SECTION 6

RECOMMENDATIONS
SHORTENED VERSION
(WITHOUT EXPLANATION PROVIDED IN SECTION 5)

CARRY-OVER RECOMMENDATIONS FROM 1994 MASTER PLAN, AS AMENDED

The following recommendations appearing in the 1994 *Fire, Rescue, and Emergency Medical Services Master Plan* **remain valid** for the ten-year period of 2005-2015, as they were not fully addressed or are of a continuous nature:

Recommendations from PART B - Service Demand – of the 1994 Plan:

B.2-1: Fire and rescue vehicle accessibility must be given significant consideration in the planning of parks and other low access areas. [Continuous recommendation]

B.2-2: The Fire and Rescue Commission should perform a risk analysis of the fire-rescue planning areas and recommend actions that might be taken to reduce risk or reduce the severity of incidents associated with higher risk areas. [See related recommendation below under "New Recommendations," sub-heading "Risk Reduction."]

Recommendations from PART D - Life Safety Services- of the 1994 Plan:

D.1-1: The fire and rescue service should continue to cooperate with appropriate public agencies and public interest groups in developing and implementing Countywide injury prevention programs. [Continuous recommendation]

Recommendations from PART F - Facilities – of the 1994 Plan:

F.2-1: As new development occurs in the County, the Fire and Rescue Commission should reassess the need for new or expanded stations. The Department [Division] of Fire and Rescue Services and the [Fire and Rescue] Commission should work closely with the Maryland-National Capital Park and Planning Commission as community master plans are prepared. [Continuous recommendation]

F.2-2: When corporation [LFRD]-owned stations are replaced, any agreements for the sale or reuse of the old stations should be decided on a case by case basis. [Continuous recommendation]

Recommendations from PART J Future Planning – of the 1994 Plan:

J.1-1: All fire and rescue service organizations should work from within the service to redefine organizational and leadership roles that promote the continued achievement of high quality public safety services.[Continuous recommendation]

Recommendations from PART K –Fire-Rescue Planning Area Profiles– of the 1994 Plan:

K-7.2: Evaluate the need for an additional fire and rescue station in conjunction with the amount of development. [Continuous recommendation related to Recommendation 1]

DELETION OF OBSOLETE RECOMMENDATIONS FROM 1994 MASTER PLAN, AS AMENDED

The following recommendation from the 1994 *Fire, Rescue, and EMS Master Plan* is obsolete and, therefore, has been deleted:

C.6-2: Future intergovernmental agreements among Montgomery and Prince George's Counties and the City of Takoma Park to provide fire, rescue and emergency medical services to the City of Takoma Park by the Montgomery County Fire and Rescue Service should enable the County to determine which station (s) and apparatus are to serve the city. [Note: The unification of Takoma Park into Montgomery County in 1997 precluded the need for the referenced agreements and voided this recommendation.]

AMENDED RECOMMENDATIONS FROM 1994 MASTER PLAN, AS AMENDED

K-2.1. Replace previously amended recommendation [last amended in 2000] with the following:

"Following the opening of the Clarksburg fire-rescue station, Station 9 will continue to operate. Incident call load in the area, risk analysis, and the ability to meet response time goals will be considered in determining the level of service provided by Station 9.

NEW RECOMMENDATIONS

►NOTE: A table summarizing Master Plan recommendations and priorities appears at the end of this Section.

MCFRS PLANNING INITIATIVES

1. HIGH PRIORITY RECOMMENDATION: The Planning Office should take a lead or primary role in addressing the following planning initiatives between 2005 and 2015:

a. Conduct additional phases of the Station Location and Resource Allocation Study, as follows:

- Phase 3 - Shady Grove, King Farm, and Derwood areas
- Phase 4 - Northeast quadrant of County (Station 13's, 17's, 4's and 28's first-due areas), including the Route 27 corridor north of Brink Road, Route 108 corridor between Routes 97 and 650, and Route 124 corridor north of Snouffer School Road
- Phase 5 - Eastern County, with emphasis on the Route 29 corridor north of University Boulevard
- Phase 6 - Western County, west of Stations 9, 22 (Germantown West), 30, 31, 33, and 35 (Clarksburg)
- Phase 7 - Norbeck Road corridor east of Gude Drive

Note: Phases 3, 5, and 7 should include a component examining the Inter-County Connector as it relates to MCFRS service needs and the delivery of fire-rescue services along the highway and adjacent areas.

b. Develop an annual work plan for the *Fire, Rescue, EMS, and Community Risk Reduction Master Plan* and coordinate its implementation, including the anticipated need for plan amendments

c. Coordinate the development of a MCFRS Business Plan that will set a course for how the MCFRS will be managed and operated to meet its Vision, Mission Statement, and Guiding Principles, and will be integrated with the *Fire, Rescue, EMS, and Community Risk Reduction Master Plan*

d. Participate in site evaluation/selection of the following MCFRS facilities:

- "Shady Grove" fire-rescue station, including expanded bays, quarters, and offices
- Station 18 (relocated)
- MCFRS apparatus maintenance facilities
- MCFRS warehouse (if multi-agency facility does not prove feasible)
- Any stand alone facilities for housing the "Ready-Reserve Fleet"
- Any other facilities that require site selection (e.g., Stations 17 and 28, if not renovated on existing sites)

e. Coordinate and integrate the continued implementation of recommendations of FRC-approved studies (e.g., *2000 Water Supply Study*, *2001 Aerial Unit Study*, 2003 *Rescue Squad Report*). A comprehensive review and revision of the Water Supply Study may be in order in the FY05-06 time frame due to the number of recommendations already implemented and the impact of deploying CAFS-equipped engines.

f. Coordination of fire-rescue needs with community master planning initiatives by MNCPPC, municipalities, and Regional Service Centers and associated Citizen Advisory Boards

g. Preparation of documentation and related testimony for the Montgomery County Planning Board's mandatory referral process for MCFRS CIP projects

h. Foster positive relationships with local and regional departments, agencies and organizations involved in community planning for the purpose of furthering joint initiatives and resource needs

i. Provide research and planning support for the department's readiness initiatives, focusing on local and regional approaches to planning, preparedness, training and response in preparation for widespread emergency events, acts of terrorism and other mass casualty incidents

j. Participate in the process to achieve improved ISO ratings in non-hydranted areas of the County and, if cost-effective, within hydranted areas

k. Develop recommendations for implementation of NFPA 1710 policies for adoption by the County Executive and County Council.

l. Expand research and development efforts, with emphasis on new technologies and innovative concepts, policies, and procedures that cost-effectively improve the delivery and outcomes for fire, rescue and EMS services.

m. Provide research and planning support to the department's wellness and safety initiatives to improve the physical condition of firefighter-rescuers and to minimize deaths and injuries caused by occupational dangers and exposures.

n. Coordinate comprehensive reviews of this Master Plan at designated intervals, including 18 months from the date (i.e., 1-1-05) the County Fire Chief took office in accordance with the provisions of Bill 36-03, and 5½ years following the adoption of this Plan by the County Council

o. Coordinate the comprehensive replacement of this Master Plan for the next ten-year cycle (2015-2025)

To accomplish this extensive list of planning tasks and initiatives, the MCFRS Planning Office will require additional planning and GIS personnel in the immediate and mid-term future.

FACILITIES

New, Relocated or Renovated Stations and Other Facilities

2. HIGH PRIORITY RECOMMENDATION: As reflected in the FY05-10 Capital Improvements Program (CIP), the following MCFRS facilities are planned for implementation:

a. The **"Germantown West" Fire-Rescue Station** is scheduled for completion in FY07. It will be a modified Class II station[1] and will house an engine, ambulance, and possibly a second EMS unit upon opening. It is further recommended that this station be designated "Station 22."

b. The **"Travilah" Fire-Rescue Station** should be a modified-Class IV station and should house an engine and EMS unit upon opening in FY08. It is further recommended that this station be designated "Station 32."

c. The **"Germantown East" Fire-Rescue Station** should be a Class 1 station with a community room, and should house an engine, aerial unit, EMS unit (type to be determined), and a fourth unit (type to be determined) upon opening. This station should also serve as a satellite facility for the MCFRS Collapse Rescue Team. It is further recommended that this station be designated "Station 34."

d. The **Clarksburg Fire-Rescue Station** should be a modified Class 1 station with a training room that could be used by the community for meetings or small-scale events. The station should initially house an engine or engine-tanker, medic unit, tanker, and brush unit. It is

[1] Site constraints have lead to a modified apparatus room design, including one full-size bay and five smaller bays, all requiring units to back in. The typical Class II station design includes 3 full-size, drive-through bays.

further recommended that this station be designated "Station 35." To address the fast pace of development in Clarksburg, corresponding increase in incident call load, and inability of units based at existing stations to meet response time goals within Clarksburg, **an interim fire-rescue facility should be established in Clarksburg during FY06.** The interim station would serve Clarksburg until the permanent station is completed in FY09. Apparatus and staffing at the interim station should include a medic unit and engine or engine-tanker. The interim facility may be co-located with another County facility, or located on another appropriate site.

e. The **Wheaton Volunteer Rescue Squad** (WVRS) is to be relocated to the intersection of Georgia and Arcola Avenues in Wheaton. The WVRS station will be a Class I, four-bay station, including a community room. The complete fleet of EMS and rescue apparatus should be moved from the existing station to the new facility. Upon relocation, the WVRS should retain its station designation as "Rescue Company 2."

f. **Cabin John Park Volunteer Fire Department (CJPVFD) Station 30** is in the process of being renovated on its existing site located at 9404 Falls Road under a joint CJPVFD-County partnership. Phase 1 of the renovation included an expansion of the apparatus room, from two bays to four. Phase 2 will include an extensive renovation to the living quarters. It is further recommended that this station retain its designation as "Station 30."

g. **Burtonsville Volunteer Fire Department Station 15**, located at 13900 Old Columbia Pike, is to be expanded to better accommodate its volunteer and career staff. The planned additions include an expanded bunkroom (i.e., ten additional beds) and the addition of a meeting/training room that can also be used by community groups. It is further recommended that this station retain its designation as "Station 15."

