notified and encouraged to periodically read them. Managers will be held responsible for implementing and tracking the implementation of the annually vetted/updated goals and objectives.

References

[MCFRS GOALS - Updated 3-23-17](#)

[MCFRS GOALS & OBJECTIVES 2016-2022](#)

[Information Bulletin 16-03](#)

3B.2 The agency assesses its current status when establishing goals and objectives.

Description

Absent a single, formal process, the department achieves this performance indicator through: preparation/updating of this Self-Assessment Manual; preparation and review of monthly /quarterly dashboards; preparation of an annual performance and accountability update to CountyStat; and through quarterly management team briefings, information published in MCFRS Quicklinks and information bulletins, the Fire Chief's monthly videos, and biweekly meetings of the Division Chiefs.

Appraisal

The department's current approach has been satisfactory over the past five years; however, a formalized process is needed that would result in a more comprehensive agency-wide status upon which goals and objectives could then be updated or re-established.

Plan

MCFRS will develop a formal status assessment process to gain a clearer picture of its current agency-wide status. Once this process has been established, it will be utilized annually to determine the agency's status prior to updating or re-establishing the department's goals and objectives. Having a clear snapshot of the agency's status will be invaluable in the annual process of updating or re-establishing goals and objectives.

References

[Performance and Accountability Report screen shot](#)

[EMS Transports Trending Chart screen shot](#)

[Screen Shots\Goals and Objectives Tracking Sheet](#)

[Screen Shots\EMS Section Dashboard - October 2017](#)

[MCFRS Webpage: Fire Chief's Monthly Video Briefings](#)

3B.3 The agency invites internal and external stakeholder participation in the development, implementation, and evaluation of the agency's goals and objectives.

Description

The MCFRS Planning & Accreditation Section seeks participation internally from Division Chiefs and their Section Managers in the development, implementation and evaluation of our goals and objectives (G&Os). Participation and input occurs before, during and immediately following the annual planning meeting as well as during development of the department's Master Plan every six years. During meetings between the Fire Chief and the Montgomery County Volunteer Fire-Rescue Association (MCVFRA) and meetings between the Fire Chief and the Fire and Emergency Services Commission (FESC), the Commissioners and the MCVFRA's leadership are given opportunity to comment on the master planning process, including G&Os presented in the plan. Additionally, the Fire Chief and Division Chiefs receive input and feedback during periodic meetings with the County's five Citizen Advisory Boards (CABs). The CABs are also consulted during preparation of the department's Master Plan.

Appraisal

The department has been successful in seeking and including internal and external stakeholder participation in the development, implementation and evaluation of its goals and objectives (G&Os). Internally, the Planning & Accreditation Section has sought participation from the Division Chiefs and their Section Managers which has resulted in the creation and use of an online table with interactive "progress bars" for tracking implementation of G&Os. These managers have also successfully updated – at least annually - the G&Os for which they are responsible. The Fire Chief and Division Chiefs have been successful in obtaining the desired level of participation concerning G&Os from external stakeholders, including the five CABs and the MCVFRA. Input provided by the CABs was also valuable during preparation of the *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*. Stakeholder input has proven very valuable to the department concerning development, buy-in and implementation of G&Os.

Plan

Based upon successful interactions with stakeholders, MCFRS will continue encouraging the participation of internal and external stakeholders in the development, implementation and evaluation of our G&Os. The department will also continue seeking input from its division chiefs and section managers as well as the MCVFRA and the CABs.

References

[Report of Proceedings of FY18 Planning Meeting 4-24-17](#)

[Updating of Division-Section Goals and Objectives](#)

[CAB Agendas and Minutes\Guest Speaker](#)

[Screen Shots\Goals and Objectives Tracking Sheet](#)

3B.4 Published materials accurately portray the agency's goals and objectives as well as mission, vision, and values in context.

Description

MCFRS utilizes publications and social media to accurately portray the organization's vision, mission, values (i.e., "guiding principles") and goals and objectives, including the *2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, MCFRS web page, and MCFRS Quicklinks (all referenced below).

Appraisal

MCFRS has successfully used its master plan as well as its web page and MCFRS Quicklinks to accurately portray the department's vision, mission, guiding principles, goals, and objectives.

Plan

MCFRS will continue utilizing published materials (primarily its master plan) and social media to accurately portray the department's vision, mission, guiding principles, goals and objectives and to convey same to its personnel and customers.

References

[2016-2022 MCFRS Master Plan - Final Approved Plan](#), Section 2, pages 2-5.

[MCFRS GOALS - Updated 3-23-17](#)

[MCFRS GOALS & OBJECTIVES 2016-2022](#)

3B.5 The governing body responsible for establishing policy reviews the agency's goals and objectives.

Description

Per County Code, Chapter 21, Section 3, the Montgomery County Fire Chief is the governing body responsible for establishing fire and rescue policy. The Fire Chief reviews and approves the department's updated goals and objectives annually.

Appraisal

The annual review of the department's goals and objectives occurred during March and April of 2017. During the MCFRS' Annual Planning Meeting, department-wide (general) goals of the MCFRS were reviewed, updated and approved by Chief Goldstein following input provided by the Division Chiefs, Executive Officer to the Fire Chief, Planning & Accreditation Section Manager, and Accreditation Manager. In May 2017, Chief Goldstein also reviewed and approved the more specific goals and objectives of the Divisions and Sections. The annual review and approval of the department's general and specific goals and objectives by the County Fire Chief has been successful as a MCFRS best practice.

Plan

The plan is to continue with an annual review of the department's general and specific goals and objectives by the Fire Chief and to update them as needed.

References

[Chapter 21- County Code](#) , Section 3(b) on PDF page 8

[Report of Proceedings of FY18 Planning Meeting 4-24-17](#), pages 3-5.

3B.6 When developing organizational values, the agency consults its members.

Description

The department's organizational values (a.k.a., "guiding principles"), as presented in the department's Master Plan, are reviewed at the Annual Planning Meeting attended by the Fire Chief, Division Chiefs, Executive Officer to the Fire Chief, Planning and Accreditation Section Manager, and the Accreditation Manager. Modifications (i.e., edits, additions, deletions) are periodically proposed, vetted by meeting participants, and then approved or disapproved by the Fire Chief. Suggestions for modifications may originate from the Division Chiefs themselves or from staff through their Division Chief.

Appraisal

While the original development of the department's organizational values ("guiding principles") occurred in the mid-1990s, they have been periodically reviewed and modified since then. The process for modifying, vetting and approving the department's guiding principles, as described above, has been satisfactory. The MCFRS guiding principles were last discussed during the March 23, 2017 annual planning meeting; however, no modifications were made. Likewise, no changes have been made to the guiding principles in recent years.

Plan

As the process for consulting members of the department concerning updates to the MCFRS' guiding principles has worked satisfactorily, the department will continue using this process for the foreseeable future. Staff will be encouraged to provide input through their Division Chief. Staff from the Office of the Fire Chief will be encouraged to provide input through the Executive Officer to the Fire Chief.

References

[2016-2022 MCFRS Master Plan - Final Approved Plan](#), Section 2, page 3.

[Report of Proceedings of FY18 Planning Meeting 4-24-17](#), page 3.

Criterion 3C: Implementation of Goals and Objectives

The agency uses a management process to implement its goals and objectives.

Summary:

MCFRS implements its goals and objectives by means of a management process featuring a tracking system (spreadsheet) and designated managers having responsibility for leading the implementation of goals and objectives.

Division Chiefs use a spreadsheet to track progress in implementing goals and objectives of the divisions and sections. The goals and objectives are tracked in terms of percentage intervals completed, depicted in the spreadsheet as shaded “progress bars.” Goals and objectives coincide with the time frame of the *2016-2022 Fire, Rescue, EMS and Community Risk Reduction Master Plan*.

The Fire Chief has designated his Division Chiefs as having responsibility for leading the implementation of goals and objectives. Each Division Chief has primary responsibility for leading the implementation of his/her respective Division’s goals and objectives. It is each Section Manager’s responsibility to oversee the implementation of goals and objectives pertaining to their specific Section and to periodically report the status to their respective Division Chief.

Performance Indicators:

CC 3C.1 Some form of organizational management process is identified and used to track progress and results of agency goals and objectives relating to general organizational and operational programs.

Description

Division Chiefs (DCs) use a spreadsheet (referenced below) to track progress in implementing goals and objectives (“G&Os”) of the Divisions and Sections. The spreadsheet is available in a dedicated folder stored on the Office 360 OneDrive. The G&Os are tracked in terms of percentage intervals completed, shown in the spreadsheet by blue “progress bars.” G&Os are matched to the time frame of the *2016-2022 Fire, Rescue, EMS and Community Risk Reduction Master Plan*; therefore, it is anticipated that all G&Os will have been completed by 2022 depending upon adequate funding, adequate resources, and other factors conducive to their completion. Upon consulting their Section Managers for input, DCs are expected to update ongoing progress within the spreadsheet periodically and are expected to review/update the G&Os annually to make any needed additions or modifications. The Fire Chief and the Planning & Accreditation Section Manager review the spreadsheet following these updates.

Appraisal

MCFRS has been successful in using this tracking spreadsheet for its intended purpose. Having the spreadsheet available on OneDrive has made its use easy. Division Chiefs are reminded periodically to update their portion of the spreadsheet. This tracking tool has made the tracking of G&Os relatively simple and, with the shaded bars, is an effective way to visually observe progress being made.

Plan

It is the department’s intention to continue using the spreadsheet described above to track progress in implementing G&Os. Should any improvements to the spreadsheet arise, they will be incorporated as appropriate.

References

[Screen Shots\Goals and Objectives Tracking Sheet](#)

CC 3C.2 The agency designates personnel to lead the implementation of respective goals and objectives.

Description

The Fire Chief has designated the Division Chiefs as the members of his staff ultimately responsible for leading the implementation of goals and objectives (G&Os). Each Division Chief has primary responsibility for leading the implementation of his/her respective division's G&Os. It is then each Section Manager's responsibility to oversee the implementation of G&Os pertaining to their specific section and to periodically report the status/progress to their respective Division Chief. The first column of the Division/Section Goals and Objectives spreadsheet (referenced below) indicates the Division and Division Chief and the Section and Section Manager responsible for implementation. For the Sections comprising the Office of the Fire Chief (not a division), only the Section Managers are identified as having responsibility since there is not a division chief.

Appraisal

Having the Division Chiefs lead the implementation of their respective division's G&Os has worked satisfactorily. This has been successful based, in part, upon the role of the Section Managers who have overseen the implementation of G&Os related to their respective Sections and have reported progress to their Division Chiefs.

Plan

It is the Fire Chief's intention to continue having the Division Chiefs designated as those responsible for leading the implementation of G&Os pertaining to each Division Chief's respective division. The Division Chief will continue relying upon each Section Manager to oversee the implementation of G&Os pertaining to their specific Section.

References

[MCFRS GOALS & OBJECTIVES 2016-2022 with Assigned Manager](#)

3C.3 All members receive information explaining the agency's goals and objectives.

Description

Agency goals and objectives are posted on MCFRS Quicklinks for all MCFRS personnel to view. Information Bulletin 16-03 informs all personnel that these goals and objectives (G&Os) are posted on Quicklinks and encourages personnel to read them. In addition, a Command Officer Professional Development Improvement (COPDI) session as well as a lesson during recruit class addresses MCFRS planning and accreditation, including an overview of agency goals. Students are encouraged to view agency G&Os on Quicklinks and to direct questions to their immediate supervisor, Section Manager or Division Chief, or directly to the Planning & Accreditation Section Manager.

Appraisal

The department has been largely successful in making its goals and objectives readily available for viewing by MCFRS personnel via MCFRS Quicklinks and in presenting and explaining them during COPDI sessions and recruit classes. The department; however, should have considered additional steps to ensure that all personnel – uniformed and civilian - received information explaining the agency's goals and objectives.

Plan

An online briefing will be created listing and briefly explaining agency goals and objectives. All career and volunteer personnel – uniformed and civilian - will be directed via a Fire Chief's General Order, or informed via an Information Bulletin, to view the online briefing on MCFRS Quicklinks.

References

[MCFRS GOALS - Updated 3-23-17](#)

[2016-2022 MCFRS Master Plan - Final Approved Plan](#), Section 2, pages 3-5.

[Information Bulletin 16-03](#)

[MCFRS PLANNING OVERVIEW FOR RECRUIT CLASS 41.pptx](#)

3C.4 The agency, when necessary, identifies outside resources that can be consulted in regard to accomplishing an agency's goals and objectives.

Description

MCFRS has identified many outside resources that can be consulted as the department works to achieve its goals and objectives. The most notable of these outside resources include CFAI, fellow accredited fire-rescue agencies, the Insurance Services Office, and the National Fire Protection Association. Additionally, MCFRS has identified partner agencies and organizations in and around Montgomery County, including other in-County public safety agencies (e.g., Montgomery County Police), neighboring fire-rescue departments, the State Fire Marshal, and the Maryland Institute for Emergency Medical Services Systems.

Appraisal

The department has been successful in identifying numerous outside resources that can be consulted as the department works to accomplish its goals and objectives. MCFRS has consulted several of these agencies and organizations when the need for guidance has arisen. For example, the MCFRS Accreditation Manager has consulted on many occasions with the CFAI Program Manager, other accredited fire-rescue agencies, mutual aid partners (some working toward CFAI accreditation themselves), and the Montgomery County Police (who are CALEA-accredited) to seek guidance on achieving our agency goals and objectives as well as offering advice to them on meeting their own goals and objectives.

Plan

MCFRS will continue efforts to identify additional outside resources that could be consulted as the department continually works to meet its goals and objectives. These efforts will look broadly at local, regional, State, federal and private sector agencies and organizations.

References

[2016-2022 MCFRS Master Plan - Final Approved Plan](#), Section 2, pages 22-35, "MCFRS Partnerships."

Criterion 3D: Measurement of Organizational Progress

Processes are in place to measure and evaluate progress towards completion of specific objectives and overall system performance. The goals and objectives are re-examined and modified periodically.

Summary:

MCFRS has processes in place to measure and evaluate progress toward completion of goals and objectives (“G&Os”) as well as overall system performance. Division Chiefs use a departmental spreadsheet to track progress in implementing G&Os of the divisions and sections. Based upon input provided by their Section Managers, Division Chiefs periodically update ongoing progress within the spreadsheet, and they review/update the G&Os annually to make any needed additions or modifications.

The Fire Chief provides, among other news, progress updates regarding our goals and objectives to all MCFRS personnel through his monthly briefing video. He also convenes an annual meeting with chief officers and line officers to provide progress updates to them directly.

The Fire Chief and/or members of his senior staff meet regularly with the County Council and the County Executive to provide updates on MCFRS accomplishments relating to the department’s goals and objectives. He also attends the monthly meeting of the Fire and Emergency Services Commission to provide an update and to discuss new or revised policies.

For the benefit of the public, the Fire Chief and members of his senior staff meet periodically with the regional Citizen Advisory Boards to provide progress updates regarding departmental goals and objectives, among other topics. Also for the public’s benefit, the MCFRS uploads quarterly to the County web page performance reports regarding our progress in achieving benchmarks related to our goals and objectives.

Performance Indicators:

CC 3D.1 The agency's goals and objectives are examined and modified at least annually for quality and to ensure they remain current and consistent with the agency's mission, vision, and long range plan(s).

Description

Annually, MCFRS' goals and objectives are reviewed for quality/appropriateness and then modified to ensure they remain current, relevant, and consistent with the department's vision, mission, and master plan. The process is led and overseen by the Planning & Accreditation Section Manager. The review occurs in the months leading up to the department's annual planning meeting which typically occurs in March. The department's general goals are reviewed and, as needed, modified during the annual MCFRS planning meeting. Review and modification of specific goals and objectives of the Sections are drafted by each Section Manager - with input provided by staff - and approved initially by the applicable Division Chief and then by the Fire Chief. Upon Fire Chief's approval, all goals and objectives are published per Performance Indicator 3B.1. The most recently updated set of goals and objectives are referenced below.

Appraisal

The process described above has been used successfully in meeting this core competency. Annually, updated goals and objectives have been produced which guide the department's efforts for the upcoming year.

Plan

The plan is to continue implementing this same approach annually to ensure that goals and objectives remain current, relevant, and consistent with the department's vision, mission, and master plan.

References

[MCFRS GOALS - Updated 3-23-17](#)

[MCFRS GOALS & OBJECTIVES 2016-2022](#)

CC 3D.2 The agency evaluates administrative and operational processes to determine improvements in efficiency and execution in pursuing organizational objectives.

Description

The Fire Chief regularly engages the division chiefs relative to his expectations regarding policy formulation and/or revision involving MCFRS administrative and operational processes to determine needed improvements in efficiency and execution. Evidence can be found in the new policies, revisions and updates that are issued each year (see examples referenced below). MCFRS takes an aggressive approach to policy formulation and revision and the rescinding of policies that have become obsolete. At least annually, the Fire Chief meets with the division chiefs to specifically review and evaluate MCFRS policies and procedures and Fire Chief General Orders (FCGOs) and to determine which require revision or rescinding. This meeting also serves as an opportunity to identify the need for new policies, procedures and FCGOs. The purpose of this overall effort is to improve organizational efficiency and execution in the pursuit of our goals and objectives. Following review and comment (a.k.a., “Notice and Opportunity”) by the bargaining units and then approval by management, new or revised policies/FCGOs must, per County Code – Section 21, be brought before the Montgomery County Fire and Emergency Services Commission for final approval prior to becoming effective.

Additionally, the Fire Chief shares upcoming and anticipated policy reviews annually with Labor – both career and volunteer. In the case of the Montgomery County Volunteer Fire and Rescue Association (MCVFRA), the Fire Chief prepares a policy memorandum to them annually in accordance with provisions of the bargaining agreement.

Appraisal

MCFRS has successfully addressed this core competency during the past five years. Beginning with the previous Fire Chief’s administration (that of Chief Steven Lohr) and continuing into Chief Goldstein’s current administration, MCFRS has taken an aggressive approach to evaluating administrative and operational processes as well as in policy formulation/revision and the rescinding of obsolete policies. The department’s efforts in this regard have led to improved

policies, procedures and FCGOs which have, in turn, led to improvements in efficiency and execution within departmental operations and administration.

Plan

Our plan concerning this performance indicator is to continue with a similar approach while seeking more direct involvement from the Section Managers via division-level meetings to be convened prior to the higher-level meeting between the Division Chiefs and Fire Chief.

References

[NOI - Policy Review - MCVFRA - 2017 – 03-23-2017](#)

[MCFRS Fire Chief General Orders](#)

[MCFRS Policy and Procedures](#)

[Rescinded Orders, Directives, Policy, Procedures, & Documents](#)

[MCFRS Document Policy 06-02](#)

3D.3 The agency provides progress updates to the governing body, its members, and the public regarding goals and objectives.

Description

The Fire Chief and/or members of his senior staff meet regularly with the County Council (i.e., County's legislative body), including the Council's Public Safety Committee, as well as the County Executive (i.e., head of Executive Branch) to provide updates on MCFRS accomplishments relating to the department's goals and objectives as well as ongoing and upcoming initiatives. The Fire Chief also attends the monthly meeting of the Fire and Emergency Services Commission – the organization whose function is to advise the Fire Chief concerning fire-rescue policy – to provide an update and to discuss new or revised policies.

The Fire Chief provides progress updates regarding our goals and objectives to all MCFRS personnel through his monthly briefing video which is made available through Quicklinks. An email, with hyperlink, is also distributed to all MCFRS personnel announcing each month's video. Additionally, the Fire Chief convenes an annual meeting with chief officers as well as a separate annual meeting with line officers to provide progress updates. These annual meetings are convened during the daytime for each of the three career shifts plus another session for volunteers held in the evening or on a weekend to provide all officers an opportunity to attend.

For the benefit of the public, the Fire Chief and members of his senior staff meet periodically with the regional Citizen Advisory Boards (i.e., public boards comprised of community leaders /representatives) to provide progress updates regarding departmental goals and objectives from a general perspective. Also for the public's benefit, the MCFRS regularly uploads to the County web page performance reports regarding our progress in achieving benchmarks related to our goals and objectives. The Fire Chief's monthly video is also available publicly on YouTube via the MCFRS web page.

Appraisal

The department has been successful in providing progress updates to the governing body, its own personnel, and the public regarding MCFRS goals and objectives. During these updates, our goals and objectives have been addressed collectively, rather than individually, in the interest of time and brevity considering that the audiences include elected officials and members of the

public who typically desire an overview versus a detailed, one-by-one accounting of each goal and objective. In cases where an individual raised a question or issue concerning a specific goal, objective or initiative, the presenter provided a more detailed response.

Plan

The department's intended plan is to continue with the same approach as described above, with an eye upon improvement as factors dictate. For example, a particular audience may request greater specificity regarding certain MCFRS goals or objectives of interest to them; therefore, the next briefing/update will be tailored accordingly for that audience and their request.

References

[March 3 Presentation for PSC](#)

[Fire Chief's monthly video - January 2017](#)

[Fire Chief Slides MCFRS Chief Officers Meeting 2016 11-27-16](#)

[Chief Officer Meeting - Chief Lohr Morning Session 2014-October](#)

[Fire Chief Slides Line Officers Meeting 12-07-16](#)

[ECCAB Agenda Oct 1 2014](#)

[FESC Meeting Minutes\2016-07](#)

Category IV: Financial Resources (Author: D/C Del Pozzo)

This category evaluates an agency's financial condition to determine its ability to fund operational priorities and its prognosis for long-range quality of service given what can be a dynamic and adverse fiscal environment. Resources must be adequate to maintain the various programs to which an agency made a commitment. Whether the agency is public or private, stability of revenues (demonstrated by a consistent history through at least the past three years) is fundamental.

The chief fire officer or chief executive officer, professional staff, and governing board share responsibility for planning, management, and stability of financial resources. The chief fire officer and administrative staff have the ultimate responsibility of budget preparation. Since the budget is the financial expression of agency programs and priorities, it should be developed through appropriate consultation with the governing board of the authority having jurisdiction (AHJ), departments, divisions, and other units.

Financial policies covering financial planning, revenue, and expenditures should be developed by the professional staff and adopted by the governing board. Financial policies shall be reviewed and revised on at least an annual basis to ensure continued relevance and address any gaps.

In approving the budget, the governing board approves the acquisition and allocation of resources consistent with agency goals, objectives, and stated priorities.

NOTE: An agency that received the Distinguished Budget Presentation and Certificate of Achievement for Excellence in Financial Reporting (Certificate) from the Government Finance Officers Association (GFOA) of the United States and Canada for their Budget and Comprehensive Annual Financial Report (CAFR) may submit those certificates and their Budget and Comprehensive Annual Financial Reports as prima facie compliance with criterion 4B and therefore does not need to address performance indicators 4B.1 through 4B.10.

Criterion 4A: Financial Planning

Agency planning involving broad staff participation activates financial planning and resource allocation. The agency's plan for financing shall reflect sound strategic planning and a commitment to its stated goals and objectives. The agency must deem financial support for programs and services adequate to maintain the number and quality of personnel and other operational costs.

Summary:

Financial planning for an upcoming budget year begins with the master plan and, more specifically, the annual strategic plan for that year. These high-level planning documents provide a rough view of the requests that MCFRS will make in the upcoming budget year. Obviously, revenue available in the budget may limit what the Fire Chief requests for any particular year.

The County's finance department and Office of Management and Budget (OMB) produce revenue projections a couple of times each year. These become very important in the year prior to the budget year. MCFRS and other County departments submit requests for additional funding in the fall, and OMB studies and evaluates these requests in light of November revenue projections, which are used to establish a ceiling for the County's overall budget. OMB then makes recommendations to the County Executive who makes the final decision on which requests for additional funding will be included in the budget that is submitted to council.

Performance Indicators:

4A.1 The governing body and regulatory agencies give the agency appropriate direction in budget and planning matters within their scope of services.

Description

For the operating budget, budget direction and planning begins about a year before the budget goes into effect. OMB leads this process for the County and works closely with the County Executive. As the attached reference shows, OMB issues detailed guidelines for budget development. After active positions are reconciled to budgeted positions, any anticipated changes to the operating (non-personnel) budget are evaluated for possible inclusion.

OMB also oversees the development of the capital budget, and planning normally begins several years before there is any spending on a project. Most CIP projects require the development of a program of requirements (POR) for the facility to be built. The POR is reviewed by OMB and competes against other departments' projects for available funding in the out years of the CIP. If the project is included in the CIP, the funding schedule may be modified as the start date draws closer and county-wide priorities come into focus.

Appraisal

The OMB established a budget and planning framework to be followed by County agencies and departments. The OMB framework is comprehensive and has been used successfully each year by MCFRS to prepare its annual operating budget request.

Plan

OMB has published detailed directions on planning and budget matters for many years and will continue to do so in the future.

References

[Capital Budget Process](#)

[Operating Budget Process](#)

CC 4A.2 Policies, guidelines and processes for developing the annual budget are defined and followed.

Description

The County's Office of Management and Budget (OMB) develops and promulgates the policies, guidelines and processes for developing the annual budget. The process begins about a year before the beginning of the budget year with the identification of fiscal impacts – changes in spending that have been determined in prior years. Departments then have the opportunity to shift funding within their budgets or seek increases for specific needs. OMB and the County Executive review the proposals from departments, meet with groups of residents and send a recommended budget to the County Council. After further public participation and committee and council hearings the County Council passes the budget.

Appraisal

MCFRS has successfully followed the County's detailed budget process and has submitted requests annually for complement, operating and facility enhancements.

Plan

MCFRS will continue to adhere to the detailed guidelines issued by OMB for developing future operating and capital budgets.

References

[Capital Budget Process](#)

[Operating Budget Process](#)

4A.3 The financial planning/budget adoption process provides transparency for all expenditures and revenues for the agency.

Description

The public budget development process begins with the release of the County Executive's recommended budget on or about March 15th and ends with adoption by the County Council in late May. The County's new fiscal year then begins on July 1st.

On March 15th, there is a press conference to announce the release of the County Executive's recommended budget, and detailed budget information is available to the public online in a user-friendly format. The County Council hosts public hearings in which groups and members of the public may express their views on the budget.

Additionally, Council and Council committee meetings on the budget, like most other Council meetings, are open to the public. Key meetings are televised, and the documents for every meeting are available on Council's website.

After the budget is adopted, the Council announces its approval, and the details of the final version are available online in the same user-friendly format as the recommended budget.

Appraisal

The County's budget development process was open to the public and the process has been and remains very transparent to the public.

Plan

The County's budget process will continue to be a transparent, public process.

References

[Online budget](#)

4A.4 The budget process involves input from appropriate persons or groups, including staff officers and other agency members.

Description

The budget process within the department is linked to the planning process, which includes personnel from across the department. Department-wide support and contributions are evidenced in the master plan and annual strategic plans. Every section in MCFRS has goals and many have unmet requirements for resources. These unmet requirements show up as budget proposals in upcoming fiscal years.

Outside of the department, OMB, the County Executive, County Council and the public have ample opportunity to examine the MCFRS budget proposal and seek modifications. Due to the limited amount of new funding available, the MCFRS budget for the upcoming year normally looks similar to the prior year with changes in the one- to three-percent range to fund particular new services.

Appraisal

MCFRS' strategic planning process provided the breadth of participation in the planning the budget progression. As mentioned, many of the needs summarized in the plan have been discussed in the budget process, and approved budgets have typically funded the higher priority items. As was described within the department's self-assessment applicable to Criterion 3B.3, the department's Division Chiefs who represent all sections of line officers and civilian support staff and external agency's such as the Volunteer Fire Rescue Association representing the volunteer departments, maintain opportunities for input.

Plan

MCFRS will draw from all sections of the department to develop strategic plans, and these plans will guide the department in its requests for additional funding.

References

[FY18 Strategic Plan](#)

The following references were extracted from Performance Indicator 3B.3:

[Report of Proceedings of FY18 Planning Meeting 4-24-17](#)

[Updating of Division-Section Goals and Objectives](#)

[CAB Agendas and Minutes\Guest Speaker](#)

[Screen Shots\Goals and Objectives Tracking Sheet](#)

4A.5 The annual budget, short and long-range financial planning, and capital expenditures are consistent with agency priorities and support achievement of the agency's strategic plan and goals and objectives.

Description

MCFRS has a six-year master plan and an annual strategic plan that are built on MCFRS' priorities and were developed with cooperation between the department's career and volunteer leadership. The initiatives in these plans are the basis for budget requests that are reviewed by OMB, the County Executive and County Council.

Appraisal

The enhancements shown in MCFRS' planning documents have been the starting point for budget requests. Many services and programs that first appeared in the strategic or master plans years ago are now operational.

Plan

MCFRS's planning documents, updated annually, will provide guidance for future budgets. Requests for FY19 resources will come out of the master and strategic plans.

References

[FY18 Strategic Plan](#)

4A.6 Budgeted expenditures are consistent with projected financial resources.

Description

The County's Office of Management and Budget (OMB) begins looking at future fiscal years' financial resources several years in advance. Revenue forecasts are updated twice annually, so by the time the County has to budget expenditures, anticipated resources have been reviewed and modified several times. The purpose of this ongoing analysis of anticipated revenues is to ensure that the County adheres to its policy of limiting expenditures to recurring revenues.

Appraisal

The County's reserves have grown for several years and continue to grow. This indicates that Montgomery County is not spending all the revenue taken in, but is making contributions to the reserves while funding all budgeted expenditures. This would not be possible if budgeted expenditures exceeded available financial resources.

Plan

Montgomery County plans to continue to fund its budgeted expenditures while making significant annual contributions to reserve funds. Per policy and consistent with past practice, budgeted expenditures will not exceed recurring revenue.

References

[FY18 Recommended Budget – Fiscal Policy section](#)

Criterion 4B: Financial Practices

Financial management of the agency exhibits sound budgeting and control, proper recording, reporting, and auditing.

NOTE: An agency that has already received the Certificate of Achievement for Excellence in Financial Reporting (Certificate) from the Government Finance Officers Association (GFOA) for their Comprehensive Annual Financial Report (CAFR) may submit that certificate and their Comprehensive Annual Financial Report as prima facie compliance with this criterion. (The agency need not address performance indicators 4B.1 – 4B.10). Reciprocity for this is acknowledged by review of the GFOA's process for reviewing CAFRs submitted to its Certificate Program.

Summary:

Montgomery County receives the GFOA's Distinguished Budget Award and the Certificate of Excellence in Financial Reporting each year. Hyperlinks are as follows:

[Distinguished Budget Award from GFOA](#)

[FY18 Recommended Budget](#)

[FY 2017 CAFR with Certificate of Achievement for Excellence in Financial Reporting](#)

Criterion 4C: Resource Allocation

Appropriately allocated financial resources support the established organizational mission, the stated long-term plan, goals and objectives, maintain the quality of programs, and services.

Financial stability is a fundamental aspect of an agency's integrity. The agency must ensure that programs and services provided can be supported by the necessary fiscal resources using sound budgetary practices.

Summary:

Resource allocation is handled through the capital and operating budget processes. Both processes begin with MCFRS identifying its future needs. For the operating budget, these needs are identified in the summer and early fall nearly a year before the new budget goes into effect. Identification of needs in the capital budget may take many months due to the size and complexity of capital projects. When capital projects are ready to move forward, they follow a process similar to the operating budget process.

The County's Office of Management and Budget establishes funding constraints and determines which additional needs may be funded based on priorities submitted by MCFRS and other departments. In recent years, available funding has increased slightly, and departments have submitted requests for additional budget authority. By February (before the beginning of the new fiscal year), the County Executive, after reviewing the requests, makes final decisions on what will be added to or removed from the budget. The Executive's recommended budget must go to the County Council in March. The County Council has about three months to review the recommended budget, make any changes, and vote on the final version. By policy, the County is required to maintain a balanced budget in which ongoing expenditures are funded by ongoing revenues.

Performance Indicators:

CC 4C.1 Given current and anticipated revenues, the agency can maintain adopted levels of service.

Description

Montgomery County has a stable and diverse revenue base that is anticipated to rise slowly during the coming years due to anticipated increases in population, home values and household income. The budgeted service level for the current fiscal year (FY18) is supported by available revenue, and it is County policy for ongoing expenditures, such as fire-rescue service, to be covered by ongoing revenues. In future years, current levels of service are anticipated to be supported through incremental increases in county-wide revenue. The FY17 and FY18 budgets saw small increases to fire and rescue services. It seems reasonable to expect the same in future years as the County continues to grow.

Appraisal

While cuts to service have occasionally been discussed when a new budget is being constructed, such reductions have not been included in recent budgets. Regardless of the service level, the anticipated service level in the budget has been fully supported by available revenue as required by County fiscal policy.

Plan

MCFRS will advocate for the service level necessary for Montgomery County. Revenues are anticipated to be sufficient for ongoing support of that level of service.

References

[Fiscal Policy Section of FY18 Recommended Budget](#)

4C.2 The governing body has an investment policy.

Description

As required by State law, Montgomery County has an investment policy. Per the County's annual budget document, "The objective of the County's cash management and investment program is to achieve maximum financial return on available funds while assuring a high level of safety. Cash will be pooled and invested on a daily basis reflecting the investment objective priorities of capital preservation, liquidity, and yield."

Appraisal

Montgomery County has followed its detailed and restrictive investment policy, which is reviewed and revised from time to time as necessary. An amended policy was developed in 2014 and adopted by County Council. Under that policy, the County had a 0.39 percent return on investments in FY16. The rate of return was projected to double for FY17 and increase to 1.2 percent for FY18.

Plan

The County will continue to follow State law which requires an investment policy. There is no indication that there will be any change in the policy's objective of maximizing return while ensuring the safety of principal.

References

[Revised investment policy adopted on October 21, 2014](#)

4C.3 Policies, guidelines, and processes exist for procurement practices within the agency.

Description

Montgomery County has long-established procurement law and regulations that provide a framework for fair competition among suppliers and the best value for county residents. The regulations establish procedures for procurements throughout county government. Procurement actions generally require more thorough review required as the value or complexity of the procurement increases.

Appraisal

MCFRS has worked closely with the County's procurement office and is required to adhere to County procurement regulations. There have been occasional audits to determine whether departments had complied with the regulations. It has been a few years since MCFRS had been audited, but the last audit did not have significant findings.

Plan

Moving ahead, MCFRS will continue to follow County procurement law and regulations.

References

[Procurement regulations \(Chapter 11B of Code of Montgomery County Regulations\)](#)

4C.4 Plans exist for the payment of long-term liabilities and debts.

Description

Long-term liabilities are generally funded through the issuance of bonds. When the County issues bonds, a payment schedule is developed for the entire term of the bonds. The County's payment schedules for active bonds are listed in the budget book and the payments, which often continue for several years, are included in future years' budget plans.

Appraisal

The County's debt payments are shown in the annually published budget book. Payments for each year have been budgeted in the debt service fund. When the County considered taking on new projects that required the issuance of bonds, the estimated payments on those bonds were included in the planning for upcoming budgets. The County's AAA bond rating – the highest possible from all three rating agencies – offers objective evidence that the County has a long history of making every bond payment, plans well in advance for future impacts of incurring additional debt and maintains a reasonable debt load.

Plan

Montgomery County will continue to carefully plan for payment of long-term obligations and maintain its AAA bond rating as well as its reputation as one of the most financially secure county governments in the nation.

References

[Debt service section of FY18 Recommended Budget](#)

4C.5 The agency projects future asset maintenance costs are projected with related funding plans.

Description

MCFRS has many valuable assets to maintain, including apparatus, fire stations, SCBA gear, PPE and firefighting and medical equipment. The department's most expensive assets are purchased through the capital improvements program (CIP). Each project in the program includes a projection of future ongoing maintenance costs so that they may be included in upcoming operating budgets. There are challenges when assets are old and maintenance costs increase. Such increases have the potential to drive the department over its operating budget or compete with other needs for budget authority

Appraisal

As new assets have been added through the CIP, the operating impact of these assets were projected and included in future operating budgets. However, the costs to maintain older assets exceed the amounts budgeted.

Plan

The department will continue to project its maintenance needs for new assets being purchased through the CIP and will seek additional funding from OMB for the maintenance or replacement of older assets.

References

[Sample CIP project description form with operating budget impact](#)

[FY18 budget book chapter on the CIP with section on "operating budget impacts"](#)

4C.6 Financial plans avoid the use of one-time funding sources to cover ongoing costs unless plans are provided to ensure a means of continuity for personnel resources and capital assets.

Description

The County has the following fiscal policy in place: "One-time revenues and revenues in excess of projections must be applied first to restoring reserves to policy levels or as required by law. If the County determines that reserves have been fully funded, then one-time revenues should be applied to non-recurring expenditures which are one-time in nature, PAYGO for the CIP in excess of the County's targeted goal, or to unfunded liabilities. Priority consideration should be given to unfunded liabilities for retiree health benefits and pension benefits prefunding."

Appraisal

The County, per policy, has avoided the use of one-time revenues to fund ongoing expenditures.

Plan

The County has no plans to alter or deviate from the policy in place.

References

[Fiscal Policy Section of FY18 Recommended Budget](#)

4C.7 The governing body has adopted a general fund reserve policy and established a time frame to meet established reserve fund levels. Operating revenues or expenditures should be established as the basis of the fund policy.

Description

MCFRS is a unit of Montgomery County Government. Montgomery County has adopted a policy of accumulating ten percent of adjusted annual revenues by 2020. Each fiscal year, the county adds several million dollars to the fund.

Appraisal

Reserves have grown each year and are on track to meet the goal of ten percent of adjusted revenues by FY2020. Total reserves are currently about \$430 million, or 8.6 percent of adjusted revenues and have been increasing more rapidly than the increase in revenues.

Plan

With continued contributions to and interest on the reserve fund, the County will have \$536 million in the fund by FY 2020.

References

[Fiscal Policy Section of FY18 Recommended Budget](#)

4C.8 The agency maintains contingency funds in accordance with generally accepted accounting practices (GAAP) recommendations and anticipate budgetary restrictions and or shortfalls.

Description

MCFRS is a department within the Montgomery County Government. The County has ample reserves to weather difficult times and currently has a policy in place to increase total reserves to ten percent of annual revenues. The reserves include the revenue stabilization fund, which receives funding annually, and significant fund balances that remain after all expenditures for the year have been paid.

Appraisal

During the last several years, the balance in the County's Revenue Stabilization Fund has increased much faster than inflation or the increase in county-wide revenues. It currently totals about \$280 million, an increase of roughly \$120 million from five years ago. Additionally, fund balances total about \$150 million, bringing total reserves to about \$430 million, or about 8.6 percent of adjusted revenues. All three rating agencies have continued giving the County the highest possible rating – AAA.

Plan

It remains the County's goal to bring reserves up to ten percent of adjusted revenue by FY2020. Under current revenue and expenditure assumptions, the County should reach that goal by FY 2020.

References

[Revenue Section from FY 2018 Recommended Budget](#)

Category V: Programs

This category is defined as the agency services, activities, and responses provided for the community or facility that are designed, organized, and operated in compliance with the agency's mission, goals, and objectives. Category VIII – Training and Competency, however, appraises the level of proficiency with which personnel actually perform within these programs.

The key elements used to evaluate these services are: adequacy, deficiency, effectiveness, methods, and results of programs. For purposes of accreditation, these terms are defined within the glossary.

The agency's mission, goals, and objectives should determine the applicability of all the listed programs. The agency should decide the relevancy of each criterion in their self-assessment manual. For criteria in Category V "Programs" that are not applicable to the agency, the agency should briefly explain why it does not provide this program.

Category V

Criterion 5A: Community Risk Reduction Program (Authors: DPS Mngr. Merck & Specialist Warnick)

The agency operates an adequate, effective, and efficient program to manage community risks as identified in the community risk assessment and standards of cover. The approach is comprehensive and includes both prevention and mitigation strategies such as life safety, hazard risk reduction, plan review, code compliance, and the detection, reporting, and control of fires. The agency should conduct a thorough risk-analysis as part of activities in Category II to determine the need for specific community risk reduction program.

Summary:

MCFRS' responsibilities for Fire Prevention and Life Safety efforts are coordinated by the Division of Fire Prevention and Code Compliance at the Department of Permitting Services (DFPFCC). The Division Chief for DFPFCC serves as the Fire Marshal for Montgomery County and the Assistant State Fire Marshal, has the primary responsibility for fire prevention and life safety programs, and is the final Authority Having Jurisdiction (AHJ) on pertinent issues.

The Fire Chief serves as a Special Assistant State Fire Marshal and derives authority for enforcing the Maryland State Fire Prevention Code through the empowering regulations for the State Fire Marshal. All civilian inspection personnel, Program Managers, and fire protection engineers assigned to the Fire Code Compliance (FCC) section collaterally serve as Special Assistant State Fire Marshals.

Performance Indicators:

CC 5A.1 The authority having jurisdiction has an adopted fire prevention and building code(s).

Description

The Department of Permitting Services (DPS), as the Authority Having Jurisdiction (AHJ), operates under two authoritative documents. The Maryland State Fire Prevention Code is primary. This code lays out the minimum acceptable fire safety criteria within the state. It adopts by reference the 2015 editions of the National Fire Protection Association (NFPA) Uniform Fire Code (NFPA 1) and Life Safety Code (NFPA 101) and applies to all new buildings with limited exception. The Maryland State Public Safety Article provides that the state fire code may not be applied to existing structures and specifically excludes one-and-two family structures. Fire codes are kept current by adopting the most recent editions of the NFPA codes in cycle with their republication every three years.

Appraisal

DPS has adopted the 2015 edition of the NFPA codes and standards and enforces their requirements through the Fire Code Compliance Section (FCC) to existing buildings. The Fire Safety Code (FSC) was amended by the Montgomery County Council in 1996 during creation of the Department of Permitting Services (DPS) which functions as the county's building department. In the 1996 amendments, DPS was given authority for plan review of all fire protection systems. Most recently (April 2017), the FSC was amended to more accurately match the change in responsibility for Fire Code Compliance from MCFRS to DPS. DPS adopts the International Building Code, International Residential Code, and International Mechanical Code as the model codes governing fire protection systems in structures. DPS regularly reviews and amends their adopted codes and standards to address issues of concern to Montgomery County and ensure congruence between the requirements of the adopted model codes.

DPS enforcement of the state and county fire codes has ensured the fire safety and life safety of buildings. The county fire safety code has been able to apply appropriate standards

to existing buildings that are exempted in state code, while application of the state fire prevention code has added a level of authority removed from the politics of local government. NFPA and ICC codes have ensured that fire and life safety is considered from the design phase through construction.

Use of codes based in NFPA requirements and ICC requirements has sometimes resulted in conflict. While many of the NFPA codes have been adopted into the ICC codes, they are not duplicative. The adoption and enforcement of multiple code versions has created a multiplicity of requirements for inspectors, plan reviewers, design professionals, developers, and builders. In all cases the most stringent requirement has applied. This situation has required considerable knowledge of each of the relevant codes by all parties. For this reason, DPS and MCFRS worked cooperatively (2015) in creating a single regulation that specifically addresses these areas of conflict, and specifically gives clear guidance on each of these areas.

Plan

The State of Maryland adopts the NFPA codes and standards with amendment. FCC enforces state law as well as local law. Therefore, any move away from codes based on the NFPA standards may run counter to the State Public Safety Article. To combat this problem, FCC participates in new construction design and preconstruction meetings along with designers and developers. Identification of potential code conflicts early in the process, and the standard to which the building will be held, greatly reduces compliance challenges later. FCC will also continue its efforts to meet with the state to coordinate the effort to amend and adopt the most recent code editions to reduce conflict between the state and county codes, as well as between the adopted model codes. The intent is to identify prevailing requirements and establish authorities.

References

[Maryland Public Safety Article, Title 6](#)

[Maryland State Fire Prevention Code, 2016 amendments](#)

[Montgomery County Fire Safety Code, as amended, Section 22-2 \(page 5\)](#)

[Montgomery County Fire Safety Code, as amended, Section 22-13 \(page 23\)](#)

[Montgomery County Fire Safety Code, as amended, Section 22-14 \(page 23\)](#)

[Montgomery County Council Public Safety Reorganization Bill 29-16](#)

CC 5A.2 The code enforcement program ensures compliance with applicable fire protection law(s), local jurisdiction, hazard abatement, and agency objectives as defined in the community risk assessment and standards of cover.

Description

The Fire Code Compliance Section (FCC) of DPS's Division of Fire Prevention and Code Compliance enforces local and state fire protection laws. The bulk of requirements come from nationally accepted standards, such the National Fire Protection Association (NFPA) and The International Code Council (ICC) as adopted by the Maryland State Fire Prevention Commission. Local amendments and enhancements of these standards are routinely adopted as Executive Regulations that apply to local conditions and thus provide improved fire protection and life safety within Montgomery County.

The Department of Permit Services (DPS) regulates the vast majority of permits for building construction, fire protection, and life safety. Intended designs are submitted to DPS for review and approval prior to the beginning of construction, renovation, alteration, or addition. DPS officials review the design for compliance with the currently adopted NFPA and ICC codes and standards and Montgomery County Executive Regulations. Permits are issued with information regarding the structure, the intended use, applicable codes and their respective editions, local regulations, and plans examiners contact information. Notations are made on the permit drawings as to the requirements of inspections, testing and verification of systems required by the fire code compliance section. These review and approval comments are standard procedure for plans examiners. Montgomery County Maryland is also guided by our own Fire Safety Code (FSC) which comprises of Chapter 22 of the Montgomery County Code. The FSC was adopted into law in the 1970s and is regularly updated via executive regulations to incorporate the most modern positive features of life safety and fire protection. Existing occupancies not subject to current building permit requirements are guided by the latest edition of NFPA 101, the Life Safety Code and NFPA 1, the Uniform Fire Prevention Code.

Private fire protection contractors must possess a license issued by the Fire Code Compliance Section that may be revoked for cause. Each license holder must meet certain

minimum training and education standards to practice in Montgomery County. Failure to have a fire protection system checked by a licensed fire protection contractor voids the operational permit. Owners and fire protection contractors are required to submit proof of system Inspection, Maintenance and Testing (IMT) to the Fire Code Compliance Section. Voided permits, indication of system impairment, or aberrations in reporting trigger an inspection of the fire protection system by a Fire Code Compliance Inspector. Fire Code Compliance Inspectors also perform "drop-by" inspections. Drop-by inspections are purposely random, though programmed. This practice ensures that all occupancies receive routine visits from a Fire Code Compliance Inspector.

Appraisal

The Fire Code Compliance Section has a strong relationship with the Maryland State Fire Marshal's office. State code officials adopt nationally recognized standards quickly for the applicable year edition and provide well thought out amendments to national standards for the entire state. The Montgomery County Fire Safety Code (FSC) has proven to be a flexible, living document that provides strong guidance in life safety and fire protection. The practice of updating the FSC requirements to incorporate the newest version of the codes is done through regulation.

The recent transfer and re-alignment of FCC resources with the Department of Permitting Services (DPS) has provided a congruent approach to enforcement of the fire and life safety laws and served well in meeting agency objectives for a safe community. This has provided assurance of compliance with applicable laws and standards. Occasionally, code conflicts arise because of the duality of requirements that stem from the adoption of both the NFPA and ICC codes. This is not unique to Montgomery County and, in fact, is a state-level issue as well.

Working groups consisting of subject matter experts from DPS have worked diligently to identify the most stringent requirements between both sets of codes and publish them in executive regulation form so that developers, builders, property managers, and business owners can refer to a single document for guidance.

The operational permit and licensing programs act as force multipliers for the Fire Code Compliance Section. Placing the inspection onus on owners and private contractors allows the section to act more in a quality assurance role rather than always as a direct provider of service. Once occupancy is identified and entered into the section's database, follow up is much more easily accomplished. The licensing program ensures that private providers meet minimum competency levels and that fire and life safety objectives are met.

Staffing of the Fire Code Compliance Section is not compatible with the assigned work load. Personnel are largely focused on agency required inspections (schools, day care and group homes) and complaint management. Thanks to the re-alignment of resources with DPS, a plan and a schedule for implementation of streamlining and automating the FCC processes into the current DPS new construction processes will eliminate the existing time-consuming manual process.

Plan

DPS has adopted the 2015 edition of NFPA 1, Fire Code, and NFPA 101 into the Montgomery County FSC. This has brought the county in line with the Maryland State's adopted version of the NFPA codes. Electronic versions of adopted standards and laws will be made available to all code compliance personnel by network connectivity and wireless field connectivity.

It is not intended that the Fire Code Compliance Inspectors will physically inspect every structure in Montgomery County in the next three years. Instead the section has applied a risk based analysis to the schedule of inspections while facilitating the individual building owners requirements for code compliance. By holding licenses and establishing minimum qualifications, private sector fire protection work quality is expected to improve dramatically. The types of licenses will also be expanded. Currently, the section only issues licenses for sprinkler and fire alarm work. Additional licensing requirements are planned for kitchen suppression and duct cleaning, smoke control and damper systems, and existing fire-rated assemblies.

References

International Code Council model codes (Visit with DPS Fire Code Compliance)

[Maryland State Fire Prevention Code](#)

[Montgomery County Fire Safety Code Chapter 22](#)

NFPA 1, Uniform Fire Code (Visit with DPS Fire Code Compliance)

NFPA 101, Life Safety Code (Visit with DPS Fire Code Compliance)

CC 5A.3 The program has sufficient staff with specific expertise to meet the community risk reduction program goals, objectives and identified community risks.

Description

The Fire Code Compliance Section (FCC) is fully civilianized and currently staffed by 12 inspectors, three Program Managers and a section Manager. Personnel are assigned to work five eight-hour shifts during the business week with flexible start times depending on customer needs. Inspectors also rotate stand-by periods during all non-business hours, during which they must be available by cell phone for consultation or callback. Inspectors are responsible for complaint handling, system impairments, licensure inspections, and school inspections. Inspectors are divided evenly between the Program Managers for supervisory and workload management purposes.

Additionally, three Engineers report directly to the DFPFCC Division Chief to provide technical advice. One Engineer is dedicated to development review, fire department access, and fire department water supply management, particularly in the rural area of the county.

Licensing required inspections for agencies, such as family day care and private educational institutions, assisting the Operations Section with enforcement, following up on known fire system impairments and inspection reports from Fire Protection Systems Permits consume the inspectors time. Complaint management and providing support to the Operations Division on working fire incidents also places a drain on inspector time. Existing buildings are inspected on a tiered schedule of every one, two or three years or in response to specific complaints or requests. Existing buildings are inspected in accordance with NFPA 1 and 101, 2015 editions as adopted by Montgomery County. Executive Regulation 6-06 AM, Sec. 3 establishes a requirement for building owners to obtain a Fire Protection System Permit to operate any protection system in a

building. These permits are created when an Inspector from this office conducts an inspection of a building. The permit is populated to expire on the last day of the month that the annual inspection of the system is due.

Personnel assigned to the FCC Section are well trained across the spectrum of code requirements. Management acknowledges the need for specialized training in the fire code compliance discipline and conducted a training review to determine appropriate classes that meet the knowledge, skills and abilities required to meet the National Fire Protection Association 1031, Standard for Professional Qualifications for Fire Inspector and Plans Examiner. All personnel are encouraged to attend all available training at the National Fire Academy (NFA) and Maryland Fire and Rescue Institute (MFRI). Better than 80% of the inspectors have completed all the NFA and MFRI courses available in the technical fire prevention curriculums of these agencies. When available, personnel are also sent to specific private sector training, such as classes offered by the American Fire Alarm Association. A quality assurance program has also been instituted to ensure that personnel are inspecting to required code. Each inspector is evaluated three times during the year under differing conditions.

Appraisal

Legislative mandate in the Montgomery County Fire Safety Code (FSC), Section 22-23 requires the inspection "as often as may be necessary all buildings and premises to ascertain and cause to be corrected any condition which would reasonably tend to cause fire or contribute to its spread." A series of existing building inspections conducted in the 2009-2010-time frame found significant violations in existing buildings and a failure rate approaching 100%. To address this, a Fire Protection System Permit was created and assigned to every fire protection system in buildings this office has inspected.

These permits expire on the last day of the month that the annual inspection is due on the system. Each month a list of system permits that have expired is extracted from the inspection data base and matched with submitted inspection reports. This leads to a list of known system impairments that an Inspector is assigned to follow up on. Inspection reports submitted to our office for an address that our office has not inspected yet create a list of

properties to inspect, while system permits that our office did not receive a record of testing generates a list of properties an Inspector must visit to determine if the fire protection system has been inspected and is in compliance.

Data searches from available sources such as the United States Census and other agency records indicate that Montgomery County contains between 35,000 and 45,000 inspectable properties not including new construction. This does not include one-and two-family dwellings. A systematic review of hard copy premise files over the last three years found that most occupancies of which there was knowledge, had not been inspected for ten or more years. In some cases, buildings have not been inspected for over 20 years. The only regular exceptions to this record are schools, day cares and group homes which must be inspected annually as a license condition. An internal staffing analysis, drawing data from recognized sources, indicated that the FCC Section is extremely understaffed. Data found that staffing conservatively should be around 50 work years in order to meet legislated assignments.

FCC inspectors all meet the NFPA 1031 requirements and training has been continuously emphasized. Competency has been ensured through a quality assurance program.

Plan

The current plan to match workload with FCC Section capacity involves automation, reliance on third party inspections of systems through a licensing process and increased efficiencies in administration. A more recent staffing analysis predicts that 20.2 inspector work years are required for those tasks remaining outside of new construction. Of the 20.2 work years required, approximately 3.0 work years are needed for after-hours work.

Because data for existing building inspections is scant, management will monitor the time requirements to determine any staffing or training shortfalls, re-evaluate, and implement or make recommendations for any needed corrective actions.

There are no plans to change any training requirements or practice.

References

[DPS FCC Organization Chart](#)

[FCC Priorities Document](#)

[Montgomery County Fire Safety Code, Section 22-23 \(page 32\)](#)

[Montgomery County Fire Safety Code, Section 22-26 \(page 34\)](#)

[Montgomery County Executive Regulation MCER 5-05](#)

[Montgomery County Executive Regulation 12-12](#)

5A.4 A plan review process ensures that adopted codes and ordinances determine the construction of buildings and infrastructure (such as hydrants, access, street width).

Description

All plans are reviewed and all permits are issued by a single entity, DPS. All internal and external customers have a single point of contact for all information regarding the process and specific case issues. DPS provides code management services for all disciplines of the building process. All electrical, mechanical, and fire protection systems permits must originate in a building permit to ensure that reviews under the various disciplines are coordinated. The codes targeted at fire prevention and life safety include state adopted model codes such as NFPA 1, *The Uniform Fire Code*, 2015 edition (UFC); and NFPA 101, *The Life Safety Code*, 2015 edition (LSC), both with state amendments; as well as a powerful Montgomery County Fire Safety Code (FSC). Montgomery County also adopts the UFC and LSC, as well as the International Code Council (ICC) codes, such as the International Building Code. The local FSC also authorizes that when it and the adopted model codes are silent in a particular area, any other model code may be used as an authoritative reference for requirements.

In addition to the plan review process provided by DPS, one engineer is assigned specifically to site plan review. This engineer participates in the Maryland National Capital Park and Planning Commission (MNCPPC) process. MNCPPC is the statutorily authorized development plan approval authority for all planned communities and large construction in Montgomery County. MNCPPC establishes the zoning, environmental, traffic, and transit requirements which are then enforced by various administrative agencies with county government. The DFPC engineer must approve fire department access plans, including road width, setbacks, systems connections access, and water supply at each stage in the process from concept plan through site plan.

This unique system of plan checking in Montgomery County requires coordination, communication, and highly skilled personnel. All personnel that provide plan review services utilizing the LSC or the UFC as well as all fire protection systems reviews are required to obtain and hold a State of Maryland Special Assistant State Fire Marshal

designation. Currently, there are three Engineers within the DFPCC Section and nine plan review specialists with DPS. Guidance on code interpretations and unique situations are discussed individually with the Fire Protection Engineers of the DFPCC. The fire protection engineers in DFPCC are authorized to render engineering judgments and code interpretations on behalf of the Fire Marshal and Fire Chief.

All plans for commercial building construction and fire protection systems must be submitted online through the DPS “eServices” module. This online submittal process ensures the “workflow” is completed. The workflow electronically notifies the reviewers that are needed and allows simultaneous reviews. Plan reviewers can email customers with questions and comments and collaborate electronically on the plans themselves. Once plan review is complete, the workflow identifies the required inspections and inspectors are scheduled when work is completed. All parties, reviewers, designers, contractors, and inspectors have access to the approved plan set.

Appraisal

The present plan checking system provides a "one stop shop" experience for the external customer. The plan review process is effective and produces quality outcomes for a safer environment. Management from both MCFRS and DPS has strived to create a seamless process for the outside customer.

However, the shortfall in the current system is the lack of accountability for design professionals to submit complete plans. DPS plan reviewers can only review to the conditions that are submitted. This frequently leads to failed inspections when the inspector finds conditions that were omitted from plan review. Interviews with design professionals reveal that standard practice is to submit 80% complete plans due to pressure from developers. Additionally, design professionals most often submit plans piecemeal. Architectural plans are submitted long before electrical, fire protection, and mechanical plan are submitted. This creates a plan review stovepipe phenomena that is largely out of the control of DPS.

Plan

The leaders of DPS will continue to make certain that the plan review program continues to function at optimum levels and will continue to monitor operations for any needed modifications or enhancements. Leaders will also to continue to specifically monitor for changes in the quality and level of communication between the two units and any such changes will be promptly evaluated, with appropriate candor and efficiency.

MCFRS is not in a position to make corrective requirements in the plan submittal process since that is the province of another department within government. However, MCFRS management will continue to engage DPS management in efforts to place an increased burden on the private sector for accurate timely plan submittals so that review can be accomplished accurately and reflective of conditions operations are likely to find.

References

[Bill 22-09, Enforcement of County Laws - Notice of Violations - Appeals](#)

[Executive Regulation 8-16](#) (includes references to MD State Fire Prevention & Safety Code)

National Fire Protection Association 101, [Life Safety Code](#), 2015 edition (Visit with DPS to view reference)

National Fire Protection Association 1, [Uniform Fire Code](#), 2015 edition (Visit with DPS to view reference)

eServices:

<http://permittingservices.montgomerycountymd.gov/DPS/eServices/AboutPermits.aspx>

CC 5A.5 The agency conducts a formal and documented appraisal, at least annually, to determine the impacts of the community risk reduction program and its efforts in risk reduction based on the community risk assessment, standards of cover, and measures performance against adopted loss reduction goals.

Description

The Fire Code Compliance (FCC) Section lacks a simple statistical evaluation of its effectiveness to reduce risk in the community. It is difficult to measure and compare the effectiveness of fire prevention in a community, as the number of fire incidents and fire deaths fluctuate greatly from year to year. Likewise, attempting to measure the damage or lives saved as a result of fire code compliance is nearly impossible to determine with such a large, highly populated jurisdiction. According to the ICC 3rd edition of *Building Department Administration*, a trackable performance measure is available aside from those mentioned above. The performance measure is related to housing and property maintenance inspection programs; however it is well suited for the FCC program as well. To best determine the impacts of reducing risk in the community, the FCC observes the amount of time between finding a violation and obtaining compliance. As noted in the literature, the longer the violation is allowed to occur, the longer the negative impact and therefore increased risk to the building and its occupants. As such, inspectors define specific time periods for compliance, typically 30 days, and follow up to ensure compliance is achieved. The Program Manager that oversees the inspector verifies that follow-ups are completed on a monthly basis. This monthly verification allows FCC to determine how many occupancies are out of compliance. The goal is to reduce this number annually (as a trending data set) to reduce risk in the community. To support this performance measure, several evaluative programs have been initiated and are aimed at ensuring system input quality rather than overall system effectiveness. These evaluative programs include:

Quality Assurance -FCC is in the beginning phase of a comprehensive quality assurance program. The intent is to institutionalize systematic performance evaluations for inspectors to improve and enhance delivery of all types of inspection services within FCC areas of responsibility. Basic technical and customer service evaluations will re-enforce terminal

objectives relative to inspection processes, means, methods, materials, installations, verification, documentation, data entry, acceptance testing, and maintenance of fire protection and life safety systems. Regular training and education for inspectors is included. Future expansion of the program is planned to include property managers and owners, and fire rescue emergency response personnel.

Contractor licensing -Fire alarm and sprinkler contractor licensing has been implemented for both the corporations and individuals who design, install, and provide inspection testing and maintenance of these fire protection systems and components. The licensing has proven beneficial to private sector companies and their employees as well as property managers and owners. FCC maintains a list of currently licensed individuals and corporations that renew bi-annually. The qualifications for levels of training and certification have encouraged the private industry leaders in fire alarm and sprinkler technology to seek training and certifications that generally are intended to improve quality.

A comprehensive assessment of fire prevention effectiveness and publication of the results is missing. The value provided to the department's mission, firefighter safety, and community safety is captured only incrementally.

Appraisal

The existing evaluative programs provide a good foundation for expansion. The quality assurance and licensing programs have been successful in ensuring that code-based fire prevention efforts are provided according to established standards of care. The AFA program is meeting its intended goal of reducing malfunctioning alarms and ensuring that fire alarm equipment is functional. However, these programs have fallen short of a comprehensive appraisal of the code-based fire prevention program as it relates to community risk reduction. Targeted program efforts need to be expanded and placed in the context of reducing risk.

Program results need to be compared to definitive data that illustrate improvements in fire rates, fire severity, civilian and firefighter injury reduction, and changes in community behaviors that reduce risk. Two problems exist in this regard. First, the targeted programs are relatively new. Initial results look promising, but longitudinal review is necessary to

determine if these efforts are truly successful. Second, data linkages need to be developed so that fire prevention program efforts can be compared to incident data.

The greatest evaluative issue is that Fire Code Compliance has provided services in a vacuum. Contributions to community safety and overall department mission are largely unknown or misunderstood by the majority of internal and external customers. This is likely to remain the case, until the reporting problems identified in the preceding paragraph are overcome.