3. The need for the following fire-rescue stations has been determined, and these facilities will be included in future MCFRS CIP requests:

a. HIGH PRIORITY RECOMMENDATION: **Kensington Volunteer Fire Department (KVFD) Station 18** should be relocated to a site within the vicinity of its existing site at Georgia Avenue and Randolph Road before the State Highway Administration's project to reposition Randolph Road under Georgia Avenue. [The land upon which Station 18 now stands will be condemned by the State to accommodate the widened road network; thus Station 18 must be relocated. The timing of the highway project is unknown due to State fiscal issues and highway project priorities; therefore the timing of relocating the station is equally unclear.] To ensure that a site is readily available when relocation becomes necessary, a site evaluation process was conducted in FY05, with input from Glenmont area residents, KVFD, Maryland-National Capital Park & Planning Commission (M-NCPPC), and the County. As this Master Plan was written, the site had not yet been selected by the County Executive. The relocated facility should be a modified Class II station, with 4 apparatus bays to accommodate the existing engine, aerial unit, brush unit, and, potentially, a future EMS unit

and/or reserve apparatus. Upon relocation, the station should retain its designation as "Station 18."

b. HIGH PRIORITY RECOMMENDATION: The **"Shady Grove" Fire-Rescue Station** should be the fifth priority in the order of new/additional fire-rescue stations. It should be a 5-6 bay station initially housing an engine and EMS unit (type to be determined), plus several specialty units, ready reserve apparatus, and potentially an aerial unit and/or a second EMS unit in the future. The Shady Grove facility, due to its centralized location, should also house the Duty Operations Chief, an EMS Supervisor (position proposed in this Plan), Fire and Explosive Investigations staff, and personnel to operate specialty vehicles that serve the entire County such as the Bomb Squad, MCFRS Command Post bus, up-county hazmat unit, decontamination unit(s), air cascade unit, and proposed EMS bus. Furthermore, this site should house a portion of the MCFRS "Ready-Reserve Fleet" within the station, or in an adjacent building, if an appropriate sized parcel of land is available for all intended uses. The recommended MCFRS warehouse (see below) could also be located on this site if an appropriate sized parcel of land can be acquired for all intended uses. The recommended MCFRS central maintenance facility is another candidate for this site, if the property can accommodate it in addition to the facilities listed above. It is further recommended that this station be designated "Station 36."

c. **Glen Echo Volunteer Fire Department Station 11**, located at 5920 Massachusetts Avenue, should be renovated on the station's existing site. Extensive renovation will be required due to the building's age, obsolete layout, and condition. As of 2005, a Program of Requirements had been prepared. Following renovation, the station should continue to house two primary apparatus (i.e., engine and EMS unit), and it should retain its designation as "Station 11."

d. **Laytonsville District Volunteer Fire Department (LDVFD) Station 17**, located at 21400 Olney-Laytonsville Road, should be renovated on the station's existing site or relocated to a nearby site. If renovated on site, the station will require extensive renovation to the entire building due to its size, layout, age and condition. If the station is to be relocated, then a site evaluation and selection process should be undertaken, with input from Laytonsville area residents, LDVFD, M-NCPPC, and the County. Whether renovated or relocated, the station should be a Class 1, or modified Class 1, facility with four bays to accommodate the large fleet of vehicles[2] housed at Station 17. The LDVFD and Town of Laytonsville may wish to include a community room in the design, as well. Whether or not it is relocated, the station should retain its designation as "Station 17."

e. **Gaithersburg-Washington Grove Fire Department (GWGFD) Station 28**, located at the intersection of Muncaster Mill Road and Shady Grove Road, should be renovated on the station's existing site, or relocated to a nearby site. If renovated on site, the station will require extensive renovation to the entire building due to its size, layout, age, and condition. If the station is to be relocated, then a site evaluation and selection process should be

[2] EW-17, RS-17, W-17, A-179, B-175, and E-172 (reserve)

undertaken, with input from area residents, GWGFD, M-NCPPC, and the County. Whether or not the station is relocated, it should be a 3- or 4-bay facility to accommodate an engine, EMS unit, specialty unit (i.e., foam unit or hazmat unit), and, potentially, an additional service (e.g., 2nd EMS unit or an aerial unit) or reserve apparatus. The station should retain its designation as "Station 28."

f. Consideration should be given to relocating **Upper Montgomery County Volunteer Fire Department Station 14**, located at 19801 Beallsville Road, into or closer to Poolesville where most of that station's call load occurs. The station should retain its designation as "Station 14," whether or not the station is relocated.

4. HIGH PRIORITY RECOMMENDATION: **Warehouse -** The MCFRS should construct or lease a central warehouse that would allow for the storage and distribution of clothing, protective gear, SCBA, equipment, and supplies used throughout the MCFRS (see Figure 4.4 in Section 4 for a complete listing of MCFRS items requiring storage at this facility). The warehouse must be configured and operated such that it can support rapid deployment of items during large-scale incidents and/or times of County-wide or region-wide crisis. The facility should be centrally located within the County to conveniently accommodate customers from all fire-rescue stations and other MCFRS work sites. Space of approximately 50,000-60,000 square feet is required to store all equipment and supplies listed in Figure 4.4.

   If, due to budget constraints, neither the multi-agency warehouse nor the MCFRS warehouse is feasible over the ten year life cycle of this Master Plan, then the least costly alternative is to lease a smaller facility to, at a minimum, store uniforms, protective gear, SCBA, and a portion of the MCFRS readiness equipment.

5. HIGH PRIORITY RECOMMENDATION: **Maintenance Facilities** - The MCFRS should operate a large-capacity, **centrally-located maintenance facility** to which all MCFRS vehicles would be brought for major repairs and servicing needs **and two smaller maintenance shops** that would handle preventive maintenance and minor/"running" repairs. The smaller shops should be located elsewhere in the County.

6. The recommended **MCFRS "Ready Reserve Fleet"** (RRF), addressed in the "Apparatus and Equipment" section below, should be housed at a **centralized RRF facility** that should be built or leased to house a large portion of the RRF. A small portion of the RRF may be housed in **existing fire-rescue stations** wherever bay space is available. **Additional sites** for the remainder of the RRF must be identified and appropriate facilities built or modified (if privately-owned garage-type buildings are to be used).

7. While the PSCC is expected to remain at its existing location throughout the 10-year life cycle of this Master Plan, the **spatial and functional needs of the multi-functional Center must be reassessed during the latter years of this Plan's life cycle**. The assessment should

be a joint MCFRS, MCP, and DPWT effort. Regarding the Alternate PSCC, there are no plans to relocate or expand that facility during the 10-year period.

8. The MCFRS should plan for a **live-burn training site** in a rural portion of the County where such training fires will have minimal impact on residents, businesses, and the environment. [The existing Fire-Rescue Training Academy (FRTA) is limited in its ability to conduct live burn training at the PSTA, due to pressure from the surrounding community as well as restrictive environmental regulations.]

Numbering System for New Stations

9. It is recommended that the MCFRS fill gaps in its sequential numbering system for fire-rescue stations. Accordingly, **numbers assigned to planned up-County stations** should be as follows:
   - Station 22 - "Germantown West"
   - Station 32 - "Travilah"
   - Station 34 - "Germantown East"
   - Station 35 - Clarksburg
   - Station 36 - "Shady Grove"

   To address the existing gap between 36 and 40, **any future MCFRS stations should be assigned the following numbers (in order): 37, 38, 39**. Any future stations beyond these three should be numbered sequentially beginning with #41, since #40 is assigned to an existing station.

Site Location and Site Suitability Criteria

10. The following list of **site location and site suitability criteria should be used in all future MCFRS fire-rescue station site evaluations/selections**:

    Site Location Criteria:
    - Response time – in relation to County Council-adopted response time goals
    - Population – density and total population served
    - Special needs populations – e.g., elderly, handicapped, non-English speaking
    - Incident call load – all fire, rescue and EMS incident types
    - Area of coverage – square mileage within first-due area
    - Proximity to surrounding stations
    - High hazards – based on a hazards analysis
    - Water supply for fire suppression – hydrants, certified drafting points, etc.