The time for buildings to gain compliance, as the only definitive performance measure available, has shown to decrease in occupancies that receive annual inspections. These occupancies are typically licensed businesses that require an annual inspection, and occupancies defined as “high risk” that require regular annual inspections. The repeated inspection process allows building owners and representatives to maintain compliance from year to year. For buildings that are inspected on a complaint basis or that see significant time between inspections, the time to compliance has not changed.

Plan

Fire Code Compliance will undertake the following efforts to broaden and improve evaluation of the code-based fire prevention program.

Licensing program - Licensing will be expanded to include kitchen suppression systems and venting of cooking by-products. A review of Firehouse data indicates that cooking fires are the largest group of commercial fires in Montgomery County. Investigation found common issues related to inadequate maintenance and cleaning. Additional activities that may be considered at a later date include atrium smoke control and fire and smoke damper maintenance.

Existing facilities and systems -FCC is changing its business model to focus almost exclusively on existing facilities, buildings and systems for the purpose of validating that they are properly serviced and maintained. The focus on existing buildings will lead to

development of better data about the impact of the fire prevention program. The number of fires and other emergencies occurring in new construction is small compared to those that occur in older, existing buildings. A larger data set will make comparative evaluation much easier.

Rolling list of recurrent violations -Our inspection data base system can be mined to identify recurring non-compliance concerns. This will provide FCC inspectors the ability to prioritize and target inspections. As the leading violations are addressed, a "new" set of prioritized repeat violations will emerge. Conceptually, the rolling list of repeat violations will drive down the number of serious violations found. The associated data could be used to evaluate program effectiveness.

Linking fire prevention data and incident data - FCC will work with the Firehouse Administrator to develop Crystal Reports that can capture the effects of fire prevention efforts. For example, the number of AFA repeat offenders can be tracked. As systems are repaired, the number of AFA should decrease. This should be easy to track and can be provided back to the Operations Division. This same methodology can be applied to identification of system performance and the decreases in incident severity.

References

[Universal Inspection Checklist – Fire Code Compliance](#) (2015 NFPA 1)

[Contractor Licensing Example #1](#) (Fire Alarm Corporate Checkoff List)

[Contractor Licensing Example #2](#) (Sprinkler Licensing)

Building Department Administration, 3rd Edition. International Code Council. Chapter 18, Housing and Property Maintenance Enforcement Programs: Performance Measures, p.510/

5A.6 The community risk reduction program identifies the frequency that occupancies are inspected.

Description

Data searches from available sources such as the United States Census and other agency records indicate that Montgomery County contains between 35,000 and 45,000 inspectable properties not including new construction. This does not include one-and two-family dwellings. A systematic review of hard copy premise files over the last three years found that most occupancies of which there was knowledge, had not been inspected for ten or more years. This workload in addition to less than optimal staffing levels creates a backlog of occupancies requiring inspection. To best address the needs of the community while achieving compliance in as many occupancies as possible, the occupancy and inspection types were prioritized by the FCC.

Information considered during prioritization of occupancies included legal obligations, fire risk, resident risk, risk to first responders, and acceptable pre-existing non-conforming architectures that pose no distinct hazard to occupants.

The prioritization of inspections resulted in the following:

- Requests for service from the MCFRS Operations Division
- Known impairments to life safety or fire protection systems or components
- Community complaints of life safety hazards
- Jurisdictionally mandated inspections required for licensure by other agencies, i.e. schools, daycares, group homes, assisted living facilities.
- Buildings with fire protection systems identified to have deficiencies
- Buildings with fire protection systems where FCC has no knowledge of annual testing
- Buildings with no information regarding the presence of fire protection systems
- All other buildings

Appraisal

The prioritization provides a good foundation for the programs inspection frequency. The requests for service, known impairments, and complaints come in on a daily basis and can be resolved by the on-duty inspector any time of day. All jurisdictionally mandated inspections are required annually, accounting for nearly 2000 occupancies, the majority of which lie in residential occupancies. According to statistics provided by the NFPA, in 2015, there were 388,000 residential structure fires resulting in 2,605 civilian deaths.

Residential occupancies by far represent the highest risk regarding fire and loss of life in comparison to the other occupancy types. This can typically be attributed to a high and continuous human occupation and lack of effective fire protection systems. In recognition of this risk to civilians and first responders, the FCC created an initiative to address the nearly 100 residential high rise buildings in Montgomery County that do not have automatic sprinkler systems. The FCC inspects all un-sprinkled high rise and mid-rise residential buildings annually to ensure all passive fire protection and any other active life safety systems are being inspected, tested, and maintained in accordance with NFPA 1, *Fire Code*, 2015 edition. This annual effort towards compliance effects thousands of county residents although there is no valid method of measurement of the program's effectiveness.

Additionally, the FCC has identified all the fire hydrants not maintained by the water purveyor (WSSC) to ensure that fire department water supply is available for fighting structure fires. The FCC inspects all buildings associated with the private hydrants when retrieving inspection, testing, and maintenance records for the private service mains in accordance with NFPA 25, *Inspection, Testing and Maintenance of Water-based Systems*, 2014 edition. There are approximately 1000 private hydrants which require an annual flush and a flow test every five years. Deficiencies and impairments found by licensed contractors during the flush or flow test must be reported to the FCC, which triggers an inspection of the occupancy if one has not been recently performed.

The FCC uses the MCFRS Operations Division as a force multiplier. While responding to 9-1-1 calls, Operations frequently encounters situations that require follow-up by FCC

personnel. This hazard identification, and at times instant remediation, allows FCC staff to focus on occupancies that have known compliance issues throughout the County.

Plan

The FCC section is not currently able to hire more inspection staff to be able to inspect more occupancies more frequently. With the transition to DPS, DFPCC is working with DPS staff to integrate our existing processes into the new construction process in an effort to: 1) diminish the increasing backlog of new buildings that require operational and system permits, and 2) to prevent fires in buildings under construction.

Once FCC permit processes are integrated from the FireHouse platform into the Hansen platform used by DPS, all new buildings will receive their required operational permits at the time of use and occupancy. Without the integration, these new buildings would wait to receive an inspection by FCC and be manually issued their permits. Issuance of permits from the start of occupancy will ensure that fire and life safety systems are being maintained from the onset and possibly prevent an impairment in the future.

Additionally, FPFCC engineers will begin to work with the Division of Commercial Construction to verify compliance with NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*. This standard requires a fire safety program and program manager to perform safety inspections at the work site to prevent fires.

References

[DPS FCC Examples of Inspection Checklists](#)

5A.7 The agency sets specific, targeted, and achievable annual loss reduction benchmarks for fire incidents and fire casualties based upon the community risk assessment and baseline performance.

Description

Structure fires and medical incidents are increasing at a rate of 3% to 4% annually in Montgomery County with little increase of availability of apparatus or MCFRS staff. This increase is due to an ever-growing population with special attention to high-density residential structures in metropolitan and urban areas. According to the U.S. Fire Administration, the State of Maryland had 45 fire deaths in 2016 and 48 in 2017, including a firefighter fatality in Montgomery County. Over 90% of those deaths occurred in residential structure fires. Currently, Montgomery County has approximately 85 un-sprinkled residential high-rises, and 45 un-sprinkled residential mid-rise buildings. Additionally, there are nearly 5,000 un-sprinkled garden-style apartment buildings. Many of these buildings' residents are reliant on the fire alarm or their in-unit smoke alarms to notify them of a fire emergency. Activation of the fire alarm system may be monitored by a central station which immediately initiates an emergency response from the fire department. Unmonitored systems only notify the residents to evacuate and it is incumbent upon those present to alert emergency services. The Fire Code Compliance section receives a daily copy of the previous 24 hours of Automatic Fire Alarm calls (AFA's) dispatched from monitored systems.

For single family homes, effective January 1, 2018, the State of Maryland has mandated that all residences with battery operated smoke alarms install long-life (10-year) battery-operated smoke alarms to replace the typical 9V battery type.

Appraisal

The FCC does not set specific benchmarks for the reduction of fire incidents and casualties, as they are metrics that are not easily controlled over short periods of time. The FCC makes it a priority to reduce the severity of incidents by influencing occupant behavior, ensuring code compliance in high-risk buildings, and promptly addressing impaired systems. Considering most fatalities are occurring in residential buildings, some focus needs to be concentrated on the multi-family buildings of the County. It can be expected that multi-

family buildings with working sprinkler systems are better protected than those without. Un-sprinkled multi-family buildings with fire alarms must have working devices such as pull stations and smoke detectors in compliance with NFPA 72, *National Fire Alarm and Signaling Code*. The building owner is required to utilize a fire alarm contractor licensed by the FCC to inspect and test the fire alarm system regularly. The licensed contractor notifies the FCC of any impairments or deficiencies to the system so that they may be addressed by an Inspector. Additionally, the Fire Code Compliance supervisors review the daily AFA's report to look for systems that appear to be malfunctioning or impaired. If a fire alarm system on the report appears abnormal, the on-duty Inspector is sent to the address to assess the alarm system condition and ensure the system is being appropriately maintained. A maintained fire alarm system in an un-sprinkled building is the fastest way to notify all occupants of the emergency so they can start evacuating and notify emergency services so they can immediately respond. A delayed response caused by a non-working or impaired system could allow fire and smoke to spread, endangering both occupants and responding firefighters.

There are instances when the fire alarm system is in need of repair and the building is under fire watch. In an attempt to reduce the risk of fire, Inspectors assist building management in educating the residents on fire safety. The FCC believes this proactive approach to fire prevention with simple fire safety tips such as not using candles, keeping clearance around heaters, and not leaving cooking unattended, is impactful and brings a needed level of awareness to the community.

High-risk buildings, such as high-rises with non-addressable fire alarm systems, are inspected annually for compliance with the NFPA 101 *Life Safety Code* and NFPA 1 *Fire Code*. While FCC can make significant efforts in reducing the risk and effects of fire in multi-family buildings, FCC is less impactful in owner-occupied dwellings and single-family homes. Through family daycare and group home inspections totaling close to 1,000 per year, the FCC can verify that homes that require fire safety inspections have working smoke alarms in areas that require them. The FCC has no right of entry in single family homes and cannot enforce regulations upon home owners.

Plan

Fire Code Compliance will work with MCFRS to gather data to be able to analyze the effectiveness of the AFA response program. Although immediate results are not anticipated, data will be able to show a reduction in alarm response by emergency responders over time. Periodic assessments to the program will be made to increase efficiencies and ensure overall effectiveness.

Access to data through MCFRS can assist FCC engineers in a demographic analysis to better prioritize inspection efforts in the County. FCC will continue to request that I.T. departments from both DPS and MCFRS collaborate to provide FCC with access to fire incident data.

References

NFPA 72, National Fire Alarm and Signaling Code (Visit with DPS Fire Code Compliance)

NFPA 1, Fire Code (Visit with DPS Fire Code Compliance)

NFPA 101, Life Safety Code (Visit with DPS Fire Code Compliance)

[CountyStat, Performance Management and Data Analytics](#)

5A.8 Fire inspection personnel should receive annual continuing education to maintain proficiency.

Description

Montgomery County's Fire Code Compliance Section is fortunate to have the Montgomery County Code, Chapter 22, *Fire Safety Code*, as well as Executive Regulations authorized under that code, the Maryland State Fire Prevention Code, and the National Fire Protection Association's Fire Code (NFPA 1) and Life Safety Code (NFPA 101) to define the requirements code-based fire prevention. These documents establish minimum requirements that provide a reasonable degree of fire prevention and control to safeguard life, property, and public welfare from:

- (1) The hazards of fire and explosion arising from the storage, handling, or use of substances, materials, or devices; and
- (2) Conditions hazardous to life, property, or public welfare in the use or occupancy of buildings, structures, sheds, tents, lots, or premises.

NFPA 1 and 101 incorporate by reference the balance of the NFPA standards that provide specific direction for installation, maintenance, and testing of fire protection features in the built environment, as well recommended practices for hazardous storage, processes, and activities. Combined, these documents provide the guidelines that inspectors are expected to apply while conducting inspections. All FCC staff have received training in the use and application of these codes and standards at the National Fire Academy and the Maryland Fire and Rescue Institute (MFRI). The fire inspectors and fire protection engineers are also guided by general Fire and Rescue policy and procedures including, but not limited to Safe Structural Fire Fighting Procedures, Respiratory Protection Policy, and Personnel and Unit Accountability.

Appraisal

Basing standard operating procedures or general operating guidelines on the national consensus codes provides a solid foundation for ensuring that inspectors meet or exceed current industry standards of practice.

Inspectors receive annual training on code compliance regarding system inspection, testing, and maintenance sponsored by the State Fire Marshal. As new editions of the code are adopted, all FCC staff receive new copies of NFPA 1 and 101 and attend training on the newly adopted editions. In-house training is provided monthly by FCC engineering staff to the inspection staff on various code topics.

Plan

The Fire Code Compliance Section will continue to use the model codes and standards as the basis for training and work performance. This aspect of the service model does not need to be re-invented. The Department of Permitting Services will be adopting the 2018 editions of the NFPA and ICC codes in the next calendar year. This will bring county requirements into line with those of the state which set minimum standards by per Maryland State law.

Finally, a quality assurance program has been initiated and is identifying inspection and training inconsistencies. Problem areas will be addressed as they are identified. The quality assurance program will continue to be refined and provides the basic assessment tool for ensuring adherence to fundamental inspection completeness and accuracy.

References

NFPA 1 (Visit with DPS Fire Code Compliance)

[Standards Maryland State Fire Code Life Safety Code](#)

[Executive Regulation 7-06 \(superseded 22-98AM\)](#)

[Executive Regulation 06-06 \(superseded 10-97\)](#)

Category V

Criterion 5B: Public Education Program (Author: Manager Nessel)

A public education program is in place and directed toward reducing specific risks in a manner consistent with the agency's mission and as identified within the community risk assessment and standards of cover. The agency should conduct a thorough risk-analysis as part of activities in Category II to determine the need for a specific public education program.

Summary:

The department has a strong public education program in place and directed at preventing, reducing and mitigating risks faced by its residents. Each year, programs are prioritized and implemented based on the frequency and severity of the risk, resources available and overarching priorities of the administration through the department's Community Risk Assessment - Standard of Cover and annual program analysis. Public education programs are developed, implemented, evaluated and maintained based on data and information from these reports. Public education programs include, but are not limited to, motor vehicle and child passenger safety, fire safety and injury prevention, home safety, senior safety, emergency preparedness, school-age education, After the Fire initiatives and weekend Safety in Our Neighborhood efforts conducted by on-duty personnel. The department has a nationally recognized Car Seat Safety program which provides extensive education and training to families, a successful Senior Outreach program, home safety visit program that averages over 500 requests per month, Risk Watch safety curriculum in elementary schools, community events, community presentations and training for our partner agencies. Additionally, the department continues to extend its Social Media reach to provide extensive and timely safety, risk reduction and program information to residents of Montgomery County.

Programs are supported by department resources, grants, donations, sponsorships and community partnerships. The Community Outreach Section is severely understaffed to meet the challenges, needs and demands of over one million residents in one of the most diversified counties in the nation. Four Montgomery County cities were recently named to

the “2018 Most Diverse Cities in America” list, outranking New York, Boston and Los Angeles for the title. The department works hard to ensure that programs are responsive to the community served. While the part-time Senior Outreach position has had a significant impact in addressing and reducing the number of fire fatalities and injuries involving seniors, additional staffing capacity is needed to prepare for the projected and unprecedented growth of the senior population already underway. The Community Outreach Section trains and partners with agencies and organizations providing services to high-risk and vulnerable residents to create a culture of preparedness and to build a resilient and fire-safe community.

The future looks bright for the Community Outreach Section, always focused on continuous improvement. Historically, tracking of activities and using data to direct educational efforts has been a time-consuming and challenging process due to the limitations of reporting systems that were not integrated. Through a Federal Grant, the Community Outreach Section has worked to design an App that will address these challenges and will provide a smart system complete with real-time, geo-based data and intelligent metrics and analytics that will efficiently and strategically document CRR efforts by area, by street address, by organization, and by demographic. The App will also produce reports designed to effectively direct our fire and life safety education efforts to the areas and the residents at highest risk, in real time.

Performance Indicators:

CC 5B.1 The public education program (such as development and delivery) targets specific risks, behaviors, and audiences identified through incident, demographic, program data analysis, community risk assessment, and standards of cover.

Description

Audiences as well as the development and delivery of public education programs are targeted based on injury prevention data from local, State and national resources and the Risk Reduction Program analysis and Standards of Cover document. Using demographic data and incident data to identify the cause and frequency of incident types resulting in injury or death, the department targets certain audiences and human behaviors as fire risk factors. Specific risks are determined by evaluating incident statistics; examples include cooking fires, lack of working smoke alarms, improperly discarded smoking materials, electrical/heating fires and determining why residents often cannot escape a home fire in time.

The department has built a set of quality programs targeting risks and audience types. MCFRS delivers a comprehensive public education program through its Community Outreach Section to school age children, adults, seniors and vulnerable/high-risk residents. The programming is directed toward fire prevention, life safety, hazard risk reduction and identifying and reducing specific risks in a manner consistent with the department's mission, using an all-hazards, community risk reduction approach. Demographic data, incident reports, first responder and call-taker experiences are used to identify the cause and frequency of incident types. Risks are identified and prioritized and public education programs are developed, implemented, evaluated, revised and prioritized.

While we have strong school and children's safety programs in place, we're looking to significantly reduce the top causes of fires by focusing on adult behaviors. Programs are designed to target specific risks ranging from car seat education and installation services, to school-based educational programs, to senior outreach services and general community

and home safety. An example of one of the most successful programs that targets specific risks, behaviors and high-risk audiences has been the implementation of the department's "Home Safety Visit" program. This program is designed to focus on behavior change – not solely smoke alarm installations. Content and methodology is identified through incident, demographic and program data analysis. Data is supplemented by analysis provided by Fire and Explosive Investigators (FEI), State trends, national statistics and from internal and external agencies including National Safe Kids, NFPA, Centers for Disease Control, National Highway Traffic Safety Administration, the County's Department of Health and Human Services and others. Through this continuous review process, the section is able to strategically assure that target risks and audiences are addressed and aligned with the department's Standards of Cover.

Appraisal

During the rating period, the section targeted its public education programs in response to local and national trends and emergency incidents and demographics. Tools used were the past MCFRS Community Risk Assessment and Standards of Cover Manual. In addition, the GIS Specialist produced ad-hoc and on-request past emergency response incident data, layered with Montgomery County demographic and socioeconomic statistical profiles, which assisted the section in developing and deploying targeted CRR programs. The GIS Specialist maintains updated geospatial local demographic and socioeconomic information, which helped assure an accurate assessment.

However, the Community Outreach Section noted the inability to effectively capture programmatic mitigation efforts, through the existing Wufoo CRR database. This web-based system, and obviously paper-based systems deployed, were cumbersome and not user friendly. Backend data retrieval was limited and analysis time consuming. Subsequently, identifying and prioritizing local trends was challenging.

To address some of these challenges, the Section was awarded a FEMA Fire Act grant to develop a local MCFRS Community Risk Reduction Mobile App, which should address aforementioned deficiencies.

Plan

MCFRS will continue to use the current Wufoo Community Risk Reduction (CRR) database, which captures all CRR contacts the department makes, the nature of the interaction and any strategies implemented (e.g., installation of smoke alarms, issue noted on incident, school programs conducted, pedestrian safety, home safety visits, etc) until the CRR Mobile App is deployed. The plan is to export the legacy data from Wufoo into the new database platform.

In addition, the new CRA/SOC will be used to help determine risk areas and CRR deployment strategies and the GIS Specialist will continue to provide critical needed services to analyze data and demographics.

The Community Outreach Section will also continue to review incident call data and reports to determine increases or decreases in call type and the impact of programs. The department's appointment-based Home Safety Visit program directed at seniors and high-risk residents has exceeded all expectations and the Section will continue to leverage this program and its data to strategically direct educational programs targeting this demographic.

References

[Slides from Home Safety Visits Presentation from Strategic Planning Session](#)
[SION Wufoo \(data collection system\) Home Survey Data-collection Screenshot](#)
[Example Screenshot of the Updated MCFRS Community Risk Assessment Map](#)

CC 5B.2 The program has sufficient staff with specific expertise to meet the public education program goals, objectives, and identified community risks.

Description

The Community Outreach Section consists a full-time Manager, a bi-lingual Program Manager (position had lapsed from 6/16 - 11/17 due to a reclassification) responsible for developing and administering Community Risk Reduction (CRR) programs and a Program Manager (vacant since 2/17) responsible for the administration and management of the department’s nationally acclaimed Child Passenger Safety program. A part-time, contractual senior outreach Program Manager is responsible for addressing fire and injury risks associated with the County’s aging population.

Staff are trained and certified in NFPA’s Life Safety Educator 1035, basic and advanced Public Information and Media Relations, Social Media training, Vision 20/20 Community Risk Reduction training and various Community Risk Reduction and Fire Prevention programs offered by the National Fire Academy including QO118 – Self Study Course for Leadership and Public Education. Additionally, staff are encouraged to enroll in the County’s “Customer Services Provider Program” which offer courses in various tracks over a 3-year period. Child Passenger Safety Technicians /Instructors are required to complete a 40-hour training class and are recertified every two years. The Community Outreach Section trains a team of approximately 35 firefighters to assist in delivering safety presentations, conducting Home Safety Checks, staffing safety events and to serve informally as “CRR leaders” in their fire stations and battalions. The department believes that CRR is not just fire prevention, nor solely the responsibility of the Community Outreach staff. Instead, all personnel have a role in community risk reduction. The Community Outreach Section successfully piloted a series of CRR training for new recruits which includes classroom instruction and a day of diversified hands-on, field assignments. Additionally, the department’s “Company Officers Leadership Academy” (COLA) program for rising officers now receives CRR training. Changes in attitude and culture start during the initial training of new personnel and continue throughout their

careers. Providing this type of training will ensure that MCFRS is CRR-focused and positioned for the future.

A team of approximately 75 certified child passenger safety technicians provides staffing for car seat installations and safety programs for the department's car seat program. The department operates car seat inspection events 5 out of 7 days a week and is considered the largest program on the East Coast and potentially in the Nation. On-duty first responders provide community education programs in fire stations which consist of community events, station tours, school programs, Fire Prevention Month activities and delivery of the Fire Chief's "Safety in Our Neighborhood" program which directs personnel to be engaged in Community Risk Reduction every Saturday afternoon.

On-duty personnel are regularly used to augment and support the high demands for the Section's services. Current staffing levels are inadequate to meet demand for public education requests by the community and to develop and maintain a comprehensive, forward-thinking Community Risk Reduction program for a jurisdiction of our size. Staffing needs to be expanded in order to meet current demand for programs and services, training of personnel and to implement and sustain effective programs into the future.

Appraisal

Education and certification requirements have been defined in the Program Manager job descriptions and have been met or exceeded. The Program Manager position for CRR was filled in 11/17. Filling the vacant Program Manager for the Child Passenger Safety was delayed due to County revenue shortfalls and resulting in budget reductions and a County-wide mandated hiring freezes. The department has recruited for the position and is optimistic that this position will be filled by the end of FY18. The section remains under-resourced to meet the demands of a jurisdiction of over one million residents to accomplish the goals and objectives of the department. Relying on on-duty first responders to augment CRR staffing and deliver programs is generally ineffective due to the volume of calls. While the section is working diligently to meet program responsibilities, supervisory and program management are considerably overburdened due to vacancies in the two Program Manager positions since 2016 that support the section.

Plan

MCFRS will continue to explore opportunities for additional staffing above the current staffing model to support the growing demand for critical fire safety education programs and will continue to train or certify individuals for educational program delivery and in CERT programs. Grant opportunities will continue to be explored to provide funding for additional staffing capacity. The department's High School Cadet program is scheduled to be reinstated following budget cuts several years ago, and it is expected that students will be trained in CRR and have academic requirements that include the delivery of programs and services in the community. The department will continue to build on its collaborative approach which partners with other departments and organizations such as Meals on Wheels, Faith-based organizations, Rebuilding Together, and Senior Villages that have trusted, well-established relationships with seniors and other high-risk populations. Continuing education will continue to be encouraged and supported for staff assigned to Community Outreach.

References

[Maryland Fire Rescue Institute \(MFRI\) Public Fire and Life Safety Educator I Course Overview](#) (Staff are trained to this level at a minimum NFPA 1035 Standard)

[U.S. Fire Administration Self-Study Course for Community Safety Educators](#) (Staff are trained to this level)

[MCFRS FY11 Recommended Operating Budget which Documents the Loss of the Operation Extinguish Program](#) (see PDF page 10 / paper page 43-4 within FY11 Recommended Changes "Lapse Senior Citizen Fire Safety Task Force position")

CC 5B.3 The agency conducts a formal and documented appraisal, at least annually, to determine the impacts of the public education program and its efforts in risk reduction based on community assessment, standards of cover, and measures performance.

Description

The Community Outreach Section reviews programs on an annual, monthly and individual basis. Annually, the section conducts appraisals of all operational programs through quarterly reports to review performance to ensure programs are consistent with the department's goals and objectives and to integrate best practices. Performance is measured frequently for the department's Home Safety Visit program, Safety in Our Neighborhood (SION) initiatives and the Car Seat Safety program and receive high ratings from the public. The section regularly competes successfully for FEMA grants to provide additional capacity and delivery of programs. These grants require formal and documented appraisals and financial and quarterly compliance reports designed to measure performance, and they provide substantive detail addressing the impacts and success of the agency's CRR programs.

Appraisal

The section has evaluated its public education program's effectiveness monthly and quarterly over the last five years by the Section Manager through staff reports as well as incident data and statistics, surveys, pre and post event assessments and feedback from residents. While these reports provide insight, information and data that is meaningful and quantitative of CRR programs and initiatives and education efforts, the analysis of this information has fallen short of producing measurable quantifiable analysis.

Incident statistics, community census and profile, and program statistics have been used to determine program effectiveness. Customer satisfaction surveys have been used and pre- and post-surveys have been utilized to determine knowledge gained. The budget process has continued to be used to prioritize programming efforts and to allocate future resources based on the goals in the Fire-Rescue Master Plan, community assessments and related performance measures.

Plan

The department will continue to annually appraise all aspects of the programs using the methodology outlined. We will continue our best practice of regular, on-going review of the development and delivery of programs and lessons learned and will implement any changes or adjustments in real time to ensure successful achievement of performance indicators.

With the implementation of the new CRR Mobile App and backend clean and relevant data collection, the Community Outreach Section will be able to produce a more effective quantitative analysis of existing programs, which will assist with quarterly and annual appraisals.

References

[SION Wufoo \(data collection system\) Home Survey Data-collection Screenshot](#)
[CountyStat Online Performance Depicting CRR Child Car Seat Customer Satisfaction](#)
[CRR Child Car Seat Customer Survey Data Table \(FY18 Q1 and Q2\)](#)
[Slides from Home Safety Visits Presentation from Strategic Planning Session](#)
[2017-02-02 FEMA MCFRS CRR Grant Semi-annual Performance \(appraisal\) Report](#)

5B.4 There are programs in place that identify large loss potential or high risk audiences (such as low socio-economic status, age, cultural/ethnic differences where appropriate), forge partnerships with those who serve those constituencies, and enable specified programs to mitigate fires and other emergency incidents (such as home safety visits, smoke alarm installations, free bicycle helmet programs, falls prevention programs, etc.).

Description

Solutions to fire and injury problems can be complex. Community involvement and partnerships serve as a force multiplier and allow the department to reach high-risk residents. The department works diligently to identify large-loss potential and high-risk audiences to ensure progressive public education and CRR programs are designed, available and implemented for individuals, businesses and the community. Specific risks and high-risk audiences are identified by evaluating incident statistics, demographic data and incident data to identify the cause and frequency of incident types resulting in injury and death. Risks are identified and prioritized.

Public education programs are developed, implemented, evaluated, revised, and maintained to provide low-cost safety items (e.g., car seats, smoke alarms, carbon monoxide detectors, bike helmets, fall prevention items, etc) with life-saving potential. The department partners with local agencies, departments and schools that serve high-risk residents to promote CRR programs and services to senior citizens, residents with disabilities, low income, non-English speaking families and other high-risk residents through its Home Safety Visit program, initiatives and community presentations.

The number of residents age 65+ in the County is projected to more than double between 2010 and 2040, from 120,000 to 244,000. This will raise seniors' share of the population from 9 percent in 1990 to 20 percent by 2040. The number of residents aged 85 and older is expected to grow the fastest, to 42,900 by 2040. To address the needs of this burgeoning population and the tragic over-representation of senior fire injuries and fatality statistics over the years, the Fire Chief is strategically enhancing a variety of critical senior services through work coordinated by a part-time, contract Senior Outreach position. At the same time, the share of minority residents among the 65+ population is expected to increase

from 34 percent in 2010 to 57 percent by 2040.

MCFRS has done extensive work to preplan for the future of “paramedicine” by partnering with local hospitals and has a team trained to conduct Home Safety Visits as part of an overall initiative to reduce the burden of ‘frequent users’ of the 911 system, providing further evidence that CRR is not “one size fits all” and that thinking progressively and focusing on high-risk audiences will result in lives saved.

Appraisal

Strong, collaborative partnerships with agencies that serve high-risk residents have provided the department the ability to enter homes where we traditionally have been unsuccessful. During the rating period, Department personnel have regularly attended meetings and community events and have responded to one-on-one requests to assist vulnerable and high-risk residents. Examples of successful initiatives included partnerships with the public school system, Head Start and Linkages to Learning programs designed for immigrant families, collaborative partnerships with organizations (e.g., Meals on Wheels, Senior Villages, Home Nurse organizations and social service agencies) focused on the safety of senior citizens and addressing the growth and challenges in this population (aging residents choosing to age in place). MCFRS has worked collaboratively with these organizations to ensure their homes have working smoke alarms and that residents were educated concerning fire safety and injury prevention.

In addition, the MCFRS GIS Specialist was used over the last several years to define socioeconomically-challenged areas within Montgomery County to help validate and guide program resources deployments.

Plan

The department will continue to provide a variety of safety and risk reduction programs and will continue to build, collaborate, identify and support programs offered by external agencies and initiate opportunities to collaborate with our partners using sound, “state of the science” recommendations as the foundation for an effective strategy to improve fire safety in Montgomery County.

References

[Senior Task Force Report](#)

[County Executive's Senior Summit](#)

5B.5 The agency should evaluate the juvenile firesetter intervention program. This program should refer all juveniles identified as involved in fire-play or fire setting behavior for educational intervention or other intervention services.

Description

The Juvenile Fire Setter Intervention Program, entitled “Operation Extinguish” was eliminated in the FY11 budget. However, the department’s Fire and Explosive Investigation (FEI) investigators continue to play a vital role in identifying community risks from juvenile fire setters and following adjudication hearings and cases involving juvenile defendants. Under current program guidelines, children in the community who engage in unsafe fire-related activities are referred to the Department of Juvenile Justice for assessment and referral to specific programs and interventions addressing juvenile fire-setter intervention programs.

Appraisal

Budget reductions, staffing cuts and programmatic constraints impacted the direct-delivery of this program resulting in the difficult decision to eliminate the program in FY11.

Plan

FEI staff continue to monitor the need for fire-setter intervention and have recently begun discussions with a neighboring jurisdiction to research opportunities to team up and develop a joint juvenile fire-setters program.

References

[MCFRS FY11 Recommended Operating Budget which Documents the Loss of the Operation Extinguish Program](#) (see PDF page 10 / paper page 43-4 within FY11 Recommended Changes “Eliminate Operation Extinguish”)

Category V

Criterion 5C: Fire Investigation, Origin, and Cause Program (Author: Capt. Mandeville)

The agency operates an adequate, effective, and efficient program directed toward origin and cause investigation and subsequent classification of fires, explosions, and other emergency situations that endanger life or property. The agency should conduct a thorough risk-analysis as part of activities in Category II to determine the need for fire investigation program.

Summary:

Every fire in Montgomery County is investigated initially by responding fire officers, each of whom has received training in basic fire investigation. If a fire's cause cannot be determined by the initial officer, an incendiary fire is suspected, the fire requires the assistance of units above the initial alarm or the fire causes an injury or death, specially trained investigators must be utilized by current policy and by industry standards.

The Fire and Explosives Investigations (FEI) Unit is organized as part of the Special Operations Section under a Battalion Chief who is also tasked with the responsibility of managing the HazMat Team. A rotating shift-work schedule is utilized to provide 24-hour coverage. All unit personnel receive fire and explosives investigations training and certification to industry standards. The unit is designated as a law enforcement agency by the State of Maryland with each Investigator sworn as a police officer in accordance with the requirements of the Maryland Police Training Commission. Each FEI Investigator is also appointed as a Maryland Special Assistant State Fire Marshal. The unit also simultaneously serves as the Bomb Squad for Montgomery County as certified by the Federal Bureau of Investigation with the mission to protect lives and property by preventing the criminal use of, or the rendering safe of, improvised explosive or incendiary devices. Additionally, all FEI Investigators are required to maintain fire-rescue and emergency medical services certifications.

Although this arrangement creates the need for an extensive and lengthy training program and an abundance of continuing education requirements, the full spectrum of these interrelated responsibilities can be seamlessly handled by fully trained Investigators.

Performance Indicators:

CC 5C.1 The agency’s fire investigation, origin, and cause program is authorized by adopted statute, code, or ordinance.

Description

The requirements and the authority to investigate every fire and explosion occurring in the County originate in both local and State legislation.

The Montgomery County Code requires inclusion of the cause, origin, and circumstances of any fire and any factors contributing to its spread in each required report by the Operations Division for every delivery of service or request thereof. It further authorizes the Fire Chief or his designee to investigate the cause, origin and circumstances of every fire, explosion or other emergency, take custody and safeguard evidence of a crime, take photographs, take statements and make drawings as necessary. The same code grants the Fire Chief the authority to organize and supervise a Fire and Explosive Investigation (FEI) Section.

The Annotated Code of Maryland defines the Montgomery County Fire and Explosives Investigations Unit as a “Law enforcement agency” and its investigators as “Police officers” with full authority to enforce the laws of the State of Maryland. FEI Investigators are trained and certified through the Maryland Police Training Commission. It further stipulates that a Montgomery County Fire and Explosive Investigator has the same authority granted to the State Fire Marshal.

These statutes are monitored and revisions are recommended by the Department when necessary changes are identified.

Appraisal

Since its inception, the Fire and Explosives Investigations Unit/Bomb Squad has undergone several changes in which requisite revisions to applicable statutes were successfully completed. Most recently in 2015, a departmental reorganization reassigned the unit from the Division of Community Risk Reduction/Office of the Fire Marshal to the Operations Division/Special Operations Section. This adjustment better reflects and

categorizes the special nature of this unit's mission and capabilities. The change required associated revisions to applicable State and local statutes to ensure that they reflected the updated organizational changes and responsibilities. The County Code was successfully updated through the legislature in 2016 when Expedited Bill 29-16 was passed into law by the County Council. Minor changes to the State laws have not yet been completed. However, on January 25, 2018, Maryland Delegates Moon, Dumais, and Queen introduced House Bill 460 to alter the existing definition of a MCFRS Fire and Explosive Investigator assigned to the Montgomery County Fire Marshal's Office to assigned to the Fire and Explosives Investigations Section of the MCFRS.

Plan

The Department will attempt to complete this transition with the final task of having the appropriate sections of the Annotated Code of Maryland revised to reflect the reorganization. The Department will also continue to evaluate the effectiveness of the program in case further adjustments are required and appropriate statutes can be revised or adopted as necessary. State House bill 460 is scheduled to be discussed at a Hearing on February 13, 2018 at 1 PM.

References

[COMAR Public Safety Article Title 6, 3-201, 6-304 \(page 8\)](#)

[COMAR Criminal Procedure Article 2-208.1](#)

[Montgomery County Code, Chapter 21-1\(c\)](#)

[Montgomery County Code, Chapter 22-6\(f\), 8\(a\)1, 9\(a\)](#)

[Montgomery County Council – Expedited Bill 29-16 \(9/2016\)](#)

[Maryland House Bill 460](#)

CC 5C.2 The agency uses a consistent approach to the scientific method which is utilized to investigate and determine the origin and cause of all fires and explosions.

Description

The importance of using the scientific method to investigate fires and explosions is stressed in both the initial training and continuously throughout the career of each Fire and Explosives (FEI) Investigator. The FEI training program includes an external basic fire investigator course which meets the requirements of NFPA 1033. These tested courses recommend the use of the scientific method as part of a systematic approach to investigating fires and explosions. The tested FEI training program further reinforces this concept to ensure that this standard is met. Each investigator is provided the latest copies of NFPA 921 and 1033, both of which use the scientific method as the recommended practice for a systematic approach to investigating fires and explosions. Continuing education in the use of the scientific method in fire and explosives investigations is available to every investigator. Origin and cause reports from investigators are reviewed and approved by the shift Captains to ensure that a systematic approach is utilized and adequately documented.

Appraisal

The FEI Training Program previously described has recently received its initial certification by the Maryland Police Training Commission. Many investigations by this unit have required expert testimony to be given during associated legal proceedings. This type of testimony requires, on an upward trending trajectory, a thorough evaluation of the investigators ability to demonstrate that the basic methodology used during the investigation was consistent with a systematic approach. To date, no Fire and Explosives Investigator's expert testimony in court or deposition has been successfully challenged.

Plan

As of February 16, 2018, one of the FEI shift Captains has been designated as the Fire Investigations Commander. Some of the responsibilities of this position will be to continuously monitor the ever-changing landscape of court testimony as it pertains to fire and explosive investigations and to make the necessary adjustments to FEI programs. The

Fire Investigations Commander will also serve as the fire investigations training officer for the Unit and will be tasked with ensuring that investigators not only maintain, but improve upon their expertise in the field and that the use of the scientific method as part of a systematic approach to the investigation of fires and explosions is perpetuated.

References

IFSTA Fire Investigator – 2 nd Edition	2010	FEI Library
FEMA FAOCI – Student Manual, 5 th edition	October 2015	FEI Library
NFPA 921 and 1033	2017	FEI Library

[FEI Training Program, pgs. 3,9,42,43,58](#)

CC 5C.3 The program has sufficient staff with specific expertise to meet the fire investigation, origin, and cause program goals, objectives, and identified community risks.

Description

The Fire and Explosives Unit/Bomb Squad is currently comprised of twelve full-time Fire and Explosives Investigators and one full-time Fire and Explosives Technician. The Unit is currently divided into four rotating shifts consisting of one shift supervisor Captain and two Lieutenant Investigators providing 24-hour coverage of at least two personnel at all times. All shift personnel must maintain fire investigator certification meeting NFPA 921 and 1033 standards in addition to certification as a police officer by the Maryland Police Training Commission. In addition to the normal continuing education requirements, all assigned personnel are in various stages of pursuing advanced fire investigation certifications.

Appraisal

Recommendations to increase the staffing level of the Unit have existed since 1993 (USFA FIMTA), when ten investigators were assigned. Since then, the County population continued to grow and the Unit assumed the responsibility of the Bomb Squad in addition to its many other duties.

The Unit was instrumental in having Section 2-208.1(a)(2) of the Criminal Procedure Article of the Annotated Code of Maryland changed to reduce the rank requirement of an Investigator to a firefighter/rescuer with five years of experience; however, this law change has not yet been able to be utilized to help increase staffing.

In January 2015, two additional investigators at the rank of captain were added, which brought the shift staffing compliment up to one captain and two lieutenants per shift. These additions helped to spread the workload of the multitude of simultaneous roles required of the FEI Investigator.

Plan

The department's 2016-2022 Master Plan follows previous versions in supporting an increase in staffing by creating a full-time bomb squad consisting of four personnel. This implementation will allow for a sharp increase toward the desired advanced level of expertise of all personnel assigned and increase available time to train the public, other MCFRS personnel and outside agencies. It will also serve to reduce the strain on overburdened FEI investigators. These factors will ultimately help achieve the primary goal of reducing risk to the community. The Department recognizes that its fire investigators continue to perform admirably in meeting the program benchmarks with the current staffing level. The many current factors however, create a moving target for staffing levels which must continue to be addressed in the future. Additionally, the Master Plan identifies the need to replace the civilian analyst position lost in previous budget years, further freeing investigators to focus on these primary responsibilities.

References

[2016-2022 MCFRS Master Plan, Sec. 5, pg. 5-10; Sec. 6, pgs. 6-6 and 6-7](#)

[COMAR, Criminal Procedure Article 2-208.1](#)

[USFA FIMTA - Final Report - MCFRS, Appendix E Oct. 1993](#)

5C.4 The agency has established written agreements and procedures, that are reviewed and revised at least annually, with relevant local, regional, state/provincial, and federal fire investigation agencies to ensure appropriate and consistent scene processing, evidence collection, and information sharing.

Description

MCFRS FEI has a longstanding integration with Montgomery County Police (MCP), a CALEA-accredited agency since 1993. This is fostered by the continued development and adoption of many MCP Function Codes by way of cross-referenced MCFRS Directives. FEI is supported by MCP in nearly all facets of its total mission including training and education, scene, evidence and prisoner processing and information sharing. FEI also maintains cooperative relationships with the FBI and ATF for both fire and explosive investigation and bomb squad missions through federal documentation. The Unit further upholds intimate relationships with surrounding jurisdictions through continuous participation in MetroTech, a working group of the Council of Governments under the Fire Chief's Fire Prevention subcommittee, and through and an MOU with Maryland's Accredited Bomb Squads. Most of these agencies are responsible for both fire and explosive investigations as well as bomb squad functions. Mutual aid assistance is exchanged through the current Fire and Rescue Mutual Aid Operations Plan.

Appraisal

In the past year, FEI has established new Intergovernmental Agreements with the ATF for the purposes of assigning an investigator to the Arson and Explosives Task Force and another investigator to become an accelerant detection canine handler. The Unit also secured access to several law enforcement databases through agreements with MCP which have enabled improved information sharing. The Bomb Squad has improved upon compliance with the FBI National Guidelines for Bomb Technicians with an increase in dedicated training hours. While FEI personnel are continually notified of changes to the MCP Function Codes through PowerDMS, the cross-referenced MCFRS Directives have not been updated regularly since 2009. MCFRS has provided all investigators the ability to maintain professional memberships in the applicable areas of responsibility to ensure that industry standard procedures are followed.

Plan

FEI/Bomb Squad will form an internal work group in CY2018 to fully evaluate, update, produce and co-locate all prescribed documentation to include policies, procedures and cooperative agreements with the goal of a safe and efficient delivery of service. FEI will subsequently create a program to reevaluate these documents as often as necessary and, at a minimum, annually.

References

[MCFRS Directives/MCP Function Codes \(two examples\)](#)

ATF – ADCP Intergovernmental Agreement FEI Library

[ATF – Task Force Officers MOU with Montgomery County](#)

USDOJ/FBI National Guidelines for Bomb Technicians (FOUO/LES) FEI Library

Metrotech Strategic Plan 2017 (Draft) (FOUO/LES) FEI Library

CC 5C.5 The agency conducts a formal and documented appraisal, at least annually, to determine the impacts of the fire investigation, origin, and cause program and its efforts to reduce fires based on community assessment, standards of cover, and measures performance.

Description

Evaluation of the program is done on a continuing basis from multiple perspectives. Each FEI shift is supervised by a shift Captain whose responsibilities encompass the review of investigator performance through the observation of on-scene discharge of duties, constant monitoring of case statuses, the review and approval of investigation documentation and maintenance of training records. Recently, FEI began documenting its performance through use of the department's Program Appraisal Template designed to format standardize evaluations for consistency across all operational programs.

Appraisal

Prior to 2015, the FEI staffing model did not include shift supervisor Captains. This new arrangement has allowed for a more intimate appraisal of the Unit's technical performance. This, however, coupled with the loss of the full-time civilian positions once employed by the unit, has come at the expense of less daily administration of the program.

For the past year, FEI has successfully used the Program Appraisal Template to evaluate the Unit's performance. Any deficiencies related to the fire investigations program's ability to reduce the number of fires should become evident with the use of this appraisal format.

Due to its divergent nature, FEI data is requisitely stored in several disassociated databases. In August 2017, work began on the implementation of a FEI data warehouse to compile and make FEI statistics more readily available to all concerned parties in a dashboard-style format consistent with other MCFRS programs, while maintaining all appropriate data safeguards. The initial rollout of this dashboard was completed in March of 2018.

MCFRS has actively utilized local and national news outlets and social media to expediently relay the results of investigations into the causes of fires that have occurred in

the County as well as to provide extensive information to the public on best practices to prevent fires whenever possible.

Plan

FEI plans to continue the previously listed program measures, complete and fully implement the data project, and explore additional options for continued assessment of Unit performance overall and as it pertains to reducing the incidence of fires in the County.

References

[FY2017 Formal Annual Program Appraisal for Fire Investigation Criterion 5C](#)

[Examples of Social Media to Inform and Solicit Public Input and Assessment](#)

Category V

Criterion 5D: Domestic Preparedness, Planning, and Response (Author: A/C Witt)

The agency operates an all-hazards preparedness program that includes a coordinated multi-agency response plan designed to protect the community from terrorist threats or attacks, major disasters, and other large-scale emergencies occurring at or in the immediate area.

Summary:

Montgomery County Fire and Rescue Service (MCFRS) has established a departmental goal: "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." As part of this goal, MCFRS is a primary agency in the Montgomery County Emergency Operations Plan (EOP) which is a multidiscipline, all-hazards plan that establishes a single, comprehensive framework for the management of major emergencies and disasters within the County.

As a primary agency in the EOP, MCFRS is required to develop and maintain resources for emergency response to all situations, including but not limited to: hazardous materials, water rescue, structural/trench collapse, confined space, and rope rescue in addition to the normal firefighting and emergency medical services capability.

Performance Indicators:

CC 5D.1 The agency publishes an all-hazards plan that defines roles and responsibilities of all participating departments and/or external agencies. The agency identifies and authorizes an appropriate multi-agency organizational structure to carry out the all-hazards plan predetermined functions and duties.

Description

The Montgomery County Fire and Rescue Service (MCFRS) is a participating member of the Montgomery County Emergency Management Group (EMG). The Montgomery County Emergency Operations Plan is a result of the collaborative efforts between the Montgomery County Office of Emergency Management and Homeland Security (OEMHS) and the many other County departments and agencies and municipalities' representatives constituting the EMG that have assigned emergency roles and responsibilities. This plan establishes the overall roles and responsibilities for emergency operations as well as the Concept of Operations for the County. It organizes the County departments and agencies into sixteen Emergency Support Functions (ESFs) to facilitate planning and coordination to achieve an effective emergency response. It is intended to be used in conjunction with established operational procedures, plans, and protocols.

Appraisal

MCFRS has been an active participant on the EMG with personnel having participated in semi-annual meetings, review and updates to the Emergency Operations Plan (EOP) and monthly drills on the use of WebEOC. In addition, MCFRS has trained personnel to staff the Emergency Operations Center ESF-04 desk. These personnel completed minimum training as required by the EOP as well as training suggested by MCFRS. These personnel have been evaluated on a semi-annual basis through EOC exercises and activations.

Plan

MCFRS will continue participating in the review and update of the Emergency Operations Plan which is on a four-year cycle. The 2017 Montgomery County Emergency Operations Plan is in the final review stages. The plan is being reviewed for content, accuracy and application by the members of the EMG. In addition, MCFRS personnel selected to work

in the EOC will continue their review of the Annexes where MCFRS is a primary or support agency to ensure MCFRS is prepared to fulfill the roles and responsibilities stipulated in the plan.

References

[Montgomery County Emergency Operations Plan 2017-October](#) - Draft

[Montgomery County Emergency Operations Plan 2013](#)

5D.2 The agency complies with the National Incident Management System (NIMS), or appropriate incident management system, and its operational methods are compatible with all external response agencies.

Description

The Montgomery County Fire and Rescue Service (MCFRS) has established in the Certification Standards for Training Experience and Credentialing Requirements that all MCFRS Integrated Emergency Command Structure (IECS)-certified personnel must complete NIMS-ICS training in compliance with Homeland Security Presidential Directive #5 and Section 21-8A of the Montgomery County Code. MCFRS has also implemented an Incident Response Policy to provide a set of policies and procedures common to all incidents. MCFRS is an all-hazards fire/rescue service organization that uses a modular and scalable standard Incident Management System (IMS). The IMS is based on the National Incident Management System (NIMS), which was created to enhance the management of emergency incidents by establishing a single, comprehensive plan for responding to these incidents.

Appraisal

Per the Certification Standards for Training Experience and Credentialing Requirements, MCFRS command officers have successfully completed an annual competency evaluation to maintain IECS certification. MCFRS's Incident Response Policy was adopted on July 1, 2017. To ensure all personnel within MCFRS and our Mutual Aid partners understood the policy, an education plan including documents, videos and references were used to prepare MCFRS for an Incident Response Policy quiz to ensure competence. In addition, Appendix T of the Incident Response Policy requires after-action reporting by the incident commander if an incident meets the prescribed threshold. These reports have led to evaluation of the response activities and the policy under which the response was managed.

Plan

MCFRS will continue to follow Certification Standards for Training Experience and Credentialing Requirements to ensure the competence of our IECS-qualified personnel. As stated in Appendix T of the Incident Response Policy:

“A properly conducted AAR [After-Action Report] can have a powerful influence on the climate of the organization. It is part of the communication process that educates and motivates people by allowing them to learn from the actions of others. AARs should focus on key aspects of incident operations with a focus on the effective distillation of lessons available for learning and recommendations for future improvement.”

It also states:

“Some incidents deserve a more comprehensive evaluation. The hot wash and the Initial Written AAR are completed quickly and are designed to quickly capture and disseminate lessons. For the more complex incidents the Fire Chief or his/her designee must determine the scope of the additional reporting.”

This process will continue leading to a department-wide evaluation of our performance and lends itself to the improvement of the department as a whole through the experience of a few.

References

[Incident Response Policy Appendix B](#)

[Incident Response Policy Appendix T](#)

[Certification Standards for Training Experience and Credentialing Requirements \(Executive Regulation 36-08AM – 10/13/2009\)](#)

[Montgomery County NIMS Policy Resolution 15-1612 Adopted 9-26-06](#)

5D.3 The agency identifies and documents outside agency support.

Description

The Montgomery County Fire and Rescue Service (MCFRS) is a signatory to the Metropolitan Washington Council of Governments (MWCOG) Fire and Rescue Mutual Aid Operations Plan. This plan establishes the mutual aid agreement between all of the MWCOG participating jurisdictions. MCFRS also has entered into automatic aid agreements with the federal fire departments located on five federal facilities within the borders of Montgomery County.

Appraisal

The Metropolitan Washington Council of Governments Fire and Rescue Mutual Aid Operations Plan is evaluated on a recurring basis to update the agreement and to address changes in jurisdictional capabilities. This evaluation is completed under the direction of the MWCOG Fire Chief's Committee. The federal fire department automatic aid agreements are constantly evaluated by the MCFRS Federal Fire Chiefs Committee to ensure they are efficient and effective while addressing the needs of both parties to the agreement.

Plan

The MWCOG Fire Chief's Committee and the MCFRS Federal Fire Chiefs Committee will continue in their current practices of evaluating and updating their respective mutual aid and automatic aid agreements.

References

[The Metropolitan Washington COG Fire and Rescue Mutual Aid Operations Plan](#)

[Federal Fire Department Mutual/Automatic Aid Agreements](#)

5D.4 The agency has processes to record information and provide data on needed resources, scope, nature of the event, and field resources deployed to local, state/provincial, and federal agencies.

Description

The Montgomery County Fire and Rescue Service (MCFRS) uses a records management system (RMS) that was developed by the MCFRS Information Technology Section. This system provides for the collection of incident-related information that will be reported to the Maryland State Fire Marshal and to the National Fire Incident Reporting System. MCFRS also has a process in place to release proper information to parties that request information for a specific event.

In order to provide event information for active or extended events, MCFRS works with Montgomery County's Office of Emergency Management and Homeland Security (OEMHS). OEMHS maintains a WebEOC platform for use by all County agencies for coordination and information sharing during multiagency events. As identified in the Emergency Operations Plan, Section IV.A, when an event occurs, the Chief Administrative Officer or his/her designee will create an event within WebEOC to facilitate the coordination and information sharing between County agencies, the Maryland Emergency Management Agency and the National Capital Region partners.

Appraisal

MCFRS Policy and Procedure 02-01AMIII - Incident Reporting Requirements and Records Management, Section 5.a, mandates a Unit Report must be completed for every unit dispatched/responded on an incident. Appropriate personnel must complete the Unit Report, Incident Report, EMS Report, and other related reports after the conclusion of an incident. Compliance with this policy has been appraised on daily basis by each station officer at 1900 hours per Section 6.d.1 and a secondary appraisal has been performed by each Battalion Chief or the LFRD Chief per Section 6.c to ensure compliance.

OEMHS has exercised WebEOC monthly to ensure all County agency representatives are able to login and are competent in its use. OEMHS also has facilitated bi-annual exercises

that include the use of WebEOC, which has ensured competency and the exercise of the disaster management processes used during events.

Plan

The Duty Operations Chief will continue to review report compliance using an RMS report and hold all personnel on their shift accountable for compliance with the policy. MCFRS will continue to identify personnel that are to maintain competency in the use of WebEOC. These personnel will participate in the bi-annual EOC exercises and monthly WebEOC Drills.

References

[MCFRS Policy and Procedure 02-01AMIII, Incident Reporting Requirements and Records Management](#)

[Montgomery County Emergency Operations Plan](#)

[Example: Crystal Report Outlining Incomplete Incident and/or Unit Reports](#)

5D.5 The agency, at least annually, conducts tests of and evaluates the all-hazards plan and domestic preparedness, planning, and response program.

Description

As stated in the Montgomery County Emergency Operations Plan (EOP), the Plan is a multidiscipline, all-hazards plan that establishes a single, comprehensive framework for the management of major emergencies and disasters within the County. The plan is implemented when it becomes necessary to mobilize the resources of County departments and agencies as the Emergency Management Group (EMG) to save lives and protect property and infrastructure. The Plan assigns major roles and responsibilities to departments and agencies. The Montgomery County Fire and Rescue Service (MCFRS) is a participating agency in the Montgomery County Emergency Management Group.

As stated in the Exercise and Training Annex of the EOP, Montgomery County will exercise portions of the EOP on a quarterly basis. This will include activation of the Emergency Operations Center. These Exercises are conducted in compliance with the Department of Homeland Security's Homeland Security Exercise and Evaluation Program (HSEEP) which is a capabilities and performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning. The intent of HSEEP is to provide common exercise policy and program guidance capable of constituting a national standard for all exercises.

Appraisal

The Montgomery EMG has used the HSEEP process to evaluate the results of EOP-related exercises which has also assisted in After-Action Report development. The Montgomery County EMG has used these After-Action Reports to improve the County's response to events that fall under the umbrella of the EOP which has improved the notification, response and recovery processes.

Plan

MCFRS will continue to participate in the Montgomery County Emergency Management Group and its exercising of the EOP, both as a primary agency and a support agency.

References

[Montgomery County Emergency Operations Plan](#)

[2016-11-16 After- Action Report 8701 Arliss Street Fire and Explosion](#)

5D.6 The agency conducts and documents a vulnerability assessment and has operational plans to protect the agency's specific critical infrastructure, including but not limited to materials, supplies, apparatus, facilities security, fuel, and information systems.

Description

MCFRS has instituted a Fire Chief's General Order (FCGO) 14-10 that addresses station, apparatus and equipment security. This FCGO identifies the responsible party and the process in the event of theft or loss. In addition, we have FCGO 09-16 that gives direction on securing portable data and portable data devices. MCFRS must also comply with Montgomery County Administrative Procedure 6-6, Information Technology Policy and Procedure Manual and Montgomery County Administrative Procedure 6-7, Information Resources Security.

Appraisal

The Montgomery County Department of Technology Services (DTS) mandated and has tracked compliance with Montgomery County Administrative Procedure 6-7, Information Resources Security using an electronic learning management system. DTS has enforced Information technology system security through IT system management which has enforced stringent password requirements to increase IT system security and network port security to restrict what devices can connect to the County's network infrastructure.

Plan

MCFRS will continue to reinforce FCGO 14-10 to make the practices second nature to our members, and it also makes the security of department property the responsibility of all employees. MCFRS personnel will continue to participate in information security training on a recurring basis for all of our technology platforms in accordance with all applicable Montgomery County Administrative Procedures and MCFRS policies.

References

[Fire Chief's General Order 14-10](#)

[Fire Chief's General Order 09-16](#)

[Montgomery County Administrative procedure 06-06](#)

[Montgomery County Administrative procedure 06-07](#)

5D.7 The agency has a documented Continuity of Operations Plan (COOP), that is reviewed and updated at least every 5 years, to ensure essential operations are maintained.

Description

As stated in Montgomery County’s Emergency Operations Plan, Section G, to ensure continuity of government, the following elements are addressed in the Montgomery County Continuity of Operations Plan (COOP) Plan:

- Line of succession (minimum three “deep”) for essential agency positions;
- Pre-delegation (in writing) of emergency authorities to key officials;
- Provision for the safeguarding of vital records and systems;
- Protection of facilities and personnel; and
- Provision for relocation to alternate operating facilities.

All Montgomery County departments and agencies are responsible for developing and maintaining an agency-specific continuity of operations plan in accordance with County guidelines and standards. Department-level Continuity of Operations Plans are incorporated into Montgomery County’s WebEOC platform. The use of WebEOC to store the plan ensures access to the plan if the normal business locations are not accessible. This storage method also ensures the most recent plan is being used by all department personnel and has eliminated the need for hard copy version control.

Appraisal

As part of a monthly WebEOC exercises, the MCFRS COOP coordinator has participated in exercises developed by OEMHS. This process has helped facilitate an ongoing evaluation of the MCFRS COOP.

Plan

MCFRS will continue to comply with the EOP COOP management and exercise requirements.

References

[Montgomery County Emergency Operations Plan, Section G \(page 67\)](#)

[Montgomery County WebEOC COOP Module – Fire/Rescue](#)

5D.8 The agency has processes in place for intelligence sharing with other public safety agencies.

Description

MCFRS uses a multi-faceted approach to intelligence sharing with other public safety agencies within Montgomery County, the State of Maryland and the members of the Washington Metropolitan Council of Governments (MWCOG). MCFRS Special Operations and Senior Chiefs are on email distribution lists for the Maryland Coordination and Analysis Center, Washington Regional Threat Analysis Center and the Northern Virginia Regional Intelligence Center. MCFRS has access to multiple federal information sources through the Homeland Security Information Network. MCFRS has a Suspicious Activity Reporting (SAR) process that automatically shares SAR reports with MCFRS senior Chiefs, the Fire and Explosives Investigations unit and Montgomery County Police Vice and intelligence Unit.

MCFRS also participates and currently chairs the MWCOG Fire Intelligence sub-committee. This group includes MWCOG fire and rescue agencies, Washington D.C. Joint Terrorism Task Force (JTTF), the National Counter-Terrorism Center. This committee acts as an information sharing platform plus a facilitator of training and education.

Appraisal

MCFRS has used multiple sources to evaluate our progress in collecting and disseminating intelligence information. The Suspicious Activity Reporting program has been used to collect information from department members and provide that information to the appropriate authority for investigation. We have determined that we need to develop a better platform to distribute appropriate information to MCFRS members. We have identified these deficiencies and are developing plans to improve in this area.

Plan

MCFRS will continue to participate on the MWCOG Fire Intelligence sub-committee, continue to receive and interpret regional intelligence products for applicability to Montgomery County, MCFRS and our customers. MCFRS is in the process of developing

a platform to better distribute information to department personnel to facilitate a two-way conversation while not compromising sensitive information or sources. We plan to develop an appropriate platform on Montgomery County's SharePoint platform to distribute information to MCFRS personnel.

References

[Information Bulletin 16-02 – Suspicious Activity Reporting](#)

Category V

Criterion 5E: Fire Suppression (Authors: D/C Kinsley, A/C Bailey, A/C Van Gieson)

The agency operates an adequate, effective, efficient, and safe fire suppression program directed toward controlling and/or extinguishing fires to protect people from injury or death and reduce property loss. If identified risks are outside the scope of the agency's capabilities, Category X performance indicators should address the agency's ability to receive aid from mutual aid partners in those areas. The agency should conduct a thorough risk-analysis as part of activities in Category II to determine the need for specific fire suppression programs.

Summary:

MCFRS operates an adequate, effective, efficient and safe fire suppression program. Fire suppression is provided by an assortment of apparatus including engines, ladder trucks, and heavy rescue apparatus. The actions and interactions of these apparatus at the scene of reported fires is governed by the Incident Response Policy and specifically the Structure Fire Appendix. This appendix accounts enhancing occupant survival, fire attack, and manual searches of the structure.

All components of the Structure Fire Appendix are consistent with NFPA and other regulatory requirements. It is also consistent with the latest in fire suppression research.

Performance Indicators:

CC 5E.1 Given its standards of cover and emergency deployment objectives, the agency meets its staffing, response time, station(s), pumping capacity, apparatus, and equipment deployment objectives for each type and magnitude of fire suppression incident(s).

Description

MCFRS maintains a fleet of over 400 vehicles which respond to approximately 120,400 incidents per year. Staffing is provided by approximately 1200 career personnel, working about 305 personnel weekdays from 0700 hours to 1700 hours to staff front line apparatus and 304 personnel on nights and weekends. This staffing is achieved by utilizing 295 career personnel and 10 volunteer emergency responders on weekdays and 260 career personnel and 44 volunteer emergency responders on nights and weekends.

MCFRS fully staffs 35 compressed air foam system (CAFS) equipped engine companies with a minimum staffing of 3 personnel; although most typically have 4-person staffing. Each engine carries a 750-gallon water tank, a 1500-gpm, single-stage pump, 25 gallons of Class A foam, and 25 gallons of Class B foam.

MCFRS dispatches 5 engines, 2 aerials, 1 rescue squad, 1 EMS unit, and 2 command officers on all reported high-risk structure fires (smoke and/or fire) in single-family, multi-family (except high-rise) and commercial (except high-rise) within areas served by fire hydrants. These incidents are measured as Fire Full Assignment – Hydrant (FFA-HY).

MCFRS dispatches 6 engines, 2 aerials, 1 rescue squad, 1 EMS unit, 2 command officers, and 3 water tanker/tenders on all reported special risk structure fires (smoke and/or fire) in single-family, multi-family (except high-rise) and commercial (except high-rise) occupancies within areas not served by fire hydrants. These incidents are measured as Fire Full Assignment – Non-Hydrant (FFA-NH).

MCFRS dispatches 5 engines, 3 aerials, 1 rescue squad, 1 EMS unit, and 2 command officers on all reported special-risk structure fires (smoke and/or fire) in multi-family

and/or mixed-use high-rise occupancies within areas served by fire hydrants. These incidents are measured as Fire Full Assignment – Special Risk High-Rise (FFA-SRHR).

MCFRS dispatches 2 engines and 1 special service (aerial or rescue squad) to all reported moderate risk structure fires (contained appliance, light smoke conditions, etc.) in all occupancies (light smoke in a high-rise excluded) within areas served by fire hydrants. A tanker/tender is added in non-hydranted areas. These incidents are measured as Adaptive 2-3 assignments (A2-3).

MCFRS dispatches one engine and sometimes various other resources to all reported low-risk trash, vehicle, brush fires, etc. These incidents are measured as Adaptive 1-F assignments (A1F).

MCFRS dispatches one to two units on a variety of other low risk suppression incidents such as automatic fire alarms, certain electrical hazards, etc. These incidents are measured as Adaptive 1-N assignments (A1N).

All of the MCFRS first arriving unit and effective response force (ERF) baseline response time continuum tables for FY13 – FY 17 and for each of these fiscal years individually are located within the Service Delivery Total Response Time Continuum and Related Components [CC 2C.5] section of the 2018 Community Risk Assessment and Standards of Cover Manual (CRA/SOC).

In addition, each of the MCFRS critical task analysis worksheets, which are used in conjunction with the Community Risk Assessment, determine the appropriate resource deployments for each type and magnitude of fire suppression incidents are included in the Programmatic Critical Task Analysis by Risk Class for 1st Due and ERF [CC 2C.4] section of the CRA/SOC Manual.

It is the goal of MCFRS to improve (decrease) 90th percentile response time for each emergency program, including fire suppression, each fiscal year by $\geq 3\%$ compared to the previous year's baseline time. MCFRS acknowledges that a 3% improvement in 90th percentile response times will not be met for all emergency programs 100% of the time, year after year, due to variables such as increased call load, resource availability,

inclement weather, and communications/technology issues. 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 $\leq 3\%$ of the 90th percentile total response time for the previous 5-year period.

Appraisal

Comparing FY17 to FY16, MCFRS noted reduced response times in Fire-Full Assignments (FFA-HY) only in Rural areas (-1:42) and noted increased response times in Metropolitan (0:03), Urban (0:39), Suburban (1:39), and Countywide (0:17) areas. Increased response times were also noted in Fire-Full High-Rise Assignments (FFA-SRHR) for the Metropolitan area (0:39) and for Countywide (0:54) as well as Fire-Full Non-Hydranted (FFA-NH) assignments for the Rural area (0:21) and for Countywide (0:23).

Comparing FY17 to FY16, MCFRS noted reduced response times in Adaptive 1-Fire (A1F) assignments for Urban (-1:19), Suburban (-0:35), and Rural (-1:14) areas and reduced response times for all Adaptive 2-3 assignments. Increased response times were noted for the Metropolitan Area (0:38) and for Countywide (0:07) for Adaptive 1-Fire assignments.

MCFRS exceeded its staffing goals for FY17 by placing a fourth firefighter on more than 80% of the front-line Engines. MCFRS staffing levels for all other front-line apparatus were met for weekday, 0700 hours to 1700 hours; however, volunteer staffing data could not be confirmed.

Failure-to-Respond (FTR) percentage for all non-crossed staffed, front-line apparatus was less than 1% on weekdays between 0700 hours and 1700 hours during FY17. Nights and weekend FTR percentage for all non-crossed staffed, front-line apparatus exceeded 1% on only four units countywide.

Plan

MCFRS will continue to monitor total response times for all Fire-Full and Fire Adaptive assignments with the goal of reducing response time by 3% annually. Four-person staffing on the last two 3-person engines will be implemented in April 2018. Efforts to further reduce the FTR percentage will be pursued over the next accreditation cycle.

References

[25-08AMII, MCFRS Policy and Procedure, Apparatus Staffing Policy](#)

CRA/SOC Manual: Service Delivery Total Response Time Continuum and Related Components [CC 2C.5] section

CRA/SOC Manual: Determination if Response Time Performance Objectives Met [CC 2C.5] section with performance deltas between FY17 and FY16 tables

CRA/SOC Manual: Programmatic Critical Task Analysis by Risk Class for 1st Due and ERF [CC 2C.4] section

CC 5E.2 The agency uses a standardized incident command/management system, which is supported by agency policy and training programs.

Description

MCFRS uses a standardized incident command/management system (SIMS). The MCFRS SIMS is consistent with the National Incident Management System (NIMS). MCFRS establishes at least a nominal incident command structure on all incidents regardless of size or complexity and then scales that incident command as necessary to ensure that all objectives are met by balancing resources, communications, and span-of-control.

The requirement for a MCFRS SIMS is detailed in County Law and is further supported by two key policies: the Integrated Chain of Command Policy and the Incident Command Policy. Furthermore, all personnel acting in the role of certified chief officers must complete an annual series of examinations, both written and practical, and complete at least 12 hours of continuing education to remain certified.

Appraisal

MCFRS has effectively used the NIMS-compliant SIMS to manage all types of events on a daily basis, regardless of size or complexity, for many years. The use of the SIMS has remained consistent, and adherence to the MCFRS process is ensured via direct communications from ranking officers, a robust program of after-action reviews, and the aforementioned annual competencies program.

Plan

MCFRS will continue to meet this core competency primarily by ensuring adherence to the existing incident management framework and secondarily by continuing with the annual competencies program.

References

[Incident Response Policy Incident Command Appendix](#)

[Integrated Emergency Command Structure Policy](#)

[Command Officer Professional Development Policy](#)

[Chapter 21 County Code](#) (see Section 21.8 and 21.8A on page 15)

CC 5E.3 The agency conducts a formal and documented appraisal, at least annually, to determine the effectiveness of the fire suppression program and its impact on meeting the agency's goals and objectives.

Description

MCFRS Policy 24-01, *Incident Response Policy*, and its associated appendices, is the guiding doctrine for all Fire Suppression services in Montgomery County. These documents guide how firefighters respond, safely operate, communicate, command, and review during all fire suppression incidents.

MCFRS establishes facilities (fire stations), assigns fire suppression apparatus and special service apparatus, and provides career and volunteer staffing to meet the needs of the demand and requirements of the operational policies.

The 2013 accreditation peer-assessment process outlined the need for an annual appraisal of the Fire Suppression program as well as other MCFRS programs. This is the first publication of a formal and documented annual appraisal.

Appraisal

MCFRS has always appraised its emergency response programs; however, a strategic recommendation from the 2013 accreditation peer assessment team was to develop a formal and documented appraisal for all programs. The Operations Division Chief, in 2017, mandated the development of a standardized appraisal template and mandated to all operations program managers this formal and documented (using the template) appraisal be conducted for fiscal year (FY17), which was from 7/1/16 to 6/30/17, and every FY thereafter.

The appraisal validated that MCFRS has appropriate personnel, facilities, apparatus, equipment, SOPs, and training to accomplish its mission to "*protect lives, property and the environment with... safe and effective emergency response provided by highly skilled career and volunteer service providers...*"

The data presented in the appraisal highlighted the commitment from the Operations Division to provide dashboards, performance tracking, response time analysis and

leadership briefings in an open and transparent manner. While MCFRS continued to focus improvement efforts in specific areas of total response time, there have been improvements shown in total response times in certain density zones, while call load has increased and the addition of resources has not kept pace.

The appraisal showed some remarkable results; foremost is the assessment by the Insurance Services Office (see references below) where MCFRS improved its rural (non-hydranted area) rating from a 6 to a 4 and its urban (hydranted area) rating from a 4 to a 2. Additionally, the appraisal documented some growth in apparatus and staffing in FY17 which was needed to address a call volume that has increased by 3-4% per year.

Plan

The Operations Division will continue to conduct this annual appraisal each fiscal year, along with all other performance appraisals that fall under this Division. The goal is to produce a more standardized data presentation and a more comprehensive analysis in future appraisals. The ultimate plan for these appraisals is to document year-to-year performance to more easily analyze improvement, as well as set-backs, in all Operations Division performance areas, including Fire Suppression.

References

[5E Program Appraisal FY2017](#)

[Incident Response Policy](#)

- [Appendix A, Operational Doctrine Statement](#)
- [Appendix B, Incident Command](#)
- [Appendix D, Structure Fires](#)
- [Appendix E, High Rise Fires](#)
- [Appendix F, Water Supply Operations](#)
- [Appendix I, Rapid Intervention and Maydays](#)
- [Appendix S, Communications](#)
- [Appendix T, After Action Reporting](#)

[ISO Public Protection Classification Rating for 02-10 for Urban](#)

[ISO Public Protection Classification Rating for 04-10 for Rural](#)

Category V

Criterion 5F: Emergency Medical Services (EMS) (Author: B/C Butsch)

The agency operates an EMS program with a designated level of out-of-hospital emergency medical care that meets the needs of the community.

NOTE: EMS is a major element of many fire service agencies. Fire service personnel are frequently the first responder to medical emergencies. For that reason, emergency medical response can be organizationally integrated with fire suppression activity. Care should be exercised not to create a priority or resource allocation conflict between the two program activities. Agencies that only provide first responder services must also complete this criterion.

Summary:

The MCFRS provides all Emergency Medical Services (except routine inter-facility transports) within the borders of Montgomery County. MCFRS engages in a robust program of measurement and assessment to ensure that the agency is responding to the EMS needs of its community. During the five-year rating period, MCFRS worked on improving ALS response times, adding BLS transport capacity and implementing a mobile integrated health program to address the needs of repetitive EMS users. The MCFRS received the Congressional Fire Service Institute “Excellence in Fire Based EMS” award twice in the last five years (2013 and 2017) for its innovative programs.

Performance Indicators:

CC 5F.1 Given its standards of cover and emergency deployment objectives, the agency meets its staffing, response time, station(s), apparatus, and equipment deployment objectives for each type and magnitude of emergency medical incident(s).

Description

MCFRS' emergency response EMS programs include high-risk ALS2, moderate-risk ALS1, and low-risk BLS. The agency is meeting emergency deployment objectives for these programs. Daily and effective staffing levels are maintained and mandated through the Apparatus Staffing Policy. Based on a granular total response time (TRT) analysis for each type and magnitude of EMS incidents and contained within the 2018 Community Risk Assessment: Standards of Cover (CRA/SOC) manual, total response time performance for first arriving unit and effective response force (ERF) are being met. Additionally, MCFRS continues to maintain adequate fire-rescue stations, apparatus, and equipment to help it achieve its vision, mission, guiding principles and values, and goals and objectives, all of which are articulated within the Master Plan.

MCFRS has taken aggressive steps since being reaccredited through the Commission on Fire Accreditation International in 2013 to institutionalize this fire service framework into its daily operations. This is evident when reviewing the granularity and frequency of analysis pertaining to each component of the total emergency response time continuum. Through these processes, and as the following two examples indicate, outstanding documented patient outcome data applicable to return of spontaneous circulation (ROSC) and ST elevation myocardial infarction (STEMI/heart attack) patients with door to balloon (D2B) time of less than 90-minutes, MCFRS confirms it meets its deployment objectives.

Appraisal

Through the aforementioned and in particular, the regular monitoring and analysis of performance data and County growth projections and demographic changes, it was noted there were areas of the County where ALS response times were lagging. For example, Fire

Station 40's distribution total response times to dispatched high and moderate risk ALS incidents were significantly above (higher) than the 90th percentile baseline distribution performance compared to similar density zones. Fire Station 40 did not have an ALS resource assigned and surrounding ALS assets were stationed farther away, which caused longer travel times.

To address this issue as well as other similar ones specific to other Station Response (Upper Tier Risk Management Zones) confirmed through granular response time analysis, MCFRS employed creative multi-faceted solutions that included adding additional paramedic engine companies and ALS Chase Units/Cars, reducing ALS medic transport unit capabilities, increasing BLS unit transport capabilities, and initiating a program to address frequent users of the 911 system. Specific to the Fire Station 40 analysis, the Fire Chief, armed with effective analysis such as this was able to secure funding with the AHJ to add a firefighter paramedic to each shift on Engine 740. On 1/11/2016 Engine 740 with three firefighters became Paramedic Engine 740. Two years of data before and after the implementation of Paramedic Engine 740 confirmed the significant decrease in Distribution total response times to reported high and moderate risk ALS incidents.

It should also be noted many of the strategies, both current and future, employed to assure continued compliance with this core competency are documented in the Master Plan and, when appropriate, reinforced in the annual Strategic Plan.

Finally, MCFRS has transparently shared its ability to meet these emergency deployment objectives on a quarterly basis, and reports these measures to the organization, AHJ, and public through the online CountyStat system. MCFRS has also included a performance improvement plan for each reported Headline Performance Measure documented within the CountyStat web site. Headline Performance Measures are the Montgomery County Office of Performance and Measurements nomenclature for key performance indicators.

Plan

MCFRS is a forward-leaning, progressive fire-rescue department that will continue to strive to achieve organizational excellence by employing and institutionalizing the CFAI model to assure its deployment objectives are being met. This includes soliciting feedback

from internal and external customers, constantly appraising EMS service delivery program performance, which includes patient outcomes, deploying new and enhanced technologies, such as FirstWatch® and remaining attuned to national and even international EMS best-practices initiatives.

References

[MCFRS CountyStat Page](#)

[MCFRS Master Plan – see Pages 5-2 to 5-4 and 5-8 to 5-9 re: ALS deployment changes](#)

[MCFRS 2018 Strategic Plan – see Pages 2 – 4 and Page 7 for FirstWatch](#)

[Apparatus Staffing Policy](#)

2018 CRA/SOC Programmatic Critical Task Analysis by Risk Class for 1st Due & ERF [CC 2C.4] section – specifically EMS Response Time Data Tables and Baseline and Benchmark Performance Statements beginning on page 213 and the Risk Category: EMS Program / Determination if Total Response Time Performance Objectives Met for first-arriving unit and ERF on beginning on page 262.

[FY2017 Formal Annual Program Appraisal for EMS Criterion 5F](#)

[Actual FirstWatch® Alert – Transport Resource Availability Exceeded Thresholds](#)

2018 CRA/SOC Positive and Negative Service Delivery Outcomes Methodology and Analysis [2A.5] section beginning on page 46.

2018 CRA/SOC Quarterly Monitoring, Assessing, Reporting Delivery Outcomes and Actions [2D.2] section beginning on page 284.

[Example of Fire Station 40 ALS Distribution Total Response Time Analysis which Depicted Lagging Response Times Which Solidified the Need for an ALS Resource at that Station.](#)

CC 5F.2 The agency has standing orders/protocols in place to direct EMS response activities to meet the stated level of EMS response.

Description

The Maryland Institute of Emergency Medical Services Systems (MIEMSS) is the state regulatory agency for EMS. MIEMSS requires the use of an Emergency Medical Dispatch (EMD) system to determine EMS call types. MCFRS currently uses the ProQA system to achieve this. For further information on EMD, please see Criterion 9B.

Once on the scene of an EMS call, MCFRS providers are governed by the Maryland Medical Protocols (MMPs), which is a written Statewide protocol document promulgated by MIEMSS. A statewide Protocol Review Committee (PRC), composed of representatives of all stakeholder groups and MIEMSS officials, meets on a bi-monthly basis, and is charged with the process of reviewing and editing the protocols. The MMPs are amended on a yearly basis with all changes taking place on July 1st. As discussed below, MCFRS vigorously participates in this process.

Appraisal

The Maryland Medical Protocols (MMPs) have served the MCFRS adequately over the five-year rating period. MCFRS has significantly increased its presence at MIEMSS committee meetings to ensure that the MMPs meet the needs of the citizens of Montgomery County and are able to be utilized effectively by MCFRS personnel. During the rating period, MCFRS has been successful in introducing, influencing and implementing several new protocols that were based on issues that the MCFRS identified as important.

Plan

The MCFRS will continue to identify opportunities for improvement within the MMPs through data analysis of EMS patient care reports and by carefully reviewing future medical research for applicability within the practice of EMS providers

References

[The Maryland Medical Protocols retrieved on 4/7/17](#)

[Code of MD Regulations Title 30 MIEMSS Subtitle 02 Chapter 30.02.02](#)

[Code of MD Regulations Title 30 MIEMSS Subtitle 02 Chapter 30.02.03](#)

CC 5F.3 The agency has online and offline medical control.

Description

MCFRS EMS providers receive immediate on-line medical direction via radio from local Emergency Department physicians through the Emergency Medical Resource Center (EMRC) which is a section of MIEMSS. All hospitals within Montgomery County are certified through the MIEMSS Base Station process to provide on-line medical direction. Off line and general medical direction is provided by the MCFRS Office of Medical Oversight (OMO). The OMO provides medical oversight for EMS delivery, EMD, and for EMS training purposes.

Appraisal

MCFRS providers have had clear guidelines through the MMPs as to when on-line medical direction is required. EMRC has provided adequate services for this purpose. MCFRS has maintained a separate system of 800 MHz radio channels with all County hospitals so that any EMRC outages have not affected the ability of providers to seek medical direction. MCFRS has been concerned, of late, by intermittent degraded radio transmissions within the EMRC system.

MCFRS has participated in the MIEMSS base station review process and has maintained good relationships with all receiving hospitals to ensure that any communication issues are quickly resolved.

During the rating period, the OMO was expanded to include a full-time Medical Director. This was a historic first for the MCFRS and places MCFRS in an elite company of EMS agencies in the country that have taken such a step.

Plan

MCFRS will continue to monitor the EMRC system to ensure that radio quality does not detract from patient care activities. MCFRS will continue to maintain a back-up radio system and will continue to participate in Base Station Review.

MCFRS will monitor the work demands placed upon the OMO and will consider the addition of part-time Assistant Medical Directors as necessary.

References

[MIEMSS Base Station web page retrieved on 04/07/17](#)

[MIEMSS Subtitle 03 Chapter 06 Base Stations](#)

[Maryland 2017 EMS Protocols Section G Communications](#)

CC 5F.4 The agency creates and maintains a patient care record, hard copy or electronic, for each patient encountered. This report contains provider impression, patient history, data regarding treatment rendered, and the patient disposition recorded. The agency must make reasonable efforts to protect reports from public access and maintain them as per local, state/provincial, and federal records retention requirements.

Description

MCFRS completes an electronic patient care report for each patient encounter. These reports are entered into the statewide electronic Maryland EMS Data System (eMEDS®), which is maintained by MIEMSS. Use of eMEDS® is required by Maryland regulations. In addition, all MCFRS personnel are mandated to follow incident reporting procedures as outlined in MCFRS Policy Number 02-01-AMIII which establishes procedures on report writing requirements, data entry, system security, and release of incident documentation. This policy includes patient care reporting requirements.

Appraisal

MCFRS transitioned successfully to the eMEDS® platform in April 2015. MCFRS implemented new hardware for EMS reporting purposes in the summer of 2016. MCFRS has vigorously participated at the State level to ensure that the eMEDS® system is effective in collecting the right information, while not being onerous for providers to use. MCFRS has engaged in active cross-matching with CAD records to ensure that all patient encounters result in a completed eMEDS® report and has a near perfect report completion rate. Because of the quality of MCFRS efforts, the department has been frequently asked by MIEMSS to review and comment upon proposed changes to the system.

Plan

Over the next two years, EMS agencies nationwide will be converting to the National EMS Information System version 3 standard (NEMSIS3). The State of Maryland is currently working with the vendor that supplies eMEDS® to transition to eMEDS® Elite, which is a NEMSIS3-compliant upgrade. MCFRS will continue to be heavily engaged at the State level to ensure that this implementation happens in a manner that meets the

MCFRS' data collection needs. The MCFRS will also ensure that this system is easier for its providers to use than the present eMEDS® system.

References

[Code of Maryland Regulations \(COMAR\) Title 30](#)

[MCFRS Incident Reporting Requirements and Records Management Policy 02-01-AMIII](#)

[MIEMSS Update on Upgrade to eMEDS® Elite](#)

CC 5F.5 The agency has a Health Insurance Portability and Accountability Act (HIPAA) or equivalent (e.g., Freedom of Information and Protection of Privacy [FOIP] for Canada) compliance program in place for the EMS program that meets federal and state/provincial guidelines, and all personnel are properly trained in HIPAA/FOIP regulations and procedures.

Description

The MCFRS is compliant with federal and State HIPAA requirements. Personnel go through annual on-line HIPAA training, and MCFRS restricts access to protected health information (PHI) to only those personnel who need such information for treatment, billing or quality assurance purposes. MCFRS maintains careful records of who accesses PHI and for what purpose.

Appraisal

During the five-year rating period, MCFRS only had one incident of a breach of protected health information, affecting one patient. This incident resulted from a willful violation by an employee and was promptly investigated and mitigated.

MCFRS participated in a County Government HIPAA compliance audit and received generally high marks for compliance with regulations and with accepted health care industry best-practices. It was recommended; however, that Montgomery County Government as a whole should develop Administrative Policies regarding HIPAA compliance and PHI breach sanctions.

Following the implementation of EMS billing, MCFRS experienced an upsurge in records requests from patients. At the time of this writing, over 500 reports per month have been requested. As a result, MCFRS expanded the hours of a formerly part-time Records Custodian to full-time so that records requests have been responded to promptly.

During the rating period, MCFRS developed and published an updated Records Management policy which incorporated HIPAA guidelines.

Plan

The MCFRS will continue to be compliant with State and federal laws and regulations governing HIPAA compliance. The MCFRS will continue to monitor demands for records to ensure that it can respond to such requests in a timely manner. MCFRS will continue to cooperate with the rest of County Government to develop county-wide policies regarding HIPAA compliance.

References

[MCFRS Incident Reporting Requirements and Records Management Policy](#)

[MCFRS Report Request Webpage](#)

[MCFRS Notice of Privacy Practices Webpage](#)

[Montgomery County 2017 HIPAA Compliance Internal Audit](#)

5F.6 The agency has a quality improvement/quality assurance program (QI/QA)
in place to improve system performance and patient outcomes.

Description

The MCFRS has an active QI/QA program. The program consists of 1.25 FTEs to respond to QA concerns, and a full-time Quality Improvement Officer. The program regularly surveys data, research and industry best practices as sources for QI. Patient care complaints from the public, hospitals, and other parties are responded to promptly, and providers are remediated as necessary by supervisors, instructors and the OMO.

Appraisal

During the rating period, MCFRS increased staff to include a full-time Quality Improvement Officer. The MCFRS surveyed best practices from the London Ambulance Service, the EMS Compass collaborative, the American Heart Association, and other industry leaders to establish a set of key performance indicators that are publicly reported through CountyStat (a County Government web-based performance dashboard that is updated on a quarterly basis).

In addition, around 2014 the Quality Improvement Officer, on a monthly basis, began sharing patient outcome data with all ALS volunteer and career members via email. This same data has been incorporated online into the MCFRS EMS Operations Blog for all members to see and from which to learn.

Measuring performance and devising metrics has allowed MCFRS to better understand its strengths and weaknesses, and distinguish between instances in which patient care documentation was simply lacking (or simply not retrievable due to the features of the eMEDs software), and instances in which patient care truly needed to be improved on a systemic basis. For instance, MCFRS experienced a 300% increase in the amount of cardiac arrest patients experiencing return of spontaneous circulation, due to the introduction of high performance CPR in 2014, and the continued investment in mechanical CPR devices.

As mentioned above, as a result of both the QA and QI processes, MCFRS identified several areas for system and statewide improvement and engaged in efforts to affect policy and equipment changes to do so. Examples of these improvements include amending the MMPs to allow the use of Versed on an intranasal basis for pediatric patients, lengthening the amount of time for attempting to resuscitate cardiac arrest victims, and allowing EMTs to draw up and administer Epinephrine in lieu of using far more costly Epi-pens.

Plan

MCFRS will continue to develop and measure EMS quality key performance indicators and will enhance the QA monitoring processes by introducing FirstPass which is a software package that works with eMEDS® to measure protocol and policy compliance on a near real-time basis.

MCFRS will also continue to routinely engage EMS providers, work to enhance methodologies, monitor trends, and share performance information to constantly improve system performance and subsequent patient outcomes. MCFRS will also continue to cooperate with external partners and peers to develop meaningful benchmarking projects.

References

[MCFRS CountyStat website](#)

[MCFRS Quality Management Plan](#) (currently a draft as of 9/19/17)

[FirstWatch® FirstPass Module website](#)

[MCFRS KPI Performance Charts Examples](#)

[MCFRS EMS Ops Blog Website](#)

CC 5F.7 The agency conducts a formal and documented appraisal, at least annually, to determine the effectiveness of the EMS program and its impact on meeting the agency's goals and objectives. This should include an evaluation of the agency's standard operating procedures, protocols, and equipment.

Description

MCFRS engages in a constant appraisal of its EMS program and reports formal program measures on a monthly, quarterly and yearly basis. The EMS Section develops and publishes an internal monthly dashboard which is reviewed by the MCFRS Operations Chief. On a quarterly and yearly basis, MCFRS reports program measures to the Montgomery County CountyStat office which posts these measures on a public facing website. These program measures also inform the department's annual strategic plan to guide all of its actions toward achieving its goals and objectives.

Appraisal

As demonstrated in the QA/QI section above, MCFRS believes in the power of program measurement and has actively sought to incorporate national and international best practices. During the five-year rating period, MCFRS has done an outstanding job of developing and using EMS program measures.

During 2017, the MCFRS Planning and Accreditation Section, with input from the Operations Division, developed a formal program appraisal template to standardize the appraisal reporting format across all operational programs. The requirement was for section chiefs and/or program managers to use this template to appraise their programs.

Plan

MCFRS will continue to monitor existing program measures as to their utility in assessing EMS program effectiveness and efficiency. If appropriate, MCFRS will continue to develop new program measures as needed.

References

[2017 MCFRS EMS Section Quarterly Dashboard Examples](#)

[CountyStat MCFRS Webpage](#)

[MCFRS FY2017 Strategic Plan](#) (see pages 3 – 5)

[FY2017 Formal Annual Program Appraisal for EMS Criterion 5F](#)

5F.8 The agency has developed a plan or has already implemented a cardio pulmonary resuscitation (CPR) and public access defibrillation program for the community.

Description

Emergency Communications Center (ECC) call-takers provide pre-arrival CPR instructions to 911 callers when needed. Various entities within MCFRS (e.g., CERT Program) provide either CPR training directly to the public or maintain a website with links to community organizations and companies that provide such training (e.g., Fire-Rescue Training Academy). In addition, effective as of 2016, all high school students in the State of Maryland are required to have training in CPR to graduate from high school.

Public access AEDs are required by Maryland law to be registered with MIEMSS and, by a combination of State and local laws, are required to be placed in/at schools, health clubs, swimming pools and other places of public assembly.

Appraisal

For most of the five-year rating period, MCFRS did not have good data about the use of public AEDs or public performance of CPR and was unable to assess whether Montgomery County's public AED and CPR program was effective or efficient; although there was some anecdotal evidence that these programs were of value. MCFRS did attempt to collect cardiac arrest outcome data from each County hospital, but this was a laborious process that required constant contact with individual physicians and nurses at each hospital.

In late 2016, MCFRS and all County hospitals became a participant in the Cardiac Arrest Registry to Enhance Survival (CARES). Participation in this program required the inclusion of certain information related to public access defibrillation and CPR on each cardiac arrest eMEDS report. Each hospital was also required to develop an automatic process to enter outcome data into the CARES program. Although this program was in its early stages at the time of this writing, early data shows promise of an ability to better assess public AED/CPR effectiveness. Early data did show that most cardiac arrests in Montgomery County occur in private homes or skilled nursing facilities.

Plan

MCFRS will use CARES data to assess whether public AED and CPR programs are effective and efficient. MCFRS will use the data to recommend appropriate local and State legislative changes to public AED and CPR requirements.

References

[MIEMSS Public AED Program Homepage](#)

[Annotated Code of MD Article Education Section 7-205 BOE CPR Adoption](#)

[MD Dept of Ed Memo to Comply with COMAR AED Program in High Schools](#)

Category V

Criterion 5G: Technical Rescue (Author: Capt. Lancaster)

The agency operates an adequate, effective, efficient, and safe program directed toward rescuing trapped or endangered persons from any life-endangering cause (e.g., structural collapse, vehicle accidents, swift water or submersion, confined space, cave-in, trench collapse, fire). The agency must conduct a thorough risk-analysis as part of activities in Category II to determine the need for specific technical rescue programs. Agencies that only provide first responder services must also complete this criterion.

Summary:

The Montgomery County Fire and Rescue Service (MCFRS) provides a scalable all-hazard approach to technical rescue incidents occurring within Montgomery County. All members of the MCFRS are trained to the awareness level in technical rescue, and many to the operations level, per NFPA 1670. As part of the community risk assessment, MCFRS has conducted a risk analysis and has identified the need for specific technical rescue programs.

Technician level response for all structural collapse, rope, trench, and confined space rescues are mitigated by the Technical Rescue Team from three consolidated stations. Additional trained, non-consolidated, members may be further consolidated and respond if the scope of the incident is such that additional trained personnel are required (e.g. large-scale incident). If the scope of the incident is such that it may overwhelm all consolidated and non-consolidated personnel (e.g. multiple operational periods), personnel and equipment resources from Maryland Task Force 1, one of 28 FEMA Urban Search and Rescue Teams that is sponsored by MCFRS, can be requested and utilized on site.

For water rescue response, MCFRS provides five operations-level boat crews to respond to water rescues throughout the County. Strategically located on the eastern and western fringes of the County, these operations level resources respond to incidents on the two rivers (Potomac and Patuxent) that border Montgomery County to the east and west as

well as the numerous lakes and storm water management ponds found throughout the County.

Technician-level water rescue response for swift water and ice rescue are provided by the Swift Water Rescue Team from three consolidated stations. Additional trained, non-consolidated members may be further consolidated and respond if the scope of the incident is such that additional trained personnel are required. If severe weather or flooding is anticipated, operations-level water rescue resources are staffed with technician-level responders to add up to five additional swift water capable boats for incident response.

Important to note is that MCFRS does not include vehicle collisions as part of technical rescue. All responders are trained in response to vehicle collisions and most must achieve technician-level certification in Vehicle and Machinery Rescue as part of the promotional process. The MCFRS deployment model consists of six heavy rescue squads, five tractor-drawn aerials, and two rescue engines, all with extrication capabilities to assist with any major vehicle collision that may include entrapment.

Performance Indicators:

CC 5G.1 Given the agency's standards of cover and emergency deployment objectives, the agency meets its staffing, response time, station(s), apparatus, and equipment deployment objectives for each type and level of risk of a technical rescue incident(s).

Description

MCFRS meets its staffing, response time, apparatus and equipment deployment objectives for technical rescue incidents with a combination of training and resource deployment models. All MCFRS members are trained to an awareness level for technical rescue and must recertify on this training annually¹. Technician level response is provided by the Technical Rescue Team (confined space, rope, trench, and structural collapse rescue) and the Swift Water Rescue Team (swift and flat-water rescue).

The Technical Rescue Team responds from three consolidated stations (25, 29, and 31) with minimum daily staffing levels of four trained and certified personnel at both Station 29 and Station 31. This minimum staffing model provides a minimum of eight trained and certified responders for any incident involving confined space, trench, rope, or structural collapse rescue. Additional trained and certified personnel from Station 25 will also respond to technical rescue incidents; however, there is no minimum staffing requirement. If additional technical rescue certified personnel are needed (e.g., prolonged incident or significantly complex scenario), non-consolidated trained and certified responders are also deployed as additional technical rescue assets. If additional assistance is still required, trained and certified members of Maryland Task Force 1 (MDTF-1), one of 28 FEMA Urban Search and Rescue teams, are dispatched to the incident.

As part of the combined training and resource deployment model for water related technical rescue incidents, MCFRS has four swift water boats and five operations-level boats in service 24/7. The Swift Water Rescue Team responds from three consolidated stations (10, 25, and 30) with minimum daily staffing levels of two Swift Water Boat Operators and two Swift Water Boat Crew personnel at both Station 10 and Station 30. This minimum staffing model provides a minimum of eight trained and certified

responders for any incident involving swift, moving, or flat water. The Swift Water Rescue Team is further trained in ice rescue. Additional trained and certified personnel from Station 25 may also be requested to respond to swift water incidents; however, there is no minimum staffing requirement. Further operations-level water rescue resources are located at five stations (14, 25, 29, 31, and 40). If flooding is forecast or imminent, these operations-level boats are staffed with dedicated swift water boat operators and swift water boat crew to provide enhanced capability for the projected event. If additional swift water rescue certified personnel are needed (e.g., prolonged incident or significantly complex scenario), non-consolidated trained and certified responders are also deployed as additional swift water rescue assets.

Logistical capabilities of the Technical Rescue Team have been recently modified and enhanced moving away from the Transport and POD system and into dedicated technical rescue response vehicles. Technical Rescue 700 and Technical Rescue 700B are two stand-alone box truck vehicles capable of supporting two smaller scale technical rescue incidents simultaneously. For large scale events, both units can deploy to the scene to support multiple rescue squad operations.

Logistical capabilities for MCFRS water rescue resources varies. Much time and effort has been invested to ensure all water rescue platforms are of similar design and manufacture. The water rescue response model is based on three platforms—the Chesapeake, the Rescue Sled, and the Rapid Deployment/Jon Boat. The 18' Demaree Inflatable Boats (DIB) Chesapeake model is the largest boat in the MCFRS fleet and is used when water level and conditions warrant or when capacity is required, such as multiple evacuations from Whites Ferry. The 14' DIB Rescue Sled is the workhorse of the MCFRS fleet and accounts for most our water platforms. For water events that are difficult to access, each boat support unit is equipped with an inflatable Rapid Deployment or Jon Boat that can be carried to the rescue scene. The boats range in age from 20 years to several months old. All boats, motors, and trailers are professionally maintained by a local vendor.

Appraisal

MCFRS does not experience a high volume of technical rescue related calls; however, the risk of such events is ever present. Of these events, water rescues have historically been the most prevalent. Daily minimum staffing requirements and increased training initiatives have been effective in providing an increased number of on-duty trained and certified personnel to mitigate technical rescue incidents. A review of Fiscal Year (FY) 2013 to FY 2017 Distribution (first arriving) baseline total response time data to reported technical rescue incidents revealed that two incidents in FY17 had high 911 call processing times, which inflated the total response times. The review also shows anomalies in the call processing baseline response time data and a few extended travel times that places Moderate, High, and Special Risk Water/Ice Rescues slightly above established FY13 to FY17 baseline response times. It is believed that the cause of these travel time anomalies centers on both minimal data sets and units not checking on scene appropriately. Currently, only two of the tow vehicles for water response have functioning Mobile Data Computers. With limited air time upon arrival at the scene, several units did not status appropriately and on-scene times were later estimated. Adding Mobile Data Computers to the tow vehicle has been identified as a need, and implementation is scheduled to begin prior to the third quarter of FY18.

Logistical support for both the Technical Rescue Team and Swift Water Rescue Team has also increased the efficiency and capabilities for providing technical rescue services. The Technical Rescue Team has placed two new vehicles in service - Technical Rescue 700 and Technical Rescue 700B. This enhancement has decreased the turn out time for the Technical Rescue Team as they no longer are required to load the appropriate POD as was required with the old transport and POD deployment model.

MCFRS has placed in service two new boats during CY2017 (i.e., SW710 and RR730). These boats will replace existing boats that will be utilized as reserve boats. Currently, a replacement schedule of 20 years on boats and 10 years on motors is providing a stop gap measure; however, due to several varied factors (e.g., usage), it is difficult to put hard numbers on a replacement schedule. The water rescue fleet is being evaluated by the

manufacturer (i.e., Demaree Inflatable Boats) which will form the basis for establishing a formal replacement plan prior to the third quarter of FY18.

In addition, per the MCFRS 2016–2022 Master Plan, a daywork Master Firefighter position was added to Special Operations to serve as a full-time Logistics Officer. This position ensures that equipment that is damaged or lost is being repaired or replaced in a timely manner. This position has not only achieved better tracking of assets but will also reduce duplicate equipment purchases while providing a cache of equipment to resupply technical rescue resources².

Plan

Our plan is to continually reevaluate response time benchmark target goals as set forth in the Master Plan and routinely and closely monitor technical rescue response time baseline data statements in an effort to correct erroneous outlier timestamp issues with the goal of reaching the benchmark targets. To assist in meeting this goal, MCFRS will continue with the installation of Mobile Data Computers in all primary tow vehicles that will respond on water rescue events, which should assist with documenting proper on-scene times, and working with the Emergency Communications Center to enhance their processing times to reported technical rescue incidents. In addition, the deployment of the FirstWatch system should be able to help monitor these response time components near real-time, which will also assist with oversight and when needed policy and training enhancements in order to improve response times to these incident types and risks.

Finally, to provide for improved supervision of the Technical Rescue and Swift Water Rescue Teams, MCFRS plans to fund and staff a fulltime Battalion Chief's position to provide oversight and management to both teams² and to fund and staff a full-time captain position to better coordinate and track technical rescue training².

References

- 1 [MCFRS Annual Recert Website Screenshot \(actual site behind firewall\)](#)
- 2 [MCFRS Goals and Objectives 2016-2022 \(Page 21\)](#)

5G.2 The agency establishes minimum training and operational standards; compliant with local, state/provincial, and national standards, and that all personnel who function in the technical rescue program meet training and operational standards.

Description

MCFRS establishes clearly defined minimum training and operational standards for all personnel who function on technical rescue incidents. MCFRS Executive Regulations and Policies and Procedures are in place to address technical rescue responses.

For membership on the Technical Rescue Team or the Swift Water Rescue Team, personnel must complete a position task book. This position task book is used to certify that the person to whom the task book belongs is trained to a specific standard. The position task book is a document that lists the performance requirements, competencies, and behaviors for a specific position within technical rescue. Currently, MCFRS utilizes three position task books for technical rescue response, Technical Rescue Team Task Book², Swift Water Boat Crew Task Book³, and Swift Water Boat Operator Task Book⁴. These task books are used not only for initial training requirements but also for recertification and must be completed initially and every two years thereafter.

The Swift Water Boat Crew Task Book requires personnel to meet both local area familiarization requirements as well as technician level certification in Swift Water Rescue per NFPA 1670. In addition, the Swift Water Boat Crew Task Book also requires members to obtain MCFRS (AHJ) training in ice rescue and helicopter operations. Prior to completing the task book, all members must be active on the MCFRS IECS list, complete the CISM awareness course, complete Hazmat First Responder Operations course, hold current EMT-B or EMT-P certification through MIEMSS, complete IS-100, IS-200, IS-700, and IS-800 online NIMS training and be certified as a MCFRS ambulance driver.

The task book is broken into two sections, drill and test, which must be completed by the prospective member. The drill session includes instruction provided to the student, both didactic and practical skill stations included, that is then signed off for completion. Once all drills have been completed, the prospective member must have a certified Swift Water Boat Operator, or higher, conduct the test for each skill to ensure the student meets the knowledge, skills, and abilities (KSAs) for the position of Swift Water Boat Crew. Once

all drills and tests within the task book are completed, the prospective member must then take a written and practical examination conducted by the Swift Water Rescue Team Training Manager or designee. This final written and practical examination spot checks the retention of the KSAs developed throughout the training cycle. Once the initial task book has been completed, identical recertification skills are documented via a spreadsheet maintained by the Swift Water Rescue Team Training Manager.

The Swift Water Boat Operator Task Book requires personnel to maintain Swift Water Boat Crew status for a minimum of one year prior to being issued a task book. The prospective swift water boat operator must also possess a certification for Safe Boater Operation through the Maryland Department of Natural Resources. Like the Swift Water Boat Crew Task Book, the boat operator task book is broken into two sections, drill and test, which must both be completed by the prospective swift water boat operator. As before, the drill session includes instruction provided to the student who is then tested to ensure the student meets the KSAs for the position of Swift Water Boat operator. A Swift Water Boat Operator, or higher, must conduct the test for each skill. Once all drills and tests within the task book are completed, the prospective boat operator must then take a written and practical examination conducted by the Swift Water Rescue Team Training Manager or designee. This final written and practical examination spot checks the retention of the KSAs developed throughout the training cycle. Once the initial task book has been completed, identical recertification skills are documented via a spreadsheet maintained by the Swift Water Rescue Team Training Manager.

The Technical Rescue Team Task Book differs slightly from the two for the Swift Water Rescue Team in that members receiving a task book must already possess two technician level certifications per NFPA 1670 for team membership covering confined space, trench, rope, and structural collapse rescue. As such, the task book is primarily utilized to track recertification of technician level skills the member currently possesses, not initial skill instruction. The Technical Rescue Team Task Book requires personnel to complete the skills identified during formal Technical Rescue Team training, station drills, or FEMA (MDTF-1) team training for those holding a position on both the Technical Rescue Team and MDTF-1. Skills may only be signed off by approved Technical Rescue Team Officers

or designated Technical Rescue Team or FEMA team instructors. All job performance requirements and minimal skill sets identified for the certification a member holds must be demonstrated every two years for recertification. Once the task book has been completed, the member must submit it to the Technical Rescue Team Training Coordinator for final approval.

In addition to the task books utilized by the Technical Rescue and Swift Water Rescue teams, MCFRS provides two courses of instruction, Surface Water Boat Crew Member and Surface Water Boat Operator, for operations level water resources through the Public Safety Training Academy (PSTA). The Surface Water Boat Crew Member course requires members to have Rescue Technician Site Operations certification as a prerequisite and each student must pass a Basic Swim Ability Evaluation⁵. Didactic and practical skill instruction is conducted to include both day and night operations. The Surface Water Boat Operator course is available for those members who have completed the Surface Water Boat Crew Member course and who have completed the United States Coast Guard or Maryland Department of Natural Resources Safe Boater course⁶. As with the Surface Water Boat Crew Member course, this program provides the student with courses of instruction in both day and night-time operations. The PSTA also offers Confined Space Rescue, Rope Rescue, Trench Rescue, and Swift Water Rescue technician-level courses at least once a year. This ensures that there is consistent depth in trained personnel. Structural Collapse Rescue Technician certification is offered once every two years and utilizes FEMA course requirements and instructors for equivalency.

Appraisal

The adaptation of past processes and subsequent adoption of position-specific task books has dramatically increased the efficiency of tracking the training of prospective members and the recertification process. The multi-step process included in each task book has provided redundancy that ensures each job performance requirement or KSA has been mastered prior to moving to the next skill. The task book concept is not new to public safety; however, it is in its infancy within MCFRS Technical Rescue. MCFRS Special Operations Section developed three task books which cover technician-level skills within the scope of technical rescue. While none of these three are expressly directed at the

management of technical rescue incidents and personnel, management for Technical Rescue and Swift Water Rescue teams have been provided by subject matter experts who have obtained a host of varied training and on the job experience for many years. While current management is very good at what they do, it has been exceptionally difficult for outside agencies to assess. This current management model of on the job experience has provided a stop gap measure now while additional task books focusing on incident and team management are being developed.

The Surface Water Boat Crew Member and Surface Water Boat Operator courses have been recently updated to ensure they meet the needs of MCFRS and provide operations-level job performance requirements that are relevant to the environments in which crews are expected to operate. However, current Executive Regulations and Policy and Procedures reference personnel and positions applicable to these operations that are no longer applicable within MCFRS.

The ability to offer technician level training courses in technical rescue through the PSTA has enhanced the technical rescue capability of MCFRS. Not only do we have instructors and facilities to offer the training, but the instructors are also responding on the incidents. The cost for offering a FEMA-equivalent Structural Collapse Rescue Technician course has prevented annual course offerings; however, cooperation between MCFRS and MDTF-1 affords the opportunity for technical rescue team members to attend a FEMA-equivalent technician level course.

Plan

MCFRS plans to continue working on the development of technical rescue appendices to be included within the Incident Response Policy¹. These appendices will reflect the updated command structure and guidance for responses to all technical rescue incidents. The conversion and inclusion into the Incident Response Policy will provide for updated guidance on response to technical rescue incidents and will eventually replace outdated and no longer applicable Executive Regulations and Policy and Procedures, which the Office of the Fire Chief will weed-out.

MCFRS Special Operations Section will also continue working on development of position-specific task books designed for management positions. Technical Rescue Team Officer, Swift Water Rescue Team Officer, Rescue Squad Officer, and Task Force Leader position task books are examples of management related task books that are in development.

Additionally, the PSTA plans to offer a minimum of four Surface Water Boat Crew Member and Surface Water Boat Operator courses each year to ensure needed depth in trained personnel. Likewise, the PSTA also plans on offering at least one of each of the following technician level courses each year: Confined Space Rescue, Rope Rescue, Trench Rescue, and Swift Water Rescue.

MCFRS, in conjunction with MDTF-1, plans to offer a FEMA-equivalent Structural Collapse Rescue Technician course every other year.

References

- 1 - [Incident Response Policy](#)
- 2 – [TRT Task Book](#)
- 3 – [SWBC Task Book](#)
- 4 – [SWBO Task Book](#)
- 5 - [Surface Water Boat Crew Member Course](#)
- 6 - [Surface Water Boat Operator Course](#)

CC 5G.3 The agency conducts a formal and documented appraisal, at least annually, to determine the effectiveness of the technical rescue program and its impact on meeting the agency's goals and objectives. This appraisal must include a full-scale evaluation of the response components, including mutual aid, when part of the deployment model.

Description

The formal and documented appraisal process for determining MCFRS technical rescue effectiveness is completed using a task book format as well as a MCFRS Formal Appraisal Process template. The Technical Rescue Team and Swift Water Rescue Team both utilize position-specific task books to monitor and track individual training and effectiveness. This individual appraisal is then reviewed by team leadership, typically on a quarterly basis, to determine training priorities for the next training cycle.

MCFRS technical rescue members have also participated in two full-scale scenario based training exercises during this accreditation cycle. The first event, the Capital Shield exercise, was a full-scale, multiple operational period, exercise designed to bring technical rescue resources from multiple jurisdictions and federal agencies together to meet mission objectives. Various rescue scenarios were staged at various locations along the Potomac River and required both water rescue and technical rescue capabilities to mitigate. The Capital Shield exercise forced team members to operate on a 24-hour work/rest cycle and provided for both daytime and night time operations.

The Virginia Rescue Challenge, a four-day training event that pushed rescuers to the limits of technical rescue, was held in the Virginia Beach area. Members participated in two scenario-based events each day which involved confined space, rope, trench, and structural collapse rescue evolutions. These scenarios, designed to be extremely challenging, push rescuers to the far reaches of their ability. This training venue afforded members the opportunity to not only network with other technical rescue teams but also provided training that is unobtainable within our current system.

Appraisal

The FY17 Technical Rescue Program Appraisal for 5G⁴ is provided as a reference which provides a comprehensive appraisal on the effectiveness of the Technical Rescue Program and the program's impact on meeting departmental goals and objectives.

Plan

MCFRS technical rescue plans to continue the use of position-specific task books to track and assess training initiatives for the technical rescue program. We are currently working on the formulation and dedication of managerial positions within the technical rescue section to assist with day-to-day management and quarterly skills evaluation of all members. Position descriptions for the position of Technical Rescue Officer and Swift Water Rescue Officer are in the final stages of development. Once completed, we plan on staffing each technical rescue station with a minimum of one Technical Rescue Officer or Swift Water Officer every day.

Current Special Operations Section initiatives, such as the GPS Operations Program and MCFRS Handheld GPS Use and Conversion Protocol, will be rolled out during FY18. The Special Operations Section also plans to investigate the feasibility of developing and sponsoring a version of the Rescue Challenge with the goal of promoting networking, skill development, and resource collaboration within the State of Maryland.

Additionally, MCFRS plans to fund and staff a full-time Captain's position to better coordinate and track technical rescue training¹. The inclusion of this position will assist in conducting a formal, full-scale appraisal of the MCFRS technical rescue program on an annual basis by having a single point-of-contact for technical rescue training initiatives. This position will also allow MCFRS to better incorporate mutual aid resources into the appraisal process providing a more comprehensive picture of the technical rescue programs capabilities within the County.

References

- 1 – [MCFRS Divisions/Sections Goals and Objections – Updated June 2016 \(page 20\)](#)
- 2 – [Capital Shield Recap](#)
- 3 – [Scenario Example 14-1 Seneca Breaks](#)
- 4 – [FY17 Criterion 5G Formal Appraisal](#)

Category V

Criterion 5H: Hazardous Materials (Hazmat) (Author: Capt. Lancaster)

The agency operates an adequate, effective, efficient, and safe hazardous materials program directed toward protecting the community from the hazards associated with the uncontrolled releases of hazardous and toxic materials. The agency must conduct a thorough risk-analysis as part of activities in Category II to determine the need for specific hazardous materials program. Agencies that only provide first responder services must also complete this criterion.

Summary:

Located in close proximity to our nation's capital and along major transportation corridors, Montgomery County has attracted many businesses which use, store, and dispose of hazardous materials. The ability to respond to hazardous material emergencies has been a priority mission of the Montgomery County Fire and Rescue Service (MCFRS) since 1981.

The department maintains a well-staffed and highly trained HazMat Team consisting of over 80 members assigned to four primary (consolidated) response stations and multiple non-consolidated stations throughout the County sharing multidiscipline response missions, including fire, rescue, EMS, and hazardous materials response within the County. MCFRS is an active member of the Metropolitan Washington Council of Governments (MWCOG) mutual-aid response plan to mutual-aid incidents in surrounding jurisdictions, including hazmat incidents.

MCFRS has been training first-responders to the hazardous materials operations level, or higher, for hazardous materials events since the implementation of 29 CFR 1910.120 (Final Rule) thru the Public Safety Training Academy (PSTA) and continues this training using NFPA 472-approved programs delivered by certified instructors. This has enabled the department to accomplish and maintain 100% compliance with federal regulatory requirements [29 CFR 1910.120(q)] and national consensus standards (NFPA 472) when responding to hazardous materials events.

Currently, HazMat consolidated stations are located strategically throughout the County, and on a daily basis, the HazMat Team maintains a minimum of 13 staff members assigned to these four stations. These stations staff:

- 2 - Hazardous Materials Response Units
- 2 - Hazardous Materials Support Units
- 2 – Paramedic Engines
- 1 - EMS Unit
- 1 - Utility Vehicle.

This complement of staffing allows the HazMat Team to roster the following assets:

- Operations Officer
- Research Officer
- Safety Officer
- Logistics Officer
- Entry Team
- Back-up Team
- Decontamination Officer
- Decontamination Team.

Since the inception of the HazMat Team in 1981, the department has experienced fluctuations in membership (due to personnel transfers, promotions, and retirements) requiring concurrent retention and recruitment programs.

Performance Indicators:

CC 5H.1 Given the agency's standards of cover and emergency deployment objectives, the agency meets its staffing, response time, station(s), apparatus, and equipment deployment objectives for each type and magnitude of hazardous materials incident(s).

Description

MCFRS meets its staffing, response time, apparatus and equipment deployment objectives for hazardous materials incidents with a combination of training and resource deployment models. For a HazMat event, personnel and apparatus are dispatched in a tiered manner based upon information obtained by ECC call-takers. For calls not fitting into the standard criteria, the Emergency Communications Center (ECC) may consult with an on-duty hazardous materials officer assigned to one of the department's hazardous materials response stations (i.e., Fire Stations 7 and 28). The ECC utilizes a hazmat response policy to train and assist with proper deployment of resources.

The majority of responses require a standard response of one HazMat Unit and one HazMat support engine. The HazMat units (HazMat 707 and HazMat 728) can be augmented by additional fire and EMS units based upon the Incident Response Plan.

Major events require a full HazMat box assignment which includes 2 Battalion Chiefs, 5 Engines, 2 Trucks, 1 Rescue Squad, 4 EMS units and a HazMat apparatus response.

The majority of fire-rescue apparatus are equipped with three-gas air monitoring instrumentation, small capacity (1%-3%) foam delivery systems (on engines), and hazardous materials reference materials (DOT Guidebook and NIOSH Pocket Guide).

MCFRS first-responder personnel are trained to a minimum of the Hazardous Materials Operations level as defined by 29 CFR 1910.120 (q)(6)(ii). Hazmat Team personnel are trained to at least the Hazardous Materials Technician level. A Battalion Chief serves as the Hazmat Group Supervisor, and a Captain or Lieutenant serves as the Operations Officer. The MCFRS Hazardous Materials Program adheres to deployment strategies as defined in the department's Standards of Cover document.

Appraisal

Analysis of the performance indicators for the standards of cover, objectives, staffing, and response times for each type and magnitude of a hazardous materials incident shows moderate program efficiency with some outlying anomalies. A review of fiscal year (FY) 2017 concentration total response time for metropolitan densities in the HazMat Special Risk program type appears at first glance to exceed the five-year established baseline parameters for effective response force total response. It is believed that this anomaly is a result of responding units not providing accurate arrival data, such as forgetting to status appropriately, which attributed to skewed data. Additionally, distribution data showed that first-arriving unit totals were close to desired response time objectives. Where some of the variance in response time data may be attributed to human error as identified previously, it does leave room for improvement.

Compliance with this performance indicator has been satisfied by a combination of resource distribution and minimum staffing standards. In addition, and specifically related to staffing objectives, the two primary hazardous materials stations (Stations 7 and 28), located in the southern and central areas of the County, respectively, have been enhanced by the additional daily minimum hazmat technician staffing placed at Stations 20 and 25, located in the southern and eastern areas of the County, respectively.

Plan

MCFRS will continue to monitor the effectiveness of Hazmat operations in relation to resource deployment and Hazmat Team-related departmental objectives. Any identified problems or deficiencies will be addressed through the department's chain of command and/or budgetary process. Additionally, guidelines on response time requirements in conjunction with new technology are expected to reduce the variation seen in First-Arriving Unit response time data.

References

Standards of Cover Section-Service Delivery and Response Time Continuum (CC2C.5)
[Emergency Communications Center Hazmat Response Team Policy](#)

5H.2 The agency maintains appropriate training, operations policies, and documentation that response personnel are compliant with all applicable hazardous materials regulations and laws.

Description

MCFRS ensures all HazMat Team members receive initial training to include a Maryland Fire-Rescue Institute (MFRI) 62-hour NFPA 472-compliant Hazardous Materials Technician and MCFRS 18-hour Hazardous Materials training prior to being considered part of minimum staffing at any HazMat station. An additional MFRI 16-hour Hazardous Materials Incident Command course and MCFRS 16-hour Hazardous Materials Officer course, which includes scenario and practical exercise and evaluation, is required for all Hazardous Materials Officers. To expand upon this initial training, the HazMat Team has three dedicated training days each month to ensure the knowledge, skills, and abilities of each team member meet the standards set forth in HazMat Team training and operational standard operating guidelines.

The HazMat Team maintains, and frequently evaluates the effectiveness of, internal standard operation guidelines. As no two incidents are the same, these guidelines are designed to ensure consistent practices are maintained regarding training, operations, and team management ensuring compliance with all local, State, and federal hazardous materials laws and regulations.

Appraisal

Appraisal of HazMat Team training, operations policies, and documentation procedures finds that the practices utilized by HazMat Team meet or exceed the minimum local, State, and federal regulations and laws for hazardous materials. The MCFRS HazMat Standard Operating Guidelines, 2014 edition, have provided clear direction for response procedures, personal protective equipment, and notification procedures to be utilized during incidents involving hazardous materials. These guidelines mirror NFPA 472, SARA Title III, and Maryland Department of the Environment (MDE) Title 26, and place all requirements in one location for ease of reference.

HazMat Team members attend three dedicated training sessions, one per shift, each month that run between 8-10 hours for each session. Where participation in monthly training varies due to several factors such as leave usage, Kelly days, and call volume, analysis of the FY17 training data indicates that a minimum of 45 members attended training each month. HazMat Team members have also completed their annual task books verifying each member has displayed an acceptable level of knowledge, skills, and abilities to function in their assigned position.

Plan

For each year during the upcoming accreditation cycle, MCFRS plans to continue delivering a minimum of one MFRI 62-hour Hazardous Materials Technician course, including an additional 18 hours of MCFRS Hazardous Materials-specific training, MFRI 16-hour Hazardous Materials Incident Command course, and MCFRS Hazardous Materials Officer course. Inclusion of these courses in the training plan ensures staffing levels consisting of both certified and experienced HazMat Team members for the future.

Additionally, MCFRS plans to continue the review and development of operational procedures for both the HazMat Team and Incident Response Plan. The Hazardous Materials Response Appendix to the Incident Response Plan, presently in its final stages of review, will be implemented within the next accreditation cycle.

References

[MCFRS HAZMAT Standard Operating Guidelines 2014 Edition](#)

- CC 5H.3 The agency conducts a **formal and documented appraisal, at least annually**, to determine the effectiveness of the hazardous materials program and its impact on meeting the agency's goals and objectives. This appraisal must include a comprehensive evaluation of the response components, including mutual aid, when part of the deployment model.

Description

Under the direction of the Special Operations Chief and his designee, a Battalion Chief is assigned as the HazMat Program Manager. Under his leadership, the team's focus is the safe and effective mitigation of hazardous materials-related incidents.

In addition to its primary focus, the team's performance is also based upon the achievement of specific goals and objectives of which some are listed below:

- To develop and finalize a cohesive plan for Rapid Intervention practices during hazardous materials events.
- Achieve better coordination and tracking of team training by funding a fulltime Captain's position to serve as Special Operations Training Officer.

Although the MCFRS HazMat Team must maintain compliance with NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, the team leadership also establishes goals to enhance its efficiency by which they are appraised periodically. MCFRS utilizes industry and consensus standards as an evaluative tool to determine the effectiveness of its HazMat Program. Furthermore, the Special Operations Chief, the HazMat Program Manager, and the HazMat Team Leader have the direct responsibility to ensure that the team complies with local, State and national standards as well as MCFRS policy and guidelines.

Appraisal

The MCFRS HazMat Team has utilized NFPA 472 as the basis of a self-evaluation to appraise the HazMat program periodically. The MCFRS HazMat Team has established goals and objectives that are used to help determine the effectiveness of the program.

Goals that have been met within this appraisal period include:

- Finalization and implementation of the Preventative Radiological Nuclear Detection policy for HazMat Team members.
- Inclusion of M908 Mass Spectrometers on Hazardous Materials Response Units.
- Equipping 2 Hazardous Materials Response Units with the Firescope Type 1 minimum inventory.

MCFRS participates in the Metropolitan Washington Council of Governments (MWCOG) mutual aid agreement and as such, automatically calls for needed automatic and/or mutual aid hazmat resources when MCFRS resources are not available or if additional capabilities are needed. This has been a seamless and successful framework with regional fire-rescue agencies and has provided MCFRS with the closest hazmat resources when needed during the appraisal period.

Also during this appraisal period since the last self-assessment, MCFRS granularly defined what constitutes low, moderate, high, and special risk hazardous materials incidents and has since developed sophisticated first arriving unit and ERF crystal reports to measure its performance at the 90th percentile. In addition, new reports have been designed to report incident counts to measure hazmat call load countywide, by density zone, and risk management zones. These response time data reports have been included in the 2018 Community Risk Assessment: Standards of Cover (CRA/SOC) manual. In addition and within the CRA/SOC, are MCFRS hazmat program baseline and benchmark target statements and critical task analysis worksheets for each level of hazmat risk. The development of these has helped validate the effectiveness of the hazmat program and assure the program has met MCFRS' goals and objectives.

One challenge has been determining when unit outlier timestamps, which cause over-inflated ERF times, are the result of units not being properly statused on-scene in the CAD system. It has been learned that too many person-hours are needed to listened to fireground audio to determine if and when appropriate unit(s) arrive. It has also been determined that one erroneous outlier inflates perceived negative performance with small

datasets and the criticality of assuring accurate timestamps exist to conduct an accurate programmatic appraisal.

Plan

MCFRS will continue to expand its efforts in improving the current standardized appraisal process utilized periodically to determine program effectiveness. MCFRS will continue to enhance the use of the “dashboard” system as a programmatic evaluative tool.

The Special Operations Section will continue to enhance data collection and analysis to assure the new formal appraisal process continues to get better and is utilized to compare trending between fiscal years and define service gaps so solutions can be implemented.

MCFRS will develop during FY19 First Watch first arriving and ERF automated notification triggers when established baselines are exceeded so a quick investigation can transpire to determine the reason for the outlier timestamp(s).

References

[FY17 Hazardous Materials Training and Responses Dashboard](#)

[Hazardous Materials Technician Task Book](#)

[Hazardous Materials Officer Task Book](#)

[FY17 Hazmat Program Formal Appraisal](#)

[CRA/SOC Methodology for Identifying, Assessing, Categorizing Risks Section CC 2B.1](#)

[CRA/SOC Service Delivery Total Response Time Continuum Section CC 2C.5 \(scroll to hazmat programs\)](#)

5H.4 The agency complies with all aspects of applicable hazardous material regulations such as, annual refresher training, medical monitoring of response personnel, annual physical examinations as applicable per standards, and exposure record retention.