Site Suitability Criteria:

- Size – 3-5 acres is preferred
- Shape/dimensions – sufficient width and depth
- Topography – preferably level
- Quick access to major roadways – preferably both north-south and east-west
- Egress and ingress of fire-rescue apparatus and citizens' vehicles
- Not located on or at the bottom of a steep grade, or on a sharp curve in the road
- Compatibility with surrounding land-uses
- Soil composition/stability
- Utility hookups – electricity, water/sewer, gas, phone, cable TV, IT systems
- Well and septic suitability, only if municipal water/sewer hookups are not feasible
- Availability and ease of acquisition
- Cost (if other than County-owned)
- Special considerations – environmental issues (e.g., wetlands), historic designation
- Pedestrian safety
- Traffic signalization and any roadway access issues

Land Reservation for Future Stations

11. MCFRS should coordinate the reservation of land for new fire-rescue stations with the M-NCPPC (i.e., Community Based Planning Division and Development Review Division) and the Directors of Regional Services Centers whose service areas require new stations. In addition, for every planned station, the MCFRS should seek Mandatory Referral from the Montgomery County Planning Board.

Station Design

12. Early within the ten-year life cycle of this Master Plan, the MCFRS, in conjunction with DPWT, should **develop a fire-rescue station design manual** to replace the existing *Program of Requirements: Prototype Fire Stations Class I, II, III IV* guide. New station designs must consider changes in operation, technology, and mission. New station designs should include station "hardening" components and systems to protect the integrity of the facilities from natural hazards, civil unrest, terrorism, and environmental threats to ensure that stations remain safe to occupy and functional at all times. Station design must also address emerging needs brought about by future Maryland Occupational Safety and Health (MOSH) and/or National Fire Protection Association (NFPA) requirements.

Assignment of Stations

13. HIGH PRIORITY RECOMMENDATION: It is recommended that **any new (additional) fire-rescue station built after 2005 with County funds be operated by the County, unless**

and until the appropriate LFRD submits an acceptable business plan[3] addressing volunteer staffing of frontline units at the station and LFRD financial commitment to station operation beyond County funding.

Environmentally-Compatible Facilities and Equipment

14. There are numerous measures that the MCFRS should consider implementing with regard to its facilities and everyday operations to become more **environmentally compatible** and to meet the intent of the County's "System of Environmental Management." The recommended measures, categorized as pre-construction measures and post-construction measures, are **listed in Section 4** of this Plan.

APPARATUS AND EQUIPMENT

Apparatus and Equipment Purchase, Replacement, and Maintenance

15. HIGH PRIORITY RECOMMENDATION: **The MCFRS should adopt and implement the recommendations presented in the "MCFRS Apparatus Management Plan" dated April 2004**. That plan recommends the following overlying strategies and implementation timeline concerning apparatus purchase, replacement, maintenance, and testing:

a. A system of **centralized accountability** for ensuring that the maintenance organization, business processes, and performance standards meet current and projected MCFRS apparatus and service needs.

b. **Safety and performance standards** for vehicles and equipment.

c. **Standards and procedures** for performing daily vehicle inspections, reporting defects, and determining and expeditiously resolving problems for vehicles declared as out of service.

d. Effective **safety and training program**, including driver training and certification.

e. An effective **preventive maintenance program** with ready access to standby frontline and reserve vehicles to ensure that service delivery is not disrupted.

f. On-going and comprehensive **testing and inspection program** for vehicle and equipment compliance with uniform standards to improve reliability and readiness.

[3] The CAO will determine the acceptability of the business plan.

g. A **management information system** that provides accurate, timely, and uniform reporting of vehicle maintenance and condition to support system-wide fleet management.

h. Cost-effective **inventory management system** to improve efficiency and reliability and to reduce down-time related to parts availability.

i. A fleet that provides for **fully-equipped standby frontline vehicles** to assure continuity of service delivery, or to respond to surge requirements in the event of a disaster.

j. A cost-effective **vehicle replacement/rehabilitation schedule** that reflects the life cycle of the apparatus.

k. **Cost-efficient facilities with appropriate capacity** to accomplish the fleet management maintenance requirements and functions to operate and sustain fire and rescue service delivery for current and projected needs of the County.

l. Adopt MCFRS **policies** addressing apparatus and equipment management.

16. HIGH PRIORITY RECOMMENDATION: MCFRS should institute a **dual foam strategy** involving the use of Class A and Class B fire fighting foams. To this end, **MCFRS should replace frontline engines with compressed-air foam system (CAFS)-equipped engines. Each new engine should carry 50 gallons of Class A foam concentrate** in a dedicated foam cell supplying the on-board CAFS system, as well as a foam proportioner. A total of 1800 gallons of Class A foam concentrate is needed County-wide, plus 500 gallons in storage to be used for training purposes and for replacement of Class A foam used at incidents. [Reference: Recommendation 15 above and Priority 2h in Section 7]

The second part of this dual foam strategy involves establishing a Class B foam capability for flammable liquid spills/fires. To meet the NFPA 11 requirement[4], **it is recommended that MCFRS acquire two foam attack units carrying a combined volume of 1000-gallons of Class B foam concentrate.** At 3% foam concentration, this amount of foam will sustain foam application operations for about 30 minutes. These foam attack units should be equipped with turrets, foam eductors (of various flows), foam nozzles (of various flows), and foam transfer pumps. The foam attack units should have pump and roll capability enabling foam application through turrets while the unit is moving. A combination foam attack unit and engine-tanker would provide the versatility for this unit to also function as a pumper and as a small tanker at incidents where foam application is not required. In addition, **each frontline engine should carry 30 gallons of Class B foam concentrate**. County-wide on-board Class B foam capability will be 2080 gallons, plus 500 gallons in storage to be used for training purposes and for

[4] In accordance with NFPA Standard 11, a minimum Class B foam supply of 15 minutes must be provided for flammable liquid spill fires of one inch depth or less.

replacement of Class B foam used at incidents. [Reference: Recommendation 15 above and Priority 2h in Section 7]

17. The MCFRS should purchase a **second set of personal protective equipment** for IECS-certified personnel to carry with them in their privately-owned vehicles in case of emergency callback. Federal Urban Area Security Initiative (UASI) grant funds will be used for the initial purchase; however, County funding must be secured for future replacements of backup sets.

18. The MCFRS should place a **full complement of equipment on all reserve apparatus**, so that these units can be placed into service on short notice.

19. The MCFRS should obtain a **firefighter-rescuer rehabilitation vehicle and/or shelter** that would provide greater rehabilitation amenities than those currently provided by Bus-27.

20. The MCFRS should replace its existing **Mass Casualty Support Units** with box-style trucks which are better suited to the task than the former ambulances now being used. Larger quantities of decontamination equipment and supplies will need to be obtained and placed on board these trucks to enable the decontamination of greater numbers of MCFRS and MCP personnel as well as the general public.

21. The MCFRS should **establish procedures or obtain assets for obtaining alternate sources of fuel** for vehicles and generators in the interest of readiness for major incidents. Alternatives could include arrangements for first-priority deliveries by DPWT fuel tankers, first-priority deliveries by local fuel vendors, or lease or purchase of a MCFRS fuel tanker.

22. The MCFRS must **maintain an inventory of specialized equipment, medical supplies, and personal protective gear that keeps pace with the County's hazmat and WMD threat**. A system that addresses periodic replacement of items having limited shelf lives is also needed to ensure that all items are ready for immediate use and will function properly. Major categories of equipment include: specialized personal protective equipment, medications, and specialized equipment (see Section 5 for details).

23. All MCFRS stations must be adequately stocked with **provisions to support callback of personnel** in times of crisis. Stations must stockpile food, beverages, paper goods, potable water, bedding, cots/mats, and related items that will accommodate large numbers of personnel for up to 72 hours without re-supply. Adequate quantities of fuel must also be stored to run station generators and apparatus.

24. The MCFRS must acquire and maintain an **inventory of medications and other EMS supplies** for use during special events involving large gatherings.

Apparatus and Equipment Recommendations from Recent Studies

25. In accordance with recommendations in the *2000 Water Supply Study*, the MCFRS should purchase **suppression units** with the following minimum capabilities and features:

    - Engines – pumping capability of at least **1500 gpm**
    - Tankers – elliptical-shaped tanks of **3000-3500 gallon capacity**

26. The *2000 Water Supply Study* also recommends that coordination should continue between the County and the LFRDs to **standardize hose appliances** carried by engines, engine-tankers and quints.

27. MCFRS should move toward deploying an aerial unit fleet comprised of **75% tower-ladders** and **25% tractor-drawn ladder trucks**. In addition, the MCFRS should continue evaluating the **"all-steer" technology**.

28. The *2004 Rescue Squad Study* recommends the following equipment purchases:

    a. All rescue squads should have at least one **thermal imager** as part of the on-board inventory.

    b. Any rescue squad equipped with an on-board air cascade system must have a **blast shield containment system** around the cascade system.

Pilot Testing of Apparatus and Equipment

29. The MCFRS should conduct pilot tests to determine the benefits and cost-effectiveness of the following equipment and apparatus:

a. **A Personal Alert Safety System (PASS) that incorporates Global Positioning System (GPS) technology should be pilot tested**. The GPS component incorporated into the PASS **allows trapped, injured, or disoriented firefighters to be located quickly** within a burning or collapsed structure by means of the GPS pinpointing the wearer's exact location inside the structure.

b. **A "Telesquirt" device should be pilot tested in an area of high fire risk** within the County. Candidate sites for pilot testing a telesquirt include Station 1, 2, 3, 18, or 23; however, the optimal site should be identified by the Operations Division Chief.

c. **A mobile traffic signal control system should be further pilot tested** in the most congested areas of the County (e.g., within the Urban Zone). Optimal areas to conduct the pilot test should be identified by Operations Division managers from MCFRS, DPWT, and MCP (assuming that MCP participates in the pilot test).

d. **A pilot test should be conducted to assess fire hydrant marking systems** that would allow firefighters to easily locate hydrants. The optimal area(s) to conduct the pilot test should be identified by the FRC's Operations Committee.

e. MCFRS should work with the local water utilities to design a **new style of hydrant** that employs one or more large-diameter outlets in place of 2½-inch outlets that have become obsolete. This design would go hand-in-hand with the use of large-diameter supply lines.

f. **One, or several (e.g., one per battalion), ManSAC® patient carrier system(s), or similar product, should be pilot tested**. The optimal area(s) to conduct the pilot test should be identified by the Operations Division Chief and EMS Section Chief.

30. The MCFRS must continue to stay abreast of the **newest/latest technologies and innovations,** and pilot test those that appear to best meet the present and future needs of MCFRS, as funding allows.

STAFFING

31. **The Fire Chief must continuously assess the staffing needs at each station and must initiate steps to increase the level of career staffing on an as-needed basis**. Staffing levels should be consistent with that recommended in NFPA Standard 1710 (see Recommendation 32).

32. HIGH PRIORITY RECOMMENDATION: **The County must increase mandatory minimum staffing to four personnel for engines, aerial units, and rescue squads; ensure staffing of tankers, and staff the new position of Battalion Chief Aide.** These staffing levels are consistent with that recommended in NFPA Standard 1710, FEMA Publication 508-4, and appropriate for the level of hazards within the County. **A 7-phase, 7-year staffing plan is recommended to achieve these vital staffing needs as follows**:

a. Phase 1, 1st Year - **Increase guaranteed 24/7 staffing to 4 personnel on 8 engines at predominantly rural stations** located on the periphery of the County by adding one firefighter-paramedic per engine on a 24/7 basis, thus establishing paramedic engines at these stations.

b. Phase 2, 2nd Year - **Increase guaranteed 24/7 staffing to 4 personnel on 8 aerial units at stations located in high-density areas** of the County by adding one firefighter per aerial unit on a 24/7 basis.

c. Phase 3, 3rd Year - **Increase guaranteed 24/7 staffing to 4 personnel on 8 engines at stations located in high-density areas** of the County by adding one firefighter-

paramedic per engine on a 24/7 basis, thus establishing paramedic engines at these stations.

d. Phase 4, 4th Year - **Increase guaranteed 24/7 staffing to 4 personnel on 6 aerial units and 3 rescue squads at stations located in suburban areas** of the County by adding one firefighter per unit on a 24/7 basis for most of these units and a daytime only basis for the remainder (plan assumes volunteers will provide the remainder of the fourth person staffing).

e. Phase 5, 5th Year - **Increase guaranteed 24/7 staffing to 4 personnel on 9 engines at stations located in suburban areas** of the County by adding one firefighter-paramedic per engine on a 24/7 basis, thus establishing paramedic engines at these stations.

f. Phase 6, 6th Year - **Increase guaranteed 24/7 staffing to 4 personnel on 6 engines and one rescue squad at stations located in suburban areas** of the County by adding one firefighter per unit on a 24/7 basis. In addition, the MCFRS should provide **dedicated guaranteed staffing of one person per each of 8 tankers to ensure immediate response of tankers** on a 24/7 basis.

g. Phase 7, 7th Year - **The MCFRS should provide Aides to assist career Fire-Rescue Battalion Chiefs in the field.** A Battalion Chief's Aide would be required on a 24/7 basis for each battalion, including the proposed sixth battalion.

Note: **As new stations open, 4-person staffing should be provided for the frontline engines, aerial units, and rescue squads housed therein.**

33. Based upon the addition of several new up-county stations and one interim station within the FY06-09 time frame as well as span of control principles, **the MCFRS must create a sixth battalion (i.e., Battalion 6) and staff it with a career Fire-Rescue Battalion Chief on a 24/7 basis**.

34. HIGH PRIORITY RECOMMENDATION: The MCFRS should establish battalion-based resources to improve effectiveness and efficiency of its operations/services through improved supervision, increased quality assurance oversight, and strategic deployment of specialized staff and apparatus. Battalion-based resources would work under the supervision of the six on-duty Fire-Rescue Battalion Chiefs, working together as a team to implement the Fire Chief's vision and policies. Battalion-based resources should include, but not be limited to, the following:

- EMS Supervisor (i.e., EMS Captain) on a 24/7 basis**.** [See also Recommendation #47 pertaining to EMS quality assurance.]

- Fire Code inspectors

- Community Resource Units on a 24/7 basis [See also Recommendation 37i]
- Battalion Chief Aide on a 24/7 basis [See also Recommendation 32g]
- Training Officer

35. HIGH PRIORITY RECOMMENDATION: The MCFRS must continuously recruit a sufficient number of diverse, qualified career and volunteer applicants to meet the department's staffing needs and retain these personnel for long-term service. **To this end, the MCFRS must continue supporting the fulltime Recruiter position established in FY05, as well as an annual budget for recruitment and retention activities, materials, advertising, and vehicle. To assist the Recruiter, additional fulltime and/or part time staff must be hired, as needed. The Recruiter must devise a comprehensive volunteer /career recruitment and retention plan and implement the plan** as quickly as possible**.**

    In keeping with the MCFRS goal of **achieving and maintaining a diverse work force**, the volunteer and career firefighter-rescuer recruitment and retention program must ensure that recruitment efforts address this goal.

RESOURCE DEPLOYMENT

36. HIGH PRIORITY RECOMMENDATION: The MCFRS should **identify resource needs** (i.e., facilities, apparatus, staffing) in the following areas not yet studied under the ongoing Station Location and Resource Allocation Study:

    - Shady Grove, King Farm, and Derwood areas
    - Northeast quadrant of County (Station 13's, 17's, 4's and 28's first-due areas), with special emphasis on Route 27, 108, and 124 corridors
    - Eastern County, with special focus on the Route 29 corridor
    - Western County, west of Stations 9, "22"-Germantown West, 30, 31, "32"-Travilah, "34"-Germantown East and "35"-Clarksburg[5]
    - Norbeck Road corridor east of Gude Drive

    Note: Also see Recommendation #1.

[5] Stations 22, 32, 34 and 35 are up-County stations to be constructed between FY06 and FY09

37. HIGH PRIORITY RECOMMENDATION: Apparatus and personnel deployment enhancements that are recommended for the immediate future include the following:

a. Add a second medic unit to Gaithersburg-Washington Grove Station 8 to serve as a "flex" unit, **having guaranteed 12-hour staffing** (e.g., 9 a.m. - 9 p.m.) **to handle peak call volume** within the Gaithersburg area

b. Add a second medic unit to Kensington Station 25 to serve as a "flex" unit, **having guaranteed 12-hour staffing** (e.g., 9 a.m. - 9 p.m.) **to handle peak call volume** within the Aspen Hill area

c. Add a second ambulance to Rockville Station 3 to serve as a "flex" unit, **having guaranteed 12-hour staffing** (e.g., 9 a.m. - 9 p.m.) **to handle peak call volume** within the Rockville area

d. Place Ambulance-199 in service at Silver Spring Station 19, **staffed on a 24/7 basis**

e. Staff Ambulance-158 (purchase new unit, as needed) at Burtonsville Station 15 **on a 24/7 basis.**

f. Upgrade Ambulance 219 to a medic unit (Medic-219) at Kensington Station 21**, and provide guaranteed 24/7 staffing**

g. In accordance with recommendations appearing in the *2001 Aerial Unit Study*, **deploy aerial units (one each) at Damascus Station 13 and Sandy Spring Station 40**.

h. Establish a **new rescue squad/rescue unit deployment strategy** (in accordance with the *2003 Rescue Squad Report*) featuring **six "core" rescue squads**, each with guaranteed staffing, **and strategically deployed extrication-capable units** (i.e., extrication-equipped engines and ladder trucks). The six designated core rescue squads will include those housed at Stations 3 (RS-3), 15 (RS-15), 17 (RS-17)[6], 29 (RS291), Rescue Company 1 (RS-19) and Rescue Company 2 (RS-29). Extrication-capable units will be housed at Stations 2, 4, 9, 12, 13, 14, 30 and 31.