Description

MCFRS has implemented a Standards-Based Annual Training and Evaluation Program for all MCFRS Hazardous Materials Technicians, ensuring they are trained to and meet all current federal and regulatory guidelines.

All MCFRS personnel are required to pass an annual physical examination, including an annual fit test, in accordance with all applicable NFPA and OSHA standards. Based on these regulations and standards, Hazardous Materials Technicians assigned to the HazMat Team are also subject to additional annual testing and monitoring, including heavy metal testing.

The MCFRS Safety Section, in coordination with the MCFRS Fire-Rescue Occupational Medical Section, have in place a robust exposure reporting, management, monitoring, and record storage system.

Appraisal

A standards-based training appraisal is conducted using position specific task books which are reviewed monthly for completion and progress. The Hazardous Materials Officer is responsible for verifying this completion and documenting any additional training completed by team members. Toward the end of the fiscal year, the Hazardous Materials Battalion Chief reviewed each member's task book to ensure completion.

The annual physical examination, annual fit test, and heavy metals testing have been conducted by MCFRS Fire-Rescue Occupational Medical Services (FROMS). The annual fit test is conducted at FROMS during each member's physical assessment by trained and certified staff. Standard blood tests and additional heavy metals screening are conducted at

FROMS several weeks prior to the member's scheduled annual physical. This has allowed the results to be returned, reviewed by the physician, and communicated to the member at the time of the physical examination.

Plan

MCFRS plans to continue compliance with all aspects of local, State and federal hazardous materials regulations. Passing of the annual physical examination, annual fit test, and heavy metals screening by all Hazardous Materials Team members will continue. Likewise, the use of position-specific task books will be the primary means of evaluating and documenting standards-based annual skills recertification. MCFRS also plans to staff a fulltime Captain's position within Special Operations to assist in tracking and scheduling training for Hazardous Materials Team members.

References

[Hazardous Materials Technician Task Book](#)

[Hazardous Materials Officer Task Book](#)

[MCFRS Division/Section Goals and Objectives](#) (page 20)

Category V

Criterion 5I: Aviation Rescue and Fire Fighting Services (Author: D/C Kinsley)

The agency operates an adequate, effective, efficient, and safe program directed toward an aviation accident or incident occurring at or in the immediate area.

This criterion report should be completed by agencies that have direct responsibility for operating programs that provide aircraft crash/rescue protection on airfields or that have identified an aircraft emergency in the immediate area as a highly probable hazard in Category II to determine the need for specific aviation rescue and firefighting services program. Simply because aircraft fly over the jurisdiction is not reason enough to require this criterion be completed.

If it determines this criterion is not applicable, the agency should still provide a brief explanation of why it does not provide this program.

Summary:

Risk involving aircraft traveling above Montgomery County and making landings and take-offs in the County is ever present. The risk is greatest at and near the two airports located in the County, but also present at several private airstrips and heliports located throughout the County. The two main airports include the Montgomery County Airport and the Davis Airport. The Montgomery County Airport, located off Woodfield Road in Gaithersburg, is a regional airport with a 4,200-foot, paved, single runway airstrip and handles approximately 51,000 flights annually of single engine planes, twin-engine planes and jets, and helicopters, but not commercial airliners. The airport operates 24-hours a day, and makes available on-site refueling, a full range of maintenance services, multiple enclosed hangar aircraft parking, and exterior tie-down/parking. The Davis Airport, located off Route 108 near Hawkins Creamery Road in Laytonsville, is a 2,000-foot, paved, single runway airstrip which operates only during daylight hours and handles a small volume of single-engine planes. It makes available on-site refueling, minor maintenance services, and mostly exterior tie-down/parking for aircraft. There are also three private airstrips located on large-acreage, rural properties in Comus, Boyds and Brookeville. Heliports are located at several hospitals, corporate properties and on private

properties. There is also a State Police heliport near Sandy Spring and a heliport at a federal facility located near Laytonsville.

Portions of Montgomery County are located in the flight paths of large commercial airliners departing and arriving at Reagan National Airport, Dulles International Airport and Baltimore Washington International Airport, plus military aircraft departing and arriving at Andrews Air Force Base. These airliners often carry over 100 passengers and/or thousands of pounds of cargo, plus thousands of gallons of fuel, creating the potential for a catastrophic incident if one of these aircraft were to crash. Historically, aviation-related incidents in Montgomery County have typically occurred at or in close vicinity of the Montgomery County Airport, and less frequently at or near the Davis Airport.

MCFRS responded to only one aviation incident (at the Davis Airport) during FY17, but typically responds to approximately two aviation incidents annually. While most aviation incidents involve aircraft running off runways without significant injuries and damage, there have been several major incidents involving crashes and casualties. The most recent incident involved a single-engine plane which crashed shortly after takeoff from the Davis Airport, killing the pilot. A historically tragic incident occurred on December 8, 2014 about one mile north of Montgomery County Airport where a twin-engine, 12-passenger corporate jet crashed into a residential area upon approach to the runway, setting two houses on fire and damaging others upon impact. All three persons aboard the jet plus three residents were killed. Other aviation incidents involving casualties and property damage have occurred at or in the vicinity of the Montgomery County Airport and Davis Airport as well. These incidents illustrate that low probability, high-consequence (i.e., special risk) aviation incidents have occurred in the County and similar incidents involving casualties and property damage can be anticipated in the future. Station 17's and Station 28's first-due areas have been determined to present "special" aviation risk due to the presence of the Davis Airport and the Montgomery County Airport, respectively.

Performance Indicators:

CC 5I.1 Given its standards of cover and emergency deployment objectives, the agency meets its staffing, response time, station(s), extinguishing agent requirements, apparatus, and equipment deployment objectives for each type and magnitude of aviation incident.

Description

As a result of the 2013 self-assessment, MCFRS developed Policy 24-09 *Response to Aircraft Emergencies* for purposes of establishing a standard mitigation procedure and safety guidelines for the use of MCFRS personnel, equipment and apparatus when they respond for aircraft rescue and firefighting emergencies in Montgomery County.

The Montgomery County Fire and Rescue Service (MCFRS) has established Benchmark performance objectives for Aviation Rescue and Fire Fighting Services in both the High Risk (ARF-HR) and Special Risk (ARF-SR) zones for First Arriving Unit Total Response Time and Effective Response Force Total Response Time.

		Metro	Urban	Suburban	Rural
ARF-HR	First Arriving Unit	11:30	11:45	12:30	13:45
	Effective Response Force	22:00	24:00	28:00	33:00
ARF-SR	First Arriving Unit	11:30	11:45	12:30	13:45
	Effective Response Force	24:00	26:00	30:00	36:00

MCFRS used the International Academy of Emergency Dispatch (IAED) Fire Priority Dispatch System (FPDS) version 6.1 for all fire dispatch call-taking and call-type determination. FPDS Card 51 Aircraft Emergencies is used in its entirety as prescribed by the IAED. All Charlie and Delta-level call types point to either a HM2 or HM3 hazardous materials response to provide adequate staffing, apparatus, equipment and extinguishing agent requirements to meet Policy 24-09. Additionally, due to limited foam capacity from MCFRS structural firefighting class apparatus, requests for mutual aid response from ARF fire departments at nearby national and international airports would bring in specialized fire suppression equipment and apparatus.

51 Card

- D1 Aircraft crash on land
- D2 Aircraft crash involving building/structure
- D3 Aircraft fire/recovery on ground
- D5 Inland water aircraft emergency
- C1 Aircraft incoming – full emergency
- C2 Aircraft incoming – minor emergency

HM2 Response Assignment

3 ENGINES, 1 TRUCK, 1 SQUAD, 2 EMS, 2 ALS, 1 HAZMAT, 1 HM SUPPORT

HM3 Response Assignment

5 ENGINES, 2 TRUCKS, 1 SQUAD, 2 EMS, 2 ALS, 2 HAZMATs, 2 HM SUPPORTS, 2 BCs

Appraisal

In FY2017, MCFRS dispatched and responded to only one incident for Aircraft Rescue and Fire Fighting services. Incident #16-0120670 on September 29, 2016 for the 51D1S Small Aircraft Crash on Land in the 23900 block of Laytonsville Road, near the Davis Airport. The incident was dispatched using the HM3 response plan, per the MCFRS Incident Type and Response Plan tables. The first-arriving unit was on the scene in 7 minutes 41 seconds total response time (Phone to On-Scene). The Effective Response Force was on the scene in 23 minutes and 53 seconds (Phone to On-Scene). This was in the Aviation Fire/Rescue - Special Risk response zone.

Since there are so few incidents for Aircraft and Fire Fighting Services each year, the 90% fractile First-Arriving Unit and Effective Response Force total response times are compared with other events that carry the same HM3 response plan. The response times for the single incident in FY17 were significantly faster than those baseline HM3 for FY17 and faster still than the benchmark for ARF-SR.

		51 Card HM3	Benchmark - Rural	All HM3
ARF-HR	First Arriving Unit	n/a	13:45	11:46
	Effective Response Force	n/a	33:00	35:08
ARF-SR	First Arriving Unit	7:41	13:45	11:57
	Effective Response Force	23:53	36:00	23:53

Plan

MCFRS will continue to collect total response time data for the First-Arriving Unit and Effective Response Force for Aircraft Rescue and Fire Fighting services. With the very low occurrence of aircraft emergencies, MCFRS will continue to evaluate those occurrences singularly against established benchmarks and baselines, as well as comparatively with other HM3 response plan incidents.

References

[2017 Annual Compliance Report](#)

[IAED Fire Priority Dispatch System v6.1](#)

[MCFRS Incident Type and Response Plans](#)

[MCFRS Policy 24-09 Response for Aircraft Emergencies](#)

[MCFRS Benchmarks for First-Arriving Unit](#)

[MCFRS Benchmarks for Effective Response Force](#)

CC 5I.2 The agency conducts a formal and documented appraisal, at least annually, that includes an analysis of response procedures, equipment, training, and after action reports to determine the effectiveness of the aviation rescue and firefighting services program and meeting the agency's goals and objectives.

Description

MCFRS Policy 24-09 *Response for Aircraft Emergencies* is the guiding doctrine for all response procedures pertaining to Aircraft Rescue and Fire Fighting (ARF) services in Montgomery County. This policy was developed after the 2013 Accreditation process identified the deficiency in Category V, Criterion I performance indicator.

Appraisal

The formal, documented, annual program appraisal of Aircraft Rescue and Fire Fighting Services can be found at the link listed below under References. This is the first such appraisal conducted by the MCFRS Operations Division. The limitations for this appraisal are twofold. First, the occurrence of aircraft emergencies in Montgomery County is very low, approximately one or two per year. While the occurrence is low, the risk for large loss of life and property destruction is extremely high in these types of emergencies. The exposure of fire-rescue personnel and command staff is extremely limited because of this. Secondly, MCFRS has limited resources and has not prioritized ARF resources, such as dedicated and specialized ARF equipment and apparatus, in annual strategic plans or budgets.

The program appraisal validates that the occurrences of ARF incidents for FY2017 are consistently low, with only one such occurrence during the year. While total response times for First-Arriving Unit and Effective Response Force exceeded established benchmarks, the nature of aircraft emergencies often precludes survivability of the occupants of the involved aircraft and victims on the ground.

The Significant Incident Report for the FY2017 airplane crash validated that a rapid response aids in location of the incident scene when not on a run-way or airport proper

and that MCFRS personnel, equipment, apparatus and training are adequate for rapid confinement and extinguishment of the resulting fire from a small airplane crash.

Plan

At regular intervals, all MCFRS Policies are reviewed and updated. MCFRS Policy 24-09, *Response for Aircraft Emergencies*, should be updated to reflect lessons learned from After-Action Reports (AARs) over the next few years for any ARF incidents that occur. The new AAR process, as described in the Incident Response Policy, Appendix T, *After Action Reporting*, should be used as the template for all future reports, specifically using the Enhance AAR as described under Section 5 (i).

Further revisions to the Response for Aircraft Emergencies should incorporate applicable NFPA standards for training, equipment and response procedures.

References

[5I Program Appraisal FY2017](#)

[Incident Response Policy Appendix T After Action Reporting](#)

[MCFRS Policy 24-09 Response for Aircraft Emergencies](#)

[Post Incident Analysis – Drop Forge Lane Fatal Plane Crash](#)

[Significant Incident Report – 23900 Block of Laytonsville Road Plane Crash](#)

Category V

Criterion 5K: Wildland Fire Services (Author: A/C Reid)

The agency operates an adequate, effective, and efficient program directed toward a wildland fire.

This criterion report applies to agencies that have direct responsibility for operating programs that provide wildland firefighting. The agency should address this criterion if there is an identified wildland risk in the risk-assessment commensurate with Category II, and/or if there are apparatus in service which directly support wildland fire services, which may include suppression, mitigation, and educational components.

If the agency determines this criterion is not applicable, the agency should still provide a brief explanation of why it does not provide this program.

Summary:

Montgomery County Fire and Rescue Service (MCFRS) operates an adequate and effective program aimed toward containing and extinguishing various types of wildland and interface fires within the County. MCFRS is the first-responder for wildland fires and is dedicated in providing the highest quality service consistent with our mission statement. MCFRS is often supplemented by response from the Maryland Forest Service, especially if wildland fires involve state lands.

The department's Incident Response Policy (IRP) instructs and governs agency members on all firefighting operations excluding wildland-urban interface firefighting. The IRP, however, provides general direction on which to base decisions concerning incident priorities (i.e., life, incident stabilization and property conservation) and helps to ensure consistency in the services across the five battalions. For incident operations, management and accountability of personnel and resources, the agency follows the principals set forth by the National Incident Management System (NIMS).

The effectiveness of the agency is performed through an analysis from its fire reporting systems, and required Post-Incident Reviews.

Performance Indicators:

CC 5K.1 Given its standards of cover and emergency deployment objectives, the agency meets its staffing, response time, station(s), apparatus, and equipment deployment objectives for each type and magnitude of wildland fire services incident.

Description

MCFRS has a fleet of firefighting resources including 35 engines (all but 2 are 4-person staffing) meeting NFPA 1901 Pumper Classifications, 4 brush engines meeting NFPA 1901 Pumper Classification, 12 brush trucks and 8 tankers/tenders (3,000 gallons or more each). These resources are not officially typed with any recognized resource management system (e.g. National Wildfire Coordinating Group).

Appraisal

The MCFRS staffing plans have been mostly effective. With few exceptions, minimum staffing (3 personnel) is met for all primary firefighting resources (Engines, Trucks and Rescue Squads). 33 of the 35 engine companies have 4-person staffing. Tankers and Brush Trucks are cross-staffed by other apparatus assigned to the station. Current staffing plans; however, only require a tanker driver in stations that house a tanker. There is no station staffing requirement for a brush truck driver; however, if a brush truck does respond, the standard staffing is two (2) and the minimum staffing is driver only.

The local volunteer fire-rescue corporations purchase brush trucks based on local needs. MCFRS has minimum specification standards for heavy apparatus (engines, trucks, and rescue squads). Other than approving the chassis for DOT, safety requirements, and general capabilities to perform the task, the agency does not have minimum standards for equipment, tools, or appliances for brush trucks.

The deployment model has been effective to deal with the primary intermix type of wildland incidents found in Montgomery County.

Plan

MCFRS will develop a Wildland Workgroup (WW) to address the following:

Coordinate with the Maryland Forest Service to develop a standard inventory, including tools, appliances, and adapters for all brush trucks

Review the process for brush truck specifications and develop a standard for capabilities and reinforce a standard for tools, appliances, and adapters.

Develop a robust driver/operator program for wildland firefighting apparatus.

Develop an Incident Response Policy addressing brush and wildland-urban interface fires.

References

[MCFRS Operations Staffing Plan](#)

[Apparatus Staffing Policy](#)

[Apparatus Maintenance Policy](#)

CC 5K.2 The agency conducts a formal and documented appraisal, at least annually, to determine the effectiveness of the wildland fire services program, to include suppression, mitigation, educational activities, and its impact on meeting the agency's goals and objectives.

Description

The MCFRS Operations Division has recently adopted a formal and annual appraisal for all operational programs. The MCFRS wildland and urban interface fire program is in its infancy and FY2017 represents the first formal appraisal of this program. Some examples of program inputs and results/outcomes of this appraisal included the process of documenting program personnel, facilities (if applicable), apparatus/equipment, SOP(s) and protocols, training and certifications, key accomplishments and long and short-term goals being met. In addition, the process includes reviewing applicable After-Action Reviews (AARs) to determine strengths and/or weaknesses in the program along with recommendations on how to enhance service delivery and efficiencies to these incident types.

Appraisal

The MCFRS Wildland Fire Services program has been initiated as a direct result of this Criterion. Other than reviewing significant wildland/urban wildfire interface AARs, a formal appraisal was never conducted. As a result of the CFAI model and specifically the 9th edition FESSAM mandates, MCFRS Operational leadership has now mandated that a wildland and urban wildfire interface program exist and its program manager conduct an annual appraisal utilizing the MCFRS program appraisal template.

Plan

The Wildland Workgroup (WW) will review public education policies and develop a program to incorporate Wildland Urban Interface home inspections with our existing Safety in Our Neighborhood® program.

MCFRS will use aerial photos, GIS data, and ground inspections to identify structures and other resources at risk – categorizing risks by low, medium, high or possibly special.

References

[MCFRS Programs Annual Appraisal Template](#)

[Department of Natural Resources – Wildland Fire in Maryland](#)

5K.3 The agency has developed a wildland risk assessment including: a fuel management plan, fire adaptive communities plan, and an inspection and code enforcement program.

Description

MCFRS has not developed any type of assessment or plan addressing wildland fire.

Appraisal

29 percent, or 93,000 acres, of Montgomery County is covered by forest. In addition, several thousand acres of agricultural reserve contain farmland that may contribute to the wildland fuel load. The agency is in the process of analyzing and mapping data to conduct a future risk assessment and incorporate programs to address wildland-urban interface issues.

The Maryland Forest Service and the National Park Service are responsible for State lands and National Parks, respectively, within Montgomery County. MCFRS provides first response to fires within these areas.

The Maryland Department of Natural Resources (DNR) Forest Service has been the lead agency on educating Maryland residents on Wildfire, including “Firewise Maryland,” a wildland-urban interface outreach, education and planning program; however, MCFRS does not “drive” this process in a proactive manner.

Plan

While there have been informal discussions with these State and Federal Government agencies, we intend to galvanize these relationships to share data and resources. MCFRS will coordinate with the Maryland DNR Forest Service to develop a risk assessment and to educate residents on wildland interface fire.

References

[Maryland-National Capital Park and Planning Commission – Montgomery County – Forest Conservation and Trees](#)

[Maryland-National Capital Park and Planning Commission – Montgomery County – Forest Conservation and Trees - - Conservation Easements](#)

[“Firewise Maryland”](#)

CC 5K.4 The agency conducts or participates in a wildland fire training and certification/qualification program that meets wildland fire services operational needs and complies with local, state/provincial, and national/international standards.

Description

MCFRS requires firefighters to meet Maryland State minimum requirements based on NFPA 1001: *Standard for Fire Fighter Professional Qualifications*.

Appraisal

Firefighting personnel responding to wildland fires are trained to the Firefighter I and Firefighter II level based on NFPA 1001: *Standard for Fire Fighter Professional Qualifications*. Students receive 3½ hours of classroom training in wildland fire but no practical work. At the current time, MFRI does not have a practical portion for Lesson 3-2 of FFI. NIMS ICS 100 and ICS 700 are also required.

Brush truck drivers are required to complete additional training in wildland firefighting and wildland fire behavior based on the National Wildfire Coordinating Group S-130/S-190 courses. The additional training is a minimal, self-paced assignment and is not the full course. A practical exam in the operation of the vehicle is also required based on NFPA 1002: *Standard for Fire Apparatus Driver/Operator Professional Qualifications*.

Fire Officers responding to wildland fires are required to complete Fire Officer I or Fire Officer II based on *NFPA 1021: Standard for Fire Officer Professional Qualifications*. NIMS ICS 100, 200 and 700 are also required.

MCFRS can assemble a local Type 4 Incident Management Team within one hour if there is a need. If the Regional Type 3 Team is requested, an advanced team can be on scene within two hours, and a short Type 3 team can be on site within three hours.

Plan

MCFRS will confirm performance criteria for the Firefighter I level (NFPA 1001 Compliance). Per the standard, three skill sets are required [5.3.19(A)(B)(C)] involving ground fire attack, backpack pump, and the use of hand tools to construct a fire line.

MCFRS will develop an internal website that will host training materials, videos, best practices and educational media for the department regarding wildland fires.

The MCFRS Wildland Workgroup will evaluate wildland training needs of structural firefighters and consider additional requirements, such as S-130, Firefighter Training (Blended) and S-190, Introduction to Wildland Fire Behavior (on-line).

The MCFRS Wildland Workgroup, in consultation with the Maryland DNR Forest Service, will review the practice of falling trees during wildland incidents. Any process, safety considerations or additional training requirements will be added to the Wildland Incident Response Plan

The MCFRS Wildland Workgroup will review the need for refresher training.

References

[Driver Certification Policy](#)

Category V

Criterion 5L: Urban Search and Rescue Program (Author: Program Mngr. Stojinski)

The agency operates an adequate, effective, efficient, and safe program directed toward urban search and rescue (US&R) incident(s).

Established in 1985, the Montgomery County Collapse Rescue Team (CRT) was initially tasked with studying the incidence of technical rescue in Montgomery County. With the aging building infrastructure, overwhelming building growth and potential for collapses in and around the County, the CRT came to the conclusion that an organized effort was needed to respond to potential technical rescue scenarios. Additional concerns included potential terrorist attacks, man-made or natural disasters, weather-related events such as hurricanes, floods, tornadoes, and other unforeseen disasters.

Since 1985, the CRT has evolved into a team of highly trained and specialized firefighters, paramedics, and civilian specialists such as physicians, engineers and canine handlers. This team known now as Maryland Task Force One (MD-TF1) was reorganized into part of a federally sponsored program that responds to disasters both nationally and internationally. As part of this program, the team purchased a vast complement of specialized rescue, medical, communications and logistical support equipment to support the team during these missions.

As a locally sponsored team, MD-TF1 responds to various regional incidents that require specialized technical rescue. These incidents may include, but are not limited to, building collapse, trench rescue, mass casualty incidents (MCI), extended search operations, and other incidents that may require specially trained personnel and equipment. On a national level, the team is prepared and often responds to incidents as a federally sponsored program and tagged as a Federal Emergency Management Agency (FEMA) asset as part of the National Emergency Response System Program.

Performance Indicators:

CC 5L.1 Given its standards of cover and emergency deployment objectives, the agency meets its staffing, response time, station(s), apparatus, and equipment deployment objectives for each type and magnitude of US&R incident.

Description

The National Response Framework is a guide to how the Nation conducts all-hazards response. It is built upon scalable, flexible, and adaptable coordinating structures to align key roles and responsibilities across the Nation. It describes specific authorities and best practices for managing incidents that range from the serious but purely local, to large-scale terrorist attacks or catastrophic natural disasters.

Emergency support functions (ESFs) provide the structure for coordinating Federal interagency support for a Federal response to an incident. They are mechanisms for grouping functions most frequently used to provide Federal support to States and Federal-to-Federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents.

The ESFs serve as the primary operational-level mechanism to provide assistance in functional areas such as transportation, communications, public works and engineering, firefighting, mass care, housing, human services, public health and medical services, search and rescue, agriculture and natural resources, and energy.

MD-TF1 is funded through a FEMA cooperative agreement as opposed to a grant. An important point in a cooperative agreement is that the grantor (FEMA) has extensive programmatic involvement. That said, deployment objectives are dictated by FEMA. FEMA does not provide a single document that identifies what or how the MCFRS US&R Team operates. The National Response System Operations Manual is an overview of the entire system. This document is one place to locate the general response time goals of 4 hours for ground travel and 6 hours for air travel. Each activation order states the exact time you must be ready and the number of personnel allowed to deploy. FEMA issues

Program Directives and General Memorandums to communicate other policies and guidance.

Appraisal

The MCFRS Urban Search and Rescue Team, MD-TF1, has met all of its staffing objectives for deployment over the past five years since MCFRS was last awarded accreditation status. MD-TF1's level of readiness is reflected in its 2017 Administrative Readiness Evaluation (referenced below).

Plan

MCFRS will continue to evaluate its need to improve the efficiencies of its Urban Search and Rescue Program in the area of resource deployment.

References

[2017 Administrative Readiness Evaluation](#)

CC 5L.2 The agency conducts a formal and documented appraisal, at least annually, that includes an analysis of response procedures, equipment, training, and after action reports to determine the effectiveness of the US&R program and meeting the agency's goals and objectives.

Description

As with the other 28 federal Urban Search and Rescue Task Forces, MD-TF1 participates in a program of rotating Administrative Readiness Evaluations (ARE). This evaluation is conducted by selected peer representatives from the other 28 teams. The evaluators conduct a full evaluation of the team's administrative process to include but not limited to personnel training records, logistical management, cache management, team deployment process and fiscal management of team operating funds.

To aid in this evaluation, the team utilizes a Program Appraisal Template to identify shortfalls and outline accomplishments. The template documents items such as personnel assigned to the team, qualified personnel, management of the vehicle fleet, program accomplishments, long term team goals, and documentation of administrative and deployment procedures manuals.

In 2000, FEMA supplied all 28 Urban Search and Rescue (US&R) Task Forces within the National Emergency Response System with a complete cache of equipment that was deemed necessary by the Logistics Working Group. The national Logistics Working Group meets twice per year to update and maintain the cache list of necessary items, and the update-related equipment is purchased by the team with budgeted grant funds. The initial supply of equipment also included rolling stock vehicles to move the equipment which, for MD-TF1, included 2 tractor trailers and 1 box truck. Since the last CFAI accreditation in 2013, MD-TF1 has acquired additional mission support vehicles. A complete listing of the vehicle fleet is shown in the "Program Appraisal Template for FESSAM Category 5", section 5, pages 2 and 3. The team hired a warehouse manager and assistant to assist with the purchase and maintenance of all cache equipment to include the vehicle fleet.

Appraisal

MD-TF1 maintained the current cache and updated the cache with needed items using grant funds. The team is currently at 97% of the current cache list as identified by the last Operational Readiness Evaluation (ORE) with the other 2-3% being large items that are in the procurement process and will be on hand within the calendar year.

Post-deployment analysis has been/is accomplished by gathering post-deployment information regarding how the team's incident response and operation can be improved and enhanced. In addition to post-incident analysis through after-action response, each member is asked to provide feedback in the form of an after-action survey for post-training opportunities. This information is compiled into a formal After-Action Report (AAR) that is reviewed by team management and FEMA leadership.

MCFRS US&R Team management coordinates a self-annual appraisal of personnel training records, response processes, and overall cache management to improve team response processes utilizing the Program Appraisal Template. In addition to the annual process, the team's quarterly training opportunities provide additional opportunities for overall team improvement. This self-evaluation is above the normal FEMA evaluation process. It allows team management to stay apprised of evaluation criteria and possible shortfalls to be corrected prior to the formal evaluations.

Plan

MCFRS will continue to maintain its current cache of equipment as identified by FEMA and anticipate the purchase of other related items through the procurement process.

References

[2017 Administrative Readiness Evaluation](#)

[2017 MD TF-1 Logistics Annex Readiness Assessment Program](#)

[2017 MD TF-1 Management Annex Readiness Assessment Program](#)

[2017 MD TF-1 Operations Annex Readiness Assessment Program](#)

Category VI: Physical Resources

Physical resources are defined as fire stations, training facilities, fire apparatus, and other capital expenditures and outlays that make up the property assets of an agency. Special attention is required to obtain and maintain appropriate quality physical resources.

Facilities that are leased and/or jointly operated may also be considered for agency use if this is accomplished in accordance with properly adopted and clearly established policies.

If work is contracted outside the agency and/or to another department within the parent agency, it is incumbent on the agency to ensure that facilities, equipment, staff, record keeping, and procedures are consistent with the performance indicators and core competencies listed herein.

Criterion 6A: Physical Resources Plan (Author: Manager Evans)

Development and use of physical resources is consistent with the agency's established plans. A systematic and planned approach to the future development of facilities is in place.

Summary:

MCFRS is mandated and conforms to a Montgomery County well-established process for building, remodeling, renovating and/or adding new facilities. Utilizing a Capital Improvement Program (CIP), individual department projects are introduced, planned, and then funded. This process allows the department to add new stations in growing or underserved areas of the County, as well as upgrade existing stations where needed. The need is justified and articulated within the approved *2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan*.

Performance Indicators:

6A.1 The development, construction, or purchase of physical resources is consistent with the agency's goals and strategic plan.

Description

MCFRS follows its Master Plan when developing, constructing, or purchasing physical resources with County and taxpayer monies. The plan is well researched, well thought out, and has been adopted and approved by the County Council for the department's use in directing its physical resource efforts. As the County grows and various new community master plans and sector plans are developed, the impact on the fire department is reviewed and required changes are incorporated into the facility planning effort.

For new stations, the County is purchasing available land within the targeted growth areas in accordance with the applicable community master plan or sector plan. MCFRS is designing and building new stations which reduce gaps in existing response coverage. Three such stations are currently in development.

Existing stations are being monitored for signs of aging building systems in accordance with maintenance costs and are updated under a capital improvement plan on an annual basis, a few stations at a time.

Appraisal

Recent evidence of how well this is working cites the planning performed for a new, five-bay station to accommodate actual construction and ongoing expansion of the White Flint area. Based upon the White Flint Sector Plan which spelled out the area's expansion and its anticipated needs, the County Executive moved up the planning and construction of the fire station (i.e., relocation of Station 23) to get it online before too much more development brings thousands of more people to the area. This proactive response has been repeated in the expansion or planning of other stations, too, in recent years.

Over the past decade, the County has completed and brought on line a total of five new fire-rescue stations. Three reduced gaps in coverage while the remaining two stations increased capacity for their coverage areas by modernizing their physical structure through a complete renovation.

Plan

MCFRS will assure that its Planner and other staff members are partners engaged with other County agencies whenever the facility needs of the department may be involved. We will continue to remain aware of the plans and efforts being made by other agencies so that our support capabilities and required standards are not overlooked, set aside or jeopardized by others with no working knowledge of fire department-related concerns.

References

[2016-2022 Fire, Rescue, EMS and Community Risk Reduction Master Plan Appendix H](#)

[FY2018 MCFRS Strategic Plan \(page 18\)](#)

CC 6A.2 The governing body, administration, and staff are involved in the planning for physical facilities.

Description

Whether it is a renovation or a new station, MCFRS has a staff team that acts as a department liaison from the inception of design through the one year, warranty walk through. The team consists of a Capital Projects Manager, assisted by a station commander, several IT and related systems representatives and any other specialty staff that may be required.

For instance, the exercise room is laid out in accordance with the fire-rescue personnel who buy and service the equipment because they know best how the room should be designed and what will be going into it. Likewise, IT, telecommunications, station alerting, radio and other staff experts will determine the needed size, location and equipment for the consolidated IT room. As equipment changes, so do the layouts recommended by the in-house representatives which avoids a "cookie cutter" mentality, since every site, and sometimes station missions, aren't always the same as before.

Because capital projects have been funded by the County and represent a considerable outlay of funds, a team consisting of architects and engineers have provided the professional management in conjunction with MCFRS technical experts. The new stations have averaged gross square footage (GSF) of 20,000 and have cost approximately 8-12 million dollars each to design and construct.

Appraisal

The planning practice has worked very well in that it has allowed the MCFRS facilities team to direct the efforts of the engineers, architects, and contractors.

This collaborative process has resulted in several recent award-winning capital improvement facilities projects that have confirmed the collaborative planning framework of MCFRS is a design for success. Two examples are the completion of the 69-million-dollar state-of-the-art Public Safety Training Academy and the opening of the new 23,000 GSF Fire Station 18 in the Wheaton/Glenmont area of the County.

Plan

MCFRS will continue to incorporate 1) lessons learned from past projects, 2) best practices learned from using our new or renovated properties, and 3) emerging trends learned at conferences, such as the Fire Station Design Conference and the Fire Industry Education Resource Organization (F.I.E.R.O); thus, ensuring that we are providing the best and safest facilities to our emergency services providers.

References

[F.I.E.R.O. Conference](#)

[Local DMV.com online article regarding new Fire Station 18](#)

[2017 F.I.E.R.O Conference MCFRS Attendee Registration](#)

[2017 October MCFRS Organizational Chart](#) (see pages 1 and 4)

Criterion 6B: Fixed Facilities (Author: Manager Evans)

The agency designs, maintains, and manages fixed facility resources that meet the agency's goals and objectives.

Summary:

Montgomery County Fire and Rescue Service (MCFRS) has in place an apparatus, equipment and facilities plan that has been identified in the 2016-2022 *Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan*, funded through the Capital Improvement Budget, and implemented, in part, through the Department of General Services (DGS). The Office of Management and Budget (OMB) evaluates requests for all capital projects and makes recommendations to the County Executive on whether to include such requests in the Capital Improvements Program.

The Master Plan lays out the need for facilities throughout the County and establishes the basis for all Capital Improvement Program (CIP) requests from the Fire Chief to the County's Office of Management and Budget.

The project must then be accepted into the CIP program via a facility planning study process. This study gathers information from the requesting department about the type of facility envisioned, consolidates it into a Program of Requirements (POR) format which allows it to compete for acceptance as a standalone project in the formal CIP. MCFRS ushers this process along for each of its projects by way of a liaison team which represents MCFRS interests along the way.

Once built, added onto or rehabbed, these fire department facilities are maintained by the Facilities Section, whose objective is to oversee the properties' management and maintenance.

Performance Indicators:

6B.1 Each function or program has adequate facilities and storage space. (e.g., operations, community risk reduction, training, support services, and administration).

Description

MCFRS operates from 48 different worksites, 37 of which are fire-rescue stations, while the remaining 11 worksites provide the other support and administrative functions of the department. All MCFRS senior administration is centralized at the Public Safety Headquarters (PSHQ) building shared with police, emergency management and the Department of Transportation (DOT). This configuration of strictly office space allows for greater policy influence, internal communications and process integration within the department and across divisions and sections.

Core mission operations occur from 14 County-owned and 23 Volunteer-owned fire-rescue stations located throughout the County. The newest three stations, built in the last five years, are approximately 22,000-26,000 GSF each and provide for both present needs and expansion of personnel and equipment for another ten or more years.

Rather than taking up valuable station space, other supportive services are located at leased, satellite spaces which are sized for the needs of a particular section or service, i.e., Logistics Warehouse, Maintenance Shop, Emergency Communications Center, Health Services and Community Services.

The PSTA is now housed in a new, state-of-the-art facility that is shared with County law enforcement agencies. This full-service training facility, completed in 2016, occupies 46 acres that includes an academic building with various classrooms and training rooms, an Emergency Medical Technician (EMT) and paramedic training facility, a simulation area, gymnasium, indoor firing range, office spaces, locker rooms, graphics and video development area, canine facility, an Emergency Vehicle Operations Center (EVOC), driver training classes and simulation room, a driver training skid pad and skill pad, a driver training track, Cityscape, and a fire safety training building.

Appraisal

Over the past five years, new stations have been built with four, 20 x 92 Square Foot (SF) apparatus bays. These stations accommodate frontline apparatus as well as some reserve equipment and apparatus. To further accommodate the needs of modern firefighting, these stations also have provided separate spaces for all activity not related to living quarters, i.e., Gear storage, SCBA, maintenance shop, EMS storage, a second laundry room and outdoor equipment storage.

There have been storage space challenges at older and smaller stations. Those being expanded and upgraded have provided opportunities for increased storage and equipment space. Still, these smaller stations have been set up to serve the department with the same operational requirements as the larger ones, within less space and in tighter quarters.

Plan

MCFRS is in the process of revisiting the Program of Requirements (POR) template and will finish incorporating “lessons learned” in the latest version of the POR. The plan is to include the Station Commander, a Battalion representative, and IT specialist on all design and construction teams to ensure the needs of the department are fully met.

Whenever possible, spaces in older stations, like maintenance bays, which will no longer serve a past use, will be repurposed to compensate for newer requirements.

References

[FS18 Opening Ceremony Handout](#)

[PSTA Opening Ceremony Handout](#)

[Fire Station 18 Floor Plan](#)

6B.2 Buildings and outbuildings are clean and in good repair, and the surrounding grounds are well kept. Maintenance is conducted in a systematic and planned manner.

Description

Maintenance of all MCFRS facilities is split between two entities – a small, in-house Facilities Maintenance Section and a large, County Facilities Maintenance Section. Each of these Facilities Sections has established procedures for providing the many needed maintenance services. As with most jurisdictions, the two sections are underfunded and must prioritize providing basic services over concentrating on aesthetic upgrades.

Annual operating funds allow for only general preventative and critical corrective maintenance. Outside contractors and vendors, with over three hundred County buildings to service, aren't always able to devote the amount of time to the fire stations as in the past when the local volunteer departments hired their own dedicated firms.

For the most part, actual cleaning is handled by the career and volunteer staffs with cleaning materials which are supplied by the County. The buildings themselves are in reasonably good repair and there is a work order system in place which allows career and volunteer staff to bring up, point out and address maintenance issues that arise.

All properties have a contractor doing the landscaping and lawn maintenance on the surrounding grounds. The grounds are reasonably well maintained.

Appraisal

Both sections have successfully used a work order system to receive, prioritize and act upon most casual maintenance requests. The Computerized Maintenance Management Systems (CMMS) allow maintenance work to be categorized, tracked and reported. To better facilitate follow up, MCFRS has published a memo detailing the steps to take if maintenance issues are not being addressed.

Preventative maintenance on major building components and equipment, such as boilers, elevators, vehicle exhaust systems and backflow prevention, etc., has been standardized

via a formal contract system administered by the County to outside vendors. Services such as snow removal and mowing have also been handled successfully this way.

Capital repairs and improvements to major systems have been successfully handled under a revolving Capital Improvements Project Fund administered by the County. Both repairs and replacements to roofs, paved surfaces, emergency generators, HVAC, electrical and life safety systems have been/are included in this program. Stations are prioritized by need, and two to four stations per year have these projects completed.

To maximize efforts, in January 2017, the two facilities sections began monthly meetings to discuss problems and potential fixes and to share responsibilities wherever possible. This has allowed certain maintenance tasks to be shared and has eased the strain on the two budgets.

Plan

Continuation of monthly meetings between the MCFRS Facilities Maintenance Section and the County's Facilities Maintenance Section will allow certain maintenance tasks to be shared and will ease the strain on the two budgets during FY2018. Mutual agreement on the "Scope of Work" portion of all new service contracts will enable each Section to address issues and include items which are not always the same, since fire department needs are often different from those of other departments handled by the County.

The department will be adding a sectional door preventative maintenance program starting in 2018. Work on three stations will begin in May 2018.

References

[Montgomery County Online Facilities Maintenance Request Form example \(behind firewall\)](#)

[Station Management Policy 15-01](#)

[Info Bulletin 2014-10](#)

CC 6B.3 Facilities comply with federal, state/provincial, and local codes and regulations at the time of construction, required upgrades for safety are identified, and where resources allow, addressed. For those items that warrant further attention, a plan for implementation is identified in the agency's long term capital improvement plan (i.e. fire alarm systems, sprinkler system, seismic, vehicle exhaust system, asbestos abatement, etc.).

Description

MCFRS, when planning and constructing new facilities or undertaking significant building improvements, complies with all federal, state, and local codes, laws, and regulations. These building codes are succinctly outlined within the Montgomery County Department of Permitting Services (DPS) website. MCFRS will not occupy any facility without maintaining an approved occupancy permit acknowledging all applicable compliances. Initiatives are guided by MCFRS' 2016-2022 Master Plan and subsequent Strategic Plans. Monies are allocated via the Montgomery County Capital Budget and Improvements Program.

MCFRS uses a combination of internal and external resources to ensure that it is providing a safe and secure work environment for its uniformed and civilian staff. Internally, the Facilities Section works with the Safety Office to focus on identifying safety issues/conditions. The process relies on effective communication with each Station Commander to identify corrective maintenance measures needed. The County Fire Marshal (Department of Permitting Services) also conducts inspections on sprinkler systems, life safety systems and general fire safety conditions.

Externally, the Facilities Section partners with our insurance company to identify and manage risks by inspecting all properties annually. The Section also relies on annual inspections by State and County agencies to identify problems and to ensure compliance for fuel tanks, storm water management equipment, elevators, and generators.

Appraisal

Initiatives completed successfully over the last several years have included:

- Completion of 10 new life safety system installations. [Replacement of these systems at all stations will be completed in 2019.]
- Completion of 8 new emergency generators capable of supplying power to the entire building for 72 hours. [Replacement of generators at all stations will be completed in 2019.]
- Removal of underground storage tanks (USTs) at three stations. Replacement of USTs with aboveground storage tanks and the installation of new fueling equipment at all station having fueling sites has occurred over time and will be completed in Fall 2018.

Asbestos abatement was addressed in the late 1990s under a Capital Program. Since then, spot abatement has occurred, as necessary, during remodeling projects. Work on vehicle exhaust systems has fallen under a preventative maintenance program.

All outside agencies have supplied the MCFRS Facilities Section with inspection reports which detail deficiencies and the required correction activities. Correction items then become scheduled maintenance activities.

Plan

The MCFRS Facilities Section plans to begin a preliminary condition assessment study for all major systems and equipment beginning in 2018. This will be done in-house. In addition, MCFRS will continue to abide by all federal, state, and local codes, laws, and regulations when constructing new facilities or undertaking any major facility renovations.

References

[FY17 Approved Capital Budget and FY17-22 Capital Improvements Program](#) (see PDF page 22 / paper page 9)

[Montgomery County Department of Permitting Services Website](#)

[FY17 Strategic Plan](#) (pages 17 – 19)

Criterion 6C: Apparatus and Vehicles (Author: Manager Lamphier)

Apparatus resources are designed, purchased, and maintained to adequately meet the agency's goals and objectives.

Summary:

County-owned apparatus is designed by committees specific to breed, i.e. EMS units, tractor-drawn aerials, brush engines, etc. The committees are representative of the work force, career and volunteer as well as Fleet management staff, with management oversight. Fleet Unit staff of the MCFRS Logistics Section also review and approve specifications for Local Fire Rescue Department (LFRD)-funded replacements.

As apparatus is constructed, the committees work with Fleet Unit staff to ensure that the construction meets specifications; and then performs a final inspection. The Fleet Unit staff also assists the LFRDs with guidance and inspections.

Apparatus resources are funded as either new services, i.e. an ALS chase car; a County-funded replacement schedule; or LFRD-funded replacements. New services are determined via the MCFRS master planning process, followed by inclusion in the operating/capital budget processes.

Apparatus are adequately maintained by a staff in the Fleet Unit of the Logistics Section. The Fleet Unit is overseen by a Fleet Operations Manager and a Fleet Support Manager.

Performance Indicators:

CC 6C.1 Apparatus types are appropriate for the functions served (e.g., operations, staff support services, specialized services, and administration).

Description

The MCFRS fleet consists of over 400 County-owned and Local Fire Rescue Department (LFRD)-owned vehicles. These vehicles are generally designed by appropriate committees and overseen by Fleet Unit staff within the Logistics Section. These vehicles include engines, tankers, aerials, rescue squads, EMS units, command vehicles, special purpose vehicles, and support vehicles.

The apparatus types are generally directed by the Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan (Master Plan). In some incidences, the Fire Chief may approve an apparatus type that has a unique function, but not specifically referenced in the Master Plan.

Apparatus are designed to meet the needs of the designated function, including personnel capacity and inventory, and meet applicable NFPA requirements at time of manufacture.

Appraisal

Prior to FY15, MCFRS vehicle replacements had fallen behind a desired replacement schedule, due to overall county priorities. Significant replacement apparatus was last funded in FY06. Since that time, several EMS units (FY10 and FY14), two tractor-drawn aerial ladder trucks (FY14), and several replacement vehicles acquired by the Local Fire and Rescue Departments were acquired,

The Montgomery County Council approved an Apparatus Replacement Program for FY15-20, and then again for FY17-22. The Montgomery County Council’s Public Safety Committee has recommended to the full Council continued funding through FY24.

When funding has been available, MCFRS vehicles have been replaced, generally within the recommendations of NFPA 1901, Annex D.

Plan

Overseen by the Fleet Unit staff, committees will continue to refine vehicles, as well as inventories, consistent with the vehicles' mission. This is dependent on adequate funding.

References

[2016-2022 Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan](#) (see Section 5, 5-6)

[NFPA 1901 Annex D \(copy-write protected\)](#)

[MCFRS Policy & Procedure 03-08AM, Acquisition of Fire and Rescue Apparatus](#)

[Recommended Capital Improvement Program, Apparatus Replacement Program, P451504, FY19-24](#)

6C.2 A current replacement schedule exists for all apparatus and support vehicles based on current federal and state/provincial recognized standards, vehicle condition, department needs, and requirements.

Description

A replacement schedule, currently funded for FY17-22 via the County's Capital Improvements Program (CIP), exists. This schedule generally allows for most County-owned/County-funded EMS units and heavy apparatus to be replaced on an adequate basis via the recommendations of NFPA 1901, Annex D. Light-duty vehicles are replaced by the County when funding permits, based upon age, mileage, and life repair costs or replaced by the LFRDs.

Appraisal

The County's CIP, Apparatus Replacement Program, has been funded for FY17-22. The LFRDs have continued to fund certain vehicle replacements through EMS transport billing funds (EMST), the Maryland State Senator Amoss grants, and/or private funds.

While replacement funding is not optimal, the currently approved funding is steady over the next six years, and generally meets the needs of the department. Continual biennial review of the Apparatus Replacement Program will be required so as to ensure the most current needs of the department are met.

Plan

The County's CIP budgetary process for the FY19-24 period is ongoing. Final approval for that FY19-24 period will occur in May 2018.

LFRD-funded requests for replacement vehicles will continue as needed with funding approved through the designated EMST and Amoss processes and specifications reviewed and approved by the Fleet Unit staff.

References

[NFPA 1901 Annex D \(copy-write protected\)](#)

[Recommended Capital Improvements Program, Apparatus Replacement Project, FY19-24](#)

[Capital Improvements Program, Apparatus Replacement Project, FY17-22](#)

6C.3 A process is in place for writing apparatus replacement specifications that allows for employee input.

Description

County-owned apparatus is designed by committees specific to breed, i.e. EMS units, tractor-drawn aerials, brush engines, etc. The committees are representative of the work force, career and volunteer as well as fleet management staff, with management oversight. Fleet Unit staff review and approve the specifications for LFRD-funded replacements.

As apparatus is constructed, the committees work with Fleet Unit staff to ensure that the construction meets specifications; and then performs a final inspection. The Fleet Unit staff assists the LFRDs with guidance and inspections.

Appraisal

Generally, this process has worked well. However, a 2000+ career and volunteer workforce has made it difficult to address functions unique to a particular station; although, career and volunteer committee representatives gathered input from as many stakeholders as possible. For example, the requirements of a rural station are sometimes different from the requirements of an urban station, but because of large workforce, a standard design is provided to both types of stations, while equipping rural stations, for example, with other apparatus unique to the needs of those stations.

Plan

Fire and Rescue Commission Policy & Procedure 03-08AM, Acquisition of Fire and Rescue Apparatus, requires several updates as it was developed in 2007, at the time when the current MCFRS structure was still in its infancy. This will be a FY18 project.

As new apparatus is specified, the stakeholders will continue to provide input as required by the specified policy and procedure.

References

[MCFRS Policy & Procedure 03-08AM, Acquisition of Fire and Rescue Apparatus](#)

Criterion 6D: Apparatus Maintenance (Author: Manager Lamphier)

The inspection, testing, preventive maintenance, replacement schedule, and emergency repair of all apparatus are well established and meet the emergency apparatus service and reliability needs.

Summary:

The MCFRS apparatus maintenance program manages all inspections, testing, preventative maintenance, and repair of all apparatus to ensure that frontline and reserve apparatus are ready for emergency response.

Such activities meet or exceed State of Maryland, Original Equipment Manufacturer (OEM) requirements/recommendations and NFPA 1911 requirements.

Performance Indicators:

CC 6D.1 An apparatus maintenance program is established. Apparatus maintenance, preventative maintenance, inspection, testing, and emergency repair is conducted by trained and certified technicians in accordance with the manufacturer’s recommendations, and federal and/or state/provincial regulations. Attention is given to the safety, health, and security aspects of equipment operation and maintenance.

Description

The MCFRS apparatus maintenance program includes inspections, testing, preventative maintenance, and repair of all apparatus to ensure that frontline and reserve apparatus are ready for emergency response. Such activities meet or exceed State of Maryland, Original Equipment Manufacturer (OEM) requirements/recommendations, and NFPA 1911 requirements.

Inspection, testing, preventative maintenance, and repairs are being conducted by:

- Internally – Emergency Vehicle Maintenance Technicians, supervised by Emergency Vehicle Maintenance Crew Chiefs. The latter position must be a Master Emergency Vehicle Technician as defined by the Emergency Vehicle Technician Certification Commission.
- Externally – A variety of contractors that are certified by the OEM to perform such work. In addition, a “third party” tester is utilized for aerial device testing.

Appraisal

Generally, the MCFRS has performed these tasks well with the most common apparatus, i.e. light-duty vehicles, EMS units, and engines. There have been infrequent occurrences; however, where tankers, aerial ladders, rescue squads, and/or heavy support vehicles have required complex repairs, or unscheduled repairs, where enough reserve apparatus are not available to meet the “daily count”. When this occurs, repairs are then prioritized based on MCFRS needs and the Duty Operations Chief is regularly updated as to repair status. The number of these occurrences has not been measured.

In 2016, a Fleet Operations Manager, with extensive general fleet and fire department fleet experience, was hired. This position has continued to refine the overall fleet inspection, maintenance, and repair operation.

For FY17, the stations reported 7,696 apparatus defects; 1864 work orders were opened; 1866 work orders were closed; 226 preventative maintenance inspections, 154 “A” PMs, 71 “B” PMs, and 23 “C” PMs were completed.

In addition, the training and certification requirements for the emergency vehicle maintenance personnel have been arduous, and filling mechanic-type technician vacancies has been difficult.

The current fleet management system, FASTER, is managed by another County agency with a focus on Federal Transit Administration requirements for transit buses. As such, many of the scheduling and tracking functions that would normally be automated, as well as reporting functions, have been handled manually, by FRS staff.

Plan

Currently funded replacement of new apparatus throughout the FY15-22 period will assist with introducing new apparatus to the fleet; thus, reducing the number of older apparatus as well as providing additional reserve apparatus for tankers, aerial ladders, and rescue squads.

Ongoing training for the emergency vehicle maintenance personnel will continue to be offered to allow these positions to continue advancing with certifications.

The Logistics Section will endeavor to replace the current fleet management software within the next several years in order to better manage the fleet.

References

[Capital Improvements Program, Apparatus Replacement Project, FY17-22](#)

NFPA 1911, Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles, copyright protected, see Fleet Support Manager

[Montgomery County Office of Human Resources Job Classes \(scroll down to Emergency Vehicle...\)](#)

[Example of a FASTER work order, defect list, preventative maintenance inspection report, and PM task list](#)

[Example of an aerial test schedule](#)

[Example of an aerial test with certification](#)

6D.2 The maintenance and repair facility is provided with sufficient space and equipped with appropriate tools.

Description

The Central Maintenance Facility (CMF) allows for effective and efficient maintenance and repair of approximately 60% of the MCFRS fleet. The facility is well spaced in terms of vehicle length and height and is well equipped with lifts, specialty tools, fluid distribution capabilities, etc.

The remaining 40% of the fleet is sent to authorized contractors for maintenance and repair.

Appraisal

The current repair facility was opened in 2009 and replaced antiquated repair facilities located in fire stations and/or contractors. The repair facility has greatly enhanced MCFRS' ability to maintain and repair apparatus.

The facility was not intended to have the space, equipment, and personnel to maintain and repair 100% of the fleet. Since the Fleet Operations Manager started in 2016, he has worked to increase efficiencies using a variety of models, and these models have been continually tweaked.

Plan

The MCFRS will continue to evaluate the available physical space to make best use of it for an efficient and effective maintenance and repair operation.

The MCFRS will continue to evaluate tools and equipment to enhance the maintenance and repair operation.

References

[Fire and Rescue Apparatus Management Plan](#)

6D.3 An adequate number of trained and certified maintenance personnel are available to meet the program needs.

Description

The MCFRS fleet operations authorized staff consists of a Fleet Operations Manager, an Equipment Services Coordinator, five Emergency Vehicle Maintenance Crew Chiefs (EVMCC), twelve Emergency Vehicle Maintenance Technicians (EVMT), and two Supply Technicians (parts).

With the exception of the Fleet Operations Manager and the Supply Technicians, all positions are required to meet the requirements of the EVMT position classification as determined by the County’s Office of Human Resources. The position classifications include requirements set forth by the Emergency Vehicle Technician Certification Commission.

Appraisal

The MCFRS continues to have both not enough authorized positions as well as continuing vacancies for emergency vehicle maintenance personnel.

The MCFRS utilizes a number of vendors that perform general and vocational maintenance and repairs to subsidize the lack of authorized positions and/or vacancies. Vendors also have performed specialty tasks, i.e. suspension, heavy engine, transmission, tires, and body work.

There are challenges, even utilizing vendors, in meeting daily customer needs.

The MCFRS has not adequately justified its need for additional emergency vehicle maintenance personnel on a quantitative basis.

The vacancies have been very difficult to fill for a variety of factors, i.e. minimum technical competencies and work experience requirements, and low comparative salaries. In 2015, the EVMTs and EVMCCs were reclassified to higher grades with a commensurate salary increase.

There have been minimal formal training programs for the EVMTs to be certified in certain EVT certifications. Not having formal training programs available has been a deterrent in advancement for several of the EVMTs.

Plan

The Fleet Operations Manager has been on board for over a year now and has learned the operation. A quantitative analysis will be performed to determine how many additional positions are required as well as how those positions can be utilized within the current physical space.

Training opportunities will be provided to the EVMTs as those training opportunities are available and are effective for the advancement of the EVMTs and the maintenance and repair of fire apparatus.

References

[Emergency Vehicle Technician Certification Tracks Website](#)

6D.4 The level of supervision is adequate to manage the program.

Description

Emergency Vehicle Maintenance Technicians (EVMT) are supervised by Emergency Vehicle Maintenance Crew Chiefs (EVMCC) on an approximate 3:1 ratio. The EVMCCs are supervised by the Equipment Services Coordinator. Finally, the overall maintenance and repair program is supervised by the Fleet Operations Manager.

EVMCCs are required to maintain the Master Fire Apparatus Technician level of the EVTCC.

Appraisal

The level of supervision, 1:3 ratio, has been adequate to manage the program with the current number of authorized positions. Based on management experience, this ratio falls within an acceptable span of control. There is one EVMCC vacancy.

In addition to daily supervision, the EVMCCs serve as mentors to the EVMTs, as well as perform advanced diagnostic tasks.

Plan

Fill the current EVMCC vacancy in FY19 (or before). If the number of authorized positions increases, then the supervision levels will be evaluated to determine the need for additional supervisory positions.

References

[Emergency Vehicle Technician Certification Commission Tracks](#)

6D.5 The reserve vehicle fleet is adequate or a documented contingency plan is in place for the event that apparatus must be taken out of service.

Description

The MCFRS has a robust reserve fleet for light-duty vehicles, EMS units, and engines. The MCFRS does not have a robust reserve fleet for tankers, aerial ladder trucks, rescue squads, and certain heavy support vehicles. There is an established “down staffing” plan that is followed by the Division of Operations when there is not enough functional apparatus to fulfill the minimum count.

Appraisal

The current reserve fleet has been adequate for light-duty vehicles, EMS units, and engines. The current reserve fleet has been inadequate for tankers, aerial ladder trucks, rescue squads, and certain heavy support vehicles. However, the number of incidences where an inadequate reserve fleet exists have not been measured.

Plan

As replacement fire apparatus is received, the reserve fleet will continue to be evaluated for reduction or expansion as needed.

Measure incidences of the reserve fleet being inadequate to justify an expansion of the reserve fleet.

References

[Down-staffing plan example \(aerials\)](#)

CC 6D.6 The inspection, testing, preventive maintenance, replacement schedule, and emergency repair of all apparatus is well established and meets the emergency apparatus service and reliability of the agency.

Description

The MCFRS endeavors to conduct inspections, testing, preventative maintenance, and repair of all apparatus to ensure that frontline apparatus are ready for emergency response. Such activities meet or exceed State of Maryland, OEM requirements/recommendations, and NFPA 1911 requirements.

Appraisal

Generally, the MCFRS performs these tasks well with the most common apparatus, i.e. light-duty vehicles, EMS units, and engines. There have been occasions when tankers, aerial ladders, rescue squads, and/or heavy support vehicles have required complex repairs, or unscheduled repairs, where enough reserve apparatus has not been available. These repairs are then prioritized in coordination with the Duty Operations Chief (Division of Operations)

Each Emergency Vehicle Maintenance Crew Chief (EVMCC) is assigned a portion of the fleet for the purposes of scheduling regular maintenance and managing unscheduled repairs. The Equipment Services Coordinator manages the scheduling of aerial ladder testing.

A process has been established to open a work order in the FASTER fleet management system, incorporate all known defects reported by the station into the work order, include a preventative maintenance (PM) inspection report, and follow a task list for PM service as applicable.

Plan

The inspection, maintenance, and repair process will continue to be evaluated and refined as necessary.

Currently funded replacement of new apparatus throughout the FY15-22 period will assist with introducing new apparatus to the fleet; thus, reducing the number of older apparatus

as well as providing additional reserve apparatus for tankers, aerial ladders, and rescue squads.

References

[Capital Improvements Program, Apparatus Replacement Project, FY17-22](#)

NFPA 1911, Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles, copyright protected, see Fleet Support Manager

[Example of a FASTER work order, defect list, preventative maintenance inspection report, and PM task list](#)

[Example of an aerial test schedule](#)

[Example of an aerial test with certification](#)

Criterion 6E: Tools and Small Equipment (Author: Manager Lamphier)

Equipment and supplies are adequate and designed to meet the agencies goals and objectives.

Summary:

Hose, equipment, appliances, and tools (HEAT) are adequately provided for all frontline EMS units, heavy apparatus, and special purpose vehicles. Each type of vehicle has a standardized inventory, developed by stakeholders to meet operational needs, and exceed the requirements of NFPA 1901 (where applicable).

The Fleet Support Unit (FSU) of the Logistics Section maintains contracts with a variety of HEAT vendors. In addition, the FSU maintains a stock inventory of HEAT items that require replacement due to operational damage or loss.

The FSU continues to build upon the County's Oracle ERP Inventory module.

Performance Indicators:

6E.1 Tools and equipment are distributed appropriately, are in sufficient quantities, and meet the operational needs of the specific functional area or program (e.g., fire suppression, community risk reduction, investigations, hazmat, etc.).

Description

Hose, equipment, appliances, and tools (HEAT) are adequately provided for all frontline EMS units, heavy apparatus, and special purpose vehicles. Each type of vehicle has a standardized inventory, developed by stakeholders to meet operational needs. At a minimum, the inventory exceeds the requirements of NFPA 1901, where applicable. Where NFPA 1901 is not applicable, inventories meet or exceed fire service best practices, i.e. for BLS and ALS care, hazardous material mitigation, and technical rescue, as directed by other work units of the MCFRS.

Appraisal

The Fleet Support Unit (FSU) of the Logistics Section has been adequately funded to meet the criteria. Funding has allowed timely repair or replacement of damaged or lost HEAT. An online defect reporting system has been developed for all personnel to advise the FSU of individual HEAT issues. The system has allowed FSU personnel to address a significant portion of HEAT issues in a timely and efficient manner. EMS and Special Operations Equipment is managed in cooperation with other work units of the MCFRS.

Plan

FSU will continue its service delivery to its customers in a timely and efficient manner. FSU will continue to coordinate evaluation of existing HEAT as well as new technology as it relates to fire suppression. Both activities will continue to ensure that primary apparatus is adequately equipped to meet operational needs while considering the implementation of improved HEAT.

References

[Fleet Management \(HEAT Defect\) Reporting System](#) (screenshot – behind the firewall)

[Fleet Management \(HEAT Defect\) Reporting System](#)

6E.2 Tools and equipment replacement is scheduled, budgeted, implemented, and is adequate to meet the agency's needs.

Description

Hose, equipment, appliances, and tools (HEAT) are adequately provided for primary EMS units, heavy apparatus, and special purpose vehicles. Operating budget funding is adequate and, through 6/30/18, all replacement vehicles receive new HEAT, including those replacement vehicles owned by the LFRDs.

Appraisal

The Fleet Support Unit (FSU) of the Logistics Section has been adequately funded to meet the criteria. Funding has allowed timely repair or replacement of damaged or lost HEAT. An online defect reporting system has been developed for all personnel to advise the FSU of individual HEAT issues. The system has allowed FSU personnel to address a significant portion of HEAT issues in a timely and efficient manner.

Plan

As long as adequate funding remains available, it is intended that HEAT will continue to be acquired and replaced. There will be a specific focus for FY19 for lifelines (rope) and hose replacement.

References

[Capital Improvements Program, Apparatus Replacement Project, FY17-22](#)

[2008 Crimson engine inventory/check sheet](#)

[2007 Pierce aerial tower inventory/check sheet](#)

CC 6E.3 Equipment maintenance, testing, and inspections are conducted by qualified personnel, following manufacturer's recommended schedules.

Description

HEAT items are maintained, inspected, and tested by qualified personnel.