i. Establish a **"community resource engine" and "community resource medic unit" (eventually one engine and medic unit per battalion),** each with guaranteed staffing, **whose primary purpose is to fill in at a station where similar units are committed on**

[6] The Sandy Spring VFD Board of Directors chose not to move RS-4 from Station 4 to Station 40 to become a core squad as recommended in the 2004 Rescue Squad Report; therefore, RS-17 will be designated as a core rescue squad instead of RS-4 (intended to become "RS-40").

long duration incidents or long duration details outside their first-due area. **Secondary purposes** of community resource units would include:

- Assisting with community outreach/public education events
- Filling in at one of the specialty team stations when engines and EMS units from those stations are committed on long-duration incidents involving the specialty teams
- Temporarily assisting in areas with heavy call loads when units in those areas are committed on incidents
- Providing a reflex capability when additional units are required on major incidents
- Serving any other temporary assignment that may arise

38. HIGH PRIORITY RECOMMENDATION: The MCFRS should establish a policy whereby **additional EMS, suppression, and rescue squad units are placed in service prior to existing units exceeding the threshold level of 2500 calls per unit per year**. **The threshold level should be re-evaluated on a continuous basis** to ensure its appropriateness considering the changing risk environment, number and type of departmental resources, overall workload of staff, and other related factors.

39. When both Germantown West and Germantown East fire-rescue stations become operational, it is recommended that **existing Germantown Station 29 remain open, housing an appropriate complement (to be determined) of fire-rescue apparatus.**

40. The proposed creation of a dedicated HIRT and a dedicated Bomb Squad should be addressed as follows:

a. **The HIRT/hazmat function should be a dedicated service** versus the existing arrangement where an engine crew (e.g., Engine 71's crew) has dual functions as both an engine company and HIRT Team. **Establishing a dedicated HIRT of 4-5 personnel would ensure that the team is readily available for hazmat calls** and would allow HIRT personnel greater time for training, calibrating and testing of specialized equipment, performing equipment maintenance, and preparing incident reports and performing other administrative duties.

b. Consideration should be given to splitting the **Fire and Explosive Investigations (F&EI) and Bomb Squad functions** to provide a dedicated service in each discipline. If split, the F&EI Section should have a complement of about 15 personnel, and the independent Bomb Squad should have a complement of about 10 personnel, with auxiliary personnel having primary duties within other sections of the MCFRS.

EMERGENCY MEDICAL SERVICES

Note: The topics of Additional EMS Units and EMS Response Threshold are addressed under "Resource Deployment" heading above. The topic of EMS training is addressed under the "Training" heading later in this section.

41. The MCFRS should **evaluate the current EMS model/system to determine how it can be improved**. Some areas on which to focus should include:
    - Use of the "1 and 1" ALS deployment model where staffing on each medic unit would be changed from two paramedics to one paramedic and one firefighter-rescuer. The 2nd firefighter-paramedic would then be assigned as the third position on an engine, aerial unit, or rescue squad at the same station as the medic unit, thus creating an ALS first responder unit in addition to the medic unit.
    - Authorization to **transport patients to the most appropriate patient care facility** (e.g., crisis center, public health facility, hospital, etc.), not always to a hospital.
    - Increased efficiency, effectiveness, and distribution of the **EMS command structure** throughout the County.
    - Use of **BLS transport units and ALS chase cars** (with and without AFRA) versus using ALS transport units exclusively (with and without AFRA)
    - Use of **part-time BLS and ALS units** - additional units used during peak periods only
    - Develop **EMS-only career positions** versus all career positions having both fire suppression and EMS responsibilities

42. The MCFRS should **provide dedicated ALS support for all specialty teams** by:
    - Dedicating at least one **ALS unit** to each specialty team
    - Identifying specific **EMS needs of specialty teams** and supporting those needs
    - Creating a **liaison** between the individual specialty teams and the EMS Section
    - Coordinating specialized **EMS needs for special operations** through the Special Operations Section.
    - Train HIRT technicians, who are also MCFRS paramedics, in toxicology so that they may more effectively treat HIRT members or other firefighter-rescuers exposed to toxic substances. Further, dedicate a minimum of four paramedics per shift, trained in toxicology and use of related medications, to respond to all incidents where MCFRS personnel will don hazmat entry suits and enter potentially toxic environments.

43. The MCFRS should **develop comprehensive plans for special events involving large gatherings** that address the following:
    - Establishing a single point-of-contact within MCFRS for **special events**
    - Creating **partnerships with local hospitals** for providing medical care for special events
    - Coordinating County services and staging departments' resources in relation to special events.

- **Determining "triggers"** (i.e., number of event participants, age group of event participants, anticipated weather conditions -- temperature, humidity, precipitation -- impacting the event) that would signal the need for certain levels and types of support.
- Establish a **requirement for a permit** for any event that is expected to draw over 500 participants, including spectators.

44. The MCFRS should **maximize the effectiveness of certain skilled services** provided to patients (e.g., increase the percentage of successful IV starts on the first attempt) by:
    - Improving training involving ALS skills
    - Requiring regular in-field evaluation/assessment/testing of paramedic skills

45. The MCFRS should **minimize on-scene contact/treatment time** between EMS providers and patients experiencing high-priority medical problems (e.g., trauma, MI,), so the patient is transported more quickly to an appropriate medical facility. This can be accomplished by:
    - Improving training involving ALS skills
    - Evaluating and revising on-scene patient care procedures, as needed
    - Ensuring rapid, complete, and concise communications with appropriate medical facility

46. The MCFRS should **minimize EMS unit cycle time** at receiving facility, therefore increasing the time that each unit is available for calls. This can be accomplished by:
    - Working with hospitals to provide actual bed and staff availability upon notification that a patient is en route via EMS unit
    - Working with hospitals to improve restocking procedures
    - Ensuring coordination between MCFRS and hospital IT staffs to expedite the downloading and printing of patient care records
    - Reducing the incidence of diversions from the intended destination hospital to an alternate hospital (usually further away)

47. The MCFRS should **establish a program and specific guidelines for BLS quality assurance and ALS quality assurance**, including documentation guidelines for BLS and ALS incidents. Together, the program and guidelines should:
    - Employ a **full-time Medical Director and an appropriate staff** to support the roles and responsibilities of the Office of Medical Oversight
    - Create a standardized process of **quality review/assurance** for all career and volunteer EMS providers, including the addition of an EMS Supervisor at the battalion level to ensure adequate quality control within each battalion. Until battalion EMS supervisors have been established, an interim program will provide field evaluations for ALS personnel, wherein each paramedic will be detailed to a medic unit at one of several chosen stations for a 10-hour shift annually. An ALS Field Training Officer will be on-board each of these select units to perform the evaluations.
    - Provide a mechanism for **patient follow up** and case review

- Establish a mechanism for **collecting and analyzing data** to indicate areas of weakness, and work in conjunction with the FRTA and the Office of Medical Oversight to develop a curriculum to address and remediate them

48. The MCFRS should **take steps to increase the number of EMS providers** by:
    - Working with the LFRDs to improve volunteer retention, so that more EMTs and paramedics are available to staff units
    - Preventing burnout of EMS providers through increased utilization of CISM, FROMS, EAP, and other County programs to sustain their health.

49. The MCFRS should **increase the safety of the work environment** in an inherently dangerous profession by:
    - Charging the MCFRS Safety Office and FROMS to take an active role in reducing the number and severity of injuries to EMS providers
    - Providing the best possible safety equipment and apparel to personnel for use at EMS incidents.

50. The MCFRS should **interact with the community on a non-emergency basis** to facilitate greater understanding, trust, and reasonable expectations during times of emergency.

51. The MCFRS should **strive to reduce EMS call volume** through the following initiatives and programs:

    a. Continuing and expanding the **Risk Watch curriculum** on home safety and injury prevention for school-aged children in both public and private schools

    b. **Educating the public** on what EMS provides to the citizen

    c. **Educating primary care physicians** on appropriate use of 911 as well as what EMS provides to them and their patients

    d. **Creating a partnership with hospice** to develop do-not-resuscitate (DNR) education for nursing facilities and families of DNR patients

    e. **Promoting community services** such as car safety seat inspection and home safety inspections.

    f. Providing **community CPR, AED, and First Aid training**

    g. Expanding the **Public Access Defibrillator Program**

52. The MCFRS should **continue to maintain effective working relationships with all hospital emergency departments, nursing homes, and assisted living facilities** in Montgomery County and with MIEMSS by:

    - Establishing **effective working relationships** with hospital administrators, emergency room physicians, and charge nurses

    - Encouraging **joint training and continuing education** involving local hospitals and MCFRS personnel

    - Educating nursing homes, assisted living facilities, and rehabilitation facilities on **the appropriate circumstances to call 911** to assist their residents

    - Continuing to maintain an **excellent working relationship with MIEMSS,** and working with MIEMSS to **expand the scope of Montgomery County's EMS providers** (e.g., participating in pilot programs developed by MIEMSS).

53. The MCFRS should **establish and maintain a state-of-the-art record management system** that will:
    - **Track patients** who enter the EMS system multiple times to determine whether follow up referrals to other County agencies are indicated
    - Utilize patient care data and the GIS to **predict future service needs**
    - Obtain **patient outcome data**
    - **Collect data** that will satisfy MIEMSS, NFIRS, and any other organization that is entitled to use this info in the future
    - **Use appropriate IT hardware and software** applications to collect and report data

54. The MCFRS should **standardize EMS response across the career and volunteer components of the department** to better serve the citizens. This can be accomplished by:
    - Standardizing crew configuration and structure
    - Standardizing rank structure and responsibility
    - Standardizing EMS inventories
    - Accountability through quality assurance

FIRE SUPPRESSION AND WATER SUPPLY

55. HIGH PRIORITY RECOMMENDATION: 2000 *Water Supply Study* recommendations that have not been completed or addressed are presented below, except for those included under other headings in this Plan.

    a. Develop **legislation requiring retrofitting of existing high-rise apartment buildings** lacking sprinkler systems with automated sprinkler protection.

    b. Establish the capability to provide a **fire flow of at least 500 gpm for the initial 30 minutes** of a structure fire anywhere in the County.

    c. **Establish ISO-certified drafting points** throughout non-hydranted areas, and **identify alternate water supply sources by means of reflective signs** along roadways in the vicinity of the water sources.

    d. Develop a Countywide **Class-B foam strategy.** [Further addressed in Rcmd. #16]

    e. Continue to encourage the **expansion and looping of water mains** (by WSSC) in the Clarksburg and Damascus areas

    f. Coordinate with the State Highway Administration **required maintenance for standpipe connections through sound barriers** along interstate highways.

    g. Develop **procedures for the tactical use of dry vertical standpipes** to establish expanded water supply relays on limited-access highways. [At such time when dry vertical standpipes are in place at new interchanges along Route 29 and other future locations, the MCFRS will adopt an SOP for their use.]

    h. **Enter GIS hydrant maps** onto the mobile data computer system in MCFRS apparatus.

    i. Establish a **program to expand the use of dry hydrants**, incorporating guidelines set forth in NFPA Standard 1142 (formerly NFPA 1231)

    j. Develop **water supply strategies for fighting fires on the American Legion Bridge**.

56. The MCFRS should **ensure that firefighters are well versed on the "Safe Structure Fire Fighting SOP" and continue to conduct drills regularly to ensure proficiency.** Special attention must be given to **proficiency in water supply operations for areas lacking fire hydrants**.

57. The MCFRS should **continue conducting panel reviews of large-scale fire incidents to identify operational improvements** that should be implemented to improve fire

suppression and water supply proficiency, safety and the overall level of service to the public.

SPECIALTY TEAMS

Note: Proposals for creating a dedicated HIRT and dedicated Bomb Squad are addressed in Recommendation #40 under the "Resource Deployment" heading.

58. HIGH PRIORITY RECOMMENDATION: The Hazardous Incident Response Team's **(HIRT) primary unit must be replaced** in the immediate future to support the team's expanded role in both hazmat and WMD incidents. [Note: This unit replacement is also addressed in the Apparatus Management Plan.]

59. The **HIRT must continually research and seek funding for the latest hazmat and counter-WMD technology and training** to ensure the Team's readiness for future incidents.

60. **To increase the Bomb Squad's explosive detection capabilities and to improve incident scene safety of all MCFRS and emergency personnel, the acquisition of an explosive detection canine should be evaluated**. Having its own explosive detection canine would enable the MCFRS Bomb Squad to be self-sufficient in this regard and quickly clear the incident scene of personnel should an explosive device be found.

61. The MCFRS should **increase the depth of certified bomb technicians** in the Bomb Squad, so that all members are certified.

62. The MCFRS should continue to purchase **state-of-the-art equipment** to enable the HIRT and Bomb Squad to effectively and safely respond to incidents involving destructive devices and WMD.

63. The Collapse Rescue Team (a.k.a. Maryland Task Force 1, National Urban Search & Rescue Response System) should pursue the following goals:

    a. Increase staffing to the full **FEMA-desired level of 210 members** (3-deep at each of 70 positions)

    b. **Train 100%** of team personnel for their **primary discipline**

    c. **Train 80%** of team personnel for their **secondary discipline**

    d. **Equip 100%** of team members with **required personal gear**

e. Obtain an **additional US&R host fire station** to improve both local and national response capabilities

f. **Develop and maintain a CRT/US&R fleet** (including two yet-to-be purchased box-style trucks) capable of deploying all team assets

g. **Obtain a storage area** of sufficient space to inventory and maintain all equipment at Station 31 and an **additional 6000 sq. ft.** (approximation) at another US&R support station (e.g., Germantown East station)

64. The following River Rescue and Tactical Services (RRATS) Team goals should be pursued between 2005 and 2015:
    - All RRATS personnel certified as NFPA-1006 Swiftwater and Rope Rescue Technicians[7]
    - All dive personnel certified as Public Safety Divers, Ice Divers, and Evidence Recovery Divers
    - Development of additional experienced senior command personnel
    - Development of more extensive training for RRATS members
    - Obtain proper flood and year-round PPE for all team personnel
    - Upgrading of dive equipment to fully encapsulate team divers
    - Availability of a team-issued, nationally-recognized training certification

65. **Establish Special Operations "Technical First Responder" capability at Station 25 and at other strategic locations (to be determined) to place hazmat, water rescue, and collapse rescue first responders in areas of the County that cannot be reached quickly by MCFRS specialty teams**. All career personnel assigned to these stations should be trained and certified to the Special Operations Technical First Responder level. Each station having Special Operations Technical First Responder capability should also have at least one HIRT member, one RRATS member, and one CRT member assigned to the station per shift. The role of the Special Operations Technical First Responders is to assess the nature and scope of incidents involving hazmat, water-related rescue, or collapse/trench/high-angle rescue and to develop an initial action plan, including resource needs, which can be relayed to command personnel and the ECC.

DECONTAMINATION

66. The MCFRS should **improve its capabilities to decontaminate** ("decon") MCFRS personnel as well as the general public through the following actions:

    a. **Replace existing Level-I Mass Casualty Support Units** with larger, customized units
    b. **Stock larger quantities** of disaster preparedness and decon equipment/supplies

[7] NFPA Standard 1006 – "Standard for Rescue Technician Professional Qualifications"

c. Establish and fund an equipment/supplies **rotation and replacement process**
d. **Offer decon training** for Operations personnel on an ongoing basis to continuously prepare all personnel for this important task.
e. **Coordinate and participate in decon training for hospital staffs**

COMMUNICATIONS

67. HIGH PRIORITY RECOMMENDATION: MCFRS staff at the PSCC will pursue the following initiatives:

a. Strive to **answer 911 calls within the State standard** of 10 seconds or two rings.

b. Strive to **process all requests for emergency service within one minute**.

c. Develop and implement measures that will **speed the processing of 911 callers' requests** for service and the dispatch of MCFRS apparatus.

d. Evaluate on an ongoing basis the effect of EMD on MCFRS-wide resource deployment and availability, and provide this information to the Operations Chief for decisions concerning short- and long-term resource deployment

f. Evaluate on an ongoing basis the time required of Emergency Medical Dispatchers to execute EMD protocols, and determine its impact on PSCC staffing needs

g. Identify and implement actions necessary to **receive requests for fire-rescue services from customers using Voice Over IP**

h. **Evaluate on an ongoing basis the effectiveness of existing communications systems at the PSCC (e.g., CAD) and emerging communication technologies**

i. The MCFRS should **establish a deployment strategy by which MCFRS Emergency Communicators are given the opportunity to split their time between the PSCC and a designated fire-rescue station**. It is further recommended that the Germantown West station be considered as the designated station to participate in this deployment strategy.

j. Continually **evaluate the scope of MCFRS Emergency Communications services** in order to plan for any new services as well as enhancements in terms of new technology and new procedures.

k. Continually **evaluate business processes and implement necessary changes** to best serve customers.

l. Establish an **ECC deployment strategy** by which MCFRS Emergency Communicators are given the opportunity to split their time between the PSCC and a designated fire-rescue station.

m. Work closely with DTS and other public safety departments to develop a **plan for implementing the 800 MHz re-banding process** in Montgomery County.

RESPONSE TIME

68. HIGH PRIORITY RECOMMENDATION: The MCFRS should adopt the **revised and expanded response time goals** presented in Figure 5.6 in Section 5 that incorporate revised MCFRS density zones based upon the following elements of density: population density, building density, future population, zoning, fire hydrant coverage, distance to the urban core, and distance to interstate highways. **The MCFRS should also consider developing a set of maximum response time goals that should not be exceeded except in rare cases**. Maximum response time goals would address situations when an incident occurs within an area where units that are normally first-due (or second-due or third-due in some cases) are committed on other incidents and distant units must be dispatched that cannot meet the lower response times appearing in Figure 5.6.