- Ground ladders are tested by a 3rd party on an annual basis per NFPA 1932.
- Hose testing is conducted by station personnel utilizing professional hose testing equipment on an annual basis per NFPA 1962.
- Vehicle extrication tools are maintained by qualified vendors, with a minimum of an annual preventative maintenance per the manufacturer's recommendations.
- Thermal imagers are maintained by qualified vendors.
- Gasoline-powered tools are maintained by in-house technicians.
- Cots and stair chairs are maintained by qualified vendors, with a minimum of an annual preventative maintenance per the manufacturer's recommendations.
- Other HEAT items are maintained appropriately, either by qualified in-house personnel or vendors.

Appraisal

The FSU has generally exceeded with maintenance, testing, and inspection of HEAT items. This has been a program area that has been well established and has minimal customer issues. Improvements are needed with tracking HEAT maintenance and repairs as this is a paper-based system. Hose testing records are decentralized at the station level.

Plan

Continue to ensure that required inspection and testing is performed and ensure a robust maintenance program for HEAT and move to an electronic tracking system for most HEAT repairs and maintenance

For FY19, an online hose record database is to be implemented. In addition, over this time period, paper records will transition to a searchable format.

References

NFPA 1932, Standard on Use, Maintenance, and Service Testing of In-Service Fire Department Ground Ladders, copyright protected, see Fleet Support Manager

[Example of in-service ground ladder test report](#)

NFPA 1962, Standard for the Care, Use, Inspection, Service Testing, and Replacement of Fire Hose, Couplings, Nozzles, and Fire Hose Appliances, copyright protected, see Fleet Support Manager

Hose test records are decentralized at the station level.

Invoices for maintenance and repairs to other HEAT are available for inspection at the FSU.

[Example of a HEAT work order](#)

6E.4 An inventory control and maintenance tracking system is in place and current.

Description

The individual fire stations are responsible for ensuring that each frontline vehicle is correctly inventoried. Deficiencies are reported via an on-line defect reporting system. The FSU utilizes a module of the County’s Oracle ERP system for inventory control. Manual systems are in place for tracking other maintenance functions.

Appraisal

The on-line defect reporting system has worked well, allowing stations to report deficiencies. These deficiencies are rapidly acknowledged and generally addressed within a business day. The Oracle ERP inventory module is not fully accurate yet, primarily due to several personnel changes while in its implementation.

The manual systems for tracking other maintenance functions need to be automated so that multiple personnel can easily track maintenance and repairs.

Plan

For FY19, the Oracle ERP inventory module will continue to be refined and automated documentation will be developed to track maintenance and repairs.

References

[Example Oracle ERP inventory report:](#)

[2008 Crimson engine inventory/check sheet](#)

[2007 Pierce aerial tower inventory/check sheet](#)

6E.5 Supplies and materials allocation is based on established objectives and appropriate to meet the operational needs of the specific functional area or program (e.g., fire suppression, community risk reduction, investigations, hazmat, etc.), and is compliant with local, state/provincial, and national standards.

Description

Supplies and materials allocation is established by the many work units of the MCFRS to include fire suppression, community risk reduction, EMS, special operations, etc. The Fleet Support Unit (FSU) of the Logistics Section supports the supplies and materials function as directed by the Division Chief for Support Services. Examples include absorbent, fire and safety tape, and flares.

Appraisal

An online defect reporting system has been developed for all personnel to advise the FSU of individual expendables issues. The system has allowed FSU personnel to address a significant portion of expendables issues in a timely and efficient manner.

Plan

FSU will continue its service delivery to its customers in a timely and efficient manner. FSU will monitor changes in established objectives or operational needs for a specific functional area or program.

References

[Fleet Management \(HEAT Defect\) Reporting System](#) (screenshot – behind the firewall)

[Example HEAT defect report and response:](#)

Criterion 6F: Safety Equipment (Author: Manager Maxam)

Safety equipment is adequate and designed to meet agency goals and objectives. For the purposes of this criterion, safety equipment includes personal protective equipment (PPE) and related equipment (e.g., self-contained breathing apparatus).

Summary:

MCFRS ensures its personnel are provided with appropriate safety equipment which meets the needs of a large and varied fire-rescue service. Safety equipment, including Personal Protective Equipment (PPE) and SCBA, meets or exceeds appropriate NFPA and OSHA standards.

Multiple MCFRS sections are involved in the research and selection of MCFRS safety equipment. MCFRS personnel meet regularly to ensure provided safety equipment is adequate and still serving the needs of the workforce.

Performance Indicators:

CC 6F.1 Safety equipment is identified and distributed to appropriate personnel.

Description

Members of the MCFRS Joint Health and Safety Committee and managers from the Property & Supply and SCBA business units work to identify safety equipment that meets the needs of MCFRS personnel. A process is in place to ensure products are evaluated and deemed effective before accepting and procuring new products. PPE and SCBA are distributed to all career and volunteer personnel from a centralized MCFRS Logistics facility using an effective inventory management and tracking system.

Appraisal

The MCFRS Joint Health and Safety Committee has met regularly to evaluate product changes and review issues with current safety products or distribution. Full product evaluations and field testing were conducted on firefighting gloves and firefighting boots in 2016/2017, resulting in improved products being provided to MCFRS personnel.

The MCFRS Property & Supply and SCBA units have relocated to a centralized Public Safety Logistics facility which allows personnel to have seamless access to safety items and repairs. In 2017, both business units received a newly created inventory system which has opened the door for enhanced analysis and distribution of safety products.

Plan

The MCFRS Joint Health and Safety committee will meet at least quarterly to ensure products provided to MCFRS members are safe and effective. Personnel will continue to attend training and conferences which will enable them to keep on the forefront of research and products that may provide better results. MCFRS personnel will continue to be active in exchanging, challenging and gathering information from other jurisdictions. MCFRS will seek to remain a role model for other departments by developing and maintaining a high quality, standardized field testing program for new products.

References

[PROPOSAL FOR STRUCTURAL FIREFIGHTING GLOVES](#)

[PROPOSAL FOR STRUCTURAL FIREFIGHTING BOOTS](#)

[Fire Chief General Order 17-01 Scott X3 SCBA Training](#)

[Information Bulletin 17-01 Implementation Globe Firefighting Boot](#)

[Information Bulletin 16-04 Implementation of New Firefighting Gloves](#)

[Scott Air-Pack X3 Brochure](#)

6F.2 Distributed safety equipment is sufficient for the functions performed.

Description

MCFRS PPE and SCBA items meet or exceed NFPA 1971 (Standard for Protection Ensembles for Structural Fire Fighting and Proximity Fire Fighting) and NFPA 1981 (Open-Circuit SCBA for Emergency Services) standards. Personnel are provided with adequate quantities of PPE items to safely and efficiently perform their tasks.

Appraisal

MCFRS career and volunteer personnel have been issued sufficient quantities of PPE (i.e., two complete structure firefighting ensemble sets per career firefighter and two sets for volunteer firefighters who attain Integrated Emergency Command Structure [IECS] status) to encourage that clean, safe PPE is available to them at all times. The MCFRS Property and Supply Section maintains inventory to lend when personnel are not able to access their personal PPE set.

50 EMS PPE sets were recently purchased for volunteer EMS-only members to better meet the specialized requirements for PPE protection in an EMS setting without the need to issue a structural firefighting ensemble.

Plan

MCFRS will continue to evaluate changes to NFPA standards which may affect the safety equipment the department chooses to provide to its personnel. EMS PPE will become a standard issue item for EMS-only MCFRS members. The Joint Health and Safety Committee (defined in the IAFF Local 1664 Collective Bargaining Agreement) will continue to evaluate the functionality of distributed safety equipment and recommend changes or enhancements as needed.

References

[Example of MCFRS Property Issuing and Tracking System](#) (Distributed Safety and non-safety is sufficient)

[Operations Division Chief Email to Station Commanders: PPE Inspection Compliance](#)

6F.3 Safety equipment replacement is scheduled, budgeted, implemented, and adequate to meet the agency's needs.

Description

MCFRS replaces PPE items at 10 years per the NFPA 1851 (2014) recommendation. Funds are made available for the acquisition of new items as equipment is retired. MCFRS utilizes the Capital Improvements Program budget process to replace Self Contained Breathing Apparatus (SCBA).

Appraisal

The process for scheduling, budgeting and implementation of safety equipment replacement has been adequate. MCFRS has recently increased their commitment to retire PPE items at the 10-year mark. Although PPE pants and coats were previously retired at the recommended time threshold, all other PPE elements have recently been added to the 10-year retirement schedule. This has been a large financial and logistical commitment on the part of MCFRS. A large-scale initiative was completed in the spring of 2017 when the entire stock of SCBA was replaced with new SCBA.

Plan

MCFRS will remain vigilant about the need to replace safety equipment regularly considering increased awareness of health effects associated with carcinogen exposure. The Joint Health and Safety Committee will continue to advocate for regular replacement of MCFRS safety items.

References

[October 2016 Fire Chief's Monthly Video Message Discussing 10-year PPE Gear Replacement](#) (begin at the approximately 14-minutes and 10-seconds mark)

NFPA 1971 and 1851 related to retiring PPE. Copywrite protected thus not hyperlinked.

[Fire Chief's General Order 17-01 – Entire Replacement of SCBA in April 2017](#)

6F.4 Safety equipment maintenance, testing, and inspections are conducted by trained and qualified personnel, and appropriate records are kept.

Description

MCFRS uses a third party verified ISP (Independent Service Provider) to ensure its PPE (Personal Protective Equipment) and specifically structure firefighting ensemble is inspected, maintained and repaired in accordance with the highest manufacturer standards. This ISP maintains a website which documents the inspections and maintenance that is provided for MCFRS PPE. SCBA is maintained and tested by certified personnel.

Appraisal

MCFRS has actively managed the relationship with their ISP to ensure PPE elements are cleaned, inspected and maintained to the highest standards. Frequent contact was and continues to be made with the ISP to ensure expectations are clear.

MCFRS policies dictate that PPE items must be sent for inspection, cleaning and repairs at least once a year. The MCFRS Safety Section has begun an aggressive program to encourage station officers to be held responsible for making sure PPE elements are inspected and maintained. Record keeping for PPE maintenance is organized, accessible and updated.

Plan

MCFRS will continue to actively manage their relationship with their PPE ISP to ensure PPE is inspected and maintained at the highest levels. Certifications for SCBA staff will continue to be maintained.

References

NFPA 1851 (copywrite protected thus not hyperlinked)

[Maryland Fire Equipment \(ISP\) Website](#)

[Maryland Fire Equipment Maintenance Work Order Example](#)

[MCFRS SCBA Technician Certification Certificates](#)

[Operations Division Chief Email to Station Commanders: PPE Inspection Compliance](#)

6F.5 A safety equipment inventory control and maintenance tracking system is in place and current.

Description

MCFRS Property & Supply and the MCFRS SCBA shop utilize a current, dedicated, inventory control and maintenance tracking system that includes control and tracking of safety equipment. Updates to this system are made most business days. Inventory counts are conducted several times a year.

Appraisal

The inventory control and maintenance tracking system works well for controlling and tracking of safety equipment. In 2017, both the SCBA and Property & Supply business units received a newly created inventory system which has opened the door for enhanced analysis and tracking of safety product distribution. This Independent Service Provider maintains an effective website which documents the maintenance that is provided for MCFRS PPE.

Frequent communication has occurred between the Property & Supply Section and individual stations and volunteer organizations to retrieve inventory which has been left at the stations after personnel have left the MCFRS. This failure by individuals to return their safety equipment/PPE remains an ongoing weakness which can result in thousands of dollars of PPE items unaccounted for and not being used.

Plan

MCFRS has been working to overcome the shortcoming regarding inventory which has not been returned to Property & Supply by personnel who have separated from the agency. In addition to the regular communication noted above, the Section Manager will begin tracking and communicating the dollar amount associated with unaccounted inventory and reporting these figures to management quarterly during the leadership briefings.

MCFRS is also hoping to utilize its new inventory system to connect to the volunteer fire and EMS personnel system (PIMS) which may be able to flag which personnel have separated and what equipment they have not returned. This will be an improvement to the current system which is done by hand each time a person leaves MCFRS.

References

[Example of MCFRS Property Issuing and Tracking System](#)

Category VII: Human Resources (Authors: D/C Zuspan, A/C Gallo, B/C Coleman)

Human resources are defined as all aspects of personnel administration. To include: payroll, hiring, promotional process, discipline, labor relations, health, wellness, safety, training and competency. The heart of any organization is its people, and this category is designed to appraise the importance and results of the human resources program.

Completing the human resources section may involve members from other governing entities or other elements of the community.

Criterion 7A: Human Resources Administration (Author: D/C Zuspan)

General human resources administration practices are in place and are consistent with local, state/provincial, and federal statutory and regulatory requirements.

Summary:

The department falls within the County Government as one of its sanctioned departments; therefore, the regulations and laws of the County are fully adopted and enforced by the department. The Montgomery County Personnel Regulations (MCPR) provide the principles, procedures and practices that must be utilized for personnel administration within the department. Additionally, the Montgomery County Code mandates that the County utilizes collective bargaining with the International Association of Fire Fighters, Local 1664 (the Union). The Union represents all uniformed Montgomery County Fire and Rescue Personnel at the ranks of Captain and below. The resultant contract between the two parties affects or controls some areas of personnel administration procedures and practices. The County Attorney reviews the Contract to ensure it is in compliance with all statutory and regulatory requirements of the MCPR, State and federal laws. The department ensures all personnel actions are compliant with federal, State, and local laws. All personnel administration within MCFRS is done by the Human Resources Division.

Performance Indicators:

CC 7A.1 A human resources manager is designated.

Description

There is a Division Chief assigned to manage the entire Human Resources Division, with three Assistant Chiefs (AC) assigned to the Division's individual Sections; Human Resources (HR) & Labor Relations, Health & Safety, and Training.

The Human Resources & Labor Relations AC oversees: employee services, records, recruiting, hiring, promotions, benefits, drug testing, and labor relations.

The Health & Safety and Training Sections, though housed in the Human Resources Division, are discussed and addressed in other FESSAM categories; therefore, only the Human Resources and Labor Relations Section's performance will be addressed here.

Appraisal

The department has continued to provide stability in the HR Section by having maintained the same AC as manager for the last eight years. This AC has the historical knowledge and expertise necessary to ensure compliance with all regulations and policies.

Plan

The Department, in its most recent reorganization, has grouped together in one Division all departmental sections that deal with its people. This provides a single Division Chief with the responsibility for all personnel issues, allowing for a broad overview and all-encompassing approach. This organizational change is expected to remain in place going forward.

References

[MCFRS Organization Chart \(page 1 and page 6\)](#)

[Division Chief Classification](#)

[Assistant Chief Classification](#)

[Battalion Chief Classification](#)

7A.2 The human resources program has adequate staffing to accomplish the human resources administrative functions.

Description

The HR Section is responsible for the personnel and labor relations programs. It is staffed with an (1) Assistant Chief, (1) Battalion Chief, (1) Captain, (2) Administrative Specialists III, (1) Administrative Specialist II, and (1) Office Service Coordinator.

Appraisal

The current staffing level in the HR Section has been enhanced in the past year with the hiring of an additional Administrative Specialist III and the replacement of its Manager III position with a uniformed Captain. The HR workload for a department of this size continues to remain challenging resulting in the need to complete some tasks with staff hours overtime. Administrative Services section personnel had to put in over \$48K in OT in FY17 in order to accomplish the tasks necessary to keep up with the department's need. The addition of staff has provided some level of relief and has allowed for redundancy of responsibilities which increases effectiveness. The increase in staff has provided the HR Section the opportunity to work on tasks, such as policy review and update which, in the past, has been left lagging behind an optimal schedule.

Plan

The department will continue to strive to obtain additional positions in the HR Section, specifically looking to add two positions: A policy analyst (Program Manager III) and a hiring/benefits position (Administrative Specialist II). The policy analyst would be responsible for policy writing and analysis and would report to the Battalion Chief. The hiring/benefits position would report to the Administrative Specialist III in Employee Services. In addition to the aforementioned responsibilities, the policy analyst and staff would support Employee Services in the formulation of disciplinary actions, written labor relations projects, and personnel and labor research activities.

References

[MCFRS Organization Chart \(page 6\)](#)

[Division Chief Classification](#)

[Assistant Chief Classification](#)

[Battalion Chief Classification](#)

7A.3 Policies are established to direct the human resources administrative practices in accordance with local, state/provincial, and federal requirements. The policies are reviewed annually and updated as needed.

Description

MCFRS has different sources of policies and regulations that govern personnel practices and administration. The Montgomery County Personnel Regulations (MCPR) apply to all employees of MCFRS. In addition, the department has policies and procedures, enacted by the Fire Chief, that internally govern personnel practices. The policies enacted by the various policy-making authorities in the past have been designated by law to remain in affect except where the previously enacted policy conflicts with the law. All County administrative policies, procedures, and regulations are kept on file with the Montgomery County Government, 101 Monroe Street Rockville, Md. 20850 and are on line at www.montgomerycountymd.gov. The County administrative policies, procedures, and regulations apply to all Montgomery County employees.

Appraisal

Each calendar year the Fire Chief determines which Policies will be reviewed that year. This is accomplished through polling of the Division Chiefs. These guidelines and policies/procedures are reviewed and approved by staff, and, where appropriate, the County Executive and County Council before implementation and are in compliance with local, State, and federal requirements. The personnel in the Office of the Fire Chief are charged with posting any new policies as well as posting any old policies, general orders and directives that have been rescinded. Administrative policies and practices for personnel administration are easily accessible to all MCFRS employees on the County's website. When policies and procedures are updated or amended, a notice is distributed to all personnel, and the new document is made available on the departmental website.

Plan

The department will continue to follow the established procedure of performing an annual review to determine the need for updating any policies, general orders and directive.

Additionally, the department will respond to any legislative changes pertaining to the operations of MCFRS.

References

[MC Personnel Regulations](#)

[MCFRS/FRC Policies and Procedures](#)

[DFRS Policies and Procedures](#)

Criterion 7B: Recruitment, Selection, Retention and Promotion (Author: D/C Zuspan)

Systems are established to attract, select, retain, and promote qualified personnel in accordance with applicable local, state/provincial, and federal statutory requirements.

Summary:

The MCFRS follows established procedures to ensure its hiring and promotions' efforts meet all legal requirements. In 2015, the department made staffing adjustments in the Recruiting Office to be more effective in recruiting a diverse pool of applicants. This includes targeting the ethnic (African American, Korean, Hispanic, etc) communities with in the County through establishment of relationships with the community leaders of these groups. Additionally, the recruiting office attends and advertises activities which have large number of women such as Women's Collegiate sport teams, Tough Mudders for Women, and local gyms for recruitment. The MCFRS Recruiting Office assists in attracting new employees, while the MCFRS Human Resources Section follows established methods to select, retain and promote personnel. MCFRS contracts with Industrial/Occupational Solutions (IO Solutions) to provide applicant and promotional testing materials, expertise and oversight. This collaboration has helped to reduce adverse impact on minority groups and provided classes that are more representative of the community. Retention continues to not be an issue. While the department does lose a few employees each year to other career fields, most of our uniformed employees make MCFRS their career choice and only leave the department upon retirement. In the non-uniformed area, retention is still very good. There is some movement of civilians seeking promotional opportunities both within this department and in other County agencies. An established competitive promotional ladder is established in DFRS Policy #512-Promotion Procedure.

Performance Indicators:

7B.1 A mechanism is in place to identify and announce potential entry level, lateral, and promotional positions.

Description

Lateral and promotional positions are announced via email to all career personnel. Entry level positions are listed in multiple locations online, in hard copy, and via press release. MCFRS, through the Recruit Section and County OHR, also places advertising in diverse media including radio, newspaper and on websites. During our latest entry level position opening, we employed social media outlooks such as Facebook and Twitter quite heavily. MCFRS Volunteers are notified via email of paid position vacancies. In addition, the Recruiting Office has created an email distribution list of more than 4,000 members who receive an announcement when MCFRS is hiring. For promotional opportunities, the Department has an electronic program called the Promotional Candidate Application Process (PCAP). The PCAP is a secure web application that allows employees to record, review and revise their promotional application, acquire promotional exam information and allows management to review and approve applications for promotion.

Appraisal

During the five-year accreditation cycle, MCFRS informed the public and its employees of vacancies in both the career and volunteer divisions utilizing multiple routes. The department held several recruiting events prior to the application period and actively sought potential candidates. To illustrate the success of our recruitment efforts, the total number of applicants is typically 3500+. PCAP has proven to be a user-friendly promotional application that has reduced the time required to prepare and approve promotional opportunities for both the employees and management. In FY17 the department processed the following numbers of competitive promotions: (1) Assistant Chief, (1) Battalion Chief, (7) Captains, (12) Lieutenants, (14) Master Fire Fighters. We also processed 79 non-competitive promotions.

Plan

The proven success of our recruitment and promotional opportunity availability has resulted in the continued use of the processes presently in place. The department will; therefore, continue to communicate all promotional opportunities via email and through the PCAP system. Entry level positions will continue to be marketed to the community, while improving accessibility to persons who are not traditionally attracted to careers in the Fire Service.

References

[DFRS policy #512-Promotion Procedure.](#)

[DFRS policy #512 Attachment](#)

[Screen shot of Promotional Candidate Application Process System](#) (behind firewall application)

7B.2 The agency administration and its members are part of the recruiting process.

Description

In 2015, MCFRS made the change from having a dedicated civilian manager to a uniformed Captain in charge of the Recruiting Office. This office falls under the control of the Human Resources Assistant Chief. The Captain then identified MCFRS field personnel who were interested in assisting him in recruitment efforts. These uniformed personnel could sign up for upcoming recruitment events and represent the organization and the job to the public. Hiring updates are posted on the newly re-vamped Recruiting website and on Facebook and Twitter accounts, ensuring that employees have up-to-date information. Personnel are encouraged to share job opportunities with friends and family.

Appraisal

The Recruiting Office was ramped up under the direction of the newly appointed Captain. Additionally he has utilized 47 part time uniformed personnel to assist in the various recruitment efforts. This resulted in some unique recruiting efforts to pull in a diverse applicant pool. One of these events, aimed specifically at the recruitment of female applicants, was “Ladies Night Out” (see attached flyer). Other recruitment efforts have included: street canvassing in heavily populated areas of the County, recruitment tables set up at local colleges, recruiting on local military installations through their staff, and sandwich boards & flyers in local business districts. These efforts have led to a very diverse applicant pool.

Plan

We have evaluated the success of the latest recruitment efforts and chosen a new Captain to take the position to lead the recruitment process. We will also encourage field personnel to more actively participate in the recruiting process. Recruiting literature will continue to be shared with field personnel. Additional opportunities for placing personnel at public events will be explored. MCFRS would like to add back uniformed recruiters who will be assigned full time to the Recruiting Office when the budget allows for it.

References

[“Ladies Night Out” Flyer](#)

MCFRS [Recruiting Website](#)

[Communication Plan for MCFRS Recruiting](#)

[Recruitment Activities Update](#)

[Recruitment Document 1](#)

[Recruitment Document 2](#)

7B.3 Processes and screening/qualifying devices used for recruitment and selection of initial, lateral, and promotional candidates are job related and comply with all local, state/provincial, and federal requirements, including equal opportunity and discrimination statutes.

Description

MCFRS complies with all local, State and federal equal opportunity and discrimination statutes. This is done by strict policy/procedure and in accordance with the County’s EEO guidelines. Promotional and lateral procedures follow DFRS Policy #512-Promotion Procedure which outlines the specific requirements and processes for promotion. The hiring process is managed jointly by the County Office of Human Resources and MCFRS. The application process is a responsibility of the County’s Office of Human Resources. Interviewing-skills workshops are offered to all personnel engaged in the interview process which includes direction in legally acceptable questions and employment laws.

MCFRS, in conjunction with the Office of Human Resources, have engaged a new outside contractor for our entry (initial)-level testing examinations - Industrial /Occupational Solutions (IO Solutions). It is the vendor’s responsibility to validate their entry-level examination. Additionally, the MCFRS has performed a job analysis on the entry-level position and had IO Solutions validate it utilizing content and concurrent validation methods. All aspects of the job analysis and validation have been performed by IO Solutions. MCFRS continues to use the Candidate Physical Ability Test (CPAT) which has been endorsed by the IAFF, IAFC, and has been reviewed by the U.S. Department of Justice. There is no specific “legal test” that governs physical ability testing; however, the CPAT is job-related and has been validated as compatible with the ability to engage in training as a firefighter/rescuer in Montgomery County. Background investigations are managed by in-house background investigators who are temporarily brought on when we begin an entry-level hiring process and utilize exclusion criteria similar to those established for police officers and other public safety personnel. Criteria examined include employment history, criminal history, driving record and drug usage. Though we continue to use all hiring steps utilized in past hiring processes, the department, in its latest hiring

process, revamped the order of these steps, used some preferred criteria points to establish who - that passed the entry test - moved on, and added an additional applicant final review by a 4-person panel consisting of personnel appointed by the Fire Chief.

Appraisal

MCFRS has been very cognizant of relevant statutes and ensures that we meet all mandates. The Montgomery County Office of Human Resources as well as both the County's and the department's EEO Officers has provided input and oversight of the MCFRS testing and hiring process to ensure it meets local, State and federal requirements. The revamped hiring process is currently being evaluated for its diversity results.

Plan

MCFRS will perform an evaluation of the newly adopted hiring process and adjust as needed to ensure, while remaining compliant with all local, state and federal equal opportunity and discrimination statutes, it also provides the department with the diversity it is seeking.

References

[DFRS Policy #512 – Promotion Procedure](#)

[Industrial /Occupational Solutions \(IO Solutions\) Entry Level Exams Webpage](#)

[MCFRS Candidate Physical Ability Test - Recruiting Webpage](#)

[MCFRS Background Check Process – Recruiting Webpage](#)

7B.4 The agency’s workforce composition is reflective of the service area demographics, or the agency has put forth a reasonable effort by instituting an effective recruitment plan to achieve the desired workforce composition.

Description

MCFRS remains dedicated to ensuring its workforce demographics adequately reflect the community it serves. To this end, the department has recently adopted new hiring processes which we believe will increase the workforce diversity to even better reflect the County we serve. The Recruiting Office focused on recruiting methods that would target audiences who may not have thought of fire-rescue as a career. MCFRS has formalized its recruiting efforts under a uniformed Captain who develops and maintains relationships with diverse organizations and media outlets to ensure effective communication of entry-level positions. The Recruiting Office Captain uses advertising in diverse media outlets including radio, newspaper and websites. MCFRS fully embraced social media outlooks such as Facebook and Twitter to communicate its entry-level job openings. In addition, the Recruiting Office has added new methods of recruitment activities to include: “Ladies Night Out” events, street canvassing in heavily populated areas of the County, recruitment tables at local colleges, recruiting on local military installations through their staff, and sandwich boards and flyers in local business districts.

Appraisal

MCFRS has continuously and aggressively planned to increase the diversity of its workforce through unconventional recruitment efforts. The overall numbers for diversity in the most recent recruit class had improved over previous classes which can be directly attributed to these new efforts.

Plan

The department plans to evaluate our latest recruitment results thoroughly, make any needed adjustments and explore any new methods that could be useful.

References

[“Ladies Night Out” Flyer](#)

[MCFRS Recruiting Website](#)

MCFRS Social Media Outreach Examples of Marketing to Specific Demographics:

[MCFRS Ladies Night Out Video](#)

[MCFRS PIO Twitter](#)

[MCFRS PIO Twitter](#)

[MCFRS PIO Twitter](#)

[MCFRS PIO Twitter – Volunteer Fire-Rescue Opportunities](#)

[SAFER Grant to Support Volunteer Fire/Rescue Recruiting](#)

[CONTRATANDO \(HIRING in Spanish\) ¡No se necesita experiencia!](#)

7B.5 A new member orientation program is in place.

Description

Each new employee spends most their first day with representatives of the Office of Human Resources for orientation. This includes, defining their benefits, completing required paperwork for payroll, health and dental insurance and death benefits. MCFRS also provides each new uniformed employee a copy of the Recruit School Policies and Procedures which has been recently updated. This provides each person a guideline on acceptable behavior, methods of dealing with problems and begins their journey in the fire service. For new volunteer members, each of the Local Fire Rescue Departments (LFRDs) is responsible for the orientation of their new members. There are minimum requirements laid out by the County which must also be included, such as classes addressing EEO, cultural diversity, blood borne pathogens, safety equipment, and fire department policy and procedures.

Appraisal

The orientation program has worked very well and has included all items necessary for the beginning of employment or volunteering. It has provided a defined set of guidelines to help the new employees/volunteers be successful. There has never been a complaint about this program or citing the program for lacking information.

Plan

MCFRS will continue to work with OHR to evaluate the new employee orientation program and determine any adjustments that may be necessary. Additionally, the department will evaluate the strengths and weaknesses of the volunteer's orientation process to ensure it is complete. The programs have worked well and will continue to be used.

References

[OHR Orientation Material](#)

[MCFRS Rules and Policies Recruit Class 43](#)

CC 7B.6 A supervised probationary process is used to evaluate new and promoted members based on the candidates' demonstrated knowledge, skills, and abilities.

Description

Montgomery County Government has a one-year probationary period for all newly hired employees. Each employee is informed of this during their orientation, and it is also documented in the Probationary Manual. This manual describes all requirements an employee must meet during the first year. The manual has very detailed requirements for both the new employee and the new employee's station officer. The station officer is responsible to ensure the probationary employee has the time and mentoring needed to complete all tasks. Periodically, the probationary employee and their officer are called back to the PSTA to demonstrate that the new employee has acquired specific skills for them to complete probation. All requirements in the Probationary Manual are skills that are required by NFPA Firefighter I and II and specific items relative to Montgomery County. Volunteers have a probationary period for which criteria and length are determined by the individual LFRD. The LFRD is responsible for communicating this to their new members and for testing competency.

Appraisal

During this five-year accreditation cycle, the Probationary Manual was reviewed and revamped for each Recruit Class. New methods, requirements and skill sets were introduced and included in the updated manual. This practice has resulted in a highly effective probationary process and has yielded personnel who are ready to work in the field successfully. For those that may need additional help, the department is able to extend the probationary period. In the last 2 recruit classes the department has extended the probationary period for a total of 17 people. This is out of 142 recruits that started the program. Out of those extended only 2 were not able to successfully complete their probationary period in the allotted time.

Plan

MCFRS will continue to review and update the Probationary Manual as necessary. The station officer's responsibility for the probationary employees assigned to their shift will continue. This method provides oversight and ensures station resources necessary for success are available when needed.

References

[MC Personnel Regulations, Section 7](#)

[MCFRS Probationary Manual](#)

MCFRS Probationary Evaluation Form Example

7B.7 The agency has an employee/member recognition program.

Description

There are multiple systems in place both at the County and Departmental levels to recognize efforts of MCFRS personnel. “Montgomery’s Best” is a countywide initiative that provides the opportunity to recognize the efforts of employees in several different categories. These awards are determined by County government employees assigned to do so by the County Executive. MCFRS has internal awards recognition such as Unit Citations and EMS- Provider-of-the-Month awards both of which are utilized on a regular basis. These awards are based on the merit of the employee(s) actions and individuals or units can be nominated by their supervisors. These awards are presented at the fire station by the Fire Chief or the EMS Section Chief. Additionally, the County has a performance awards program that enables a supervisor to nominate an employee for a monetary or annual leave award for outstanding performance.

Appraisal

The variety of award programs have allowed the department several opportunities to recognize superior work. These awards are propagated by the employee’s supervisor and, therefore, the willingness of supervisor to complete the required documentation to recognize their subordinates varies. In FY17 the department presented 105 EMS providers with an EMS award and 2 Unit Citations. Overall personnel enjoy being recognized for their efforts, and it has a positive influence on them and others.

Plan

The organization plans to continue to recognize the efforts of MCFRS personnel in the performance of their duties. Leadership will continue to work with personnel to ensure that those employees who provide service above and beyond the normal are recognized by their supervisors and the department overall.

References

[Personnel Regulations – Section 13 - Performance Awards](#)

[Example of Unit Citation](#)

[Examples of EMS Providers of the Month Certificates](#)

7B.8 The agency's working conditions and environment attract, diverse and qualified applicants, and retains a tenured workforce.

Description

MCFRS ensures it follows all EEO guidelines and values its diverse workforce. The department has recently revamped some of the hiring process steps to help increase its current diversity. Though MCFRS does not have any problem attracting qualified applicants, we use community relationships and targeted recruitment to ensure the diversity of the candidates is reflective of the community in which we are located. The starting salary is comparable to those in the Washington Metropolitan Region, the working conditions are among the best in the country, and the overall compensation package is very attractive to the clear majority of applicants.

Appraisal

MCFRS' new recruitment and revamped hiring processes have produced a more diverse recruit class than we have had in the recent past; however, not quite at the levels we wish to achieve. Like most other inner urban fire departments, we have experienced difficulties obtaining a desirable number of female candidates through the entire entry-level process. One factor which has influenced the hiring of non-traditional candidates is the length of the entry-level process. Most people not familiar with fire department hiring do not realize that it takes 6-9 months from date of application to date of employment.

Plan

The department will continue to evaluate its recruitment efforts and will continue to seek out opportunities to reach more diverse populations. The Recruitment Office will establish more relationships with the leadership of diverse community groups and continue to research and attend community activities where many diverse potential candidates attend.

References

Demographic information provided during on site review

[Social Media Marketing Examples \(note images used within Tweets\)](#)

7B.9 The agency conducts exit interviews or periodic employee surveys or other mechanisms are used to acquire feedback and improve policies and procedures.

Description

Though MCFRS has no specific policy we invite all personnel that leave the department prior their normal retirement date to participate in an exit interview. This invitation is extended by the Administrative Section and is conducted by the Battalion Chief assigned to that section. Discussion points for these interviews include: reason for leaving prior to retirement, the work environment they experienced, feedback on processes and other topics the employee wishes to express.

To illicit feedback from current employees, the department holds periodic station officer meetings with the Command staff. Additionally, open communication is encouraged at all levels of the organization which allows personnel to express their views to their chain of command.

Appraisal

Exit interviews have been and continue to be a crucial method to measure the health of the department. The number of personnel that leave the department prior to normal or disability retirement continues to be quite small. The questions asked in the interview have given us a clear picture of the employee's reason for leaving and is open-ended enough to provide the employee with the opportunity to offer input into whatever subject or aspect of their experience they wish to discuss. The information gleaned from the exit interviews demonstrates that the reasons for leaving are typically not related directly to departmental environment but rather are due to family issues, leaving the area, or career path changes.

Plan

The Department will continue to hold exit interviews and amend the questions when/if we identify that it would be advantageous to do so because we are in need of additional or different information. The department will evaluate the need to adopt a more formal process to receive input from incumbent personnel. Methods that will be considered are surveys, forums, and informal around the kitchen table talks

References

[OHR Website](#) (click exit process)

[Exit Procedures for Employees](#)

7B.10 The agency conducts workforce assessments and has a plan to address projected personnel resource needs, including retention and attrition of tenured and experienced employees/members.

Description

Departmental attrition charts are produced on a regular basis and are used to determine the need for additional personnel. These charts show the balance between the projected numbers of personnel leaving MCFRS and the scheduled hiring of new employees.

Attrition Charts are produced for several scenarios as needed and are greatly affected by the budget. For example, we may not know whether we can hold a recruit class and size of that class until the budget for that FY has been approved. The Fiscal Management Division will produce several charts with the varying scenarios. The Deferred Retirement Option Plan (DROP) that is in place allows the Human Resources Division to identify how many employees are planning to retire with 3 years notice, allowing the Department to accurately project personnel needs in the future.

Appraisal

The DROP has proven to be a valuable tool to predict personnel needs. The department has knowledge of many retirements 3 years in advance of when they will occur allowing us to plot that on the attrition charts. Once this information has been incorporated in the attrition charts, it paints a clear picture of when the Department needs to hire new personnel to retain the correct personnel complement. Though hiring needs are easy to identify, there have been times when MCFRS could not meet those needs due to budgetary constraints. The County's budget affects whether a recruit class can take place, the timing of the class, and the number of recruits.

Plan

The Department is happy with the present methods used to assess personnel needs. We will continue to work with the County Office of Human Resources to standardize the scheduling of recruit classes.

References

[MCFRS Attrition Chart](#)

Criterion 7C: Personnel Policies and Procedures (Author: D/C Zuspan)

Personnel policies and procedures are in place, documented, and guiding both administrative and personnel behavior.

Summary:

MCFRS has an abundance of documentation to regulate and guide administrative and personnel activities. These include; MCFRS Policies and Procedures; Montgomery County Personnel Regulations; Maryland Emergency Medical Protocols; and MCFRS Directives and Fire Chief General Orders. All personnel have access at the station level to applicable guidelines in the station library and through the MCFRS website. Each year the MCFRS Policies, Procedures, and Regulations are reviewed and several are identified and prioritized to go through the update process that year. All other guidelines are reviewed as stated above and changes are made as appropriate. Corrective action has been taken in cases where policy and regulatory deficiencies have been identified.

Performance Indicators:

CC 7C.1 Personnel policies, procedures, and rules are current, written, and communicated to all personnel.

Description

MCFRS policies, procedures and rules come in several different forms. There are MCFRS Policies and Procedures (including Fire and Rescue Commission Policies and Regulations), Montgomery County Personnel Regulations and MCFRS Directives and Fire Chief General Orders. Each calendar year the Fire Chief determines which Policies will be reviewed that year. This is accomplished through polling of the Division Chiefs. From there all identified Policies are assigned to a Division for review and rewrite. The rewritten versions are reviewed by Command staff and then go out for review and comment to the various bargaining units. There is also a collective bargaining agreement with the career firefighter's union. Collective bargaining agreements are negotiated every one to three years. Fire Chief General Orders are intended to act as a temporary policy until a formal policy can be implemented. These are reviewed annually and rescinded or cancelled as necessary. All policies, procedures and rules are sent, via County email accounts, to all MCFRS members when they are implemented. Additionally, they are posted on-line for easy reference. There is a process in place which allows the labor groups to review and provide comment on all policies, procedures and rules prior to publication.

Appraisal

MCFRS has an adequate number of policies, procedures and rules, and the new annual review process has resulted in a larger number of revisions. The prioritization of updating is based on whether the policy is meeting the department's need. There are still some policies which need to be revised solely for terminology updates but, since they are still relevant for the effective management of the organization, they remain in place. The department has prioritized the updating of those that are not meeting our needs.

Plan

The Fire Chief will continue to promulgate policy, procedure and regulations as needed and based on organizational priorities. The department will continue to perform an annual review and revise those that are obsolete.

References

[MCFRS Policies and Procedures Montgomery County Fire and Rescue Commission](#)

[Policies and Procedures Montgomery County Personnel Regulations Maryland](#)

[Fire Chief General Orders](#)

[Directives](#)

CC 7C.2 The agency has a **policy that defines and prohibits sexual, racial, disability, or other forms of harassment, bias, and unlawful discrimination** of employees/members and describes the related reporting procedures. The policy and organizational expectations specific to employee behavior are communicated formally to all members/employees and are enforced.

Description

It is the policy of Montgomery County to prohibit discrimination and harassment of its employees in the workplace by any person and in any form. In the past two years, the department has made great strides in both building out its EEO office and training all personnel on the subject. Whereas, prior to CY16 the department's EEO Officer also had the duties of the Internal Affairs Office we have an appointed EEO officer as well as a cadre of deputy EEO officers to assist him. The personnel assigned to these positions have a reputation amongst field personnel as being open and approachable. This past year, there has been mandatory two-part EEO training for all personnel. The two parts included a scenario based on-line portion followed by an EEO officer led presentation and discussion. All supervisory personnel have an affirmative duty to maintain and provide MCFRS personnel a workplace free of harassment. Violations of the County's sexual harassment or discrimination policies can be reported to any supervisor, the Fire Chief, County Attorney, or the departmental EEO officer or the County EEO Officer. As with all policies, those regarding harassment and/or discrimination are easily accessible to employees.

Appraisal

MCFRS has the necessary policy and procedures in place for the prevention of harassment, and to address situations where the policies are violated. The changes listed above have resulted in an increase in EEO inquiries and investigations. This increase can be seen in the number of incidents reported to the EEO officer. In CYs 12 – 15 we had 3 or 4 allegations reported per year. After changing the configuration of that office and the institution of an EEO officer that was a Captain in the field we have seen the following numbers: CY16: 51 and CY17: 72. It is believed that this uptick is not a result of

increased incidents but rather a result of more personnel being aware of the rules and feeling they have someone to trust in discussing these matters.

Plan

The department plans to provide periodic continuing education to all employees addressing the subjects of EEO, harassment, and discrimination. We are in the process of updating the MCFRS Discrimination Policy. We will continue to provide the department's EEO office the necessary tools to deliver an effective and far-reaching EEO program to ensure the department is free of any harassment or discriminatory behavior.

References

[Discrimination Policy](#)

[MCFRS Code of Ethics and On-Duty Personal Conduct Regulation](#)

[Preventing Workplace Harassment Training FCGO](#)

7C.3 A disciplinary system is in place and enforced.

Description

Section 33 of the Montgomery County Personnel Regulations (MCPR) and Article 30 of the Collective Bargaining Agreement with the International Association of Fire Fighters, Local 1664 (i.e., IAFF contract) govern disciplinary action. These documents explicitly describe the disciplinary action procedures that must be used. The documents also set forth the rights of employees. Disciplinary action procedures are also set forth in MCFRS Policy 503; however, this policy is consistent with both the MCPR and the IAFF Contract. The department follows the progressive discipline format. In practice, MCFRS involves the supervisory chain-of-command when disciplinary actions are issued to employees. MCFRS has an Internal Affairs Section that investigates incidents that may result in a high-level discipline.

Appraisal

The Disciplinary process within the department has been and continues to be effective and fair. The involvement of supervisors and chief officers in each of the disciplinary proceedings has increased the efficiency and acceptance of the procedures. The existence of predetermined types of disciplinary actions established by the Personnel Regulations, and the adherence to past practices within the department, ensures that members charged with similar rule violations are treated similarly, while also ensuring that cases are treated on an individualized basis. Every discipline above Oral Admonishment goes through a rigorous internal vetting process to ensure the level of discipline is appropriate and is consistent with similar infractions.

Plan

The Fire Chief will continue to support and use discipline to assist employees with behavior modifications. There is a plan to develop a comprehensive database to track all departmental discipline ensuring the ability to look at past practice, the need for progressiveness, and trending.

References

[Section 33 Montgomery County Personnel Regulations](#)

[Collective Bargaining Agreement, IAFF Local 1664 for the years 2017 through 2020,](#)

[Article 30, Pages 58-62](#)

[DFRS Policy 503, Disciplinary Action Procedures](#)

7C.4 An internal ethics and conflict of interest policy is published and communicated to employees/members.

Description

MCFRS has adopted the Code of Ethics outlined in the Montgomery County Code and Ethics Regulation. The code of ethics regulation and County code provisions govern economic conflicts of interest as well as outside employment activities of employees. Policies and procedures regarding ethics and conflict of interest are easily accessible to employees in: Policies and Procedures Manual, Ethics Regulation, Outside Employment policy and regulation. Personnel whose position have been identified as one that requires an annual review are required to complete a Financial Disclosure Form. This form is then reviewed at several levels of County Government to ensure there are no conflicts of interest.

Appraisal

The policies currently in place have served the department well. The recent move to an on-line Outside Employment Request has streamlined the process for any employee wishing to work an additional job. Employees have adequate access to policies on-line. When using progressive discipline, the Code of Ethics Regulation is referenced; thus, if there are violations of a similar nature, the employee is aware of the expectation.

Plan

The department will evaluate the policies and regulations that deal with Ethics. We will accomplish this by looking to see if we are experiencing an increase in incidents that could be circumvented by amending them. If the department identifies any need changes we will work with the County agencies (OHR and Ethics Commission) that address these issues to make them aware of any unmet needs.

References

[Chapter 19A of the Montgomery County Code Montgomery County Ethics Commission](#)
[DFRS Policy 510, Outside Employment](#)
[MCFRS Policy 22-00 AM Code of Ethics and On-Duty Personal Conduct Regulation](#)
[Financial Disclosure Form](#)

7C.5 A [grievance/complaint procedure](#) is published and communicated to employees/members.

Description

The Montgomery County Personnel Regulations set forth, in Section 34, a grievance procedure for non-unionized employees. The grievance procedure for IAFF unionized employees is dictated by Article 38 of the Collective Bargaining Agreement. The steps and time constraints are clearly pointed out in both.

Appraisal

Grievance procedures have been clearly communicated to all departmental personnel, and written policy is readily available - both on-line and at each worksite. Proof that the personnel are aware of the grievance process is that the department received 10 grievances in FY17 and had no complaints from the employees or bargaining units that personnel have been unable to file. All management employees have received and continue to receive formal training on the County's grievance procedures.

Plan

The plan is to review the grievance processes and determine any need to change current practice. If this review determines a need to change we will work through the collective bargaining process to amend them.

References

[Montgomery County Personnel Regulations, Section 34](#)

[Collective Bargaining Agreement IAFF, Local 1664, Section 38, Pages 69-75](#)

Criterion 7D: Use of Human Resources (Author: D/C Zuspan)

Human resources development and utilization is consistent with the agency's established mission, goals, and objectives.

Summary:

MCFRS has both a current mission statement and established goals. The service utilizes all Human Resources in accordance with established policies and guidelines. The Mission Statement provides overall guidance for the organization with specific details directed by Federal Law, Local Law, Policies and Procedures and the Collective Bargaining Agreement. There are methods in place ensuring everyone is treated equally and fairly. Promotions and Discipline are addressed in both policy and the Collective Bargaining Agreement. The system works well, and is supported by the entire County Government.

Performance Indicators:

CC 7D.1 A position classification system and a process by which jobs are audited and modified are in place.

Description

Position classifications are reviewed on a five-year cycle by the County's Office of Human Resources (OHR); however, they can be modified more frequently if there is a need. The positions are audited, with input from all incumbents, to ensure that the classification is accurate and appropriate. After all data is collected, if there are adjustments necessary, they are completed and the amended position classification is posted. Additionally, there is a means to add completely new classifications if necessary. All position classifications are posted on the County website.

The general review of the classification for a position is the responsibility of OHR with input from the Department. The classification team collects all data, makes necessary adjustments and posts the new position classification.

Appraisal

The department had 4 civilian positions that successfully went through the reclassification process. Additionally, the department was able to create a new civilian classification (EMS Educator) which better met our needs at the Training Academy. This was done in cooperation with County OHR personnel. Overall, the system has worked well and provided additional opportunities for employees to challenge their current classification.

Plan

MCFRS will to review position classifications annually and evaluate the need for both position reclassifications and any new classifications. When these are identified we will work with County OHR and within the confines of the classification system to meet our needs.

References

[Montgomery County Personnel Regulations, Section 9](#)

7D.2 Current written job descriptions exist for all positions, and incumbent personnel have input into revisions.

Description

All positions have a position description. Each position description is evaluated by OHR's classification team. Any employee can offer an addition or deletion to the position description; however, the job duties and responsibilities outlined in the position description are ultimately assigned by management. If an employee believes the work associated with their position is not classified correctly, OHR offers the opportunity to request a reclassification review of that position.

Appraisal

MCFRS has had, through this process, adequate position descriptions for all positions, and input from the employees is solicited. Prior to all promotional exams we conduct a job analysis. This process involves providing the present list of Task Statements and Knowledge, Skills and Abilities to all incumbent personnel of that rank. They can review and provide input toward any needed changes. Additionally, the process has allowed employees a means to request a reclassification if they have felt their position was not classified correctly.

Plan

MCFRS will continue to work with OHR in determining the scope of work for each position is relevant to the expected duties and mission of the organization and request new classifications if necessary.

References

[MC OHR Classifications](#)

[MC Personnel Regulations, Section 9, Classification, Pages 71-75 \(reclassification\)](#)

7D.3 A personnel appraisal system is in place.

Description

The Individual Employee Performance Appraisal (IPPA) is the MCFRS evaluation process that reviews bargaining unit (includes employees up to the rank of Captain) employees' performance and provides feedback to employees. Chief Officers and civilian personnel are evaluated under the Montgomery County Personnel Regulations procedures for performance evaluation and utilize the County's new electronic Workplace Performance Management system. The supervisor generates a Performance Plan for the rating period for each employee they supervise. Annual IPPAs are completed on the employees' anniversary date. Interim IPPAs can be administered before the anniversary date if performance issues warrant immediate action. All performance evaluation procedures are used to achieve accurate and useful evaluations of an employee's job performance. The evaluations are used to identify training needs, evaluate recently promoted officers, and communicate to the employees regarding their work proficiency. If an employee receives a "Does Not Meet Expectation" on their appraisal, they will be given a Work Improvement Plan and a certain time frame to bring their performance up to acceptable standards. "A Does Not Meet Expectations" may also result in suspension of their increment (pay raise), or other employment action.

Appraisal

IPPAs have proven a valuable resource for both supervisors and employees. They have helped track employee performance and provide valuable feedback to each employee. All employees have a clear list of expectations that they will be measured against and supervisors can provide feedback to the employees in very specific terms. If deficiencies are noted the supervisor can initiate a work improvement plan to bring the employee's performance up to the required standard. The IPPA process has allowed for continuous improvement of each employee's job performance.

Plan

There is a plan to move all IPPAs to the County's Workplace Performance Management system. This move will take significant collaboration between the County and the

Department and is not expected to occur within the calendar year. In the meantime, MCFRS will continue to utilize the IPPA procedure, and modify as needed based on the mission priorities of the organization. MCFRS will continue to evaluate chief officers utilizing the performance evaluation procedures mandated by the Montgomery County Personnel Regulations (MCPR).

References

[Individual Performance, Planning & Assessment \(MCFRS\) Fire Rescue](#)

[Performance Planning and Evaluation Procedures - OPT/SLT \(MCGEO\)](#)

[MC Personnel Regulations, Section 11, Performance, Planning and Evaluation](#)

7D.4 Methods for employee/member input or a suggestion program are in place.

Description

The department does not have a specific suggestion program in place nor a policy that covers this process. That said, there are many ways for employees or members to provide their input. We have employees and members that sit on many of the various committees and work groups within the department. Additionally, input or comment is welcome by numerous command staff up to and including the Fire Chief. There is an open-door atmosphere in the department which fosters inclusiveness. The career firefighters' union and the volunteers' bargaining representative are allowed to participate in policy formulation, and are provided an opportunity to comment on any final draft before being implemented.

Appraisal

Though an open-door atmosphere allows for all types of input, it has not been a specified process. Additionally, while the Fire Chief and his command staff have allowed personnel to direct comments directly to them, it has, at times, been counterproductive. It becomes counterproductive when it is used by an individual as a complaint session that is not focused on the department but rather that person's individual experience. These complaints could be handled a much lower level and can result in a waste of valuable time for the Fire Chief. Additionally, when the comments do not come up through the chain of command, it can result in the immediate supervisor remaining unaware of a suggestion or issue until it comes back down the chain of command.

Plan

While there is no immediate plan to establish a specified suggestion process, the Department will continue to encourage all supervisors to listen to the employees and members and solicit feedback in all forms. Due to the deficiencies listed above, the department will upon receipt of a request to meet with the Fire Chief or other Chief officer attempt to vet with the employee what they wish to meet about and the steps the person has taken prior to requesting a meeting. In this way we can, if necessary and/or appropriate, direct the employee back to their chain of command. Employees will

continue to be able to provide individual comments, or comment through their respective bargaining agent.

References

See HR Division Chief for a listing of all committees and members (confidential)

7D.5 Career and professional development programs are in place for all members.

Description

MCFRS has a strong history of providing a career development path to the organization. There are two governing documents which address this issue. MCFRS Policy and Procedure #512 provides the requisite training, experience and qualifications needed for any career employee to be promoted to the next rank, and Executive Regulation 36-08AM, Certification Standards for Training, Experience, and Credentialing Requirements, provides this information to the entire service. At present, volunteer personnel are not held to the same standard as career employees when it comes to certain training and promotional testing. The department has reinstated the Company Officer Level Academy (COLA), a 48-hour course for all those personnel that are eligible to move into the Lieutenant rank. COLA covers material related to their new supervisory roles, including administrative procedures, supervisory responsibilities, and incident command. The final method of career development is the support MCFRS personnel receive regarding outside training. Employees and members who seek training in the form of NFA courses, seminars, conferences, local and state training are supported.

Appraisal

The department has been happy with the career development paths currently in place. We have experienced personnel that are well trained and operationally ready as they moved to the next level within the organization. Newly promoted individuals have reported that they feel ready to take on the duties of the new rank and their supervisors report that they are performing at an appropriate level for a newly promoted individual. It seems we have struck the correct balance of education, training, and time in grade.

Plan

Executive Regulation 36-08AM, Certification Standards for Training, Experience, and Credentialing Requirements, has been flagged as a policy that will be updated this year; thus, ensuring the Department has a regulation which meets our needs.

References

[Executive Regulation 36-08AM, Certification Standards for Training, Experience, & Credentialing](#)

[DFRS Policy and Procedure 512, Promotional Policy](#)

[Company Officer Leadership Academy 2017 class schedule](#)

7D.6 The agency has a leadership development program and/or succession plan.

Description

MCFRS has several components in place to address leadership development and succession planning. One of those, as described in 7D.5, is the Company Officer Level Academy (COLA), a 48-hour course for all personnel that are eligible to move into the Lieutenant rank. Additionally, we have a process allowing personnel that have passed the Battalion Chief promotional exam (2 year cycle) and are waiting for a vacancy to successfully complete a “bump-up” class and act as BCs in the field when needed.

MCFRS also participates in the Leadership Montgomery Program, an intensive experience designed to inform, educate, and connect the seasoned leaders and decision makers of Montgomery County to the resources and expertise of other local leaders. There is a Chief Officer Professional Development and Improvement (COPDI) Program which mandates continuing education seminars for all certified chief officers.

In addition to these specific programs, there are many opportunities for mentorship while ascending the various ranks, though this is predicated on the motivation of individuals to seek out their own mentors. As to succession planning, the Deferred Retirement Option Plan (DROP) program allows the department to know well in advance when one of the higher-ranking officers (BC and above) is ready to retire. Prior to that date, the Fire Chief looks to the promotional testing results and interviews all personnel who apply for the promotion. In cases where it is necessary, the department allows for a period of job shadowing to ensure smooth transitions at the highest levels.

Appraisal

The department has been satisfied with the varied leadership development paths currently in place and its ability to perform succession planning. In FY17 the department processed the following numbers of competitive promotions: (1) Assistant Chief, (1) Battalion Chief, (7) Captains, (12) Lieutenants, (14) Master Fire Fighters. We also processed 79 non-competitive promotions. The personnel that have chosen to promote into leadership roles within the department have been through extensive training and testing, resulting in

highly successful transitions. We have put the following numbers of personnel through the Battalion Chief Bump-up class, FY11: 22, FY13: 7, FY15: 15, FY17: 9. Additionally, we have had the following participant numbers in the COLA class: FY04:48, FY06: 42, FY16:43, and FY17: 39. The 10-year gap was due to the program being cut with mandated budget cuts. It was reinstated in FY16. It has proven to be a well-balanced approach of education, training, and time in grade.

Plan

The department has just recently begun the process to develop a mentoring program for its newly promoted lieutenants, the first supervisory step. The Fire Chief has appointed a group of command officers to develop the specifics of this program. Once this has been finalized the department will look to implements as soon as possible.

References

[Company Officer Leadership Academy 2017 class schedule](#)

[BC Bump up training content](#)

[MCFRS Policy 23-05AMII Chief Officer Professional Development and Improvement Leadership Montgomery Program](#)

Criterion 7E: Personnel Compensation (Author: D/C Zuspan)

A system and practices for providing employee/member compensation are in place.

Summary:

Montgomery County continues to be a premier work location. Historically, the County has been in the top 10 counties in the United States for overall wealth. The County provides excellent benefits, and salaries are competitive with other jurisdictions in the surrounding area. Many employees are covered by collective bargaining agreements, including those with the International Association of Fire Fighters (IAFF), Local 1664, and the Montgomery County Government Employees Organization (MCGEO). Each of the employee unions have negotiated strong agreements for employees in both salary and benefits. Additionally, the volunteer members are covered by a Directly Negotiated Agreement which dictates a Nominal Fee program as well as a Length of Service Award Program (LOSAP) which assigns certain compensations to them. Chief Officers, a small group of civilian managers, and others are not covered by an employee representative organization.

Performance Indicators:

CC 7E.1 Rates of pay and compensation are published and available to all employees/members.

Description

All employees have access to their respective pay scales in several ways. Personnel covered by a collective bargaining agreement are provided a copy of their respective contract after the completion of the negotiation process. Pay scales for personnel not represented by collective bargaining agreements are published on-line in the OHR library.

Appraisal

Montgomery County has made excellent use of all forms of media to provide up to date information regarding compensation. We have had zero complaints from any employees that they were unable to find this information.

Plan

If we begin to have any complaints that this information is not readily accessible or available we will re-evaluate our processes.

References

[Compensation FY18 IAFF Collective Bargaining Unit Salary Schedule Collective Bargaining Agreement, IAFF, Appendix I-A, I-B, I-C, pages 109-110](#)
[Compensation FY18 Montgomery County General Salary Schedule Collective Bargaining Agreement MCGEO, Article 6, Pages 6-14](#)

7E.2 Member benefits are defined, published, and communicated to all employees/members.

Description

Benefits are handled through the County OHR. At the beginning of employment, all employees are briefed on the benefit packages by an OHR representative. Every November there is “Open Season” where any employee may elect to change their benefits (i.e., plans, providers, levels, costs to the employee, etc.). OHR sends out very detailed and interactive worksheets that describe the different types of plans. The on-line OHR library has the same information year-round that can be accessed by any employee. In addition, some benefits are described in the firefighters’ collective bargaining agreement.

Appraisal

Montgomery County OHR has greatly improved dissemination of benefit information and has provided user-friendly ways to implement a change of benefit or plan. One area for improvement could be for each employee to readily see who they have named as beneficiaries. Presently, if there is a change of beneficiary you send it to OHR and they update it but there is not access to view the information.

Plan

We have identified our concern that employees cannot readily have access to their named beneficiaries to County OHR. We will continue to communicate our request to update the process to them but as this is 100% under their control we cannot institute changes ourselves.

References

[Collective Bargaining Agreement, IAFF, Multiple Articles](#)

[Montgomery County Government Employee Benefits Webpage](#) (screenshot with actual website hyperlink within)

Criterion 7F: Occupational Health and Safety and Risk Management (Author: A/C Gallo)

The agency's occupational health, safety, and risk management programs protect the organization and personnel from unnecessary injuries or losses from accidents or liability.

Summary:

MCFRS has a substantial network of systems, personnel, and programs designed to protect the organization and personnel from unnecessary injuries or losses from accidents or liability.

A designated risk manager is in place and oversees the occupational health, safety, and wellness programs as prescribed by the NFPA 1500 standard. To effectively accomplish this mission, the MCFRS risk manager, who is the Assistant Chief of the Health & Safety Section, and the assigned Safety Captains collaborate with Montgomery County Government's Division of Risk Management, the five MCFRS Divisions, as well as the Local Fire and Rescue Departments (LFRD) to accomplish the task of developing, administering and enforcing these programs.

The County's Division of Risk Management reviews all injuries and illness claims reported by MCFRS supervisors. MCFRS utilizes Corvel, a national provider of risk management solutions, as a third-party claims administrator for injury claims, while Volunteer Fireman Insurance Services (VFIS), a Division of Glatfelter Insurance Group, is the contracted insurance provider which handles collisions, facility, property, and liability claims. Prior to this review, each report undergoes a thorough quality review by either the Health & Safety Section Assistant Chief or the Fire and Rescue Occupational Medical Services (FROMS) Battalion Chief.

The Health & Safety Section imbeds into the Operations Division, the four primary MCFRS Safety Officers who are responsible for investigating injuries, collisions, and significant or near-miss events to determine behavioral trends and their causal factors. Regular evaluations are conducted post-incident to determine the specifics that led to the event and to ensure necessary steps are taken to prevent future injury, illness, or loss.

MCFRS developed and introduced a resourceful system to consistently report injuries, collisions, and other types of losses as it pertains to personnel and physical assets. This computer-based reporting system is known as the Risk Management Accountability Program (RMAP). The Health & Safety Section acts as the system's program manager by handling system updates, allowing reporting privileges, and providing managers with comprehensive training and support to ensure user success. The benefit of using RMAP allows for managers to quickly run reports to assist in identifying trends and search for commonalities to determine root causes. The RMAP reporting system also doubles as the insurance form that is submitted to initiate a claim, saving users from having to report the incident twice.

MCFRS consistently asserts its safety message to its workforce through a focus on continual safety-related training, education, and an emphasis in physical and behavioral wellness.

Performance Indicators:

7F.1 A specific person or persons are assigned responsibility for implementing the occupational health, safety, and risk management programs.

Description

MCFRS has a committed Assistant Chief who is responsible as the Risk Manager, the Health & Safety Section Chief, and acts as the department's Safety Officer. This position oversees the occupational health, safety, and wellness programs as prescribed by NFPA 1500. MCFRS risk management consist of the department Safety Officers and the Fire and Rescue Occupational Medical Services (FROMS). Additionally, The Health & Safety Section Assistant Chief reports directly to the Human Resources Division Chief, as well as the Fire Chief on matters that involve the health, safety, and wellness of the MCFRS workforce.

A Battalion Chief is assigned to FROMS to fulfill the mission of the Wellness & Fitness program that incorporates many of the IAFF/IAFC Wellness Fitness Initiatives. The focus is on medical, fitness, and behavioral health of the MCFRS family. Under the FROMS Battalion Chief is a full-time Captain responsible for managing the Medically Influenced Duty Status (MIDS) program. The MIDS program assists with personnel who are injured or ill for both work and non-work-related events. This program works with the County's Division of Risk Management, Office of Human Resources, FROMS, and Corvel on all work-related injuries and illnesses. To assist the Battalion Chief with behavioral health, FROMS has two fulltime Behavioral Specialists in the form of a licensed Clinical Psychologist and a Therapist.