69. The County should **acquire a mobile traffic signal control system** for use in the most congested areas of County to improve response time and safety. This should be coordinated between MCFRS, MCP, and DPWT as a multi-agency project. [See related recommendation under "Pilot Testing of Apparatus and Equipment" above.]

70. The MCFRS should develop response time goals for its specialty teams (i.e., HIRT, RRATS, CRT, Bomb Squad) to reach the scene of any incident to which they are dispatched. An alternative would be to establish variable response time goals for special operations apparatus based upon the type of special hazard involved in a given incident.

71. The MCFRS should consider developing response time goals for command staff to arrive on the scene of incidents to which they are dispatched. These goals would not likely apply to discretionary responses by command staff where they were not dispatched.

MCFRS RESPONSE READINESS

72. It is vitally important that the MCFRS **continually take steps to ensure response readiness for large-scale incidents** such as terrorist attacks, natural disasters, transportation incidents, and other incidents involving mass casualties. Once the desired level of readiness has been defined, that level can be achieved by accomplishing the following actions and measures:

a. Establishing specific **goals and objectives** to achieve readiness

b. Building upon areas where readiness exists and providing **appropriate organizational development techniques** to spread readiness throughout the organization and become institutionalized

c. Exercising operational functions and integrating tasks into **large-scale exercises** to identify areas where the MCFRS has not achieved the desired level of readiness

d. Continuously looking for opportunities to obtain **funding for needed** resources

e. Continuously **evaluating current supplies and equipment** to identify what is needed to reach the desired level of operational readiness, and then initiating processes to obtain these needs

f. Establishing an organizational functionality toward **central asset management and maintenance**

g. **Specific training** and continuous learning focused on readiness, incident management and response to terrorism

h. Developing a deep **understanding of the adverse effects associated with WMD** and other terrorist weapons of choice and the needed procedures for safely and effectively handling the effects of these weapons. The key elements of this strategy are recognition, detection and protection.

INCIDENT COMMAND

73. The MCFRS should continuously explore **ways in which new technology, best practices, and innovations can be applied to incident command**.

74. The MCFRS should **participate in COG-, State- and federally-sponsored planning and training for incident command of regional incidents**.

75. **The MCFRS should continue to develop and enhance the IMT concept for both in-County and regional incidents of a large-scale.**

76. **The MCFRS should support and continue participating in the federal initiative to create a "Metropolitan Incident Management System" (MIMS) and associated "Metropolitan Incident Management Team" (MIMT)** in the Washington, D.C. Metropolitan Area for use during regional incidents. A desirable outcome of the MIMS/MIMT initiative would be the **creation of Type-3 Incident Management Teams**

(IMTs) that could be deployed across jurisdictional boundaries to assist with major incidents, including jurisdictions within the NCR and COG as well as nearby jurisdictions that are not included within COG or the NCR.

RISK REDUCTION

EMS Risk Reduction and Injury Prevention

77. MCFRS personnel should **educate the public on injury prevention and risk reduction** as follows:

a. **Educating the public on EMS** and what services it provides to the citizen
b. Providing **community CPR, AED, and first aid training**
c. Expanding **the Public Access Defibrillator Program** (PADP) to place AEDs in public places, and teaching staffs at shopping malls, restaurants, theaters, etc. to use them effectively
d. Promote **community services,** such as car safety seat inspection and home safety inspections (see below)

78. Led by the Public Information & Community Outreach (PI&CO) Section, the MCFRS should **continue, or initiate** (where applicable)**, the following programs and efforts to reduce risk and prevent injuries:**

a. **"Safety In Our Neighborhood"** (SION) Program aimed at all County residents
b. **"Risk Watch"** aimed at children in elementary and middle schools
c. Other programs for school-age children
d. **Smoke alarm program**
e. **"Operation Extinguish"** aimed at juvenile fire setters
f. **Senior citizen programs**
g. **"CERT/CHAMP"** training program for adults at or above 18 years of age
h. **Special events** -County Fair, Kids Festival, File of Life, Fire Prevention Week, etc
i. **"Safe Kids"** Program - focusing on safety seats and home and recreational safety
j. **"Federal Fire Partnership"** Program [New program]
k. Program to Prevent Fire- and Fall-Related Deaths Among Older Adults [New]
l. “Fire & Rescue Safety Zone" programs at new Station 1 [NEW]

79. **The PI&CO Section should pursue the following upgrades between 2005 and 2015 that relate directly or indirectly to risk reduction**:

a. Add one Public **Education Specialist position** for each MCFRS Battalion. In addition to general safety knowledge and skills, each should have an area of particular expertise such

as seniors, children, CERT/CHAMP, corporate training, training of MCFRS personnel in risk reduction, etc.

b. Establish an **up-county "Fire & Rescue Safety Zone"**

c. Establish dedicated funding for the **CERT/CHAMP Program**

d. Standardized **educational videos, brochures, CD-ROMS, equipment**, etc. for distribution at each fire-rescue and EMS station

e. Purchase/lease vehicles for use by the PI&CO staff

80. **Other recommended initiatives and enhancements relating to risk reduction that should be implemented include the following**:

a. Conduct a study/survey on age and operability of **smoke alarms**, focusing on target areas of the County

b. Establish a targeted program of door-to-door **smoke alarm checks**, with handout of free 10-year smoke alarms to low income residents

c. Pilot test a **cable television fire and injury prevention show**, and continue the effort if feedback is positive

d. Pilot test a **customer service unit** for conducting home inspections, public education, etc., and make the vehicle/program permanent if it proves successful

e. Pilot test a **mobile fire/injury prevention "lab"** similar to that operated by the Home Safety Council, and then operate it permanently, if it proves successful

f. Pilot test **on-line fire/injury prevention classes** for the public developed jointly with Montgomery College and MCPS, including the earning of credits. Continue the initiative if it is well received

g. Create **on-line video communication/training classes** for MCFRS personnel concerning community risk reduction and injury prevention

h. Establish **mandatory community safety classes** for Operations staff as part of promotional requirements

i. Establish **discretionary funding** for each station to purchase materials/items for public education events

j. Establish **"Public Education" stations** at select locations for in-depth community outreach

k. Include within the design of each new station, or station that will undergo a major renovation, a **"Fire Safety Education and Fire Escape Simulator."**

l. Establish formal **fire/injury prevention awards** for citizens and MCFRS staff and initiate an annual ceremony honoring award recipients

m. Conduct **risk reduction/safety seminars** for residents, business owners, and MCFRS personnel

n. **Expand outreach efforts** to the County's fast growing Hispanic population, including the publication of risk reduction, injury prevention and fire prevention literature in Spanish

Fire Risk Reduction

81. **The following recommendations from the 2000 *Water Supply Study,* related directly or indirectly to risk reduction, should be implemented:**

a. All MCFRS personnel should participate in a **comprehensive risk analysis** performed at the station first-due response areas, or fire box areas, so that all risks and target hazards throughout the County are completely identified and assessed.

b. The MCFRS should **develop an inspection procedure for use by in-service fire-rescue units based upon NFPA Standard 25**.

c. The MCFRS should coordinate an **annual review of hydrant flow records** with the three municipal water authorities.

d. On a continuous basis, the MCFRS must encourage WSSC to **improve maintenance of hydrants and improve the process whereby WSSC notifies the MCFRS when WSSC hydrants are out of service.**

82. The MCFRS should **encourage property owners, particularly those in areas lacking fire hydrants, to implement measures to lessen the likelihood and consequences of fires,** including the following:

- Installing an automatic fire **sprinkler system** in their home
- Ensuring **functional smoke detectors**, preferably monitored by a security/monitoring company
- Practicing **fire safety** in their homes and outbuildings on a daily basis
- Having an **evacuation plan**, practiced by all occupants, including a designated assembling point

- **Quick reporting[8] to 911 of actual fires**, odors of smoke and malfunctioning systems/appliances
- Installing a **pond (preferably with a dry hydrant), cistern, or underground water tank** on the property for use by firefighters and ensuring adequate access to the cistern or pond by large, heavy fire-rescue apparatus
- Ensuring that driveways allow **ready access** to homes and outbuildings by large, heavy fire apparatus
- **Clearing trees/brush** away from structures to lessen the chance of a brush fire spreading to structures
- **Avoiding the use of wood shingles** on homes and outbuildings
- Installing **lightning protection systems** if the home or outbuildings are sited in high and/or open areas

83. HIGH PRIORITY RECOMMENDATION: The MCFRS should continue its efforts to draft and encourage the enactment of **laws requiring sprinkler retrofits in unsprinklered townhouses, garden apartments, and residential high-rises**. The first priority should be retrofitting unsprinklered residential high-rises, followed by garden apartments, and then townhouses.

84. To minimize the risk of fires spreading from mulch to the outside walls of dwellings or to wooden decks, the County should **increase fire safety educational efforts** to encourage smokers to dispose of smoking materials properly **and enact an ordinance making it illegal to place wood mulch within "x" feet[9] of multiple-family dwellings.**

85. The County should address the issue of **fire risk associated with abandoned buildings** through a multi-agency task force approach.