Additionally, four full time Safety Captains are assigned to the Health & Safety Section to implement and manage risk management programs. One Safety Captain is assigned to each of the 24-hour department shift schedules with an additional Safety Captain assigned to a relief position to maintain message and operational continuity. The Safety Captains act as Health & Safety Officers and complete a variety of administrative tasks, interface

directly with shift personnel and other work unit personnel, and respond to fire, rescue, and emergency medical incidents during their shift.

Appraisal

The current staffing includes a designated Risk Manager (Assistant Chief), a Wellness and Behavior Health Manager (Battalion Chief), a MIDS Officer (Captain), and four Safety Captains who have successfully overseen and implemented programs to ensure MCFRS health, wellness and safety goals are attained. This current structure is satisfactory.

Plan

The 2018 MCFRS Strategic Plan identifies two additional positions needed to assist the Health & Safety Section; they are a Claims Manager and a second Risk Manager - Battalion Chief. Creation and filling of these positions will be pursued when fiscally feasible.

The general responsibilities of the future Claims Manager are:

A claims manager is responsible for undertaking many jobs related to their position.

Duties would include maintenance of insurance claim files, review such files for completeness, must follow up with all issues related to the insurance claims and direct such issues to pertinent parties when necessary to have them resolved by those individuals.

The Risk Manager Battalion Chief is a mid-level management position that will provide appropriate management, oversight and supervision of safety programs and Kelly day fill-in capabilities for the on-duty MCFRS Shift Safety Officer.

The MCFRS Risk Manager Battalion Chief will be responsible for the management and oversight of personnel injuries, collisions, root cause trend analysis of injuries and collisions, and the training and education for the prevention of MCFRS injuries and vehicle collisions. This position will also be responsible for the day to day management of the on-duty safety officers and will establish work plans and assign tasks, duties and projects as required. The Risk Manager Battalion Chief will also provide relief for the Shift Safety Captains by filling in on their assigned Kelly days.

References

NFPA 1500, copyright protected, available for view during visit

NFPA 1582, copyright protected, available for view during visit

[2018 MCFRS Strategic Plan](#), Pages 13 & 14

[IAFF & IAFC Joint Health & Wellness Initiative](#)

[MCFRS Organizational Chart](#)

[Division Chief Classification](#)

[Assistant Chief Classification](#)

[Battalion Chief Classification](#)

7F.2 The agency's policies and procedures report, evaluate, address, and communicate workplace hazards as well as unsafe/unhealthy conditions and work practices.

Description

The mission of the MCFRS Health & Safety Section is to support the department in matters pertaining to the safety and welfare of all MCFRS personnel. Several policies and procedures guide the work of the Health and Safety Section. Each quarter, the station commanders and station officers are responsible for conducting work site inspections and sending their completed forms to the MCFRS Safety Officer's office at Fire Station 32. The MCFRS Safety Officers are responsible for communicating and coordinating compliance with this requirement with the station commanders, station officers, Battalion Chief, and the Duty Operations Chief assigned to their shift. The Health and Safety Section Chief reports compliance rates to the Operations and Human Resources Division Chiefs.

The Volunteer Fireman's Insurance Service (VFIS), who is the MCFRS insurance provider, conducts annual site safety inspections of all insured properties and provides a descriptive report that is used as a baseline to prioritize and plan improvements and safety upgrades to MCFRS's physical assets.

The Health & Safety Section has three captains assigned to the MCFRS Safety Officer role, each on a 24-hour shift work position, and one captain who works their scheduled days off. The charge of the MCFRS Safety Officers is to consult and assist MCFRS personnel and other stakeholders in matters pertaining to health, safety, and wellness. These Safety Officers are a point of contact for support and guidance when a health and safety matter arises. Examples of such issues are physical facility maintenance questions, apparatus problems, equipment concerns, protective clothing compliance, and injury, collision, or loss investigation and reporting. The MCFRS Safety Officer responds to emergency incidents and assumes the role of the incident safety officer, working directly under the incident commander. The Safety Officers continually evaluate any occurrences of unsafe and unhealthy practices as part of their daily shift responsibility.

Every employee has the right to know what type of hazardous chemicals or products are accessible at their work site. MCFRS is required to obtain and make available Material Safety Data Sheet information, including the product, manufacture, usage, storage location, and supplier. In addition, the employees receive training and information to help them understand what they need to do to protect them. Fire Chief General Order Number 13-06, OSHA Hazards Communications and Global Harmonization Training, addresses these issues by referencing a document titled the “Montgomery County Hazard Communication Program.” This program guides the organization to be compliant with Article 89, 32A through H, COMAR 09.12.33, and CFR 1910.1200 as adopted by Maryland regulations. This is commonly known as the “employee right to know” standard or “access to information about Hazardous and Toxic Substances Act.” MCFRS records these documents in binders at each work site. These binders are known as the Material Safety Data Sheets (MSDS) or Safety Data Sheets (SDS) records binder. MCFRS assigns a facility manager, typically the work site station commander, who is responsible for ensuring these documents are updated and employees comply with current safe practices. MCFRS is currently working with the County’s Office of Risk Management to consolidate all SDS binders into one computer program accessible to all employees on a web-based system.

Appraisal

The Health & Safety Section has continued the best-practice of an annual worksite inspection to allow mentoring and education for employees and supervisors. Each quarter the MCFRS station commander and station officers are responsible for conducting work site inspections and sending their completed reports to the Safety Officer’s office at fire station 32. In the past, these safety inspections have proven difficult to manage due to scheduling conflicts and emergency responses. We continue to struggle to obtain 100% compliance with the inspections mentioned above and in FY 17 only reached a completion rate of 87%. In the past year we have solicited the assistance of VFIS who went to each worksite to complete a safety inspection. The results of those inspections are listed in the reference material.

Plan

MCFRS will continue to aggressively support all Divisions in protecting the health, safety, and wellness of every MCFRS employee. The Health & Safety Section will continue to guide and oversee the work site safety inspection program including the collection of data as it relates to all areas of work site safety. A focus will be placed on Maryland Occupational Safety & Health (MOSH) compliance to keep all employees well informed and equipped. The Health & Safety Section has designed a system to ensure accountability is managed in all these areas pertaining to work place hazards. The Health & Safety Section will continue to work with supervisors and subordinates to ensure these hazards are effectively identified, evaluated, and managed with efficiency.

References

[Policy DFRS #813](#), Station Safety Inspection Program

[Policy DFRS #804](#), Protective Clothing and Equipment

[VFIS Annual Inspection Report](#)

[FCGO #13-06](#), OSHA Hazard Communication and Global Harmonized System Training

7F.3 The agency documents steps taken to implement risk reduction and address identified workplace hazards.

Description

The agency documents steps taken to implement risk reduction and address identified workplace hazards through multiple methods of oversight, reporting or investigation that include:

1. First Notice of Loss
2. MCFRS Quarterly Workplace inspections
3. VFIS Annual Workplace inspections
4. Risk Management Accountability Program (RMAP) reporting
5. Significant Injury reporting
6. Employee Medical Screening
7. Apparatus Safety inspections
8. MCFRS Quarterly Leadership reporting
9. Monthly Collision Investigation Review Committee reports
10. MCFRS Safety Officer Training Requirements by Function
11. Monthly Joint Health & Safety Committee reports and studies
12. 24-hour staffed Safety Officer position

The Health & Safety Section responds to new or previously unidentified concerns and develops and follows-up on specific action plans to manage and document issues that may affect the health, safety, or wellness of the work force.

MCFRS culture allows for reporting by anyone to either their union representative or through their chain of command. MCFRS has in place a mechanism for employees or supervisors to request a review or discussion on any topic through the joint Health & Safety committee which is comprised of labor and management representatives. The Joint Health & Safety committee reports on matters directly to the Fire Chief and Union President. MCFRS has also developed a robust Health & Safety webpage with useful resources to help identify or manage concerns.

Records are produced for all investigations and are entered into the RMAP program. These records are maintained by the Health & Safety Section and reports are published through the email blast “MCFRS Announcements” to the whole organization. Reports always include causal factors leading to an injury, collision, or loss, to include findings and offer direct actions to prevent further occurrences to protect the organization and its employees from harm or liability.

Medical screenings are provided by FROMS to evaluate new onset illness of injury and to provide baseline and periodic screening of all employees. Medical records are maintained to create individual wellness profiles of all employees and volunteers in the organization. Records are kept for thirty years following employment.

Records are maintained by the Health & Safety Section of all annual and quarterly worksite safety inspections. These are important to ensure that identified concerns are being addressed by the responsible organization or stakeholder.

Training plays a significant role in risk reduction as well as recordation and maintenance of vital certifications held by employees. Specific organization focused at risk reduction and prevention include:

1. Monthly “Did You Know” Communiques on emergent issues or concerns
2. Yearly Certification focused on Safe Driving and best practices
3. 3-year EVOC recertification based on the VFIS course model
4. Battalion Based Training Initiative focused on Collision Reduction Strategies
5. MCFRS Safety Officer site visit to Gore training seminar
6. MCFRS Safety Officers to FIERO SPPE Symposium
7. VFIS Training on Incident Investigation & Root Cause Analysis
8. ISO & HSO certification
9. Development of an NFPA 1851 certification program
10. Development of an MCFRS Safety officer credentialing document
11. Development of an instructor led RMAP training module
12. NFPA 1403 certification

Appraisal

The Health & Safety Section effectively responded to matters brought to their attention regarding employee wellness and safety. This was usually accomplished through informal contact by an employee's supervisor or the union once a situation or concern had been identified. To keep this reporting consistent and well-organized, MCFRS should have a policy or practice in place addressing how the Health & Safety Section is engaged. Frequently, supervisors and employees contact the on-duty Safety Officer to initiate a dialogue to correct an unsafe practice or unhealthy situation. The Safety Officer is frequently the primary level to launch an investigation and manage its progression. Currently no intake form exists to capture this type of interaction, especially if the issue is corrected immediately at this level.

Plan

MCFRS will continue to support all organizational elements in protecting the health and wellness of all MCFRS personnel. As issues develop, the Health & Safety Section will aggressively pursue improvement plans that efficiently target and dispatch concerns and limit organizational exposure and liability.

References

[DFRS Policy #813](#), Station Safety Inspection Program

[RMAP Program screen shot](#) (actual application is behind the firewall)

7F.4 Procedures are established and communicated specific to minimizing occupational exposure to communicable diseases or chemicals.

Description

MCFRS has established procedures to allow staff to safely mitigate incidents involving emergency medical services and hazardous materials, while minimizing risk of occupational disease and chemical exposures. Ongoing training, a newly developed Infection Control Plan, and adherence to policies, procedures and the Fire Chief General Orders will further increase awareness in preventing occupational disease exposures to MCFRS members.

The response to incidents, as well as MCFRS' training standards, meet and exceed all applicable governmental regulations on a local, State, and federal level in limiting and mitigating risk to occupational disease and hazardous materials exposures. MCFRS has also created a Woofu (internal webpage system) exposure form that allows for an instantaneous notification to MCFRS Fire and Rescue Occupational Medical Services (FROMS) staff who manage occupational disease exposures.

FROMS provides all new and incumbent MCFRS members, when applicable, with OSHA- required respiratory fit testing and N95 mask testing. During respiratory testing, MCFRS members are instructed how to properly don and when to use the N95 Respiratory mask. All respiratory testing records are maintained in each employee's medical record and Fit Test Tracking database. FROMS has also created a new infection control plan that helps establish procedures for preventing and reporting an exposure to a communicable disease.

Appraisal

The MCFRS Training Academy provides comprehensive training to all new members to meet all applicable governmental and departmental regulations required to respond to medical and hazardous materials incidents. This comprehensive training, which is monitored via a database, includes mandatory classes on initial SCBA and PPE training, Hazardous Materials training, and entry-level bloodborne pathogen exposure training. These are either covered in recruit training for new career personnel (88 in FY17) or through PEAFF, HazMat and on-line Blood Borne Pathogen training classes for new volunteers. In FY17 we trained 164 volunteers in HazMat, 176 SCBA & PPE, and 264 in Blood Borne Pathogens. Additionally, the department requires all personnel who provide emergency response, both career (1170 personnel) and volunteer (823 members) to complete annual recertification training on those subjects.

Plan

MCFRS will continue to monitor data to develop and implement training programs as necessary for MCFRS members with the overall goal of preventing occupational disease and hazardous materials exposures. The MCFRS Training Academy and FROMS will continue overseeing their current training curriculum and fit testing procedures for all members, including updating of their respective databases. In addition, FROMS will continue to utilize the data from the Woofu Exposure Form to monitor the route of exposure, communicate with necessary parties, and train members of MCFRS with the goal of preventing future occupational disease exposures.

References:

[MCFRS Respiratory Protection Policy](#), 26-06AMII

[MCFRS Incident Response Policy](#), 24-01

[MCFRS Infection Control Plan](#)

CC 7F.5 The agency's occupational health and safety training program instruct the workforce in general safe work practices, from point of initial employment through each job assignment and/or whenever new substances, new processes, procedures, or equipment are introduced. It provides specific instructions on operations and hazards specific to the agency.

Description

The MCFRS engages in an aggressive system of basic, compliance and awareness training that is designed to communicate to the employee the hazards associated with providing emergency response and the dangers of working in the light to moderate industrial setting found in firehouses. Entry level training focuses on basic use of personal protective equipment; from N95 face masks, to use of exam gloves, to use of structural firefighting gear and self-contained breathing apparatus (SCBA). Each response/operations employee is required to take this basic safety training prior to response or participation at any emergency incident or event.

The Department protects all employees by implementing all federal, State and local workplace health, safety and wellness regulations that apply. Annually, all employees and LFRD members must complete recertification's that ensure compliance with mandates. This training includes a blood born pathogen program and teaches the responder basic use of body substance isolation (BSI). Training is conducted annually to maintain each responder to the hazardous material Operations level. This "hazmat" training is designed to allow responders to evaluate, protect and work in the presence of potentially hazardous chemicals. Non-responder employees are not required to take part in this training.

Upon successful completion of basic training, employees or members are qualified to operate the basic tools required as a member of a fire and rescue department in Montgomery County. At the root of all provided training is the thread that protects the health, safety and wellness of the employee or volunteer members. Training has been designed to provide background, theory and safety methods designed to protect the

provider while delivery emergency work, throughout their agency tenure and after by teaching the employee about the long-term exposure risks associated with emergency response work.

All responders must complete annual recertification training which takes place through a web-based training program and in-station practical evolutions. These are tracked for all personnel to ensure compliance.

MCFRS employees are provided training and education about the chemical substances used in the work place, where they are stored and proper use. Employees are educated about Safety Data Sheets (SDS) and Chemical Information Lists contained in the “Employee Right to Know Station.” Each time new chemicals are added; the information is updated and the employee is to be notified. MCFRS assures that station level supervisors perform this training and continuing education is being conducted annually. Volunteer chiefs have been tasked to assure volunteer personnel are following the same direction and procedures. The SDS and right to know information is applicable to all MCFRS employees not just the responders.

Fit testing is performed by Fire Rescue Occupation Medical Services or at the SCBA shop. Fit testing is performed for users of the N95 particulate mask and the Scott AV3000 HT face piece. Employees or members who are not compliant will be removed from the integrated emergency command structure and will not be permitted to engage in emergency operations. These devices, associated training and evaluations, protect the employee, responders and the Department from injuries, illnesses and potential claims

Appraisal

All fire/rescue series employees have met basic training standards prescribed by the NFPA, the State of Maryland, Federal Government and MCFRS

As new equipment is approved and made available, MCFRS conducts in-service training and Battalion based training to familiarize members with the use of the device and proper

procedures required to operate the device.

Each employee or responder has been provided annual fit testing to ensure compliance with respiratory protection regulations and policy.

Plan

MCFRS will continue to support all personnel in protecting the health and wellness of all MCFRS personnel throughout their tenure with the agency. As issues develop, MCFRS will continue to act to target and reduce hazards and threats efficiently and limit exposure of the organization and employees to risk.

The Health & Safety Section will continue to participate with the Washington Metropolitan Council of Governments Semi-annual Safety and Health Symposium. This symposium is designed to focus attention on the risks associated with being a fire-rescue care provider. This allows for evaluation of direct on scene hazards as well as chronic health concerns facing fire rescue personnel.

References

[Web Based recertification for 2018](#)

[Collision Reduction Training](#)

[Health and Safety Section home page](#)

[NFPA Standards 1971 & 1851 \(cover sheets only\)](#)

[COG Safety Symposium 2017](#)

[FCGO No. 17-07, Air Monitoring Devices](#)

[FCGO No. 13-06, OSHA Hazard Communications. & Global Harmonized System Training](#)

[NFPA 1851 Training Program](#)

7F.6 The agency uses near miss reporting to elevate the level of situational awareness in an effort to teach and share lessons learned from events that, except for a fortunate break in the chain of events, could have resulted in a fatality, injury, or property damage.

Description

Not applicable to MCFRS

In 2005 MCFRS made important headway to introduce these concepts within the organization by institutionalizing CRM by embedding the course work into required training for each operational firefighter. The Health & Safety Sections MCFRS homepage provides a link available to all MCFRS personnel to the National Fallen Firefighters “Near Miss” reporting and encourages anonymous reporting to convey their experience.

MCFRS, through the Incident Response Policy Appendix T – After Action Reporting, Section 5, 2j, Significant Incident Investigative Report, provides clarity that the Fire Chief determines the scope and nature and will appoint a panel to investigate significant incidents. A near-miss/close call, such as a mayday situation constitutes a significant incident and MCFRS produces these post incident analysis reports not only teach and discuss lessons learned, but determine if training or policy enhancements are needed to attempt preventing future occurrences.

Appraisal

The Health & Safety Section had developed a “Safety Message” in 2009 that was written by the shift Safety Officer each Saturday that was communicated to the shift Duty Operations Chief for dissemination to MCFRS personnel each Sunday. The message was an attempt to elevate the level of awareness of personnel to attempt to prevent a near miss, or worse, from occurring. The “Safety Message” was discontinued in 2016 because the message became stale and its intended audience began treating the information as passive direction. To fill this void, the shift Safety Officers are now required to visit each station monthly and deliver a dedicated message regarding CRM, “Near Miss” reporting, and other predetermine priorities.

In 2017, MCFRS initiated a new Incident Response Policy which comprises the CRM doctrine as one of its guiding principles.

MCFRS has produced Post Incident Analysis reports for near-miss mayday situations and posts them on the Quicklinks website for all members to read and learn.

Plan

MCFRS must inspire all personnel to report a near miss event. MCFRS should develop and maintain an internal near miss program that is web based and linked to the National Near Miss Reporting system. This must include instruction to make aware of the power that their event has in alerting others to a condition that may cause significant injury, loss, or line of duty death.

MCFRS will introduce a plan to include the CRM training module into the Emergency Medical Technician course. This is required training for all operational personnel and is taught locally at the MCFRS Training Academy. Additionally, the department will develop an instructor-led Risk Management Accountability Program (RMAP) training module that includes the “Near Miss” reporting procedures, an annual COPDI training module addressing RMAP, Incident Investigation Root Cause Analysis an injury prevention. This same “Near Miss” reporting module can also be included as part of the Company Officer Leadership Academy (COLA) class required for newly qualified line officers.

At the operational level, there must be a continued focus on tactical risk assessment

MCFRS will continue to develop near miss/mayday reports for these significant incidents.

References

[“National Near Miss Reporting System” CloseCalls.com](#)

[Incident Response Policy #24-01](#)

[COPDI – Incident Investigation](#)

[COPDI – Root Cause Analysis](#)

[MCFRS Policy Number 24-02, Vehicle Collision Investigation and Reporting Policy](#)

[2016-03-15 Churubusco Lane with Mayday PIA](#)

[Incident Response Policy Appendix T](#)

[2006 Goshen Road Near Miss Report](#)

[2009 Frederick Avenue Significant Injury Report and the webpage](#)

[2016 Leekes Lot Way Mayday Report](#)

7F.7 The agency has a process in place to investigate and document accidents, injuries, legal actions, etc. The agency's information management system supports this process.

Description

MCFRS has Fire Chief's General Orders (FCGO), Directives, and Policy & Procedures that cover investigations of accidents and lost time injuries. MCFRS follows the Montgomery County Government Administrative Procedure 3.1, Reporting and Record Keeping of Injuries, which is a basic format of information required to file an injury or collision investigation. When collision or injuries occur involving MCFRS personnel, the on duty Battalion Chief/Certified Chief Officer and or Safety Officer is required to investigate the incident and document the report in the Risk Management Accountability Program (RMAP). Serious injuries and collisions will cause the Safety Chief to assemble a serious incident/injury investigation panel in accordance with MCFRS Policy #812.

The RMAP system is a management tool used to report and collect data related to cause of injuries, loss, and collisions. This program is a Microsoft Access data base that is managed by the Health & Safety Section. MCFRS identified Risk Managers utilize this system to enter vehicle collision, physical/personal property loss, and injury information. Report summaries can be queried from the data base and is currently utilized for a quarterly reporting process to MCFRS leadership. MCFRS has designed the RMAP system to take the information gathered during the investigation and create an insurance report that can be electronically submitted to the insurance carrier. The RMAP system creates a single source to store associated information during an investigation, including photos, videos, police reports, insurance correspondence, and any written statements obtained in the processing of the incident or event.

MCFRS has established a Collision Incident Review Committee (CIRC). This committee is chaired by the Health & Safety Section Assistant Chief. There is representation from County Risk Management, Health & Wellness, Labor, and subject matter experts. The purpose of this committee is to review the RMAP reports and determine preventability and

fault on the part of MCFRS personnel. There is an evaluation process designed to assign points to members for preventability and at-fault collisions or incidents. This system is explained in MCFRS Policy #606, Vehicle Accident/Incident Review and Disposition.

Appraisal

Montgomery County Government Administrative Procedure 3.1, Reporting and Record Keeping of Injuries, is an efficient management tool that provides the necessary items required to conduct a thorough collision, loss, or injury investigation. Additionally, MCFRS successfully uses MCFRS Policy 24-02, Vehicle Collision Investigation and Reporting Policy, MCFRS Policy Number 606, Vehicle Accident/Incident Review and Disposition, and the FCGO 10-17, Reporting MCFRS Insurance Claims as its guiding documents to process and investigate injuries, loss, and collisions.

The procedure for reporting and preventing injuries is first-rate. When MCFRS personnel are injured, their immediate supervisor contact Corvel, the County's third-party administrator for Workman's Compensation Claims, and files a First Notice of Loss (FNOL) report of the injury. The on-duty Battalion Chief/Local Fire and Rescue Department (LFRD) Certified Chief Officer, or the Safety Officer is then notified and works collaboratively to initiate an investigation concerning the cause and provide feedback on how to prevent future occurrence. The responsible investigator then completes the investigative report in the RMAP system. The RMAP system has greatly improved the capture of data and has improved consistency in reporting causes of injuries, collisions, and other losses. The overall process of having the RMAP system utilized to record information discovered during the collision and injury investigation process is outstanding.

MCFRS has worked with an independent contractor to reduce our losses. One of the objectives identified in the evaluation process was ensuring MCFRS has one way of investigating these types of incidents. The plan was to establish a safety committee with representation including career, volunteer, and management personnel. To meet the

objectives intent, and to comply with collective bargaining agreements, MCFRS formed a Joint Health & Safety Committee. Both the volunteer and career labor representatives meet weekly with the Fire Chief, and each group is given notice and opportunity to comments on initiatives and organizational changes.

Plan

MCFRS expects to evaluate the present systems to ensure it continues to meet there intended objectives. The Health & Safety Section plans to update the RMAP from an internal program to a more robust web-based program that will allow broader and more stable access. Training on the new system will be conducted.

MCFRS intends to implement an organizational wide Safety Officer credentialing program. This credentialing program will define the core training that will be required to operate as a Safety Officer. To accomplish this credentialing, the Health & Safety Section intends to sponsor a Safety Officer Academy to hastily offer required training.

Lastly, the Health & Safety Section plans to review, and if prudent, update the referenced existing guiding documents to improve processes, investigative techniques, and to ensure compliance with any new reporting requirements.

References

[Montgomery County Administrative Procedure 3-1, Reporting and Record Keeping of Injuries](#)

[DFRS Policy Number 606, Vehicle Accident/Incident Review and Disposition](#)

[DFRS Policy Number 812, Injury Investigative Team Procedures](#)

[Directive 03-15, Handling Personal Protective Equipment \(PPE\) Following an Injury](#)

[Fire Chief General Order 10-17, Reporting MCFRS Insurance Claims](#)

[MCFRS Policy Number 26-01, Loss Control Program](#)

[MCFRS Policy Number 24-02, Vehicle Collision Investigation and Reporting Policy](#)

[DFRS Policy Number 525, Critical Illness/Injury Guide](#)

[MCFRS 2016 Collision QA Information-1](#)

[MCFRS 2017 Collision QA Information-2](#)

7F.8 The agency incorporates risk management practices to increase the level of decision making and the ability to identify unsafe conditions and practices during emergency operations.

Description

MCFRS has recently adopted a new Incident Response Policy (IRP) and Operational Doctrine Statement (July 2017) for its all-hazards emergency response operations. This collection of documents replaces the older “Standard Operating Procedures for Safe Structural Firefighting Operations.” Per the IRP, risk describes the relationship between hazards and harm. More specifically, risk is the product of the probability that a certain hazard will cause harm and the severity of the harm if it were to occur.

During emergency operations, the risk assessment is established early to induct those factors into the development of incident priorities, objectives and action plans. The earlier into the incident this risk assessment is conducted, the safer the action plan will be. The IRP requires the first-arriving unit to establish command and perform the initial risk assessment, reporting by radio to the responding command officer the following factors: Initial On-Scene Report (IOSR), Situation Update Report (SUR), establishment of command, units taking assigned tactical positions, 360 circle check of building, primary and secondary water supplies established, and status of occupants.

The assignment of the Incident Scene Safety Officer (ISSO) is a critical point in incident operations. Per the IRP Incident Command Appendix, the ISSO is a member of the Command Staff responsible for monitoring and assessing safety hazards or unsafe situations, and for developing measures for ensuring personnel safety.

Appraisal

With the adoption of the new IRP and Operational Doctrine, MCFRS has taken steps to become a more sophisticated "learning organization." Emergency operations are continually evaluated, with concerted efforts on safety, risk management and decision-making. In order to evaluate this the department uses the After-Action Reporting Appendix of the IRP. This requires the Incident Commander lead a hot-wash after all working incidents, with the primary objective to respectfully and openly engage decision

makers to determine how their individual actions helped or hindered the operation holistically. For those incidents deserving a more comprehensive evaluation, the Initial Written After-Action Report is completed by the Incident Commander which captures the information from the hot-wash, adds an analysis from the Incident Commander, and is shared throughout the organization. A more complex analysis can be ordered by the Duty Operations Chief or the Operations Chief, in the form of an Enhanced After-Action Report, which contains all elements of the initial written AAR along with media, site plans, etc., and additional details about operational aspects in a presentation format designed for self-study. The reference material in this category contains a link to all of these reports so the reader can see the number of reports completed as well as the detail involved. The results of these reports have been tantamount in the establishment of new policies and procedures. These reports can be viewed by all MCFRS personnel by going to the online Significant Incident Digest.

The Operations Chief can direct a special appraisal of emergency operations. One recent appraisal focused on the IRP, specifically the risk assessment functions of the first-arriving unit officer per the IRP requirements. This appraisal was an independent review of the first 93 fire full assignments (FFAs) since the implementation of the new IRP, where the reviewer listened to the first 10 minutes of radio transmission for compliance on the tasks. The full report of compliancy can be viewed in the referenced material "IRP Compliance Project." Results of the appraisal indicated general weakness in reporting for all areas, but specifically in those areas needed to complete an adequate risk assessment to develop incident objectives and a safe action plan, including failure to report occupant status, no evidence of 360 circle check completed, and lack of primary and secondary water supplies, as well as weak SURs. As a result of this appraisal, the Operations Chief directed that all certified command officers engage unit officers under their commands with a face-to-face conversation to remind them of the need for good on-scene reporting and the proper sequence of risk assessment.

Plan

MCFRS, specifically the Operations Chief and his Duty Operations Chiefs across the three shifts, will continue to evaluate all emergency operations for proper risk assessment practices to identify unsafe operating conditions and support the development of incident objectives and safe action plans. The Operations Chief and his Duty Operations Chiefs will continue to support the requirements of the After-Action Reporting appendix of the IRP, by encouraging the creation of After-Action Reports, review and critique of those reports, publication and sharing of knowledge from those reports with all members of MCFRS, and implementing any recommendations for organizational improvement from those reports. Further, the Operations Chief will continue to require ad hoc appraisal of emergency operations, with critical data-based analysis, and implement resulting organizational improvement recommendations.

References

[2017 Command Competencies Resource Site](#)

[After Action Reporting Guidelines](#)

[Email from Division Chief Kinsley November 11, 2017 Improving the Initial Reporting Sequence for Reported Structure Fires](#)

[Incident Response Policy](#)

[Incident Response Policy Appendix A Operational Doctrine Statement](#)

[Incident Response Policy Appendix B Incident Command](#)

[Incident Response Policy Appendix I Rapid Intervention and Maydays](#)

[Incident Response Policy Appendix T After Action Reporting](#)

[IRP Compliance Project](#)

[MCFRS Significant Incident Digest](#)

Criterion 7G: Wellness/Fitness Programs (Author: B/C Coleman)

The agency has a fitness and wellness program for recruit and incumbent personnel. The agency specifies and communicates the provisions if members do not comply with the fitness and wellness program.

The Montgomery County Fire and Rescue Service (MCFRS), through its Fire and Rescue Occupational Medical Services (FROMS), offers all career and volunteer members, including new applicants, initial and annual screenings to ensure that they are medically cleared to perform each essential job task. MCFRS members who are non-compliant with policies, procedures, and executive regulations regarding required physical examinations will be removed from full duty and placed in a light duty or provisional status, including disciplinary action. In addition, FROMS has initiated a cardiac risk reduction program with the use of Calcium CT Scoring and enhanced bloodwork screening with the goal of reducing sudden cardiac death and detecting early cardiac disease. The Employee Medical Examiner (EME) maintains data on the Cardiac Risk Reduction Program for future evaluation. Also, FROMS has established several relationships with physical therapy locations to ensure a quick and seamless return-to-work process for firefighters who are injured on the job.

Performance Indicators:

CC 7G.1 The agency provides for initial, regular, and rehabilitative medical, and fitness evaluations.

Description

Fire and Rescue Occupational Medical Services (FROMS) is responsible for ensuring career and volunteer operational members are medically cleared by the FROMS Employee Medical Examiner to perform essential job tasks. MCFRS initiated the Cardiac Risk Reduction Program due to the overall demands that stress and firefighting have on the cardiovascular system. Cardiovascular deaths are still the leading cause of death for active firefighters in the United States. During the physical examination process, the FROMS EME discusses the cardiac risk associated with firefighting as well as health and wellness strategies to mitigate these risk factors.

MCFRS members injured while on duty, when applicable, are immediately seen by the appropriate physician depending upon their specific bodily injury. When the member is cleared to participate in a physical therapy program, FROMS directly oversees the coordination of the physical therapy, including the initial approval through the Worker's Compensation Coordinator. By having established relationships with physical therapy offices, it allows the injured member to receive the appropriate care to return to full duty as soon as possible.

Appraisal

MCFRS has ensured that all operational personnel, both career and volunteer, have received annual physicals. Fire and Rescue Occupational Medical Services (FROMS) was created to medically clear members for duty. By creating the Cardiac Risk Reduction Program, which promotes overall health and wellness through healthy diet and lifestyle, cardiovascular health awareness has increased for MCFRS members. Since the inception of the Cardiac Risk Reduction Program, MCFRS members have completed over 100 calcium CT scans.

Plan

MCFRS members will continue to receive annual medical screenings by FROMS with the goal of ensuring members are medically able to perform the essential job task. FROMS will continue to make enhancements to the MCFRS Cardiac Risk Reduction Program to identify and reduce the risk associated with cardiac disease, including early detection methods. The FROMS EME collects data on MCFRS members to show that the new Cardiac Risk Reduction Program is effective in preventing early cardiac disease. FROMS will continue to cultivate the relationships with the current physical therapy groups, to ensure all MCFRS members receive excellent rehabilitative care.

References:

[Risk Management Administrative Policy 3-1 Reporting](#)

[MCFRS Policy and Procedures, 01-02, Medical Standards for Operational and Candidates of MCFRS](#)

[FROMS Inova Contract, Scope of Services](#)

[FROMS Cardiac Risk Reduction Program](#)

[Chief Goldstein Video Message May 28, 2017: FROMS](#)

7G.2 The agency provides personnel with access to fitness facilities and equipment.

Description

All of the Montgomery County Fire and Rescue Services (MCFRS) worksites are currently equipped with physical fitness equipment to optimize physical performance at the incident scene. MCFRS has created a new electronic physical fitness request form that is used to expedite the purchasing, requesting, and the repairing of broken fitness physical equipment at MCFRS work sites. In addition, MCFRS has now hired a third-party fitness equipment contractor to handle all preventive maintenance and repairs for MCFRS fitness equipment. MCFRS, in collaboration with IAFF Local 1664, also provided the necessary funding to the new MCFRS Public Safety Training Academy for state-of-the-art equipment. Presently, one MCFRS employee is assigned to inventory, purchase, repair, and sell old fitness equipment.

Appraisal:

MCFRS provides a (2) hour block of time for personnel to engage in physical fitness each shift. This time is dependent on the need to respond to emergency incidents as these hours are done while on duty. MCFRS has been successful providing its personnel with needed fitness facilities and equipment, spending \$?? In the last several fiscal years.

Additionally, the new MCFRS fitness equipment tracking system adequately tracks and stores the cost of repairs and maintenance of all MCFRS fitness equipment. With the tracking system, MCFRS station personnel have been given the ability to request new equipment and create service tickets for broken fitness equipment. The tracking system has allowed for the efficient tracking of repairs and purchasing of fitness equipment.

Plan:

MCFRS in the future will continue to ensure that all worksites within the department are fully equipped with the specified allotted fitness equipment to assist members with their overall health and wellness.

References:

[Fire Service Joint Labor Management Wellness-Fitness Initiative](#)

[Fleet Management Reporting System - Defect and Mileage Reporting Module](#)

7G.3 The agency provides wellness/fitness training to all employees/members.

Description:

MCFRS has incorporated multiple ways to provide wellness and fitness training to all of its members. All MCFRS members have access to wellness and fitness education through the MCFRS fitness blog. MCFRS launched a program with Virgin Pulse that gives members access to a variety of health and wellness related topics. The Virgin Pulse website allows for employees to earn financial incentives by tracking their daily steps and exercise and covers a variety of topics including exercise, nutrition, and proper sleep. In addition, MCFRS members now have access to an on-site dietitian at FROMS. Ideally, after a MCFRS member has completed their annual or applicant examination, he or she will choose to meet with the registered dietitian. The dietitian conducts station visits and participates in ride-alongs to encourage MCFRS members to establish and maintain healthy eating habits and lifestyles while on the job.

Appraisal:

MCFRS has 61.32% of their employees signed up to participate in the Virgin Pulse program. In the 1st and 2nd quarters of FY18, (the program was started in July) the dietitian was requested to visit 11 worksites and interacted with 76 firefighters. In the 3rd quarter of FY18, as more personnel became aware of this new program, she has already been requested at 12 worksites and has interacted with 101 firefighters. In addition to the worksite visits the dietitian has attended the Recruit Training Class 16 times, held a presentation at Public Safety Headquarters (PSHQ) for civilian employees, with another scheduled for April 4, 2018 and participated in over 74 individual coaching sessions. We expect that all of these numbers will continue to rise over the next quarter as personnel become even more aware of these programs.

Plan:

MCFRS will continue to advertise these programs and encourage employee/member participation. The department will attempt to use data to see if there is a correlation between these offered programs and the overall health of our employees at their annual

physicals. We will also continue to look for enhancements or additional programs to meet the wellness needs of the department.

References:

[FROMS Pamphlet Examples](#)

[Fire Service Joint Labor Management Wellness-Fitness Initiative](#)

[FROMS Inova Contract, Scope of Services](#)

[Official Blog of MCFRS Wellness & Fitness](#)

[Virgin Pulse Website](#)

7G.4 The agency provides an employee/member assistance program with timely access to critical incident stress debriefing and behavioral counseling resources.

Description:

To meet the mental demands of mitigating emergency incidents, MCFRS members have access to both an on-staff psychologist and a therapist. To maintain confidentiality for the member, the psychologist and therapist have independent offices located away from FROMS. The MCFRS behavioral staff is well-trained to assist both members and their immediate family members. MCFRS Behavioral Staff and CISM Team members meet quarterly to review data and discuss new training initiatives and behavioral outreach programs with the goal of reducing stress within the entire department. The MCFRS behavioral staff maintains key points of data that are presented to the senior leadership that helps determine key areas of focus.

In addition, MCFRS members have access to the MCFRS Critical Incident Stress Management (CISM) Team. The team leader and members consist of MCFRS staff who are available 24 hours/day, seven days a week and can be activated when necessary to assist with critical stress debriefings. Also, MCFRS members have access to the Montgomery County Crisis Center and Employee Assistance Program.

Appraisal:

Plan:

In March – June 2018, MCFRS will be initiating an extensive behavioral outreach program to assist members with building resiliency when dealing with the effects of the accumulation of stress from emergency incidents. The MCFRS behavioral staff will continue to develop training programs meeting areas of need based on data collected during office visits and CISM Team activations.

Reference:

[Fire Service Joint Labor Management Wellness-Fitness Initiative](#)

[FROMS Behavioral Health](#)

[FROMS CISM](#)

7G.5 A formal and documented appraisal is conducted, at least annually, to determine the effectiveness of the wellness/fitness programs and its impact on meeting the agency's goals and objectives.

Description:

To ensure that MCFRS is meeting the health and wellness goals of its members within the parameters set forth in the IAFF Wellness Fitness Initiative, meetings are held throughout the year with key stakeholders. The key stakeholders include FROMS staff, Montgomery County Office of Human Resources (OHR) staff, Montgomery County Employee Medical Examiner (EME), and INOVA contracted staff. In addition, FROMS staff and representatives from County Risk Management and the third-party administrator (TPA) meet monthly to discuss work-related injuries, injury trends, and return-to-work strategies.

Appraisal:

MCFRS has initiated a new Cardiac Risk Reduction Program created by stakeholders due to a near miss cardiac event. Since the inception of The Cardiac Risk Reduction Program, FROMS has experienced the following results: 438 people screened using enhanced blood work, questionnaire and annual physical. This has led to cardiac referrals for 9 people for high risk factors, 5 people for high Calcium CT results. Additionally, this process has discovered pulmonary nodules in 14 people allowing for the detection of early signs of lung cancer.

Plan:

FROMS will continue to be proactive and forward thinking in its approach to meeting the health and wellness needs of MCFRS. FROMS will continue to develop new health and wellness programs based on trends from data analysis. When data is reviewed and medical illness or diseases have been identified by data from our current programs, FROMS will also use this data to assist with the development of new programs.

FROMS will also continue to do enhanced bloodwork on MCFRS members who are older than 39 years of age as another surveillance tool to increase early cardiac disease detection.

References:

[FROMS Pamphlet Examples](#)

[FROMS Inova Contract, Scope of Services](#)

[Fire Service Joint Labor Management Wellness-Fitness Initiative](#)

[Cardiac CT Score Poster](#)

[FROMs Cardiac Risk Reduction Program video](#)

Category VIII: Training and Competency (Author: Capt. Pinthiere)

Training and educational resource programs express the philosophy of the organization they serve and are central to its mission. Learning resources should include a library; other collections of materials that support teaching and learning; instructional methodologies and technologies; support services; distribution and maintenance systems for equipment and materials; instructional information systems, such as computers and software, telecommunications, other audio-visual media, and facilities to utilize such equipment and services. If the agency does not have these resources available internally, external resources are identified and the agency has a plan in place to ensure compliance with training and education requirements.

Central to success of the training and educational process is a learning resources organizational structure and a technically proficient support staff. The training staff should provide services that encourage and stimulate competency, innovation and a continual learning cycle. The agency or system should provide those learning resources necessary to support quality training. The agency should depict their approach to recognized state/provincial and national fire service professional standards programs in their written responses to the performance indicators in this section.

Criterion 8A: Training and Education Program Requirements

A training program is established to support the agency's needs. The agency provides access to and guidance on educational programs that increase advancement potential and support the agency's needs.

Summary:

Training programs are presented at the Public Safety Training Academy (PSTA) year-round. The PSTA schedules are designed to accommodate both volunteer and career personnel as we have a combined system in Montgomery County.

The Fire Chief and PSTA staff employ the concept of front-end analysis to meet the department's training needs. Management staff continuously monitors and evaluates departmental trends to determine training strengths and needs to effectively deliver programs to personnel.

The courses offered at the PSTA are designed to meet the needs of personnel seeking minimum training and/or promotion. Courses meet or exceed State and national certification standards, including: [National Board on Fire Service Professional Qualifications](#) (NBFSPQ); [International Fire Service Accreditation Congress](#); [Maryland Fire Rescue Education Training Commission](#).

Performance Indicators:

CC 8A.1 The organization has a process in place to identify training needs. The process identifies the tasks, activities, knowledge, skills, and abilities required to deal with anticipated emergency conditions.

Description

The department has a continuous process that it follows to ensure training needs are met. Management continually monitors personnel attrition, reviews standards and critical calls, and analyzes feedback to assist the training design process.

The rate of personnel attrition is monitored as an aid to the training process. Attrition may dictate the type and schedule of training that the department needs to provide in the future. Standards are monitored for changes that may affect the training provided by the department. Various national and state entities and local policies dictate the training standards that fire service personnel need to adhere to when performing in various roles. National and State entities that the department monitors to ensure compliance include: National Fire Protection Association (NFPA); Federal Emergency Management Agency (FEMA); Occupational Safety and Health Administration (OSHA); Maryland Occupational Safety and Health Administration (MOSHA); Maryland Fire and Rescue Institute (MFRI). Local policies that dictate training requirements include: Fire Chief General Orders (FCGOs); Montgomery County Executive Regulations; Fire and Emergency Services Commission (FESC) policies; Fire Chief Directives.

The department reviews critical and complex calls to ascertain if any specific skills or knowledge need to be revisited by the PSTA to ensure personnel safety. The department reviews critical calls through the Post-Incident Analysis and Significant Incident Report processes.

The department continuously receives and evaluates feedback provided by the various program leaders. The needs of program leaders pertaining to their deficiencies in training

and requirements are met by the PSTA course schedule, which is adapted as necessary. Furthermore, the PSTA continuously solicits feedback on courses and training from the primary stakeholders - the students.

Appraisal

The process that is in place has proven to be effective in meeting the needs of all members of the organization, both career and volunteer. Much valuable information on classes and programs has been obtained through course and training feedback mechanisms. The Calendar Year (CY) 2016 In-Service training program trained a total of 887 personnel on commercial mayday operations and returned 100% of feedback solicitations electronically, which provided information on the quality of the program. The CY2017 In-Service training program, which trained a total of 718 personnel on rural water supply, was designed directly as a result of deficiencies that were noted and relayed after consultation with Operations Division chiefs.

Montgomery County Fire and Rescue Service's (MCFRS) aggressive training schedule is comprised of courses that meet the needs of members, specialty teams, management teams, officer training, and company level operations. Each course is evaluated by instructors, PSTA staff, and students to ensure the most effective educational strategies are used, which ensures the highest quality training and the most effective field personnel are produced. The PSTA ran 310 classes in CY2016 and 248 in CY2017, most of which solicited specific feedback on the course, instructors, materials, and training environment. While feedback has been robust, the PSTA is still using paper feedback forms which often makes it cumbersome for managers to review the enormous amounts of forms that are returned throughout the year.

The Emergency Medical Services Quality Assurance/Improvement Office has successfully used quantitative analysis to focus departmental training needs on the most critical areas. Return of spontaneous circulation (ROSC), ST Elevation Myocardial Infarction (STEMI), and patient stroke interventions data have been routinely quantitatively analyzed against American Heart Association recommended standards of

practice. This data and analysis has been successfully used for EMS program development, enhancement, and updates, and subsequently, integrated into PSTA training to improve patient care.

Plan

The Training Chief (Assistant Chief, Training Section) will continue to oversee all PSTA programs and confer with program coordinators to evaluate their programs. A quarterly meeting will be held with PSTA staff to identify training needs and deficiencies within MCFRS, and identify tasks, activities, knowledge, skills, and abilities required for emergency operations. The Training Chief will consult with the Operations Division Chief and his staff on information obtained in Post Incident Analysis and Significant Incident reports to identify any training deficiencies that the PSTA might be able to address in current or new training initiatives. The Training Chief will look into the feasibility of moving to all-electronic feedback mechanisms which might also provide easier interpretation of analytics.

References

[MCFRS Post Incident Analysis Reports and/or Presentations](#)

[Memo from Training Chief](#)

[Example of one Post Incident Analysis report: 03/14/2016 Churubusco Lane](#)

[2016 in-service dashboard pdf in document library](#)

[2017 In-Service Totals](#)

[2016 and 2017 Classes Delivered](#)

See 2018 CRA/SOC section titled Positive and Negative Service Delivery Outcomes Methodology and Analysis [2A.5] & Event Consequence and Loss Data [2B.3] for examples of how the MCFRS EMS Quality Assurance/Improvement Office uses quantitative analysis which helps determine agency training needs as part of its processes

8A.2 The agency's training program is consistent with the mission statement, goals and objectives and meets its needs.

Description

The overarching premise of the organization's mission statement from a training perspective is to provide personnel with the knowledge, skills, and abilities that will allow them to meet the community's needs in regard to an all-hazards approach to emergency response. The training that is provided at the PSTA fulfills this desire of the mission statement.

The PSTA trains members to respond to and mitigate a multitude of hazards that the community may encounter, from entry-level firefighting and emergency medical skills to specialty team responses in the areas of Urban Search and Rescue, Hazardous Materials, Swift Water Rescue, Technical Rescue, and Heavy Rail responses.

In addition to the core training provided to personnel, the organization also provides continuous professional development opportunities to further prepare individuals, such as the Command Officer Professional Development and Improvement (COPDI) program, the Company Officer Leadership Academy, an In-Service Training program, and EMS continuing education courses. Training is provided by the PSTA year-round to continually provide personnel with the training to prepare them for emergency response delivery.

Appraisal

The training programs in place are meeting the organization's mission. Personnel have been able to maintain numerous certifications and licenses that have allowed the organization to maintain normal response levels and specialty team activities. The PSTA graduated 75 new recruits in June 2017 that were trained as nationally-registered emergency medical technicians, firefighters, hazardous materials first responders, and emergency vehicle operators-forming a foundation for continued learning towards fulfillment of the Department's mission. 92 chief officers were certified through the

COPDI program for CY2017, ensuring safe, consistent, and effective command of a wide range of hazards by command staff is possible.

An area where the department needs to improve is the organization of the wealth of data that is generated from training delivery into easily quantifiable metrics that succinctly summarize the effectiveness of the training program.

Plan

To ensure the continued success of the training program, the Training Chief and staff will continue to assess outcomes through a process of continuous monitoring, evaluation, and action as-needed. In addition, a system will be devised to standardize data to a form that is easily translated into performance metrics and accessible to all staff; department IT staff is working on the development of an enterprise management system that will address this need, with a projected completion date of CY2019. Further, monthly meetings will be scheduled where staff can discuss training efforts and collaborate on the best delivery methods for various programmatic efforts.

References

[Command Officer Professional Development and Improvement](#)

[In-Service Training](#)

[EMS Recertification Schedule](#)

[MCI Week 2016](#)

[2017 COLA schedule](#)

8A.3 The training program is consistent with legal requirements for performing mandatory training.

Description

The PSTA provides standardized training for all members of the department that meets the requirements of all applicable regulations, codes, directives, and adopted standards. The various agencies, associations, and/or entities that assert legally-binding regulations, codes, directives, and standards which direct the training efforts of the organization include, but are not limited to, OSHA, NFPA, Code of Maryland Regulations (COMAR) Title 30, the Montgomery County Executive, and the Department of Homeland Security.

The PSTA provides training to meet many requirements posed by the entities identified above. The OSHA regulations that personnel are trained to include, but are not limited to, 29CFR1910.120, 134, 146, and 1030. NFPA standards that personnel are trained to include, but are not limited to, NFPA 472, 1500, 1561, 1583, 1584, 1001, 1002, 1006, 1521, 1041, and 1021. All members of the Department must meet (and are trained to prior to leaving the PSTA as new members) the minimum training standards as defined in Montgomery County Executive Regulation 38-08AM, Certification Standards for Training, Experience, and Credentialing Requirements, which follows Montgomery County Code Chapter 21 Sections 8 and 18. In addition, personnel training delivery has been upgraded to comply with Homeland Security Presidential Directive #5 (HSPD 5), which requires those receiving federal preparedness assistance funding to be compliant with the National Incident Management System.

Some of the courses provided by the PSTA that satisfy legal requirements include: Bloodborne Pathogens, Self-Contained Breathing Apparatus and Personal Protective Equipment, Hazardous Materials Awareness and Operations for First Responders, Introduction to the Incident Command System, National Incident Management System, an Introduction, ICS for Single Resources and Initial Action Incidents, Emergency Medical Technician-Basic.

Appraisal

The PSTA's training program has met and exceeded the legally-binding requirements that have been set forth by the entities previously mentioned. Also, the training program has consistently met the requirements of the Maryland Fire and Rescue Institute under the Maryland Fire-Rescue Education Training Commission.

The PSTA has successfully implemented all program changes as mandated by MFRI. The PSTA has passed all five reviews conducted by MFRI in the past five years. In addition, testing security has been upgraded to match new testing software that has been instituted by MFRI.

Plan

The Training Chief and staff will continue to monitor the legal environment to ensure that the training programs delivered by the PSTA meet all requirements. The PSTA will continue to plan for and implement change notifications that are relayed from MFRI.

References

[Montgomery County Code, Chapter 21](#)

[Montgomery County Executive Regulation 38-08AM](#)

[NIMS Training, Fire Chief General Order](#)

[Homeland Security Presidential Directive #5](#)

8A.4 The agency identifies minimum levels of training required for all positions in the organization.

Description

MCFRS is subject to many regulations, standards, and codes that dictate the minimum levels of training that members are to have at all levels of the organization. MCFRS continues to monitor minimum levels of training that are dictated by OSHA, NFPA, the National Registry of Emergency Medical Technicians (NREMT), the Department of Homeland Security (DHS), and the Maryland Institute for Emergency Medical Services Systems (MIEMSS).

MCFRS has documented levels of training required for all positions in the organization. The Montgomery County Executive Regulation, 36-08AM Certification Standards for Training, Experience, and Credentialing Requirements, incorporates the MCFRS minimum levels of training into one document. Regulation 36-08AM identifies minimum training that is required for entry-level firefighter and EMS recruits through the ranks of EMS Chief and Duty Operations Chief. Further, MCFRS has identified minimum levels of training for the various specialty personnel in the organization. MCFRS adheres to training levels as dictated by NFPA and OSHA for the positions of Hazardous Materials Technician, Hazardous Materials Officer, Fire Investigator, Fire Inspector, Incident Safety Officer, and the various Technical Rescuer positions: Confined Space, Swift water, Rope, and Trench.

In addition to the minimum training that is required at each level in the organization, MCFRS provides for the ongoing training of personnel through its Command Officer Professional Development and Improvement (COPDI) program. Annual COPDI training is required for personnel at the Chief Officer rank in the amount of 12 hours but is open to all members of the organization.

Appraisal

The department has continued to identify minimum training that is required by constantly monitoring the regulatory environment for changes. Personnel have been successfully meeting the minimum levels of training, education, and experience, as exemplified through the delivery of year-round training. The PSTA delivered 310 classes in CY2016 and 248 in CY2017; these courses included minimum training to allow personnel advancement through the ranks. MCFRS continues to put new hires through the recruit training process that are trained to identified minimum standards that allow for effective service delivery to the community while placing personnel in a good position for advancement. MCFRS graduated 75 recruits in 2017.

Plan

The Training Chief and staff will continue to monitor the regulatory environment to maintain the required levels of training for personnel and provide them with training that continues to meet the all-hazard mission of the Department.

References

[National Registry of Emergency Medical Technicians](#)

[Maryland Institute for Emergency Medical Services Systems](#)

[Montgomery County Executive Regulation, 36-08AM](#)

[Chief Officer Professional Development and Improvement](#)

[2016 and 2017 Classes Delivered](#)

8A.5 A command and staff development program is in place that encourages pursuit of professional credentialing.

Description

Most of the training programs provided by the PSTA lead personnel to professional credentialing possibilities with the NBFSPQ. The PSTA offers classes that can be used for NBFSPQ credentialing, including: EMS Officer I; Fire Officer I/II/III; Instructor I/II/III; Health and Safety Officer; Incident Safety Officer. In addition, many of these classes are required for minimum staffing potential, putting personnel in an ideal position to pursue professional certification.

Further, command and staff personnel are required to participate in the Command Officer Professional Development and Improvement (COPDI) program annually, which provides them with additional training on management theory, leadership, conflict resolution, documentation, risk management, legal issues, customer service, etc. Topics that are offered through the COPDI program have served as a foundation for personnel to receive the Executive Fire Officer (EFO) credential that is offered through the National Fire Academy (NFA).

Appraisal

The command and staff development program in place has improved organizational performance and provided a vehicle to continually assess individual performance using a standardized rubric. The foundational software program for scenario-based training in the COPDI program, "FireStudio," was recently upgraded to the latest version and installed in a new command lab. 92 chief officers went through the COPDI program and received Chief Officer certification in CY2017. Personnel have utilized their training and experience as a springboard to obtaining professional credentials, such as the NFA Executive Fire Officer certification.

While the COPDI program is designed to cover a broad range of professional development topics, the program manager has been working to increase the range of subjects delivered to staff. At times, there has been a dearth of qualified people available to present fresh topics to personnel, while keeping budgetary hits to a minimum.

The FireStudio software was upgraded, but has proved to be cumbersome at times. The programming and use of the software has been very labor-intensive.

Plan

The organization will continue to provide classes for command and staff development and deliver the COPDI program. Additionally, the COPDI program manager will begin to actively seek collaborative meetings with other staff development managers in the COG region to ensure that the organization's program is delivering the most comprehensive training.

The COPDI program manager will actively nurture a partnership with the Maryland Emergency Response System (MERS) to increase the robustness of the COPDI program and augment the command lab's simulation capabilities. A preliminary meeting was held with the MERS in February 2018, with a follow-up planned.

References

[MFSPQB Applications for Certification](#)

[Chief Officer Professional Development and Improvement](#)

[National Fire Academy Executive Fire Officer Curriculum](#)

Criterion 8B: Training and Education Program Performance

Training and education programs are provided to support the agency's needs.

Summary:

Adherence to training, experience, and credentialing standards ensures that individuals who perform fire and rescue operations within the organization have the requisite knowledge, skills, and abilities to safely and effectively execute their duties.

The State of Maryland established and maintains a quality assurance program for courses delivered through and sponsored by the Maryland Fire and Rescue Institute (MFRI). The Maryland Instructor Certification Review Board (MICRB) evaluates course delivery and instructors in accordance with state standards. Course instructors conduct quality assurance audits for the organization's training academy courses, which are reviewed by the Training Course Coordinator.

The Training Division will regularly evaluate all courses, review student evaluations, and assess instructor evaluations and effectiveness for all training provided by the Training Academy. Since NFPA standards are reviewed and/or updated every five years, staff will continue to analyze and modify the curriculum to meet or exceed any amended standards.

Performance Indicators:

8B.1 A process is in place to ensure that personnel are appropriately trained.

Description

The organization has in place many facets to ensure personnel receive the necessary training to perform essential job functions, from introductory firefighter through the chief officer ranks. The process begins with the recruit training curriculum, which trains new firefighters and emergency medical technicians (EMTs) to NFPA standards for new firefighters and Maryland standards for EMTs.

After recruit training, personnel are exposed to various Training Academy courses covering a wide range of topics that provide the skills, knowledge, and abilities for personnel to fill a range of vital departmental roles. Examples of roles that personnel can be trained for by the Academy include: apparatus driver, paramedic, hazardous materials technician, swift water rescue technician, technical rescue technician, and boat operator. In addition to specific academy courses for core organizational roles, personnel seeking to promote to line officer and chief officer ranks are required to take additional management-oriented courses prior to testing for those positions. All personnel are required to meet minimum training standards as designated in policy 36-08AM for all positions within the organization.

The Department requires a yearly review of personnel certification files of all personnel by supervisors to ensure personnel have the current training required to function in essential positions. This review occurs concurrently with a mandatory, annual recertification period when personnel review material to ensure proficiency in essential subject areas for all-hazard emergency delivery. An electronic record of compliance is maintained in the enterprise management system.

Appraisal

The process in place has done well in ensuring personnel are appropriately trained and meeting necessary standards. The Promotional Candidate Application Process System (PCAP), which is a training database that is part of the enterprise management system, has been helpful by giving managers an easy way to ensure training levels are compliant with Department policies and standards.

Training of all kinds has continued to be delivered to all members of the organization. Course registration has been transitioned to a mostly online format to allow for more robust and timely access to all personnel. Further, the transition to online delivery of most recertification courses and non-classroom courses has allowed for quick and robust tracking of completion rates.

The Training Academy has continued to hold classes during days, nights, and on weekends to accommodate both career and volunteer personnel. The transition to a new facility has increased capacity to run multiple classes and recruit training simultaneously.

Plan

The current process will be maintained to ensure personnel are appropriately trained. Further, the Training Academy will continue to provide the current schedule of training and evaluate the quantity of training that needs to be provided on a semi-annual basis. The quality of training will be continually evaluated by all involved, to include students, instructors and administrators. Course offerings will be reviewed by the Training Chief and Course Coordinator on an annual basis to ensure the organization's needs are being met and adopted training standards are being followed.

References

[PSTA 2017 Management Course Offerings](#)

[PSTA 2017 Firefighter Course Offerings](#)

[Montgomery County Executive Regulation, 36-08AM](#)

[PCAP Screenshot](#)

[Annual Recert Screenshot](#)

[Link to RC41 Calendar](#)

8B.2 The agency provides a training schedule that meets the organization's needs.

Description

The Training Academy schedules classes to accommodate all personnel, including both volunteer and career. Long-range classes are frequently scheduled on a daytime, weekend, or nights-and-weekends schedule. Classes frequently mirror a college/university delivery model to accommodate personnel work schedules. A schedule of classes is made available to all personnel, and registration is automated. All personnel are notified via email, departmental mail, and the online training registration system (OTRS) of course schedules.

In-service training is provided to personnel to maintain skills, and explore new techniques and trends in the fire/rescue service industry. In-service training usually takes place during six months of the year and at strategic times that are chosen to capture a majority of career and volunteer personnel.

Personnel are given the option of receiving a handful of courses via a distance learning model delivered through the Blackboard Class system. This feature provides accommodation to personnel who have a hardship with getting to the academy site.

Appraisal

The PSTA training schedule has met personnel needs by making courses available throughout the workweek and during all seasons. In CY2016, 310 classroom-based courses were scheduled to meet organizational training needs-248 courses were delivered in CY2017. In addition, the In-Service program has been scheduled in a way that has allowed for thousands of personnel to participate in training; 887 personnel received the training during the CY2016 program, 718 personnel received the training during CY2017. Since the move of the PSTA to the new training facility in late CY2016, a new scheduling software – “TeamUp” - has been commissioned to assist with the scheduling of classes. The software has proven invaluable but has only worked well when personnel have used it as designed.

Plan

The Training Academy will continue to provide a training schedule that attempts to meet the needs of all personnel. In addition, the Academy will continue to develop a distance learning model that will further accommodate personnel while maintaining a minimum standard of quality and allowing for continuous quality assurance.

References

[2017 Course Schedule Screenshot](#)

[2016 In-Service Totals](#)

[2017 In-Service Totals](#)

[2016 and 2017 Classes Delivered](#)

[TeamUp Calendar Screenshot](#)

CC 8B.3 The agency evaluates individual and crew performance through validated and documented performance-based measurements.

Description

As a first step to performance-based evaluation, the Training Academy evaluates all personnel through the classroom process. At the end of all required classes, there are several methods of performance measurement that are utilized to assess individuals' retention of knowledge and ability to perform skills as required by adopted standards. For example, individuals taking Firefighter I/II are required to meet the performance standards of NFPA 1001, which are evaluated through standardized performance and cognitive tests throughout the course. As another example, individuals learning to become hazardous materials technicians must pass standards based on NFPA 472.

In addition to individual evaluations based on adopted standards, standardized benchmarks are used to evaluate a combination of crew and officer performance. Chief officers can use benchmarks for all apparatus types assigned to incidents to evaluate officer and crew performance, and completion of expected tasks. Further, command officers are evaluated at least yearly, and on every call as needed, for adherence to command-level benchmarks.

Finally, all personnel are evaluated yearly utilizing a standardized measurement tool used by MCFRS called the Individual Performance Planning and Appraisal (IPPA). This document serves as an evaluation based on expected performance outcomes tailored to an individual's rank and/or level in the organization. These forms also serve as documentation of the organization's efforts to boost and support employee performance when needed.

Appraisal

The organization has provided fair, timely, and performance-based evaluations of individual and crew performance. Supervision has been provided on all levels for all personnel which has allowed for the robust delivery of evaluations. New probationary employees have returned to the PSTA on a consistent basis for periodic, standardized evaluations throughout their probationary periods: Timely evaluations have ensured that performance issues have been caught early and addressed before they became deeper

problems. 75 probationary employees returned to the PSTA in CY2017 for probationary testing.

Plan

The Training Chief and Training Academy staff will continue to review classroom and training performance standards on an annual basis to ensure the organization is conforming to nationally and/or locally recognized standards. Further, the Training Chief will design a plan to confer with the Fire Chief on a continuing basis to analyze whether the organization's performance benchmarks for all activities and positions are relevant and in-line with organizational policies and recognized standards.

References

[Water Supply Benchmarks](#)

[Command Benchmarks](#)

[IPPA's](#)

[Firefighter II Performance Test II](#)

8B.4 The agency analyzes student evaluations to determine reliability of training conducted.

Description

Student evaluations and surveys are collected for all formal training conducted by the Training Academy. Instructors are required to review these evaluations after every class. Further, program managers and the Training Chief review classroom evaluations to assess instructor effectiveness and content of the class.

Student surveys are also collected for company training that takes place during in-service training exercises sponsored by the Training Academy. In addition to analyzing student surveys and evaluations, the Training Academy regularly reviews the evaluation processes and methods to ensure they conform to national and local testing standards and are accurately measuring the outcomes that the organization is seeking to document. Further, the Training Academy's classroom testing instruments are strictly designed and tracked by MFRI, who handles all test design instruments for classes they sponsor.

Appraisal

After delivery of the organization's 2016 in-service training sessions, which trained 887 personnel, survey data was organized into a dashboard that could easily be analyzed for course reliability and effectiveness and used for planning of future training and policy. A similar dashboard was used for the 2017 in-service program, which trained 718 personnel, with a few modifications to the assessment questions. With the use of a system that requires submission of a survey to receive attendance credit, the in-service program has been at a virtual 100% compliance rate for submission of surveys which has enhanced analysis of training reliability. Instructors and managers continue to evaluate students and evaluation techniques.

The Training Academy has recognized that an investment in a learning management software suite may be necessary in the future to manage and consolidate the amount of data being generated by a large organization; consolidation might be able to help instructors and managers better recognize patterns that may exist in training delivery and student response. The department's IT Section has started internal work on a custom

enterprise management system, which should alleviate the management burden at the Training Academy.

Plan

The PSTA will continue to modernize the student evaluation processes so that data accumulation and trend recognition is easier and faster. The Training Chief will ensure the PSTA has significant input into the design of the enterprise system that is being built. A preliminary 6-month timeframe has been allotted for the gathering of current and future evaluative and data needs to assist with input on the new learning management system.

References

[2017 In-Service Dashboard](#)

[2017 In-Service Totals](#)

[2016 In-Service Dashboard](#)

[MFRI Testing Policy](#)

8B.5 The agency maintains a training records management system that meets recognized standards.

Description

The Training Academy utilizes a training records management system (RMS) to meet the needs of all personnel, both volunteer and career. The RMS that the Training Academy uses is called “Pathlore.” It is a database that stores the training records for all personnel from the start of their service and throughout their service. Volunteers may search their training records by using their Personnel Information Management System (PIMS) which pulls information from the Pathlore database. Career personnel utilize the Promotional Candidate Application Process (PCAP) system to view training information stored in Pathlore.

In addition to Pathlore, all personnel in the department may utilize the MFRI transcript system and the Pro Board Fire Service Professional Qualifications System to view training records as well. Most courses that personnel take at the Training Academy are MFRI-sponsored courses; therefore, these training records are also stored in MFRI's RMS. Personnel training that qualifies for national Pro Board certification, and that personnel apply for, may be viewed in the Pro Board's RMS.

Appraisal

The methods that MCFRS has been using to maintain training records have worked and met students' needs, but the Pathlore system could be improved. Specifically, the records of roughly 2500 personnel are maintained in the Pathlore system with no major issues, but it is an old system that could be swapped for one that is easier to manipulate and provides better analytic capabilities. The MFRI and Pro Board systems are basic, but easy to use and provide the information that they were intended to provide.

Plan

MFRI and the Pro Board do not have plans to discontinue their records systems; these systems will continue to be available to personnel. A plan will be devised by the Training Chief, utilizing input from a representative group of stakeholders and Training Academy

staff, to explore the continued viability of Pathlore and/or formulate specifications on more current and user-friendly database options. The enterprise management system that the organization's IT department is working on will likely suit the training tracking needs of the organization, with some input from the Training Chief.

References

[Screenshot of Pathlore](#)

[MFRI Transcript/Certificate Request Form](#)

[ProBoard Certification History Form](#)

Criterion 8C: Training and Education Resources

Training and education resources, printed and non-printed library materials, media equipment, facilities, and staff are available in sufficient quantity, relevancy, and diversity, and are current.

Summary:

The Training Academy moved to a new, state-of-the-art facility in CY2016 that provides an increase in capacity and training resources. The new facility exceeds the national standards set by NFPA 1402, Guide to Building Fire Service Training Centers. Training facilities include: two burn buildings; high-bay building; apparatus bay building that provides fire apparatus, breathing apparatus, and protective equipment storage; command development center (in apparatus bay building); subway car training prop; flammable liquid training area; vehicle fire training prop; compressed gas training prop.

In addition to the physical training areas, the new academy provides increased capacity and technology. 350 personnel can be seated simultaneously among eight traditional classrooms. In addition, the command development center can be converted to seat roughly 20 people and provides equipment to serve as a classroom. All of the traditional classrooms in the new facility are equipped with state-of-the-art LCD screens, projectors, and audio systems to enhance the learning experience. Further, the academic building houses an audiovisual laboratory for the technical development of training materials.

The Training Academy currently has approximately 100 Maryland Instructor Certification Review Board-certified instructors on its rolls, who are available to meet the training needs of the organization in all areas, including fire, EMS, hazmat, search and rescue, water rescue, etc. ([MICRB](#))

Performance Indicators:

CC 8C.1 Facilities and apparatus are provided to support the agency's all-hazards training needs. The agency has plans addressing any facilities and apparatus not available internally to complete training activities.

Description

The training academy is a new training compound that exceeds the standards of NFPA 1402. There are a plethora of classrooms, instructors, and ancillary training structures available to support the organization's training needs. In addition, the organization has internal access to a variety of apparatus to support training, including: 35 FEMA Type I Pumpers; 15 FEMA Type I Aerials; 8 FEMA Type I Water Tenders; 6 Rescue Squads; a multitude of ambulances.

The organization has agreements with other area training facilities to facilitate burn training with Class A materials. The organization has training agreements with both Frederick and Loudoun counties to conduct Class A burns. The organization also has the ability to utilize the MFRI burn building as it is a statewide training facility.

Appraisal

The organization has provided access to training with the construction of a state-of-the-art facility, equipment, and apparatus. In CY2017, the PSTA put on 248 classes, including 24 driving-oriented classes that utilized internal apparatus. In addition, between CY2016-CY2017, the PSTA hosted the following classes, which required use of a multitude of specialized internal apparatus and equipment: surface water rescue, ice rescue, swiftwater technician, pump operator, vehicle and machinery, and hazardous materials technician.

In addition to the internal classes that have been successfully delivered at the PSTA, there have been many successful interactions with outside agencies to provide facilities and equipment that weren't available. From CY2016-CY2017, there were 18 Firefighter I/II courses that were delivered utilizing help from outside agencies that provided Class A burn buildings, such as Loudoun County Fire/Rescue and MFRI. In addition, the PSTA successfully utilized the MFRI maze trailer to assist in the delivery of training. In

CY2017, the PSTA Recruit Training program successfully graduated 75 new firefighters utilizing a combination of facilities and equipment located both internally and externally.

Plan

The new training academy will provide years of quality training platforms for the organization. The Training Chief will ensure that the training staff maintains the new equipment and facilities that have been placed in service. The Training Chief will also ensure that the organization is continually reevaluating facilities and equipment to be certain that the most current and efficient resources are being utilized for training.

References

[Map of PSTA](#)

[FEMA Resource Typing Scheme](#)

[PSTA Assigned Apparatus](#)

[2016 and 2017 Classes Delivered](#)

CC 8C.2 The agency has instructional personnel with teaching qualifications and expertise to meet its needs.

Description

The PSTA employs 15 full-time staff to meet the instructional needs of the organization. All PSTA uniformed staff are required to obtain Level II MICRB-instructor certification upon assignment. The current full-time positions include: three Maryland State RN-licensed EMS nurse clinicians; Driver Training coordinator and a Driver Training program manager; two Recruit Training coordinators; In-Service Training coordinator; BLS Training coordinator; ALS Training coordinator; Training Course coordinator; two Technical Services coordinators; Command Development coordinator and Assistant Training officer; and Training Chief.

In addition to full-time staff, the Training Academy has approximately 100 MICRB Level II-certified instructors on its roles that are assigned to field stations. These instructors are available to meet the training needs of the organization in all areas, including fire, EMS, hazmat, technical rescue, water rescue, etc.

MICRB Level II instructors are required to have the following training: Instructor I and II coursework; complete practical and cognitive evaluations; complete 60 interim training hours; receive two satisfactory evaluations from MICRB evaluators; every three years, complete a minimum of 12 hours continuing education and teach at least 60 hours.

Appraisal

Since the last accreditation cycle, the organization has made great strides toward meeting this indicator. Between the last cycle and now, the PSTA hired an additional technical services coordinator, an additional nurse clinician, an ALS program manager, and a full-time course registrar.

The Training Academy has had an increasing need for full-time instructors/staff to meet the ever-expanding needs of a growing department. The Training Academy has utilized part-time personnel to assist with training and instructional delivery for large classes and during peak time periods. There were roughly 42,000 overtime hours utilized in FY2017 to deliver PSTA training programs.

Plan

The Training Chief and PSTA staff will continue to track overtime usage and details needed to administer programs and deliver training to provide justification for the acquisition of more full-time personnel.

References

[PSTA Organizational Chart](#)

[MICRB](#)

[Master Instructor List](#)

[FRS066 Overtime Report](#)

8C.3 Instructional materials are current, support the training program, and are easily accessible.

Description

Training materials are current, support the program, and are easily accessible because MCFRS conforms to Maryland Fire and Rescue Institute (MFRI) standards for class delivery; most training programs delivered by the Training Academy are MFRI-sanctioned courses. Since the department has a testing and evaluation agreement with MFRI, instructional materials for all MFRI-sanctioned training is maintained to current NFPA standards. The Training Course Coordinator (TCC) maintains an electronic database of the most current instructional materials that are provided by MFRI. In addition, the TCC maintains a physical library of the most current textbooks and instructor guides as provided by MFRI.

For programs that are not a part of the MFRI agreement, MCFRS still maintains currency with the most up-to-date NFPA standards and standards of care and practice. Overall, the Training Academy complies with the requirements of the following local, regional, and state certifying bodies: MFRI, MFSPQB, International Fire Service Accreditation Counsel (IFSAC).

The department's Training Academy website makes many training materials available in a web-based format for quick and easy access. The website includes access to driver training, CPR, and command competency resources. In addition, the In-Service Training site makes many skill-oriented training resources accessible in an online format as well. When personnel access the PSTA's website, recent training efforts can be reviewed along with new training materials deemed as priority training by the Training Chief.

Appraisal

The organization has maintained conformity with MFRI course delivery and testing standards on a consistent basis. Instructional materials have been kept up-to-date, organized, and easily accessible. The PSTA has kept a consistent physical inventory for roughly 18 courses, including instructor guides and textbooks.

While the In-Service Training program has provided web access to training resources, the content has been lacking in number and variety. Further, managers realized that the program might be better-served in seeking to capitalize on the many new electronic and/or web-based platforms available, e.g. YouTube, live-feed services, etc. Considering these revelations, the PSTA started a YouTube channel to deliver more in-service training content; as of August 22, 2017, the channel had 83 subscribers and 899 views.

Plan

The organization will continue to maintain the training agreement with MFRI and conform to MFRI standards on course delivery and material currency. Further, the In-Service Training Coordinator will continue to work with the Training Chief to expand the electronic availability, subject matter, and reach of current training materials.

References

[Examples of Online Resources for Command Competencies](#)

[In-Service Training site](#)

[In-Service YouTube Channel](#)

8C.4 The agency has a process for purchasing, developing, or modifying existing curriculum to meet its needs.

Description

The Training Academy has a written agreement with MFRI to deliver MFRI-sanctioned instruction, which makes up the bulk of courses delivered by the PSTA. Through the agreement, continuous curriculum development and materials are provided by MFRI in exchange for the PSTA's concordance with the provisions of the agreement. Curriculum development, test development, and course materials are all provided by MFRI at no cost.

All EMS programs delivered in the State fall under the purview of the Maryland Institute for Emergency Medical Services Systems (MIEMSS). MIEMSS directs training and develops curriculum which must be followed by all Maryland jurisdictions that provide emergency medical services. Further, all medical providers in the State must be certified by the National Registry of Emergency Medical Technicians (NREMT), which also dictates training course content. The organization follows all the training and curriculum requirements put forth by MIEMSS.

The PSTA utilizes its annual budget to purchase curriculum materials that are not covered by the MFRI agreement. Major purchases are routed through the County Government procurement process.

Other training and recertification programs delivered by the Training Academy are reviewed and/or updated annually to ensure content is relevant, timely, and in accordance with industry standards. Annual recertification materials are reviewed annually by subject-matter experts (SMEs) who provide input to the In-Service Training Coordinator. The In-Service Training Coordinator plans training which is developed in conjunction with the Operations Division's needs and approved by the Training Chief. The Recruit Training Coordinator (RTC) continuously reviews training materials to ensure they are in accordance with MFRI and MIEMSS standards. Further, the RTC continuously ensures that practical training aligns with accepted industry practices.

Appraisal

The organization has continuously delivered current and relevant training that is in accordance with national, State, and institutional requirements. Materials, curricula, and practices have been reviewed and/or updated as necessary to deliver effective training.

While training and curricula pertaining to MFRI, State, and national training programs have been reviewed on a continuous basis, the process for other training and recertification might be more efficient for managers if there existed a schedule for the review and submittal of material for delivery to personnel.

Several non-MFRI courses have been recently developed by staff who recognized a deficiency between the training the organization was providing and the hazards facing responders within the jurisdiction; a surface water boat operator, ice rescue awareness, and ice rescue technician courses were developed. Work started in the summer of 2017 on a new Truck Company Fireground Operations course, to be delivered in 2018.

Plan

The organization will continue to adhere to the requirements set forth by MFRI, the State, and the NREMT. Further, the Training Chief will work in conjunction with PSTA staff to devise a preliminary schedule for the planning and review of recertification and in-service training curricula. Personnel who have ideas for the enhancement of existing courses, and the development of new ones, will continue to be supported by the Training Chief.

References

[MFRI Agreement to Allow MCFRS Academy to Teach Programs](#)

[MIEMSS Initial Certification and Licensure Requirements](#) (specifies training required by EMS Board for EMT-B and Paramedic)

[Recruit training schedule \(Shows different training topics\)](#)

8C.5 Equipment utilized for training are properly maintained in accordance with the agency's operational procedures. The agency makes training equipment readily accessible to instructional personnel.

Description

The PSTA has at its disposal a plethora of apparatus and equipment that is used solely for training. Equipment and apparatus that is made readily available to instructional personnel includes: two fire engines; a passenger bus; a utility van; a pickup truck; ten ambulances; Self-Contained Breathing Apparatus (SCBA); ladders; fire extinguishers; CPR mannequins; manual defibrillators; BLS/ALS equipment; saws; and hose appliances. In addition to the aforementioned equipment utilized for practical skills and class delivery, the PSTA also uses a multitude of multimedia equipment, including: laptop/desktop computers, video projectors, and video/editing lab equipment.

The maintenance of most of the department's equipment is directed by the Support Services Division as dictated by the County Executive's Office. Within the Support Services Division is the Fleet Maintenance Section (FMS), which coordinates maintenance of most fire and EMS apparatus and equipment. Notwithstanding, FMS coordinates the repair and maintenance of most of the PSTA's equipment, including apparatus and their associated small appliances, ladders, and SCBA. Ladders are tested and inspected annually by an outside vendor, coordinated by FMS. SCBA are exchanged annually with the SCBA shop, who flow-tests all of the department's SCBA. Apparatus maintenance is coordinated by FMS as well. FMS also coordinates the repair of ambulance stretchers and small equipment.

The maintenance of the PSTA's defibrillators is coordinated through the department's EMS Section who maintains the warranty with the manufacturer. Maintenance of smaller EMS equipment, including mannequins, is coordinated in-house by the PSTA EMS Program Coordinator; equipment may be repaired by staff or replaced utilizing the PSTA's EMS Program budget.

The PSTA Technical Services Coordinators (TSC) play a large role in coordinating the repair and maintenance of training equipment, and determining whether small items may be serviced in-house or should be sent to the manufacturer or a certified vendor.

The maintenance of all computers and electronic equipment is coordinated through the County Departments of Technology Services and General Services.

Appraisal

Training equipment has been properly maintained to enable the effective and efficient delivery of instruction at the PSTA. The PSTA has maintained a sufficient quantity of equipment to fulfill its mission. Upon moving to the new facility, the PSTA secured ten ambulances to support a robust driver training program.

TSCs have proven invaluable to the operations of the PSTA in terms of equipment maintenance and overall operational readiness. In the rare instance where a piece of equipment needed for training has been found broken or otherwise inaccessible, the PSTA Technical Services Coordinators have been able to utilize various mechanisms to obtain replacements from the department's reserve cache or field units. The TSCs have built strong relationships with many outside contacts which has contributed to the swift resolution of many equipment issues.

Plan

PSTA staff will continue to ensure that all equipment is maintained in peak condition to enable the safe and effective delivery of training programs to personnel. TSCs will continue to play a major role in the operations of the PSTA.

References

[Fire & Rescue Apparatus Management Plan](#)

[Screenshot of Fleet Management Defect Reporting System](#)

[PDFs of 6, 12, 24-month Pumper Inspection sheets](#)

8C.6 The agency maintains a current inventory of all training equipment and resources.

Description

The PSTA purchases all equipment through a closely-monitored County purchase approval process. This process requires all purchases to be reconciled monthly and reviewed by the County Finance Department. Records of purchases are maintained by both the Finance Department and PSTA staff. In addition to the purchase approval process, when equipment is received by the PSTA, it is labeled as such and tracked by program managers. The EMS, Training Course, Driving, and Technical Services Coordinators all keep records of equipment and resources that are housed under their programs. Further, the Driver Training Coordinator maintains an inventory of all major apparatus assigned to the PSTA, while the County Equipment Maintenance Operations Center (EMOC) tracks all staff vehicles.

Appraisal

The inventory system utilized by the PSTA has been individual to each program and manually managed; accuracy is heavily dependent on accurate human input and close coordination between staff and the Finance Department. The Training Chief and Deputy Training Officer have not had the ability to view inventory at-a-glance and in one location, if the need were to arise. The system has worked thus far, but benefit might be realized in a searchable, centralized, inventory tracking system.

Plan

The PSTA will mount efforts to evaluate inventory tracking needs and streamline the current process where necessary. Outside systems will be evaluated for efficacy in meeting the PSTA's current inventory tracking needs where applicable.

References

[Driver Training inventory of apparatus](#)

[TCC inventory of training resources](#)

8C.7 A selection process is in place for training and educational resource materials.

Description

MCFRS has an academy agreement with the Maryland Fire and Rescue Institute; as such, training and resource materials are provided by MFRI to the PSTA for the delivery of training courses - in both print and multi-media formats. MFRI has a continuous process of evaluation and replacement of training materials to keep information current with nationally-recognized standards. Further, the PSTA is evaluated on a continual basis by MFRI for compliance with the academy agreement. The TCC maintains an inventory of the most current instructional materials that are provided by MFRI.

In addition to the MFRI academy agreement process, the PSTA selects educational and training materials that supplement its programs and meet or exceed all local, State and national requirements and standards. Standard-setting bodies that the PSTA resource material selection process conforms to include, but are not limited to, the Office of Homeland Security, NFPA, Washington Metropolitan Council of Governments, and MIEMSS.

Appraisal

The selection process has worked well for the PSTA. The PSTA has been maintaining compliance with the academy agreement with no issues. MFRI has continued to perform spot-check evaluations of compliance with all procedures and materials. MFRI recently provided the PSTA with a new Scantron machine to grade tests, bringing the PSTA in line with a new learning management system and speeding up the grading process.

Plan

Training and educational resource materials that meet or exceed all applicable standards will continue to be selected for use. Further, the PSTA will continue to comply with the requirements of the academy agreement with MFRI to continue using their selection process for resource materials.

References

[Maryland Fire Rescue Institute Compliance Memorandum](#)

CC 8C.8 Training materials are evaluated at least annually, to reflect current practices and meet the needs of the agency.

Description

Training materials are kept current and continually evaluated for efficacy in meeting MCFRS needs. The department has a testing and evaluation agreement with MFRI, so instructional materials for all MFRI-sanctioned training are maintained to current local and national standards, including Maryland Fire Rescue Education and Training Commission and NFPA standards. Further, training materials for EMS courses are continually evaluated for compliance with standards set by MIEMSS and the National Registry of Emergency Medical Technicians.

The annual in-service training program is developed and evaluated on a continuing basis by collaboration between the PSTA and Operations Section to ensure the program and materials are meeting the department's needs. During development, staff ensure the in-service training program reflects the current policies and procedures of the department and adheres to practices expected by standard-setting bodies.

Appraisal

The Training Chief and his Deputy have met at least semi-annually, or as-needed, to review minimum standards set forth by NFPA, MFRI, and other standard-setting organizations that guide the activities of the department. The Training Chief has regularly engaged staff individually and during meetings to ensure training and related materials have continued to meet the department's needs.

Plan

The Training Chief will continue to meet with the Deputy Training Officer and staff to discuss the PSTA's position in ensuring that materials reflect current practices and meet the department's needs. The Training Chief will ensure that program managers are continually evaluating the materials their programs are using for relevance and efficacy.

References

[Maryland Fire Rescue Education and Training Commission](#)

[Maryland Institute for Emergency Medical Services Systems](#)

[National Registry of Emergency Medical Technicians](#)

Category IX: Essential Resources (Authors: B/C Davis, B/C Baltrotsky, others)

Essential resources are defined as those mandatory services or systems required for the agency's operational programs to function. They should be given the same value of importance as a primary program. Appropriate adjustments may be necessary in the self-analysis to adapt the typical components listed below to the local situation. For example, when reviewing a water supply system, the evaluation may not be limited to conventional resources such as water lines and hydrants, but may include alternative resources, such as tankers (tenders), ponds, streams, lakes, cisterns, etc.

Criterion 9A: Water Supply (Author: B/C Davis)

The water supply resources are reliable and capable of distributing adequate volumes of water and pressures to all areas of agency responsibility. All areas meet fire flow requirements in accordance with applicable fire flow criteria.

Summary:

With the release of the April 2000 Water Supply Study – Final Report, MCFRS began a journey to improve many aspects of the water supply delivery process in both the hydranted and non-hydranted areas of the County. Since then, much work has been completed within MCFRS in the areas of apparatus, equipment, training and procedures. The MCFRS tanker fleet has expanded to eight, large capacity units with each tanker having an assigned driver twenty-four hours per day. There now is a reserve tanker that is used to help reduce coverage outages during maintenance and repair of the frontline units.

The MCFRS pumper fleet consists of more than 40 pumpers, each capable of pumping in excess of 2,000 gpm from hydrant sources and more than 1,500 gpm from static water supply sources. The use of large diameter hose as supply hose is the standard across the entire frontline and reserve pumper fleet; thus, allowing large volumes of water to be pumped over long distances.

Regarding the public water supply systems, the County is served by three: the Washington Suburban Sanitary Commission (WSSC), the City of Rockville Public Works, and the Town of Poolesville Public Works. The largest provider of water is WSSC. All three public water supply systems have worked over the last five years to improve their delivery of clean drinking water to their customers, which resulted in an improvement in fire protection water supply as well.

Within the WSSC system, development in the Clarksburg, Damascus, and Laytonsville areas resulted in the expansion of fire hydrant coverage area and improvement in flow capability and system redundancy. Within the Rockville system, recent efforts to improve system pressure zones and increase flows in low flow areas resulted in significant improvement in the water supply available for fire protection. In Poolesville, new land

development projects resulted in an expansion of the Town's water system – specifically system capacity and expanded fire hydrant coverage.

In the areas of the County that lack fire hydrant coverage (i.e., located more than 1,000 feet from a hydrant), fire suppression efforts rely on water supplied by MCFRS - generally in the form of tankers. While the MCFRS process to supply fire protection water using tanker operations improved greatly since 2000, the process by which to replenish that supply (tanker fill sites) continues to struggle. There are many places throughout the County where tankers can refill using static water sources such as ponds, streams, rivers, and cisterns. The problem lies in the control and reliability of those static water sources: most of the static water sources in the County are not under the control of MCFRS. While these static water sources are still used to support fire protection efforts, improvement is needed in terms of inspection, maintenance, repair, flow testing, and access. To more focus the needed improvement efforts, MCFRS intends on re-implementing the Water Supply Work Group with the goal of reviewing all aspects of the fire protection water supply delivery system and implement change as needed to address the deficiencies found.

Performance Indicators:

CC 9A.1 The agency establishes minimum fire flow requirements for new development in accordance with nationally and internationally recognized standards. This information should be included in the fire risk evaluation and pre-fire planning process.

Description

Minimum fire flow requirements for new development in Montgomery County are clearly established and mandated through both State and County Code. The Montgomery County Code's adoption of the Maryland State Fire Prevention Code, which adopts NFPA 1, as amended, includes minimum fire flow requirements. Specifically, NFPA 1's Section 18.4, which defines fire flow requirements, is included in the adoption of State and County codes.

For every new building, addition or Change of Use application permit received by the Montgomery County Department of Permitting Services, the fire flow requirements are applied. The Montgomery County Fire Marshal is assigned to the Department of Permitting Services and is legislatively responsible for applying the Fire and Life Safety Code within the County.

The local County Code applicable to fire prevention is reviewed triennially along with the Maryland State Fire Prevention Code. Updates to the State Code are then adopted by Montgomery County, also on a triennial basis. The County Fire Marshal serves as a subject matter expert at the State level for the State's adoption on fire and life safety code adoptions and recommended code changes. An equivalent process occurs in the County. The County Fire Marshal recommends local amendments to the adopted State Fire and Life Safety Codes to be considered by the Director of Permitting Services, the County Council and County Executive.

MCFRS, based on guidance provided by the Center for Public Safety's 9th edition Fire and Emergency Services Self Assessment Manual, has incorporated building stock with

fire protection systems into its fire risk assessment. The agency's water supply model is based on fire risk and preplanning processes and has been validated by local testing with its equipment, water supply resources, and travel times.

Appraisal

The Fire Marshal has been on the Maryland State Fire Prevention Committee during the last 14-years and has been instrumental in the administration and management of each code update since 2004. In 2016, the Fire Marshal recommended the County Executive adopt within the County Fire Safety Code, updates made to the Maryland Fire Prevention Code. The County Executive approved this recommendation and the Council legislatively mandated the updates to County Code. This process has kept the County's minimum fire flow requirements in line with the State's and the National Fire Protection Association's Standard 1.

Plan

The Montgomery County Fire Marshal will continue to remain engaged with proposed changes to national and international fire and life safety codes, which could affect the health and wellbeing of Montgomery County residents, workers, and visitors, and specifically dealing with fire flow requirements. Proposed updates to codes affecting fire flow will be analyzed for applicability and the Fire Marshal will continue to educate stakeholders and make effective recommendations to the executive leadership regarding code changes.

MCFRS will continue to liaison with the Department of Permitting Services Fire Code Compliance Section to address mutual life safety objectives applicable to fire flow.

References

[Water Supply Study Appendix B](#)

[State of Maryland Fire Prevention Code, Revised January 1, 2016](#)

[Montgomery County Council Resolution 18-604: Approval of Executive Regulation 8-16](#)

Section 18.4 of NFPA 1 (2015) Fire Flow Requirements for Buildings (copy-write protected and available during site visit at the DPS Fire Code Compliance Office)

CC 9A.2 An adequate and reliable water supply is available for firefighting purposes for identified risks. The identified water supply sources are sufficient in volume and pressure, based on nationally and internationally recognized standards, to control and extinguish fires.

Description

Montgomery County is served by three, public water systems: Washington Suburban Sanitary Commission (WSSC), the City of Rockville system, and the Town of Poolesville system. The three systems provide clean drinking water to more than 80% of County's population and fire protection water through more than 23,000 fire hydrants. In terms of fire protection, all three systems generally provide sufficient water volume and pressure to support fire suppression efforts regardless of location or time of day. This assessment is based upon MCFRS' no known incidence of insufficient, municipal system volume or pressure; and, no serious deficiencies noted in ISO's 2017 PPC Summary Report for Montgomery County FPSA (hydranted area).

The WSSC system is the largest of the three systems and is interconnected with the City of Rockville and the District of Columbia. The Rockville connection provides emergency and peak demand supply to the Rockville system if needed. The District of Columbia connection provides an emergency supply to the District's system. None of the interconnections are sufficient to adequately supply all water demands between the systems during emergency situations. Due to its isolation and remoteness, no water system is interconnected with the Town of Poolesville's system.

During times of reported water pressure problems or significant water main outages in hydranted areas, MCFRS, in some instances, will temporarily relocate tankers from the rural response areas to cover those problem outage/pressure areas until the problems are resolved. In other instances, additional engine companies are added to the response assignment in the areas affected by the system pressure problem.

Appraisal

According to ISO's 2017 PPC Summary Report for Montgomery County FPSA, MCFRS received a score of 29.46 out of a possible 30.00 points on Item 616 – Credit for Supply

System. The ISO PPC evaluation process is an in-depth evaluation process that uses recognized American Water Works Association (AWWA) and NFPA standards to assess a community's water supply for fire protection.

With a score of 29.46 (98.2%) in the water supply system category, the public water supply systems that serve Montgomery County achieved a top-rated performance score in the ISO evaluation process – a score relative to a Class 1 PPC rating.

Plan

MCFRS' liaison to the three public water systems will work to ensure that communications with system authorities remains strong so that the timely notification of supply issues occurs. The MCFRS Water Supply Officer will work to standardize response plan adjustments for those times when water system supplies are impacted by outages or pressure reduction.

References

[Montgomery County Comprehensive Water Supply and Sewerage Systems Plan](#)

[2017 ISO PPC Montgomery Co FPSA Summary Report](#)

9A.3 The agency maintains regular contact with the managers of public and private water systems to stay informed about available water supplies.

Description

Minimal contact is maintained with the three public water system providers in the County. An MCFRS Battalion Chief is assigned as a liaison to WSSC but does not regularly interact with the agency. No liaison is assigned to the Rockville or Poolesville systems. The most common interaction that occurs between the three water service providers and MCFRS is the reporting of outages which normally comes in the form of a phone call made directly to the MCFRS communications center. The Communications Center then notifies command staff and fire station personnel using various electronic notification means.

Appraisal

The recent loss of the MCFRS fire code enforcement function to the Department of Permitting Services has reduced the fire department's interaction with the water service providers. The only real interaction is the notification of outages and pressure losses. When the fire code enforcement function resided in MCFRS, more interaction occurred with the water service providers mainly because of the plans review process and the involvement of water supply needs for land development and building occupancy.

Plan

To improve MCFRS contact and interaction with the three, public water service providers in the County, MCFRS will reassess the role and responsibilities of the Battalion Chief assigned as the liaison to these agencies. New responsibilities will include a more proactive approach towards being better informed about water system matters. The MCFRS liaison to the water service providers will need to insure that regular, scheduled communications occur between the agencies. These communications should occur as "in-person" meetings; initially on a semi-annual schedule that can be adjusted as agency needs change.

References

[Email String with Dept of Permitting Services Fire Code Compliance Leadership](#)

9A.4 The agency maintains copies of current water supply sources and hydrant maps for its service area.

Description

Both paper and electronic maps are used to identify the locations and types of fire protection water supply sources throughout the County. The traditional paper maps are generated at the station level and normally provide much needed detail about a response area, including water supply sources. These maps are normally drawn by company level personnel using computer software and a variety of data sources. The maps are stored in a map book on the apparatus and are available to transfer companies via loaner map books. Additionally, all of the battalion chief response vehicles carry a WSSC map book showing water main locations, sizes, etc.

Regarding electronic mapping and source information, the current version of MCFRS' CAD system provides fire hydrant and static water source location information on the mobile data terminals in each emergency vehicle. In addition to the CAD mapping information, command officers have access to WSSC's phone app for water system outages/problems. They also have access to a MCFRS Google mapping app that displays rural water supply locations (static sources) and water supply points along the interstate highway system in the County.

Appraisal

The CAD mapping system for water supply locations continues to remain a stable source of information for company-level response. The addition of the Google mapping app at the command level response has provided a good source of specialized location information. The paper maps generated at the company level have provided a solid back-up to the electronic system provided by CAD. Improvements in the paper map system are needed; however, to provide more standardization of symbols and mapping alignment with the response area box numbering system.

Plan

Company level personnel will continue to generate and revise the local response maps making sure to provide updates to the technical support staff responsible for the CAD mapping system. The MCFRS Water Supply Officer will review all static water supply source data for accuracy and currency. Upon completion of that review, CAD dispatch premise data will be updated to provide recommended primary and secondary water supply sites for all non-hydranted box areas.

References

[Example of Typical MCFRS Map Book with Hydrants Listed](#)

[Example of MCFRS Mobile Data Computer in Apparatus Map Layer with Hydrants](#)

9A.5 Hydrant adequacy and placement reflect the locality's known hazards and the agency's needs for dealing with those hazards. Hydrant placement is based on nationally and internationally recognized standards.

Description

The placement and flow adequacy of fire hydrants in Montgomery County is addressed by Chapter 22 of the Montgomery County Code and the NFPA standards referenced therein. However, fire code enforcement no longer resides as a function within MCFRS and is handled by of the Department of Permitting Services (DPS). All fire hydrant placement over the last 25 years has been driven by Montgomery County Code and no change has occurred since the transition of fire code enforcement services to DPS.

Regarding hydrant inspection and flow adequacy, MCFRS has never been directly involved in the flow testing of fire hydrants in any of the three public water systems serving the County. All inspection and flow testing activities on the 23,000+ fire hydrants maintained by the three public water systems are scheduled and completed by those authorities. All inspection and flow testing activities on private fire hydrants in Montgomery County are scheduled and completed by the property owners (or their designee) in accordance with local codes and requirements. MCFRS has never been involved in the inspection or flow testing of private fire hydrants other than ensuring compliance with local codes.

Since the transition of fire code compliance enforcement to DPS, it is DPS that determines and enforces all fire hydrant inspection fire flow testing requirements related to fire code matters. This includes new construction and development as well as renovated properties and change in occupancy use.

The three public water system authorities complete their own inspection and flow testing on the hydrants within their respective systems. When needed, the results of those tests are shared with MCFRS officials.

Regarding MCFRS' knowledge of individual water system adequacy, that knowledge is based on historical experience and on the findings of ISO's assessment of the water system. Since the last accreditation review process, MCFRS knows of no incident

involving water supply volume or pressure matters in the hydranted response areas. In addition, the ISO 2017 PPC Summary Report for Montgomery County FPSA noted no serious deficiencies in the assessment of the three, municipal water supply systems serving the County.

Appraisal

According to ISO's 2017 PPC Summary Report for Montgomery County FPSA (hydranted area), MCFRS received a score of 29.46 out of a possible 30.00 points on Item 616 – Credit for Supply System. MCFRS received a score of 3.00 out of a possible 3.00 points on Item 621 – Credit for Hydrants. MCFRS received a score of 3.5 out of 7.0 points for Item 630 – Credit for Inspection and Flow Testing.

It is clear that the public water systems supplying water to Montgomery County provide a robust service in terms of water for fire protection and consumption. All three water systems have a strong infrastructure and supply.

The area of deficiency most noted in the ISO 2017 PPC summary report relating to water supply was fire hydrant inspection and flow testing. The public water system authorities received only 50% of the possible points in this evaluation category. In most cases, the leading factor affecting fire hydrant inspection and flow testing is lack of sufficient resources (water system personnel) to complete the work on the 23,000 fire hydrants in compliance with ISO and NFPA requirements.

Plan

The MCFRS liaison to DPS will ensure code compliance issues are addressed regarding the placement and flow adequacy of the both public and private fire hydrants.

MCFRS will continue to liaison with the public water system authorities to ensure that fire hydrant inspection and flow testing occurs in a manner such that the ISO scores on Items 616, 621, and 630 of the PPC are at least maintained at their current level or improved.

References

[Montgomery County Code, Chapter 22, Section 22-29](#)

[2017 ISO PPC Montgomery Co FPSA Summary Report](#)

9A.6 Fire hydrants are located so that each is visible and accessible at all times.

Description

There are 23,000+ fire hydrants located along the three public water systems that serve the County. All of those hydrants were installed in accordance with the AWWA and NFPA standards in place at the time of installation. Those standards address installation location, access, and visibility. In addition, Chapter 22 of the Montgomery County Code addresses the location and accessibility of fire hydrants; therefore, all public fire hydrant installations must comply with the Code.

The number of private fire hydrants in the County is unknown. Most of the private fire hydrants would have been installed due to Chapter 22 code requirements and therefore would follow similar location, access, and visibility requirements.

MCFRS has no type of hydrant inspection program that examines hydrant accessibility or visibility. Regarding the public water systems, all work related to fire hydrant accessibility and visibility is completed by the water system authorities. For the private water systems, all work related to fire hydrant accessibility and visibility is completed by the property owner.

Appraisal

MCFRS has no formal program that addresses fire hydrant location, access, or visibility. While DPS is involved in the initial installation of said fire hydrants, follow-up once the fire hydrants become operational is minimal. Fire station personnel may occasionally identify fire hydrant access and visibility problems during emergency response, pre-planning, or training events. Those problems are generally forwarded to the respective water authorities or property owners.

Plan

MCFRS station personnel will continue to survey response areas for fire hydrant visibility and access problems and will submit those problems to the party responsible for making the corrections.

The MCFRS Water Supply Officer will work to create a reporting process by which station personnel can enter defect data on fire hydrants so that a greater understanding of the problem and improved follow-up on repair can occur.

References

[Montgomery County Code, Chapter 22, Section 22-29](#)

9A.7 Public fire hydrants are inspected, tested, and maintained in accordance with nationally and internationally recognized standards. The agency's fire protection related processes are evaluated, at least annually, to ensure adequate and readily available public or private water.

Description

Public fire hydrants in Montgomery County are inspected, tested, and maintained by the three independent water authorities: Washington Suburban Sanitary Commission, the City of Rockville Public Works, and the Town of Poolesville Public Works. MCFRS conducts no inspection, testing, or maintenance on any public or private fire hydrant in Montgomery County.

Regarding the inspection, testing, and maintenance work conducted by the three water authorities, that work generally follows nationally recognized standards; however, the frequency of said work varies from authority to authority. With WSSC being the largest of the three water supply systems, that system is also the most difficult in which to complete annual inspections, testing, and maintenance; thus, the frequency of inspection, testing, and maintenance completion in the WSSC system is lower. The Poolesville system is the smallest water supply system in the County; therefore, inspection, testing, and maintenance work is completed with the greatest frequency. The Rockville system falls in between the WSSC and Poolesville systems in terms of inspection, testing, and maintenance frequency.

Other than use on an emergency incident, the only interactions that MCFRS personnel have with public and private fire hydrants in Montgomery County are training events and a rare, public service call to check for an "open" hydrant or other operational problem.

Appraisal

There is little MCFRS interaction with the three public water authorities regarding the inspection, testing, and maintenance of system fire hydrants. The fire department carries out its mission of emergency response, and the water authorities carry out their mission of delivering drinking water to their customers. While the current level of interaction might not be the best practice, if fire hydrant reliability was a problem in the County then

MCFRS most likely would be more engaged in the assurance of inspection, testing, and maintenance. Because the components of the three water systems are (and have been) very reliable, the need for fire department involvement in the inspection, testing, and maintenance of fire hydrants has not risen to a level of importance requiring action.

According to ISO's 2017 PPC Summary Report for Montgomery County FPSA (hydranted area), MCFRS received a score of 29.46 out of a possible 30.00 points on Item 616 – Credit for Supply System. MCFRS received a score of 3.00 out of a possible 3.00 points on Item 621 – Credit for Hydrants. MCFRS received a score of 3.5 out of 7.0 points for Item 630 – Credit for Inspection and Flow Testing.

It is clear that the public water systems supplying water to Montgomery County provide a robust service in terms of water for fire protection and consumption. All three water systems have a strong infrastructure and supply.

The area of deficiency most noted in the ISO 2017 PPC summary report relating to water supply was fire hydrant inspection and flow testing. The public water system authorities received only 50% of the possible points in this evaluation category. In most cases, the leading factor affecting fire hydrant inspection and flow testing is lack of sufficient resources (water system personnel) to complete the work on the 23,000 fire hydrants in compliance with ISO and NFPA requirements

Plan

MCFRS will continue to liaison with the public water system authorities to ensure that fire hydrant inspection, testing, and maintenance occurs in a manner such that the ISO scores on Items 616, 621, and 630 of the PPC are at least maintained at their current level or improved. In addition, MCFRS' review of system inspection, testing, and maintenance records will occur on an annual basis; not just when an ISO survey is underway. The review of records will be completed by the Water Supply Officer with findings reported to the Fire Chief.

References

[2017 ISO PPC Montgomery Co FPSA Summary Report](#)

9A.8 The agency identifies and plans for alternate sources of water supply for those areas without hydrants, where hydrant flows are insufficient, or in the event of a major disruption in public water supply capabilities.

Description

Appendix F "Water Supply Operations" of MCFRS Policy and Procedure 24-01, "Incident Response Policy (2017)" outlines the plan for water supply operations in areas with and without fire hydrant coverage. Enacted July 1, 2017, Appendix F provides doctrine and direction regarding the process by which water supply operations are initiated and expanded upon to support emergency response operations.

For operations in the non-hydranted areas of the County, Appendix F provides company-level and command-level officers options for water supply delivery, including attack tanker (nurse tanker) operations, tanker shuttle operations, and relay pumping operations.

The July 2017 policy is a revision of the previous Safe Structural Firefighting Operations SOP (MCFRS Policy 24-07 AMII) and provides more clarity and direction in water supply operations.

Appraisal

MCFRS' ability to deliver water for fire protection using alternative water supply sources is very good and has continually improved ever since the completion and release of the 2000 MCFRS Water Supply Study. This improvement is most noted in the improved ISO PPC rating for the FDS (non-hydranted) area.

In 2015, MCFRS assigned a Battalion Chief the collateral duty of Water Supply Officer (WSO) following the recommendations of NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, 2017 ed. Thus far, the role of the WSO has been limited to the ISO survey process and limited involvement on policy development and equipment purchases. Expanded use of the WSO is needed to improve the use of alternative water supply sources and delivery methods.

Over the last ten years, tanker deployment and response coverage has improved with the most recent deployment of Tanker 713, directly impacting the department's improved PPC

rating in the FDS. Included in this deployment program is a tanker fleet replacement program which also includes a reserve tanker program.

The recently enacted MCFRS Policy and Procedure 24-01, "Incident Response Policy (2017) adds a sixth engine to structure fire assignments in non-hydranted areas. The addition of this engine allows the first five engines to focus on assignments similar to the hydranted-area response plan while providing an additional engine dedicated to establishing a water supply source to support tanker or relay pumping operations. While results-related data on the addition of this sixth engine is extremely limited thus far, the extra engine is expected to improve firefighting and water supply efforts at structure fires occurring in the non-hydranted response areas.

One result from the ISO's 2017 PPC Summary Report for Montgomery County FDS was the creation of predicted water supply delivery rates throughout the non-hydranted areas of the County based upon a 2-hrs tanker shuttle water supply operation. While these predicted flows varied some throughout the County, a maximum flow of 950 gpm was achieved.

One area of improvement still needed is the reassessment of existing alternative water supply sources and the development of new alternative water supply sources. Much of the alternative water source data used today is based upon information collected almost 20 years ago and the update process is inconsistent. Likewise, the department has little input on the development of new, alternative water supply sources and likely only learns of the new sources once the sources are placed into service.

Plan

The MCFRS Fleet Management Section will need to continue its work maintaining the eight-tanker frontline fleet and will work to expand the reserve tanker fleet to two tankers from the current level of one.

MCFRS will work to re-establish the Water Supply Work Group (WSWG) for the purpose of identifying water supply issues/deficiencies and developing recommendations for improvements. One of the immediate goals of the WSWG will be to review and reclassify

all alternative water supply sources county-wide. Information collected from the review will be used to update mapping, signage, and dispatch information.

MCFRS will work to develop a more operational-specific deployment plan for tanker coverage during times of system outages in the three public water supply systems. The plan will address tanker deployment and use in the hydranted response areas during times of low operating pressure and total service interruption.

References

[MCFRS Policy and Procedure 24-01 Incident Response Policy: Appendix F Water Supply Operations \(July 1, 2017\)](#)

[2017 ISO PPC Montgomery Co FPSA Summary Report](#)

[2017 ISO PPC Montgomery Co FDS Summary Report](#)

[2016 MCFRS ISO Waterflow Testing Map](#)

9A.9 The agency has operational procedures in place outlining the available water supply.

Description

Appendix F "Water Supply Operations" of MCFRS Policy and Procedure 24-01, "Incident Response Policy (2017)" outlines the plan for water supply operations in areas with and without fire hydrant coverage. Enacted July 1, 2017, Appendix F provides doctrine and direction regarding the process by which water supply operations are initiated and expanded upon to support emergency response operations.

Appraisal

Since the release of the MCFRS Water Supply Study in 2000, MCFRS has worked to improve its delivery of water supply for fire protection in both hydranted and non-hydranted areas of the County. This work has included the development of operational procedures – the most current of which is Appendix F- "Water Supply Operations" of MCFRS Policy and Procedure 24-01, "Incident Response Policy (2017)"

Plan

MCFRS will continue to review the effectiveness of its water supply operational procedures as part of the post-incident review process. Currently, incident commanders must complete a written review of all significant incidents and it is during this review that water supply issues are identified. MCFRS will continue to develop training programs and revise operational procedures based upon the "lessons learned" as presented in the post-incident review process.

References

[MCFRS Policy & Procedure 24-01 Incident Response Policy, Appendix F – Water Supply](#)

Criterion 9B: Communication Systems (Author: B/C Baltrotsky)

The public and the agency have an adequate, effective, and efficient emergency communications system. The system is reliable and able to meet the demands of major operations, including command and control within fire/rescue services during emergency operations, and meets the needs of other public safety agencies having the need for distribution of information.

Summary:

The Montgomery County Fire and Rescue Service (MCFRS) Emergency Communications Center (ECC) is co-located in the Public Safety Communications Center (PSCC) with the following agencies:

- Montgomery County Police Communications (Primary Public Safety Answering Point (PSAP))
- Traffic Management (TMC)
- Emergency Management (EMG)
- The Emergency Operations Center (EOC), a component of the County's Office of Emergency Management and Homeland Security (OEMHS)
- The Department of Technology Services, PSCC Support Component.

The MCFRS ECC is responsible for the coordination of all fire, rescue and emergency medical services related emergency events in Montgomery County. These responsibilities are regulated and governed by the references listed below.

The MCFRS ECC is responsible for taking and dispatching calls for fire, rescue and emergency medical assistance and the recording of pertinent incident information. At the 911 call-taker position, a determination is made on whether an incident is medical or fire-related. The call-taker enters the appropriate information on a Computer Aided Dispatch (CAD) terminal and sends the CAD incident screen to the primary radio position to be dispatched. All 911 call-takers utilize protocol-based call-taking practices using one of three protocol paths. If the 911 call is EMS in nature, the call-taker processes the call using an Emergency Medical Dispatch (EMD) protocol. If the 911 call is fire in nature, the call-taker processes the call using an Emergency Fire Dispatch (EFD) protocol.

Incidents are queued to one dispatch position for review prior to dispatch. This methodology ensures that requests for service are not duplicated.

After the CAD system has created the event, an event number is assigned to it, and it is prepared for dispatch. Automatic Routing Logic (ARL) is employed to determine the location of the units based upon either their actual GPS location or their geographically located station. Rarely is human intervention required for the majority of apparatus assignments; however, if needed, the dispatcher can refer back to the static recommendations which are based on fixed station running orders in a pre-calculated running route (run card). The dispatcher has the following redundant systems available for dispatch of the event information:

- Emergency Alerting System (Purvis) consists of station audible and visual alerting alarms that can be configured to control lights, traffic control devices, door and audible alarms or whistles.
- Mobile Data Computer system (MDC)
- Remote Station CAD terminals and station printers
- Personal and unit paging system (Everbridge, Active911, Code Messaging)
- Ultra-High Frequency (UHF) Alerting System (700-800 MHz)
- Very-High Frequency (VHF) Alerting System (150-174 MHz)
- Public Telephone System.

All calls to the MCFRS ECC, including those to the individual call-taker positions are recorded on both instant recall and logging digital recorders. These recordings are maintained by a commercial off-the-shelf (COTS) client-based database system called “Kova”.

The MCFRS ECC’s goal is to transition all future call-taking to the primary PSAP. The MCFRS ECC will maintain 45 full time uniformed fire and rescue personnel to function as the dispatch personnel, and the primary PSAP will provide call-takers to meet the needs of the emergency dispatch functions of the department. Included in these numbers are shift supervisors, dispatch and call-taking supervisors, training officers, and quality assurance officers. Additionally, two personnel will support the operations of the MCFRS

ECC, supporting CAD, radio, and Telecommunications device operations. The MCFRS ECC also seeks to maintain a back-up cadre of operational Fire-Rescue personnel with MCFRS ECC certification for times of MCFRS ECC workforce shortages.

The MCFRS ECC operations staff and supervisors work a three-day rotation consisting of one 24-hour day on duty and two 24-hour days off duty. These days are configured as follows:

- 0700 to 0700 for a 24-hour period staffing 9 positions with a minimum on-the-floor of 7 personnel.
- During this 24-hour shift, personnel are afforded one 6-hour sleep period, one 2-hour physical training period and two 30-minute breaks.
- To regulate the hours, personnel are given a rotation of Kelly Days. The Kelly Day is a scheduled day off from the regular shift. These Kelly Days are assigned one per every three weeks, two per every 6 weeks and three per every 12 weeks to create a 42-hour workweek with a 504 hour, 12 week pay cycle.

Performance Indicators:

CC 9B.1 A system is in place to ensure communications with portable, mobile, and fixed communications systems in the field. When an area is identified as not being capable of adequate emergency scene communications, such as inside buildings or below grade level, an operational plan is written.

Description

The Montgomery County Fire and Rescue Service operates with an 800 MHz radio system utilizing 20 conventional channels and over 300 talk groups. The MCFRS 800 MHz radio fleet map is organized into a system of Zones (applicable to a specific mutual aid jurisdiction or in-county agency) and Talk Groups (individual radio sub-sets found within a Zone). Zones are numbered (1-18) and Talk Groups are lettered (A-P).

Trunked radio systems are used whenever a relatively large number of radios need to share radio frequencies. They are used by local government as wide-area private radio networks and are the radio equivalent of the public switched telephone system. Trunked radios offer much greater airtime efficiency than traditional systems. Compared with conventional single channel networks, a trunked system is more efficient, simpler to use, and less likely to be busy. Radio trunking systems feature computer technologies that dynamically allocate a common pool of frequencies between a number of different users. The advantages of radio trunking, when compared to conventional duplex radio repeater systems, include:

- More efficient use of the radio frequency spectrum - e.g. Montgomery County is able to create 300+ Talk Groups within 18 zones but only uses 22 traditional radio channels.
- Wide-area coverage is possible.
- Greater privacy is possible via computer aided encryption.
- A higher grade of service.
- Enhanced features such as private paging, scanning, etc.
- Automatic selection of a clear channel.

To ensure clarity and conciseness with regard to radio communications, the MCFRS mandates the use of a combination of a numeric (Zone) and alphabetical (Talk Groups) designations to denote “where,” within our radio system, the fire-rescue unit(s) is conducting operations. For example, the main MCFRS dispatch Talk Group is known as “7Alpha.”

To further avoid confusion, alphabetical designations are substituted via the use of phonetic equivalents, specifically with the International Phonetic Alphabet (IPA). These designations are as follows:

A – Alpha	B – Bravo	C – Charlie	D- Delta	E – Echo	F – Foxtrot
G – Golf	H – Hotel	I – India	J – Juliette	K – Kilo	L - Lima
M – Mike	N – November	O – Oscar	P – Poppa		

All primary and secondary MCFRS fire-rescue apparatus has been equipped with a complement of portable radios and at least one mobile radio. In general, portable radios remain with their “assigned” apparatus; radios that are issued to one vehicle and are cross-referenced to a specific unit’s fleet stock number and unit number called “alias.” These radio aliases are tracked in the radio system by a Motorola product called the “Alias Database Manager.” This enables the MCFRS ECC to identify, with specificity, a radio’s assigned fire-rescue unit, including riding position. This information is critical to both the MCFRS ECC and the Incident Commander in the event a user experiences an emergency.

In general, when operating within MCFRS's Talk Group Zones (i.e., Zones 7, 71, 72), fire-rescue personnel must follow the specific direction of the MCFRS ECC with regard to which talk group to switch.

A Public Safety Systems Modernization (PSSM) project is nearing completion that will replace the current Motorola Type II radio system with a new Motorola – APCO Project 25-compliant radio system due for full implementation in 2018-19.

Currently, each fire-rescue provider assigned to an apparatus is provided a portable radio for use during operations. These devices are assigned to the riding position of the apparatus and adequately support the MCFRS end user. Where areas have been identified that have poor reception, new technology has been introduced to overcome these deficiencies. Bi-Directional Amplifiers (i.e., Vehicular Repeater Systems) have also been placed on all primary command units to help against poor reception.

Appraisal

The current non-P25 radio system infrastructure is outdated, end-of-life and failing. Much effort has been spent maintaining the system and the circuitry that is supporting it. Currently, the subscriber units (portable and mobile radio) have been upgraded and, while these subscribers are of the latest technology and kept to very high usability and standards, they are weakened by the failures of the infrastructure and legacy systems that support them. The MCFRS ECC has been outfitted with new subscriber back-up radios in a VOIP – Deskset phone setup. This is a more efficient design than previously noted and has removed harmful RF exposure from the dispatchers on the operations floor. If needed for back-up purposes, unit officer subscriber radios also now carry the legacy VHF system which is simulcast through the jurisdiction and can be used in lieu of the 800Mhz system. The MCFRS ECC can also transmit and receive on this VHF system in lieu of the 800 MHZ system.

Plan

Montgomery County is currently undergoing a multi-million dollar radio system replacement project under PSSM. When implemented in CY2018-2019, the new P25 radio system will modernize the entire land mobile radio communications system in Montgomery County. The system will expand our current coverage by adding 12 tower receive sites to the current complement of 11 tower receive sites to bring our total receive sites to 23. This will drastically improve the radio system coverage, efficiency and fault tolerance and bring Montgomery County up to current industry standards.

References

- [US Fire Administration Communications Guide](#)
- [Association of Public-Safety Communications Officials \(APCO\) Project 25](#)
- MC P25 Radio System – High Level Overview (Confidential – Reference Located in the Tech Operations Battalion Chief’s Office)

9B.2 The emergency communications system is capable of receiving automatic and/or manual early warning and other emergency reporting signals.

Description

The MCFRS ECC is not equipped with direct alarm reporting devices for suppression and evacuation diction devices. Notification of fire alarm system activations are provided by a combination of telephone calls from citizens hearing an audible alarm or from commercial monitoring companies reporting alarm activations.

Montgomery County is part of the Metropolitan Washington Council of Governments' (MWCOCG) notification system known as RICCS (Regional Incident Communication and Coordination System). This Regional Emergency Support Function (R-ESF) communications infrastructure supports regional response efforts before, during, and after a regional incident or regional emergency, by ensuring that regional decision makers and leaders are aware of events in the region and are prepared to react/respond to these events.

MCFRS also actively works with all surrounding jurisdictions to ensure inter-operability of radio systems and communications.

In addition, the MCFRS ECC participates with the Maryland State Joint Operations Center and the National Weather Service to exchange information of critical events and severe weather events. Both systems are monitored and tested twice daily. The MCFRS ECC is also enhanced by the availability of the National Warning System (NAWAS). NAWAS is a 24-hour continuous private line telephone system used to convey warnings to federal, State and local governments as well as the military and civilian population.

In addition to these notification systems, all MCFRS radios are equipped with emergency button functionality. When this button is activated by the end-user, an audible alarm and a flashing visual icon will occur on the dispatcher consoles at the MCFRS ECC. When the emergency button is activated, the MCFRS ECC receives the identification of that unit. If the unit is not associated in the radio system, a generic hexadecimal number is displayed. A procedure is in place to address the activation of these signals on both the field user and the MCFRS ECC personnel levels. The MCFRS has also implemented a satellite/internet

based weather station which is used to supplement warnings provided by the various weather agencies. This system works well as designed hard wire circuits and supports the current fire-rescue mission

Appraisal

The current early warning systems in place at the MCFRS ECC are sufficient for notifying personnel and subsequently the decision-makers about impending emergencies and/or events which impact the region/country. These systems have proven reliable during local and regional disasters and weather events.

Plan

The MCFRS ECC can receive alerts from national weather and various joint-operations centers around the region. With the addition of the satellite/internet based weather station, these systems work well as designed hard wire circuits and support the current fire-rescue mission.

References

- [FEMA - NAWAS Manual](#)
- [MWCOG – RICCS System](#)

9B.3 The agency's communications center(s) is/are adequately equipped and designed, (e.g., security, telephones, radios, equipment status, alarm devices, computers, address files, dispatching circuits, playback devices, recording systems, printers, consoles, desks, chairs, lighting, and map displays).

Description

The MCFRS ECC provides communication and technical support to all phases of public safety. Via a complex information technologies infrastructure, the MCFRS ECC fulfills these mandates through a streamlined, yet thorough, business process focused on rapid, effective, and superior customer service. Calls for service are received on a standardized 911 emergency telephone line (i.e., "Viper" system).

The Viper telephone system employs dedicated trunked lines for 911 service. These lines are divided into three categories:

- 16 lines for conventional telephones
- 16 lines for Cellular telephones
- 6 lines for VoIP telephones

The calls are processed and assigned to an event using advanced technologies such as Emergency Medical Dispatch (EMD), Emergency Fire Dispatch (EFD), Proactive Quality Assurance (Pro- QA), Automatic Routing Logic (ARL), and Computer Aided Dispatching (CAD). Once processed, emergency alerts are provided to fire-rescue stations.

MCFRS career and volunteer personnel are alerted by alphanumeric and conventional wireless paging and by an 800 MHz radio system. Field units receive the events over the 800 MHz radio system and with the assistance of Mobile Data Computers and telephones (cellular and landline). Personnel in the field manage these events using both mobile and hand-held communication devices.

Emergency Medical Dispatching (EMD) is a State-mandated Emergency Medical Services (EMS) call processing requirement. EMD provides scripted interrogation questions designed to assist certified Emergency Medical Dispatchers with determining what is

happening medically. EMD employs a system known as Pro QA and is integrated into the CAD.

Emergency Fire Dispatching (EFD) has been implemented by Montgomery County. EFD provides scripted interrogation questions designed to assist certified Emergency Fire Dispatchers with determining the nature of the fire emergency. Like EMD, EFD employs Pro-QA and is integrated into the CAD.

Computer-Aided Dispatch (CAD) systems are easily defined as work-order processing systems. Call-takers enter the details of 911 calls for service into the CAD system. The system then determines, based on the call type and the location of the emergency, what resources should be sent to the call. When used in conjunction with EMD and EFD, CAD can substantially improve resource utilization and management; thus, reducing operational costs and improving both operational and financial performance. More importantly; however, is the ability of these systems to facilitate optimal distribution or coverage of available fire and emergency medical resources.

The system can work with Phase II cellular phones. Phase II cellular services require carriers to deliver more specific latitude and longitude location information, known as Automatic Location Identification (ALI), to the dispatcher.

Beyond the technology associated with the dispatch and call-taking process, the PSCC is supported by administrative personnel. In addition to ordinary office technologies, ECC personnel also utilize the following specialized services:

- Kova Servers: Used to record all incoming and outgoing telephone and radio messages.
- AQUA: Used for oversight of the EMD and EFD processes.
- PEPCO: A system designed to track power outages.
- Enterprise: A standard intranet server.

In addition, there are 11 seated CAD positions all equipped with adjustable desktops, seating, communication ports for users and trainees, computers, lighting, chairs, and the technologies mentioned above.

A complete back-up center with 70% redundancy is available at a separate facility in the County and can be occupied and fully operational within 2 hours of transition.

Appraisal

The current system in use for Computer Aided Dispatch is adequate for daily MCFRS operations. This system is very new, having gone live on April 2, 2017. The system design is holistically based on Geographic Information Systems (GIS) and dispatches using Automatic Routing Logic (ARL), based on the unit's GPS-acquired location. With this new CAD system, the technology is back up to standard and, in many cases, well above standard, which is different from previous reporting. Systemic issues are rare, and we continue to develop efficiencies in this new system. As reported previously, the PSAP was upgraded with brand new furniture designed for emergency communications centers and in use by various regional emergency communications centers. This implementation has increased productivity and workflow.

The usage of EMD and EFD has yielded efficiencies in call processing and resource allocation. When introduced, EFD proved its resource efficiency goals; however, an increase in call processing was noticed. This has, however, decreased over time and has not yet returned to pre-EFD levels.

Plan

The MCFRS will continue to enhance the CAD system and embrace new CAD and GIS technologies to more efficiently take calls, dispatch resources and mitigate emergencies. The CAD system has proven its efficiencies in the short time it has been in service, and we will continue to add to those efficiencies enhancements to the software and business practice modifications. Through quality assurance, quality improvement and continued training, MCFRS will strive to continue to reduce call processing times and resource efficiency throughout the service.

References

- ECC Configuration Diagram (Confidential – Reference Located in the Tech Operations Battalion Chief's Office)

9B.4 The uninterrupted electrical power supply for the primary communications equipment in the communications center is reliable and has automatic backup capability.

Description

The PSCC is supplied with power by the Potomac Electric Power Company (PEPCO) with three Commercial Power Phases delivered from a single power transfer station. Each phase powers a specific area of the building. All power comes into the building through one of several uninterrupted power supplies (UPS). The UPS cleans the power and delivers it at very consistent amperage eliminating power fluctuation potential.

In addition, the building is supported by two generators. Each generator can support 100% of the building's electrical load:

- Each generator – 780 KW
- 5,400-gallon diesel fuel tank (300-hour continuous run capacity)
- 50-gallon day tank

Upon loss of commercial power, both generators come on line and provide power to the building. Generator power also runs through an UPS. While both generators are operating, only one supplies power while the other runs in stand-by mode. Should one of either generators fail, the power system begins a load shed process. Load shedding occurs when only one of the two generators is operational. During load shedding, nonessential lighting and HVAC systems are shut down to conserve power.

In addition to the emergency generators, the facility is supported by four independent UPS systems. Two of these UPS systems are dedicated to Police and Fire communications while the remaining two support the remaining occupants at the PSCC. These UPS are battery systems designed to clean the power, by removing small fluctuations in continuity, amperage, and voltage from commercial and generator sources. The UPS is also designed to carry the load of the building during the loss of commercial power and the start-up of generators. This transfer capability allows power to remain constant even during power outages. Although not designed for continuous support, the UPS will support the building power independently based upon the size for specified times:

- UPS #1 – 220 KW UPS – PSCC excluding TMC and EOC – 60 minutes
- UPS #2 – 220 KW UPS – PSCC excluding TMC and EOC – 60 minutes
- UPS #3 – 150 KW UPS – TMC Only – 120 minutes
- UPS #4 – 150 KW UPS – EOC Only – 120 minutes

Two Power Distribution Units (PDUs) are located on each operations floor and are designed to distribute power to the essential components. The PDU is simply a distribution box with circuit breakers designed to direct power sources to their respective locations. The power outlets are color-coded to provide indicators on the UPS and the intended use. The color codes are as follows:

- Ivory – Radio Equipment – Supported by 30 KW UPS
- White – Radio Equipment – Supported by 220 KW UPS
- Red – Data Equipment – Supported by 220 KW UPS
- Grey – Telephone Equipment – Supported by 220 KW UPS
- Black – Furniture, heaters, fans, lights, motors – Not UPS Supported
- All TMC – Supported by 150 KW UPS
- All EOC – Supported by 150 KW UPS

UPS batteries are on constant charge by commercial power or by generator power; however, in the absence of all 3 phases of commercial power, or during generator power, the charging capability is reduced. As such, supported time can vary.

Appraisal

The systems are efficient for the operation of the MCFRS ECC. They are tested weekly for one hour for operations and monthly for four hours under load for operations. With the implementation of the new furniture, the entire system was re-engineered and readjusted to account for the new power loading. At this time, the UPS system is adequate for the mission.

Plan

The MCFRS will maintain the current PSCC power system with weekly checks for operation and monthly service on the components to include, generator, battery level, and

general system maintenance. These checks will be consistent with manufacturer recommendations and practices and will be conducted by authorized electricians and systems service agents.

MCFRS will maintain the current PCC power system with routine maintenance and testing. In addition, the MCFRS, in conjunction with building partners and other County agencies, will participate in a replacement project to refresh all UPS systems over the next 12 months with new state-of-the-art systems and batteries.

References

[ECC and AECC Electrical Power Systems Overview](#)

9B.5 Adequate numbers of fire or emergency dispatchers, supervisors, and management personnel are on duty to handle the anticipated call volume.

Description

MCFRS ECC operations staff and supervisors work a three-day rotation consisting of one 24-hour day on duty and two 24-hour days off duty.

On-duty personnel staff two general areas of call-taking and dispatching in addition to one Floor Supervisor position. Each function (call-taking and dispatching) also employs one supervisor. Call-taking employs three call-takers during peak hours, while the dispatch function is always staffed with two dispatchers at a minimum, and a third tactical talk-group operator at all times.

As a backup, every morning the on-duty MCFRS ECC Supervisor identifies ECC-qualified personnel that are assigned to operational fire-rescue stations. The supervisor then develops a plan with the MCFRS Duty Operations Chief to move these personnel to the MCFRS ECC when periods of high event volume are anticipated such as thunderstorms or when any event occurs which might tax the staffing in place. These procedures have proven valuable several times since their implementation.

A workflow study conducted in 2010 by a consultant in emergency communication operations recommended combining the Police and Fire-Rescue 911 call taking function into a single, unified call taking function under the MCPD. A unified call-taking operation would reduce the time necessary to process 911 calls for fire-rescue services; thereby, making both the Police and MCFRS communications centers operate more efficiently. The implementation of this recommendation is well underway, and much progress has been made to make the transition. Issues, including call processing training, have been researched and a collaborative group of managers put in place for effective transition of services.

Appraisal

MCFRS ECC staffing is inadequate for the level of service intended. A study performed in 2003 showed that adequate staffing for this center, using the current work plan and

business process, should be twelve personnel with a minimum floor staffing of nine. To accomplish the goal of 12 personnel daily, 18 positions should be allocated to each shift.

Call volume has increased steadily every year since the MCFRS was reorganized in 1988. Despite increased responsibilities and increased workload created by new technologies, staffing levels have remained the same relative to the event volume. Despite the study referenced above, staffing has remained at ten personnel on weekdays and nine personnel at other times. This shortfall is largely due to the current economic climate within County Government.

Bargaining agreement issues must be considered as a part of staffing for the MCFRS ECC. Issues include periods of rest, physical training and break periods. These issues, combined with call volume, add to the need for additional staffing.

The introduction in 2010 of civilian call-takers and dispatchers has been a slow yet productive process. The eventual full consolidation of services will provide a more uniform model of emergency communications and reduce the staffing burden on the MCFRS.

The overall consolidation of services under the Montgomery County Police 911 Center has been a struggle. Generally, personnel differences (i.e., uniformed firefighter to civilian) have yielded a very difficult transition which has been largely unsuccessful due to the attrition numbers within the MCPD and challenges of training civilian personnel to understand the functions of the MCFRS.

Plan

Until full consolidation is achieved, the MCFRS will continue to show the need for additional ECC staffing and make requests for additional staff through the normal budget process. MCFRS will also continue to participate in and advance the Universal Call-Taking and service consolidation model toward implementation to better leverage the use of existing personnel. The management team and joint-MCPD/MCFRS senior governance group in place to continue the consolidation process will continue to meet weekly and strive to achieve universal call-taking and eventually full consolidation under the MCPD.

As consolidation evolves, the overall process will integrate into process review and resolution through an Executive Steering/Governance Committee. This plan will be largely successful only if staffing numbers are sufficient to allow for minimum staffing to be maintained while allowing time for training and quality improvement efforts.

References

- [Operations Battalion Roster 2018-ECC Staffing](#)

9B.6 A maintenance program is in place with regularly scheduled system tests.

Description

There are many forms of maintenance for the various systems within the PSCC. Each system is supported by a maintenance contract with the vendors. In addition to these contracts, the Department of Technology Services (DTS) and the MCFRS Technical Operations Section provide both routine and emergent maintenance.

The primary maintenance contract is administered by Motorola Solutions, Inc (MSI). Motorola provides on-site dedicated technicians for all Computer Aided Dispatch (CAD), phone and radio systems. Motorola oversees routine maintenance and is responsive to the County's needs. The County has the overall authority in prioritization of systems maintenance. County agency representative groups are tasked with prioritization of upgrades and system enhancements through a customer experience process.

Appraisal

The current CAD contract with MSI is effective and has worked well since its implementation. Weekly meetings between MCFRS, MSI, and DTS are conducted to address maintenance issues and to coordinate initiatives to improve the capabilities of the system. These meetings address change management, CAD system updates, phone system changes, and computer replacements. Monthly building governance meetings are held to discuss and coordinate building components, specifically the UPS and generators.

Plan

The MCFRS will continue to participate in the weekly and monthly meetings concerning the systems in place. MCFRS personnel will also continue to participate in the customer experience committees and enhancement priority groups. This will allow the MCFRS to voice the needs of the Fire and Rescue Service and provide overall enhancements to the systems.

References

- Motorola Maintenance Agreement (Confidential – Reference located in the Tech Ops B/C Office)

9B.7 The agency has established time-based performance objectives for alarm handling. These objectives are formally communicated to communications center managers through direct report, contracts, service level agreements, memorandums of agreement, etc.

Description

MCFRS manages calls for service based on various factors, including the nature of the call for service, level of emergence (priority), and available resources. Understanding the importance of industry best practices and standards, MCFRS measures its internal alarm handling time-based performance objectives and future benchmark target goals (documented within the 2016-2022 Master Plan) to the voluntary National Fire Protection Association (NFPA) 1221 *Standard on the Installation, Maintenance, and Use of Emergency Services Communications Systems*. MCFRS constantly strives to narrow the gap between baseline alarm handling performance and the stated published benchmark performance goals for each emergency service program. Ultimately, MCFRS wants to meet the NFPA 1221 performance standards and works to this goal by first attempting to reach benchmark goals.

Rigorous time-based performance reviews occur weekly and expectations are regularly communicated to the operational staff by the MCFRS ECC Office of Professional Standards, which maintains the call processing data.

Appraisal

The MCFRS ECC's Professional Standards Unit, within the past year, has implemented a very effective SharePoint site to formally communicate time-based performance objectives for alarm handling to all staff members. This medium has proven an effective tool to monitor and compare performance as well as define outlier issues that sometimes cause inflated call processing times as well as serves as a portal where all applicable information resides.

Plan

The MCFRS will continue to enhance and strive to meet response time objectives and goals as well as assure alarm handling quality assurance. The goal will be that calls for service will be handled with increasing accuracy, speed and efficiency. This will be based on protocols as indicated by the State of Maryland, MCFRS, the National Academies of Emergency Dispatch, and NFPA guidelines.

References

[ECC SOP – Priority Dispatch Systems](#)

[MCFRS DIVISIONS’/SECTIONS’ GOALS AND OBJECTIVES – UPDATED JUNE 2016](#) (pages 17-18)

[MCFRS 2016-2022 Master Plan – Appendix G Table 3 First Arriving Unit Benchmark Response Time Goals](#) (see Phone to Dispatch PtoD columns)

[MCFRS 2016-2022 Master Plan – Appendix G Table 4 ERF Benchmark Response Time Goals](#) (see Phone to Dispatch PtoD columns)

[PSCC / ECC SharePoint Site Examples](#) (actual site may be behind firewall)

[PSCC / ECC Dashboard Performance Example within SharePoint Site](#)

9B.8 Communications training programs for emergency dispatchers and emergency response personnel ensure adequate, timely, and reliable agency emergency response.

Description

MCFRS has had an ECC Training Captain since 2004. This position is responsible for oversight of all new and in-service training. Each year, the MCFRS ECC trains approximately 10-20 new assignees and recertifies approximately 60 incumbents. This involves approximately six weeks of classroom training and 2-4 months of preceptor on-the-job training. All dispatchers are trained to the minimum level of Emergency Telecommunicator. Nationally recognized Emergency Telecommunicator courses are used, and course instructors are employed by Montgomery County to teach these courses. A professional standards Captain provides coordination and supervision of the Quality Assurance Officer and Training Officer. This Professional Standards Unit is responsible for the training and oversight of quality assurance at the MCFRS ECC based upon national standards of emergency dispatch.

Appraisal

The Professional Standards Unit has successfully provided the oversight, administration, and operational needs for all MCFRS ECC training. This has included creating training programs, lesson plans, syllabuses, training aids, teaching, monitoring evaluating, and adjudication of all issues related to training. Very recently, the MCFRS has added another Fire-Rescue Lieutenant to the Quality Assurance position. This has assisted the Professional Standards Captain and existing Lieutenant functions and is already producing positive results in the areas of QA research and personnel time management.

Plan

The QA positions will continue their current practice and develop plans to increase the efficiency of MCFRS ECC staffing. This will be measured by an anticipated decrease in overall alarm handling times.

References

[Operations Battalion Roster 2018- ECC Staffing](#)

9B.9 The interoperability of the communications system is evaluated and documented. The agency has processes in place to provide for interoperability with other public safety agencies in the field including: portable, mobile, and fixed communications systems, tools, and equipment.

Description

MCFRS radios (portable and mobile) are programmed with fifteen 800 MHz trunked radio systems that consist of all the jurisdictions that share common borders with Montgomery County and all members of the National Capital Region (NCR) as defined by federal statute:

Shared Border:

Carroll County, MD

Fairfax County, VA*

Frederick County, MD*

Howard County, MD

Loudoun County, VA*

Prince George's County, MD*

Washington, DC*

* - Also member of NCR

NCR Member:

Arlington County, VA

City of Alexandria, VA

Prince William County, VA

Washington Metropolitan Airport Authority, VA

(Note: There are fewer than 15 jurisdictions listed because some jurisdictions have more than one trunked radio system and all relevant systems in each jurisdiction are programmed in the MCFRS subscribers)

This shared programming allows MCFRS users to directly access the radio systems of mutual aid partners when responding to incidents in the jurisdictions identified. When switched to a mutual aid radio system, MCFRS radios function as though they are native subscribers on the active system permitting access to all advanced trunking system features, including emergency alerts and emergency calls via the emergency buttons on the subscriber radios.

In addition to the identified trunked radio resources all MCFRS subscribers are also programmed with 800 MHz regional and national conventional mutual aid channels:

FCC Region 20 interoperability channels:

RINS1

RINS2

RINS3

RINS4

RINS5

RINS6

FCC NPSPAC national interoperability channels:

8CAL90

8TAC93

8TAC91

8TAC94

8TAC92

These conventional channels support interoperation with 800 MHz capable jurisdictions outside the NCR, either when they respond into Montgomery County or when MCFRS units respond into their jurisdiction.

Additionally, MCFRS houses one element of the NCR Radio Cache which is managed by the NCR Communications Interoperability Group (NCR CIG). The MCFRS element of the NCR Radio Cache consists of 400 Motorola XTS5000 portable radios programmed with NCR fire-rescue and law enforcement systems and talk-groups. These radios are available to be issued to responding jurisdictions and agencies that are not organically equipped with radios that provide direct MCFRS interoperability. The Cache is also equipped with interoperability switches and repeaters that can be deployed to provide interoperability and/or enhanced communication options in specific circumstances. The NCR CIG personnel are nationally trained to the Communications Leader and/or Communications Technician levels that can provide management and oversight of incident communications when requested by command. Should the need arise, MCFRS can request support from the other two NCR Radio Cache elements bringing an additional 750 Motorola XTS5000 radios programmed with fire-rescue and law enforcement interoperability systems and talk-groups in addition to other NCR CIG personnel to assist with the management of the resources.

The subscriber radios of the listed mutual aid partners also carry MCFRS radio zones in their radios so that when mutual aid users respond into Montgomery County, they can directly access our trunked radio system as would a native Montgomery County radio. Mutual aid responses are routine within the NCR and adjoining jurisdictions occurring on an hourly basis many times each day. During each one of these responses, the responding units are assigned to a talk-group on the appropriate radio system at the time of dispatch. The jurisdictions have been coded by number and the talk-groups generally have an alpha designation. For example, users are told to respond on “7 Bravo”, the MCFRS operations talk-group; a unit assigned to “4 Charlie” would be going to Fairfax County’s primary incident talk-group. Users are very familiar with this nomenclature, and the radio resources are numbered and lettered in accordance with the plan, so users seamlessly navigate to the assigned resources when dispatched.

Appraisal

The interoperability shared by Montgomery County and its regional partners is second to none in the nation. It has proven to be very robust, and is constantly improved through regional coordination and participation in regional communications committees. Through these efforts, interoperability is continually evolving and expanding to ensure local, regional and national interoperability. Montgomery County and the NCR Region is often looked to as the model for the nation for radio communications interoperability.

Plan

The MCFRS will continue to evaluate the effectiveness of its radio “fleet map” deployment model. Bi-yearly programming changes will be made and implemented into all subscriber radios. This model will be continuously reevaluated and improved as in-County and neighboring systems change.

References

[GAO – EMERGENCY COMMUNICATIONS In the National Capital Region](#)

CC 9B.10 A formal and documented appraisal is conducted, at least annually, to determine the effectiveness of the emergency communications system and its impact of meeting the agency's goals and objectives.

Description

MCFRS Policy 24-01, Incident Response Policy (IRP), and its associated appendices, is the guiding doctrine for all for operations performed during all-hazards responses in Montgomery County. The policy guides how firefighters and EMS providers respond, communicate, operate, command, and review during and immediately following all operations performed during all-hazards responses. MCFRS has direct oversight/assignment of the emergency communications, 911 intake processes, event creation process, resource allocation, and dispatch of incidents based on the operational policies and procedures. Appendix S of the IRP pertains to Communications.

The appraisal of Emergency Communications can be found at the first link below in the reference list. The 2013 peer assessment process recommended a formal and documented annual appraisal of services be performed, including for the emergency communications system. This is the first publication of such an appraisal.

Appraisal

The appraisal has validated that MCFRS has personnel, facilities, equipment, systems, SOPs, and training to accomplish the emergency communications function. The data presented in the appraisal has highlighted the commitment from the Operations Division to provide dashboards, performance tracking, response time analysis and leadership briefings.

With the addition of the new CAD system and implementation of EFD, there was a noticeable increase in call processing times. That increased time is attributed to a large learning curve, and a decrease has been noticed in recent months of FY2018.

Plan

The Operations Division will continue to conduct appraisals each fiscal year of the emergency communications system, along with appraisals of other operational programs.

Our goal is to produce a more standardized data presentation and a more comprehensive analysis in future appraisals. The ultimate plan for these appraisals is to document year-to-year performance to more easily analyze improvement, as well as set-backs, in all Operations Division performance areas, including communications.

References

[FY17 Criterion 9B ECC Program Appraisal](#)

[Incident Response Policy](#)

[Appendix A Operational Doctrine Statement](#)

[Appendix B Incident Command](#)

[Appendix D, Structure Fires](#)

[Appendix E, High Rise Fires](#)

[Appendix F, Water Supply Operations](#)

[Appendix I, Rapid Intervention and Maydays](#)

[Appendix S, Communications](#)

[Appendix T, After Action Reporting](#)

9B.11 The dispatch process utilizes a formal and recognized Emergency Medical Dispatch (EMD) system that allows for pre-arrival instructions and adequate triaging of medical calls for service.

Description

The calls for emergency service are processed and assigned to an event using advanced technologies such as Emergency Medical Dispatch (EMD), Emergency Fire Dispatch (EFD), and Proactive Quality Assurance (Pro- QA). These systems are Commercial Off-the-Shelf (COTS) products, authorized under Maryland law, and governed by National Standards established by industry leaders.

Personnel are licensed by the State of Maryland in EMD and certified by the National Academies for EMD and EFD. This training and certification includes the imbedded national standard Post-Dispatch and Pre-Arrival Instructions, which are imbedded as part of the EMD/EFD software programs. At the end of each event, the call-taker is required to provide these instructions to the caller as part of the EMD/EFD call processing.

Appraisal

With the use of EMD and EFD, the MCFRS has shown an improvement in the quality of service provided. Early medicine via the EMD tool and early recognition of actual chief complaints have led to better resource allocation and management. This general correctness has provided the customer with the correct personnel and equipment to more rapidly mitigate the event and provide life-saving intervention.

Plan

The MCFRS will continue its use of EMD and EFD protocol systems. Through a Dispatch Review Committee and constant quality improvement oversight, we will continue to reduce response times, increase rapid intervention during critical lifesaving events, and better manage resources.

References:

[Academies of Emergency Dispatch](#)

[Example of Code of Maryland Regulations \(COMAR\) requiring EMD program](#)

9B.12 The agency has a system in place for the recall of off-duty personnel for incidents of significance.

Description

Personnel are regularly scheduled for breaks and ancillary activities while operating at the MCFRS ECC. It is the policy that all on-duty personnel must remain in contact with the MCFRS ECC Supervisor via phone, radio or pager when on approved sleep or ancillary activity periods. Personnel must be available to return to the floor to assist as needed in a reasonable amount of time as determined by the MCFRS ECC Supervisor. On-duty personnel may leave the PSCC property only with the approval of the MCFRS ECC Supervisor.

Appraisal

The current method of recall for MCFRS ECC personnel works well for on duty personnel who are off of the operations floor participating in collateral activities. Personnel are regularly called back to the operations floor for significant events, and this supplementation of staffing increases efficiency and timely response. DFRS Policy & Procedure #901 specifies the recall of off-duty MCFRS ECC personnel. This policy is not followed as it is largely outdated, and while still in effect is in violation of the more recent IAFF bargaining unit agreement. Lastly the MCFRS ECC follows a general "ECC Emergency Action and Evacuation Plan" This document specifies the recall of police personnel for the Primary PSAP, however does not include Fire & Rescue Communications. The document was last updated in 2006, with major changes recommended to the primary PSAP in 2016 after a major 911 outage. These changes were largely ignored and not put into place in the master document/procedure.

Plan

The MCFRS will continue to maintain its current on-duty call-back policy as written and expand as necessary. Also, the MCFRS will undertake a complete re-write of DFRS Policy & Procedure 901, and bring this policy into current agreements and needs of the department. Lastly the MCFRS Communications staff will once again push through PSCC/911 System Governance the addition of Fire & Rescue Recall into the ECC

Emergency Action and Evacuation Plan, in an overall desire to bring this plan up to the standards expressed herein.

References

[MCFRS ECC – Position Responsibilities SOP](#)

[DFRS PP #901 – CALLBACK Procedure for ECC Personnel](#)

[ECC Emergency Action and Evacuation Plan](#)

Criterion 9C: Administrative Support Services and Office Systems

Administrative support services and general office systems are in place with adequate staff to efficiently and effectively conduct and manage the agency's administrative functions, such as organizational planning and assessment, resource coordination, data analysis/research, records keeping, reporting, business communications, public interaction, and purchasing.

Summary:

The Montgomery County Fire and Rescue Service's (MCFRS) Information Technology Section's Infrastructure Team, Data Team, and Application Team are responsible for managing an Active Directory Organizational Unit with over 1500 users. This team is responsible for the hardware, software and communications necessary to support business applications for the department including timesheets, recruiting, promotions, scheduling, email, collaboration tools, etc. This team manages over 1000 devices, most of which are connected to the wide area network at over 40 worksites. This team also collaborates with the Montgomery County Department of Technical Services for user help desk IT issues, IT procurements, the IT hardware inventory, multiple shared server volumes and the department's interest in IT contracts.

MCFRS also employs a decentralized effective process whereas the station captains take ownership and responsibility for station-related office support and systems. This process is effective and allows for individual management to occur at 37 different fire-rescue stations.

MCFRS is a large and administratively effective agency whose processes have evolved to include well-trained administrative support staff, effective public information and communications strategies, and workflows to maintain organizational documents and document tracking.

Performance Indicators:

CC 9C.1 The administrative support services are appropriate for the agency's size, function, complexity, and mission, and are adequately staffed and managed. (Author: D/C Zuspan)

Description: For the purposes of this analysis, support services are defined as those activities within the department that serve internal customers (vs. the community at large) and enable/enhance the direct delivery of services to the citizens of Montgomery County. The FRS support services utilize a combination of uniformed and civilian personnel to provide a variety of functions, such as information technology, recruitment, procurement, human resources, fleet and facilities management, logistics, and SCBA repair.

Appraisal: MCFRS has made a concentrated effort to centralize the support services through a reorganization which resulted in several of the administrative and support services being moved to new Divisions. The procurement office was moved under the newly created Fiscal Management Division along with EMS Transportation Fee program. The Logistics, Facilities and Information Technology Sections were moved under the Division of Support Services. Since the last writing, all sections have been able to meet the previously recommended staffing levels; although, as the agency grows, the staffing levels in some of these sections have not grown with it. The department did include in its FY18 Strategic Plan the need for several positions to support the HR/Administrative Division. In addition, Fleet Management still struggles with filling vacant mechanic positions due to the highly specialized skill set required, and the Facilities Section has requested additional staffing and not received it. The agency still depends on light duty and uniformed staff to assist with areas of administrative support services including IT and human resources.

Plan: MCFRS will make a concentrated effort to build out the staffing levels of its administrative and support sections. As opportunities arise in the budget process, we will request and hopefully obtain additional civilian and uniform positions in those sections that are struggling to meet the needs of the agency. The HR Division requests for a Claims Manager, a Health and Safety Battalion Chief, and additional Safety Captains, all included in the FY18 Strategic Plan, have not been requested yet in an annual budget. A few other

needed positions as articulated in Criterion 7A.2 have also yet to be formally requested in a budget request, but will in the coming two years.

References:

[FY2016 Budget Overview](#)

[FY2017 Budget Overview](#)

[FY2018 Budget Overview](#)

[2016 MCFRS Accreditation Annual Compliance Report](#) (see Fire Chief's Mini-Restructuring Exhibits 6a, 6b, 6c on PDF pages 38-40 / hardcopy pages 33-35)

[2017 MCFRS Accreditation Annual Compliance Report](#) (see next phase of Fire Chief's Mini-Restructuring Exhibits 1b & 1c on PDF pages 50-51 / hardcopy pages 39-40)

[FY18 Strategic Plan \(see Human Resources beginning on PDF page 14/document page 11\)](#)

9C.2 Sufficient general office equipment, supplies, and resources are in place to support agency needs. (Author: D/C Del Pozzo)

Description

Employees have the office equipment and supplies they need to perform their duties. Accomplishment of administrative functions is not burdened by lack of supplies or broken office equipment.

Appraisal

MCFRS has maintained ample office equipment at every worksite, not just its administrative offices. For example, every station has maintained computers and the capability to copy, print and scan documents. The department has not been lacking for office supplies. For efficiency and effectiveness, one person at headquarters was assigned to handle office supply orders for the department. This employee effectively received requests, placed orders, tracked statuses and handled payments to vendor(s). This has allowed employees at various worksites to focus on their tasks without putting aside substantial time to keep supplies stocked.

Plan

MCFRS will continue to be well stocked in terms of office equipment and supplies. Equipment will continue to be well-maintained and relatively new; supply needs will continue to be handled expeditiously through headquarters.

References

[MCFRS Station Supply Ordering Process](#)

9C.3 Technological resources (e.g., telecommunications equipment, computer systems, general business software) and the information management system are appropriate to support the agency's need. Access is available to technical support personnel with expertise in the systems deployed by the agency. Documentation and analysis of data (e.g., formative, process, impact, and outcome measurement) are accessible to the agency. (Author: Manager Chu)

Description

The MCFRS Information Technology (IT) Section under the Division of Support Services is responsible for the upkeep of the enterprise computing platform, the enforcement of IT security requirements, IT training, the implementation of automation solutions, providing data to management and appropriate operational leadership for data-based decision making, specifying and managing all computer and software systems, software application development and maintenance, and hardware and software technical support.

The IT Section collaborates and works closely with the Montgomery County Department of Technical Services (DTS) to assure a fully integrated IT enterprise exists to meet internal and external customer needs. DTS maintains a robust technical support helpdesk team to assist County workers with IT issues. MCFRS also maintains a Tier 3 higher-level technical support team to address MCFRS issues when the DTS helpdesk cannot resolve the issue.

MCFRS telecommunications systems, such as phones, are managed by the Technical Operations Section which also resides under the Division of Support Services.

MCFRS maintains an IT trainer who provides employee and group IT training sessions, develops web-based and in-class training, and offers application technical support to headquarters staff.

Appraisal

IT had re-organized into three teams (Infrastructure Team, Data Team, Application Team). This re-organization was to stream line the management of data center, data and software applications. The IT department is now better organized to allocate IT staff with appropriate skill sets to the proper jobs and able to develop backup personnel for various systems.

With a series of desktop replacements in the recent years, the majority of desktops deployed in the field are now less than 3 years old. As a result, most personnel have up-to-date computer equipment. The IT team also implemented an automated system to inventory and remotely manage desktop computers that are deployed to 40+ MCFRS work sites. This new system prevented the daily shutdown of the desktops at 9PM due to County DTS policy that interrupts administrative activities in the fire stations. Some of the desktop computers in some fire stations have performance issues. The slow-down of these computers negatively impacted the administrative activities in the affected stations. The IT department is working on identifying the causes of the slow down and will address this slow down issue in the near future.

The EMS electronic patient care (ePCR) operation was vulnerable due to the aging mobile devices that ran on an end-of-life operating system. These mobile devices were replaced with new hardware running on a Microsoft-supported operating system.

IT also implemented a strategy to incrementally upgrade data center equipment annually. This strategy is quite successful as all critical servers in the data center are now less than 3 years old.

The Software Team had built and implemented new systems to replace SCBA Tracker and Property Tracker. These new systems are now powered by Microsoft SQL server, instead of the Microsoft® Access database used by the old SCBA Tracker and Property Tracker. The new systems have provided a better and friendlier user interface and allow the department to access and maintain its inventory records in a timely manner.

The Software Team also had released numerous software enhancements to FireApp, which is the MCFRS incident reporting system. These enhancements tightened data editing, shortened the time required to file a report, as well as allowing the management to police/enforce the compliance of filing the incident/unit reports. Due to all these enhancements, the time required to file a report is reduced and the data error rate is dramatically reduced. It used to take about 45 minutes each day to scrub and correct data entry issues. This data scrubbing activity is now reduced to about 30 minutes a week. It used to take up to 6 hours to generate and export NFIRS data to the State Fire Marshal each month and some of those exported data failed to pass the NFIRS edit. It now takes about 45 minutes or less to generate and export NFIRS data with no NFIRS edit problem.

The Data Team continued to build and enhance the data warehouse system. As a result, the team built and published many canned Crystal Reports for the agency. All authorized users can now run these reports on demand from the Crystal Reports web site. For example, all the performance measure reports required for CFAI Accreditation can be run on demand from the Crystal Reports web site. The data warehouse is now matured enough to enable the team to fulfill ad hoc report requests within a day, on average. It is now very rare that the team would miss an ad hoc report request deadline.

Plan

The IT team is having a dilemma of facing ever-expanding IT requests with limited IT staff. The plan to address this issue is to automate as much IT tasks as possible to enable the IT staff to deliver IT services with minimal effort. For example, the Data Team will work on the framework to enable the user to mine the data more easily. The Application Team will continue to expand the .NET class library as a re-usable class library to shorten the time required to build and enhance applications.

The land-wired network in each fire station is locked down in such a way that each network port in the station can recognize only one specific device. As a result, staff from other stations or administration cannot utilize the wired network in the station with their own County-issued devices. The plan is to work with DTS network service to find a way

to relax this restriction so that an approved County-issued device can connect to any network port in the station while the County system is still protected.

Concerning the desktop computer performance issue in the fire stations, the team will conduct a review of how the computers are utilized and all the variables causing the slow down. The team will then devise a plan to attack this problem from both technological and procedural perspectives.

The team is also working to improve the personnel record management system. The plan is to consolidate/integrate/bridge various related systems (Telestaff, various Staff system in Operations Division, IT Training, PSTA Training, HR Case, PIMS, etc.), to minimize duplicate data in multiple systems as well as presenting the staff record to the user in one view.

References

[MCFRS Division of Support Services Webpage](#)

[DTS IT Helpdesk Online Customer Survey](#)

[Montgomery County Department of Technology Services Homepage](#)

[DTS 2016 – 2019 Technology Strategic Plan](#) (see MCFRS on PDF page 49)

[Screenshots of Montco DTS IT Self Help Information Portal \(SHIP\)](#)

[MCFRS Organizational Chart](#) (see page 4)

9C.4 Public reception and public information (i.e. public information officer)
components support the customer service needs of the agency. (Author: PIO Piringer)

Description

The MCFRS Public Information Officer (PIO) reports directly to the Fire Chief. The PIO provides a consistent flow of information, mostly incident centric, to both internal and external customers, by gathering facts and distributing them as necessary.

The PIO also serves as the agency's point of contact for all news media inquiries. The PIO strives to constantly and consistently convey the MCFRS' vision, mission, and guiding principles, as articulated in the agency's organizational doctrine, when communicating with external and internal customers, all the while maintaining a social media presence.

In addition, the PIO works closely with the Community Outreach Section under the Division of Volunteer and Community Services, as well as the MCFRS EEO/Diversity & Community Engagement Office under the Fire Chiefs Office and constantly assists with community outreach public safety and community risk reduction messaging, including regular interaction and information sharing with other County agencies and the various media outlets. The PIO Office also liaises with the County's Customer Service Center (MC311) to ensure appropriate support in the form of 'knowledge-based-answers' (KBAs) for non-emergency requests for information via Montgomery County Government's single point-of-contact number (311).

All of these aforementioned components relative to supporting our customer service needs have been recently reflected in a 2017 National Citizen Survey™ Community Livability Report where 95% of Montgomery County residents surveyed rated MCFRS positively (excellent or good). This was the highest percentage of all other aspects of the County Government surveyed.

Appraisal

The PIO position became vacant in 2013 after the retirement of a uniform fire officer serving in the capacity and after some other organizational restructuring. The current PIO

had previously served in this capacity and has since been involved in the development and instruction of national public safety PIO coursework through the Federal Emergency Management Agency, Emergency Management Institute. The PIO supports the customer service needs of the Department while operating within the Incident Command System framework. The MCFRS PIO has been credited with greatly enhancing the agency's social media footprint and uses these mediums to routinely convey critical and routine incident information and important community risk reduction public service announcements. The PIO, while engaged in public safety and emergency management activities, has been responsible for ensuring that the affected public (community) receives accurate and timely information, especially during emergencies. In general, the Public Information Office has handled approximately 40,000 information requests annually during the last several years. These requests come from the media, residents, and various public and private sector agencies and organizations. The PIO or his/her designee has also issued approximately 50 formal news advisories annually over the past couple years.

Plan

With limited human resources, and increased activity and the need of timely and accurate information on many levels, the PIO will continue to expand the pool of trained and competent backup personnel to assist with on-scene and community engagement activities. During this appraisal period, eight uniform Captain and Battalion Chief-level officers successfully completed the online FEMA Awareness and classroom-based PIO training classes. A few also completed the Advanced PIO class and are Proboard PIO certified. These officers, when they have been called to fill-in as the department's PIO, have not been required to do so while "on-duty".

Alternative methods of supporting the delivery of community outreach programs are constantly being assessed and need to be re-evaluated and new approaches explored. Basic concepts of information management do not change with the inclusion of new or social media tools and platforms. Ultimately, new communication technology is all about speed. There is an expectation from the public that their government agencies will not only be transparent and responsive, but that the response must be customized to the

incident, activity or community affected. We must continue get the right information, to the right people, at exactly the right time, so they can make the right decisions.

References

[2017 National Citizen Survey™ Community Livability Report](#) (PDF page 8/Doc page 6)

[MCFRS 2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan](#) (see Organization Doctrine - PDF page 42 / document page 2-2; Public Information Officer – PDF page 47 / document page 2-7; Community Outreach Section – PDF page 56 / document page 2-16)

[MCFRS PIO Twitter Account](#)

[Alternate PIO Twitter Account](#)

[Alternate PIO Twitter Account](#)

[Alternate PIO Twitter Account](#)

[Alternate PIO Twitter Account](#)

[2017 December Fire Chief’s Monthly Video Message Featuring PIO](#)

[2017 February Fire Chief’s Monthly Video Message Featuring PIO](#)

CC 9C.5 Organizational documents, forms, standard operating procedures or general guidelines, and manuals are reviewed at least every three years and updated as needed for all agency programs. (Author: Fire Chief Goldstein)

Description

For the purposes of this analysis, organizational documents include MCFRS Policies, Procedures, Fire Chief's General Orders, and Executive Regulations. MCFRS also operation under county-wide administrative policies and procedures and internal support documentation on the department's internal website (Quicklinks). In the January division chief meeting each division chief is instructed to review all documents to identify any that are outdated or in need of revision.

Appraisal

Chapter 21 Section 3 outlines that the Fire Chief must implement County law, regulations, and policies to effectively administer the Fire and Rescue Service. Since 2013, the department has aggressively pursued updated policies, as well as issuing new orders and policies as necessary.

The bullets below tally the number of Fire Chiefs General Orders Issued by year:

2013	17 orders
2014	24 orders
2015	16 orders
2016	12 orders
2017	16 orders

The following policies have been amended:

- Care After Pronouncement of Death, Policy 21-02 – October 1, 2015
- Worker's Compensation Claims, Policy 04-01 – May 16, 2016
- Standardized Identification & Safety Graphics Scheme for County-Owned Fire and Rescue Service Apparatus, Policy 01-07AMII – August 1, 2016

- Incident Reporting Requirements and Records Management, Policy 02-01AMIII – August 1, 2016
- Apparatus Staffing Policy, Policy 25-08AMII – September 27, 2016
- Medical Standards for Operational Members and Candidates of MCFRS, Policy 01-02 – October 3, 2016
- Property Accountability, Policy 06-01 – June 12, 2017
- Chief Officer Professional Development and Improvement Policy, Policy 23-05AMIII – December 15, 2017

Many of these amended policies incorporated changes and updates along with the consolidation of multiple general orders into a single revised document.

The bullets below tally the number of documents that have been deleted since 2013:

Fire Chiefs General Orders	90
Policies	12
Directives	116

The following policies have been added:

- Personal Protective Equipment and On-Duty Apparel Policy for LFRD Volunteer Personnel, Policy No. 06-10 - April 1 2013
- Response for Aircraft Emergencies, Policy No. 24-08 – July 15, 2014
- Station Management, Policy No 15-01 – April 21, 2015
- MCFRS Document Policy, Policy 06-02 – February 24, 2016
- Identification Cards and Facility Access Policy, Policy 06-11 – February 23, 2016
- Incident Response Policy, Policy 24-01 – July 1, 2017

An annual policy revision / creation notification to the volunteer fire rescue association was incorporated in a February 2013 memorandum of understanding with the County Executive and the volunteer fire rescue association. This notification prescribes that the

Fire Chief will advise the association of anticipated policy additions or revisions in the upcoming 12 months. This process facilitates an internal process for each division to identify policies they intend to revise / create.

Plan

MCFRS will continue to revise policies to support both service needs and changes along with updating legacy documents to reflect current organization structure and titles. The Fire Chief will continue to ask each division to revise at least two (2) policies per year.

References

[2018-02-13 Notice of Intent – Policy Review Memo to MCVFRA for CY 2018](#)

[2017-03-27 Notice of Intent – Policy Review Memo to MCVFRA for CY 2017](#)

[2016-01-14 Notice of Intent – Policy Review Memo to MCVFRA for CY 2016](#)

[Rescinded Orders, Directives, Policy, Procedures, & Documents](#)

[MCFRS/FRC Policy and Procedures](#)

[2018-02-06 D/C Zuspan Email to HR Division Section Managers Seeking Applicable Policy Reviews per Fire Chief Verbal Order](#)

9C.6 Administrative support staff members have adequate training and education in order to perform their roles and responsibilities (Author: D/C Zuspan).

Description

Administrative support staff are in large part civilian, non-uniformed employees. The County's Office of Human Resources (OHR) is tasked with providing necessary classes and training programs for these employees. Some of the training is mandatory and other is elective or directed by the employee's immediate supervisor. The County also offers a comprehensive tuition assistance program to those employees who are seeking college-level degrees.

Appraisal

The County's OHR offers a robust selection of training. Classes include Career Development Programs with many optional learning paths. Some of the Employee Learning Paths include: Aspiring Supervisor, Communication Skills, Customer Service, and Diversity Studies. They also offer Management Learning Paths which include Human Resources Management, Labor Relations, and Performance Management. In addition, there are mandatory training programs that are pushed out to appropriate-level personnel. These are both instructor led and on-line classes. The agency also actively supports personnel attendance at conferences relating to their area of responsibility so they can keep up to date with the most current information and practices in their fields.

Plan

The agency will continue to rely on County OHR to provide and coordinate training for administrative and support personnel. The agency will also continue to support the education of its personnel through attendance at these training sessions and learning paths, tuition assistance and conference attendance.

References

[OHR Programs and Catalog](#)

[OHR Career Development site](#)

[County Tuition Assistance Program](#)

9C.7 Public records are maintained, available, and disposed of in accordance with local, state/provincial, and federal legal mandates. Record retention and destruction are documented in accordance with an adopted procedure. (Author: A/C Reid)

Description

The agency maintains records in accordance with policy. A Records Management System (RMS) operates over a wide area network, with terminals in all Montgomery County Fire and Rescue Service work sites. The information collected fulfills data reporting requirements of several Federal, State, and local agencies and programs. These agencies and programs include but are not limited to the Federal Emergency Management Agency (FEMA); the National Fires Incident Reporting System (NFIRS); the Sen. William H. Amoss Fire, Rescue and Ambulance (“508”) Fund; the Maryland Institute for Emergency Medical Services System (MIEMSS); and the Length of Service Awards Program (LOSAP). The data collected is also critical for fire and rescue service management, budgetary, and planning purposes. However, the Incident Reports and Records Management Requirements policy does not address disposal/destruction of records; thus, MCFRS continues to maintain all records.

The agency employs a records custodian (Administrative Specialist). The majority of request for records, including notices to preserve are routed through the specialist who may consult the County Attorney for advice and direction.

Incident Reports that were produced before March 25, 1997, exist in hard copy and are deemed to be in the custody of the Local Fire and Rescue Departments (LFRD). Reports of incidents that occurred after that date are presumed to have been entered into the RMS and are in the custody of the Fire Chief. However, if an LFRD has failed to enter these reports in the RMS, the LFRD is considered the custodian of those records.

Appraisal

During the rating period, the agency produced all required records, reports, publication education announcements, and media releases. Requests for fire incident reports, fire investigation reports, and medical reports, which were made in accordance with prescribed

procedure, have been fulfilled. No release of requested medical reports (from EMS responses) occurred without complying with the Health Insurance Portability and Accountability Act (HIPAA). Any other requested EMS documents, except for Quality Assurance investigative notes, are discoverable by the Freedom of Information Act or the Maryland Public Information Act, and have been fulfilled.

During Fiscal Year (FY) 2017, the records custodian processed 2,216 requests for records. Also during FY17, the position went from 20 hours/week to 40 hours/week because of workload demand. A managerial observation has been made that indicates the agency suffers in customer responsiveness and timely release of records when the records custodian/administrative specialist is off for extensive periods.

Plan

The agency realizes that improvement to the Records Management Policy is necessary. One component this self-assessment has revealed is to research and determine if a records retention/destruction policy/procedure needs to be implemented. Quality of reporting requirements are addressed in the current framework, but the policy falls short on retention and destruction criteria. The agency plans to address these shortfalls during the next two fiscal years.

In addition, the agency realizes that the current and projected workload for one administrative specialist cannot be sustained. The agency has no depth on the bench to effectively manage the requests. Additional specialists are needed and will be considered in future budget cycles.

References

[MCFRS Policy: Incident Reporting Requirements and Records Management](#)

[Maryland Department of Health](#)

[Maryland State Medical Society Retention Guidelines](#)

[MCFRS Webpage: Procedure for Requesting Incident Reports](#)

Category X: External Systems Relationships (Authors: A/C Dimitriadis & AM Vlassopoulos)

An agency's external relationships are defined as those relationships which serve to integrate the performance of one system with another. The increased use of multi-unit systems and the increase of interagency agreements between various types of government entities necessitates regular attention to these relationships and the agreements between autonomous operating units. Agreements must be legally adopted, current, monitored, and updated within the accrediting period. Programs which rely on support from external system relationships to meet agency expectations must be referenced in the agreement.

Criterion 10A: External Agency Relationships

The agency's operations and planning efforts include relationships with external agencies and operational systems that affect or may influence its mission, operations, and/or cost effectiveness.

Summary:

The Montgomery County Fire and Rescue Service (MCFRS) has both a master plan and a fiscal strategic plan for fire, rescue, emergency medical service, and community risk reduction. While not directly referenced in the written document, these plans take account of regional relationships within the National Capital Region (NCR) and the Baltimore Council of Governments (COG).

MCFRS is a vital member of the Metropolitan Washington Council of Governments (MWCOG). This relationship provides valuable resources for regional planning, cooperation, and preparedness for response to emergency situations within the region.

Performance Indicators:

CC 10A.1 The agency develops and maintains outside relationships that support its mission, operations, and/or cost effectiveness.

Description

Public safety agencies within Montgomery County, including the Montgomery County Fire and Rescue Service (MCFRS), are active participants within the Metropolitan Washington Council of Government's (COG) public safety committees. Regional public safety relationships fostered through COG committees are invaluable. They significantly enhance and support MCFRS' ability to meet its mission while nurturing its vision of enhanced trust and understanding amongst fellow stakeholders. These relationships enhance regional policy formation and adoption, grant concept development and funding prioritization, and strengthen automatic and mutual aid agreements. This amalgamation effectively leverages public safety assets toward tremendous economies of scale.

While only one example, COG partnerships provide a unique insight into the collaborative culture of not only this agency, but regionally. All MCFRS divisions endeavor to maintain formal and informal relationships with outside agencies, groups and individuals that either support the MCFRS or share similar responsibilities in their jurisdiction. Section 2 of the MCFRS 2016 – 2022 Fire, Rescue, EMS, and Community Risk Reduction Master Plan outlines numerous, additional partnerships the MCFRS maintains across a diverse array of outside entities. All of them support our mission and overarching goals.

Appraisal

During the appraisal period, MCFRS has actively participated on COG's Fire Chiefs' Committee and numerous subcommittees; such as, Emergency Medical Services (EMS), Fire, Health, and Safety, Hazmat, Passenger Rail, Senior Operations, and Technical Rescue.

MCFRS shares its expertise by providing COG with subject matter experts who regularly engage as operational decision-makers on Subcommittees. These individuals have met monthly with their regional colleagues for many years. These meetings and workshops have led to robust regional policy and procedure development, seamless and integrated automatic

aid pacts, development of large-scale operational exercises, and Urban Area Security Initiative (UASI) grant concept and program sustainment efforts. Examples of fire-rescue concepts discussed at the COG-level and that have been approved and funded regional through UASI grant programs included the purchase and implementation of FirstWatch®, sustainment of the National Capital Region Type III Incident Management Team and the Communication Interoperability Groups, Medical Ambulance Buses, and patient tracking technologies. In addition, the COG Operations Chiefs have been working to update the Fire and Rescue Mutual Aid Operations Plan (MAOP).

For its trend-setting efforts, the MCFRS received the Congressional Fire Services Institute's (CFSI) prestigious Excellence in Fire Service-Based EMS Award. This honor recognizes progressive organizations who employ best practices and innovative solutions in the delivery of emergency medical services. Montgomery County is the only County to receive this award twice.

As an example, the Division of Operations ~~routinely~~ meets quarterly with with public safety stakeholders from neighboring jurisdictions and federal government partners (e.g. fire departments located within Montgomery County's borders). They discuss common issues and concerns and develop plans to improve mutual mission goals, operations, and efficiencies. These associations supplement our previously discussed efforts within COG.

Still further, each of our organization's five divisions have fostered and enhanced professional relationships well beyond the bounds of our core mission and have done so through numerous and ongoing diversity initiatives within our organization as well as through regular interactions with minority and cultural-based organizations.

Plan

The MCFRS will continue to strengthen its relationships with all partner agencies through formal and informal channels, through Washington Metropolitan COG committee

memberships, our interactions with Baltimore COG, and via regular engagements with other public safety stakeholders and community members. Furthermore, the MCFRS will continue its culture of collaboration by building community, regional, state, federal, and non-government organizational relationships because it firmly believes these endeavors greatly enhance our ability to exceed the tenets of our stated mission.

And finally, the MCFRS will commit to continue to sustain current tactical and strategic partnerships with other county, municipal, regional, state, and federal agencies and private sector organizations by remaining engaged with external stakeholders and looking for opportunities with new stakeholders to help develop synergistic solutions to sometimes complex problems.

References

[MWCOG Homepage](#)

[MWCOG Fire Rescue & Webpage](#)

[MWCOG Committees Webpage](#)

[MCFRS 2018 CRA/SOC section 2A.2 beginning on page 22 with hyperlinked mutual aid agreements](#)

[MWCOG Screenshots](#)

[MCNIC³ Overview](#)

[MCNIC³ CFSI Award & Acknowledgement](#)

[MCFRS Master Plan](#) (Section 2 begins on page 2-1)

[MCFRS 2018 Strategic Plan](#) (See page 32, items 9 & 10)

10A.2 The agency's strategic plan identifies relationships with external agencies/systems and their anticipated impact or benefit to the agency's mission, operations, or cost effectiveness.

Description

Section 2 of the MCFRS 2016 – 2022 Fire, Rescue, EMS, and Community Risk Reduction Master Plan documents the numerous partnerships the MCFRS maintains with a diverse array of external agencies and organizations, all of which support its mission and overarching goals. Department Goal #8, listed on page 2-4 of the Master Plan, reinforces the importance of each of these relationships:

“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 om keeping our homeland safe.”

Additionally, each external agency partnership listed in the Master Plan includes a bulleted list describing their benefits and impacts to the MCFRS.

And finally, our organization's goals, including that quoted above, are included in the 2018 MCFRS Strategic Plan on page 32.

Appraisal

The FY2018 MCFRS Strategic Plan describes the extent MCFRS has undertaken to foster and enhance external relationships which further our mission, enhance cost effectiveness, and improve efficiencies. The department's non-emergency intervention and community care coordination (MCNIC³) program was born out of a partnership with the Washington Adventist Hospital and the County's Department of Health and Human Services. Data has confirmed this initiative has significantly reduced emergency 911 responses to some of the 911 system super-users. In addition, the data has proven less ER visits of these top-tier users; thus, confirming how the program has improved efficiencies.

Over its history, the MCFRS has developed and nurtured numerous external relationships with countless stakeholders. These are defined within the approved 2016 – 2022 Fire,

Rescue, EMS, and Community Risk Reduction Master Plan. The value of these and future relationships has been memorialized as a MCFRS goal.

Plan

In addition to previously cited examples, the MCFRS will continue to consider external relationships in all of its planning processes. We have memorialized this goal within the framework of both our strategic planning and master plan documents. We commit to making every effort to reference, abide, and be guided by these documents. Our master plan provides the goals and framework for continuing to build important relationships with external agencies and document these within future master plans. This will be accomplished by committing to continue to sustain current tactical and strategic partnerships with other county, municipal, regional, state, and federal agencies and private sector organizations by remaining engaged with external stakeholders and looking for opportunities with new stakeholders to help develop synergistic solutions to sometimes complex problems.

References

[MCFRS Master Plan](#) (Section 2 and specifically beginning on page 2-22)

[MCFRS 2018 Strategic Plan](#) (See page 32, item 10)

[MCNIC³ Overview](#)

10A.3 The agency researches, analyzes, and gives consideration to all types of functional relationships that may aid in the achievement of its goals and objectives.

Description

The MCFRS maintains a culture of collaboration with many local, state, federal, and non-government organizations (NGO), as documented in the 2016 – 2022 Fire, Rescue, EMS, and Community Risk Reduction Master Plan. The Fire Chief is mandated within Montgomery County Code Part II Local Laws, Ordinances, Resolutions, Etc. Chapter 21, Section 21-12 subsection (b) to draft a master plan in coordination with specific agencies, departments, and organizations, as well as, “...any other interested parties.”

There are numerous entities which appreciate reciprocal support from the MCFRS. Often functional in nature, these relationships are mutually conducive toward supporting each organization’s goals and objectives. They often find their genesis in situations where fire/rescue research and analysis identify a challenge requiring collaborative solutions amongst similar or dissimilar agencies and/or organizations. In other instances, they may evolve when the MCFRS is approached to help solve fellow agency challenges or through collaborative engagement where local or regional issues are tackled.

Regardless the nature, the MCFRS places a high value on synergistic relationships which maximize success in achieving mutual goals and objectives and enhancing the communal safety and welfare of its constituents.

Appraisal

To meet its stated goals and objectives, MCFRS has demonstrated a record of transparency, progressiveness, and forward-leaning approach where value and nurturing supports critical functional relationships amongst stakeholders.

By maintaining an active membership role on Metropolitan Washington COG committee/subcommittees, it provides invaluable expertise which routinely spurns the development, implementation, and revision of regional interagency policies and agreements. These trusting functional relationships have helped with the integration of a seamless and

robust geographical boundary-less automatic aid arrangement where the closest applicable emergency service resource(s) is dispatched.

Currently, several members of the MCFRS serve as subject matter experts and contributory counselors on several COG committees. Additionally, the MCFRS Fire Chief serves as the Vice-Chair for the COG Fire Chiefs' Committee and our Special Operations Battalion Chief as chairman of the Fire Intelligence Subcommittee. In June 2017, the MCFRS Fire Chief testified before the Fire Chiefs' Committee to present a proposal for the regional replacement of Self-Contained Breathing Apparatus (SCBA) cache dating back to 2005.

The Fire Chief also serves on the COG Homeland Security Executive Committee (HSEC) Advisory Council. According to COG, "This subcommittee of the Chief Administrative Officers Committee works closely with the Senior Policy Group (SPG) to manage homeland security programs in the National Capital Region. Its members are the administrative leaders of local governments."

The MCFRS is proud to share its legacy of collaboration through resource sharing with other disparate disciplines. MCFRS' assistance in developing the Montgomery County Public Schools FY2014 to 2019 Systemwide Safety Programs Strategic Plan is one example. Another was its assistive efforts in developing the Montgomery County 2013 Hazard Mitigation Plan, an end-product of the County's Office of Emergency Management and Homeland Security. The MCFRS also maintains long-standing and highly productive functional relationships with the American Red Cross, the Potomac Electric Power Company, Washington Suburban Sanitary Commission, and local area hospitals.

Plan

The MCFRS commits to continued and active participation in Metropolitan Washington COG, Baltimore COG, and all relevant Montgomery County, state, and federal committees, which demonstrate functional and/or philosophical relevance to MCFRS' goals and objectives.

We also pledge to continue to research and analyze data applicable to services the MCFRS provides. If validation confirms negative trending and no easy solution is defined, we will

seek opportunities to harness additional, functional public-private relationships to assist with possible solutions.

And finally, the MCFRS will commit to continue to sustain current tactical and strategic partnerships with other county, municipal, regional, state, and federal agencies and private sector organizations by remaining engaged with external stakeholders and looking for opportunities with new stakeholders to help develop synergistic solutions to sometimes complex problems.

References

[Montgomery County Code Chapter 21, Section 21-12 / Whole MC Code Chapter 21](#)

[Montgomery County Public Schools FY2014 to 2019 Systemwide Safety Programs Strategic Plan \(see bottom of page 1 under Stakeholders\)](#)

[MC 2013 Hazard Mitigation Plan \(see PDF page 20/document page 14 Stakeholders\)](#)

10A.4 A conflict resolution process exists between all external organizations with whom the agency has a defined relationship.

Description

The MCFRS acknowledges that differences of opinion are a normal, relationship phenomena. Dovetailing on its previous successes, the MCFRS has engaged a conscious decision not to draft a written policy applicable to conflict resolution with external entities. In most instances, issues or concerns are resolved through committee process, negotiation, or on an informal basis between jurisdictions.

Appraisal

MCFRS leadership firmly believes their current approach to conflict resolution remains the most effective means for achieving an end to this normal relationship phenomenon. Through non-confrontational and professional approaches to issues, the MCFRS has found that informal conflict resolution works best when no one jurisdiction supersedes the others. Our regional public safety partners and local governments employ similar approaches. This is evidenced by prolonged disagreements being an infrequent occurrence in Metropolitan Washington COG.

Plan

The MCFRS will continue to employ its current approach to managing conflict resolution. On a routine basis, we will evaluate events which fall within the definition of “conflict” and determine whether our efforts contributed to successful resolution. Where shortcomings are identified, we will acknowledge them, and identify corrective action(s) and engage timely change(s) in business practice. Furthermore, we will share these experiences with our organization’s management as well as partner agencies.

References

No policy doctrine available for reference.

Criterion 10B: External Agency Agreements

The agency maintains current agreements with those external agencies which support the identified programs. All external agency agreements required to be maintained in support of any program must be current, reviewed, and/or updated within the accreditation period and adopted by the appropriate governing bodies. All agreements should support the agency's effort to take advantage of any operational and cost effective benefits. Data reports, at least annually, should reflect the impact of each agreement on the agency.

Summary:

The MCFRS is deeply committed to ongoing collaboration with external agencies that appreciate value that comes with synergistic relationships. We ensure this end through routine dialogue with local, regional, and state-based stakeholders who share mutual interest in preserving the safety and welfare of our vast and highly diverse constituency. Agreements are henceforth memorialized in written agreements.

The MCFRS participates in written Mutual Aid Assistance Agreements with all five federal fire departments located in Montgomery County. These include the Walter Reed National Military Medical Center (WRNMMC), the National Institutes of Health (NIH), the Naval Surface Warfare Center (NSWC), the National Institutes of Standards and Technologies (NIST), and the Fort Detrick Fire and Emergency Services - Forest Glen Garrison.

The MCFRS also participates in a written National Capital Region (NCR) Mutual Aid Agreement through the Metropolitan Washington COG. This agreement encompasses the District of Columbia, surrounding counties in Maryland and Virginia, self-governing municipalities within those counties, and the Metropolitan Washington Airports Authority (MWAA).

In addition to the above-referenced, written mutual aid agreements, the MCFRS also participates in several COG regional mutual aid plans including the Regional Emergency Coordination Plan and the Mutual Aid Operations Plan.

MCFRS possesses a limited number of written mutual aid agreements with regional partners outside Metropolitan Washington COG. Howard and Frederick Counties, in Maryland, are

two examples. Mutual aid with other counties (e.g. Carroll County, Maryland) is conducted on an informal basis.

Performance Indicators:

CC 10B.1 External agency agreements are reviewed on an annual basis and revised as necessary to meet objectives.

Description

Mutual Aid Assistance Agreements with the federal fire departments and the NCR Mutual Aid Agreement are current and support the overall, MCFRS organizational objectives outlined in its latest strategic plan. These agreements advance a broader understanding of regional public safety issues and help ensure participating agencies benefit from the synergistic effects of collaboration and economies of scale.

Appraisal

All agreements are signed by Montgomery County’s Chief Administrative Officer and adopted by the Montgomery County Council. The adoption of the MWCOG Mutual Aid Operations Plan (MAOP) in 2006 enables all participating jurisdictions in the National Capital Region to combine response resources as requested and as necessary. Additionally, the Regional Emergency Coordination Plan provides a structure through which MCFRS can collaborate on planning, communication, information sharing, and coordination of activities prior to, during, and after a regional emergency.

While most partner agencies in COG do not regularly revisit specific terms and conditions within its mutual aid agreements and compacts, all COG partners routinely engage in one-on-one dialogue and in joint forums to discuss issues associated with interoperability. Potential changes are reviewed, discussed, and carefully vetted prior to engaging adjustments. The fact that most agreements (compacts) that the MCFRS has entered have stood decades of seamless application is testament to their durability, applicability, and maintaining currency.

Plan

The MCFRS will continue to participate in the Metropolitan Washington COG planning process for regional emergency response. We will also continue to maintain currency as it pertains to all Mutual Aid Assistance Agreements, especially as it pertains to applicability,

appropriateness, continuity, and effectiveness. The MCFRS will seek out written mutual aid agreements with jurisdictional partners where none currently exist and where deemed necessary and appropriate for sustaining continuity of operations. On a quarterly basis and in conjunction with our routine engagement with our jurisdictional partners, we will re-evaluate our response standards to ensure compliance with stakeholder expectations.

References

[MWCOG Homepage](#)

[MWCOG Fire Rescue & Webpage](#)

[Regional Emergency Coordination Plan. \(2002\). MWCOG.](#)

[Mutual Aid Operations Plan. \(2009\). MWCOG](#)

[Approval of a Mutual Aid Agreement between Federal, State and Local Governments in the National Capital Region. \(2006\). Montgomery County Council](#)

[Approval of Mutual Aid Agreements between Montgomery County, Maryland and National Institutes of Health, National Naval Medical Center, Montgomery County, Maryland and Walter Reed Army Medical Center, and Montgomery County, Maryland and National Institute of Standards and Technology. \(numerous years\).](#)

10B.2 The agency has a process by which their agreements are managed, reviewed, and revised.

Description

The MCFRS reviews and revises all external relationship agreements on an as-needed basis.

Appraisal

As of this writing, the MCFRS has consciously exercised a decision not to establish a formal process or established time-line to review and revise external relationship-based agreements. Instead and as a matter of routine, the MCFRS monitors regional activities and events to ensure its current response methodologies serve its county's interests and are consistent with regional practices. Furthermore, the MCFRS has actively participated with the Metropolitan Washington COG Senior Fire Operations subcommittee in revising the National Capital Region (NCR) Mutual Aid Agreement, when it is deemed appropriate.

Furthermore, while most partner agencies in COG have not regularly revisited specific terms and conditions within its mutual aid agreements and compacts, all COG partners routinely engage in one-on-one dialogue and in joint forums to discuss issues associated with interoperability. Potential changes are reviewed, discussed, and carefully vetted prior to engaging adjustments. The fact that most agreements (compacts) that the MCFRS has entered have stood decades of seamless application is testament to their durability, applicability, and maintaining currency.

Plan

The MCFRS will continually reevaluate the efficacy of developing a formal schedule and time-line for reviewing all external relationship agreements as conditions and systems evolve. In the interim, the MCFRS will continue to participate and coordinate with the COG Senior Fire Operations subcommittee to develop functional agreements and response plans with the jurisdictions in the NCR.

References

[MWCOG Homepage](#)

[MWCOG Fire Rescue & Webpage](#)

[COG Update on the Mutual Aid Operations Plan Revision](#)