Hazmat, Destructive Devices and WMD Risk Reduction

86. The MCFRS should **focus on the following risk reduction efforts concerning hazardous materials, destructive devices and weapons of mass destruction:**

a. Continued enhancement of HIRT, Bomb Squad and CRT **response capabilities**

b. Continued **stockpiling** of specialized protective clothing and respiratory protection

c. Acquiring, storing and re-supplying **key equipment and supplies** listed in Annex O of the *Emergency Operations Plan*

[8] A delayed report of fire can result in an advanced-stage fire by the time MCFRS units arrive, thus destroying much of the home prior to MCFRS intervention.

[9] Number of feet to be recommended by the Fire Code Enforcement Office

d. Expanding the inventory within the **EMS Mass Casualty PODS**

e. Expanding the **WMD medications** inventory and regularly replacing items with short shelf lives

f. Expanding **decontamination capabilities** for MCFRS personnel and the general public

g. Providing WMD and mass casualty **training** to all MCFRS personnel

h. Conducting training **exercises** involving MCFRS and other County and municipal departments

i. Acquiring needed equipment with funds awarded through **federal and State grants**

j. Conducting **local and regional planning, preparedness and training**

k. Continuing participation in the Washington Metropolitan Area **Metro Medical Response System** and associated **Metro Medical Response Team**

l. Establishing a **"ready reserve fleet"** to supplement regular MCFRS apparatus

m. Expanding **logistical capabilities** (i.e., food, beverages, cots/mats, water, etc.) to support the callback of career personnel and large numbers of volunteers on-duty at stations, and to ensure at least 72-hour self-sufficiency of all on-duty personnel and MCFRS assets

n. Continually **seeking other opportunities** to become better prepared and to improve readiness

Water Hazards Risk Reduction

87. The MCFRS should focus on the following **water-related risk reduction efforts:**

a. **Provide water safety presentations and demonstrations** for boaters and the general public by the RRATS Team, PI&CO Section and other Operations personnel

b. **Provide pool safety presentations and demonstrations** for the general public by Operations personnel in all MCFRS battalions

c. Offer general **water safety measures** by the PI&CO Section through risk reduction programs such as Risk Watch, Safety in Our Neighborhood, Safe Kids, CERT/CHAMP and other programs

d. **Provide flash flood mitigation and safety precautions** to the public by the OEM

e. Make seasonal **public safety announcements and TV/radio coverage** available concerning pool safety and the dangers associated with venturing onto thin ice

f. Post information on the **MCFRS web site, including the "Safety e-Newsletter**"

FIRE CODE/LEGISLATIVE INITIATIVES

88. HIGH PRIORITY RECOMMENDATION: MCFRS should lead the effort to **promote risk reduction legislative initiatives** aimed at saving lives, reducing the number and severity of injuries at home and elsewhere, and lowering property damage caused by fire. This should be a joint effort between the Fire Code Enforcement Section and the Public Information & Community Outreach Section. The **following initiatives** should be addressed:

a. Retrofitting of <u>all</u> non-sprinklered nursing homes and assisted living facilities with automated sprinkler systems within a 10-year period.

b. Retrofitting of <u>all</u> non-sprinklered high-rise residential buildings with automated sprinkler systems within a 10-year period.

c. Requiring **sprinkler protection for the attics and garages of new buildings** of all types

d. Retrofitting of non-sprinklered single-family homes with automatic sprinkler systems **when these homes undergo major/extensive renovation**.

e. Requiring **hard wired (w/battery back up) smoke alarms within each sleeping area and on all levels** of all types of residential occupancies.

f. Prohibiting the use of fuel-fired space heaters in single-family homes. [Note: Law is already in existence for all other types of occupancies]

g. Requiring that a **safe usage sheet accompany all candles** sold in Montgomery County.

h. Requiring that **risk reduction classes (e.g., Risk Watch) be taught in Montgomery County schools**.

FIRE & EXPLOSIVES INVESTIGATIONS

89. The Fire & Explosives Investigation Section should pursue the following goals between 2005 and 2015:

a. Close at least 50% of all criminal cases
b. Increase the number of **certified personnel** for the Bomb Squad
c. Increase the **number of personnel** within the Section to keep pace with workload
d. Continue efforts to increase **incident scene safety** for investigators

NOTE: A recommendation to consider splitting the fire and explosive investigations and bomb squad functions is addressed under the "Resource Deployment" heading above.

FIRE CODE ENFORCEMENT

90. The following enhancements are recommended for the Fire Code Enforcement program:

a. Complete automation of the inspection process enabling faster record management to expedite inspection turn-around time and statistical data management and retrieval.

b. Reliable state-of-the-art computer hardware and software applications, including those that would allow for statistical computations to reduce the time required to manually compute statistics.

c. Electronic access to building and fire protection permit records (including hazmat permits) by Fire Code Enforcement staff and Operations Division personnel.

d. Re-introduce the practice of inspections of current occupancies. Additional Code Enforcement personnel will be required to implement this program.

e. Equip all Fire Code Enforcement vehicles with mobile data computers and records management access for automation purposes.

f. Implement training at the FRTA for new firefighter-rescuers that will enhance their understanding of the direct relationship between the building inspection process and responder's safety. Specifically, a one-day class is recommended that would provide recruits knowledge of the ESCAPE (Exits, Storage, Capacity, Access/Aisles, Protection, Emergency Lighting) Program.

g. Provide continuing educational opportunities to Operations personnel on technological improvements to sprinkler systems, fire pumps, fire alarm systems and clean-agent extinguishment systems.

h. Actively participate in life safety enhancements for occupants and responders in pre-existing non-conforming buildings and facilities.

i. Inclusion of Fire Code Enforcement personnel in Operations Division preparedness activities such as regular skills review, SOP changes/updates, and training opportunities.

j. Implement fire modeling of actual incidents to assess fire protection systems' effectiveness and to provide data in support of code modifications

k. Develop revenue streams that shift program costs to system users and provide funding for Fire Code Enforcement enhancements

TRAINING

91. The MCFRS should **pursue the recommended enhancements described in extensive detail in Section 4 of this Plan** (see "Non-Emergency Functions" and then "Training").

92. **The MCFRS should maintain EMT-P, EMT-I(CRT) and EMT-B curricula at the current national-level standard** through the following actions:

    a. The EMS Review Committee and FRTA should identify areas where improvement is needed in EMS training.

    b. Train prospective paramedics at the EMT-I(CRT) level, allow students to obtain field experience at that level for a 9-month period, then provide these personnel a "bridge" course to the EMT-P level. The "bridge" will also be offered for those MCFRS personnel who were certified under the 1999 EMT-I(CRTs) standard to bring them up to the 1999 EMT-P standard.

    c. Combine continuing education for EMT-B, EMT-I(CRT) and EMT-P providers, as it would allow for a greater understanding of the capabilities of each level among all levels.

    d. Open the regular case review process to all MCFRS providers.

    e. Encourage EMS providers' attendance at continuing education sessions provided by local hospitals.

    f. Consider increasing the flexibility of continuing education for EMT-B providers.

    g. Offer "blended learning" opportunities for EMS, including classroom training at the FRTA and distance learning at stations (if allowed by the State) through web-based on-

line instruction, CDs, and videos.

93. **Require all MCFRS personnel making up minimum staffing on heavy rescue squads to have completed the FRTA's "Site Operations and Vehicle & Machinery Rescue Course" (formerly "Practical Rescue Course"), or an equivalent course** taken elsewhere (e.g., through MFRI).

94. The MCFRS should **provide training** for MCFRS command-level officers that will enable them to effectively use the **MCFRS Mobile Command Post,** and training for **Mobile Command Post drivers** to operate the bus safely and effectively.

95. The FRTA should **maximize training opportunities for volunteer personnel** to ensure they are given ample opportunity to complete both mandatory and optional training courses and programs.

96. **Include basic fire code inspection training in Recruit School or as a requirement for promotion to the rank of Master Firefighter** to ensure that personnel understand the importance of, and are capable of effectively conducting, fire safety inspections.

97. **The County should continue providing optional foreign language courses, or tuition reimbursement for college-offered foreign language courses, for MCFRS personnel interested in conversing more effectively with non-English speaking customers**. Courses should reflect the foreign languages most commonly spoken by County residents, including Spanish, Chinese, Vietnamese, Korean, Russian, and Farsi. To encourage participation, the County should continue offering a pay differential to those career MCFRS employees who become proficient at one or more foreign languages and an appropriate incentive for volunteer personnel who become proficient in a foreign language.

WELLNESS AND SAFETY

98. The MCFRS Wellness Program should focus on the following enhancements and goals:

a. Continue **monitoring the health** of all uniformed MCFRS personnel, including fitness, medical, and behavioral health monitoring

b. Monitor MCFRS staff to identify **trends in injuries and occupational disease**, and targeting programs for the prevention of these health problems

c. Ensure that the **wellness program is available to all uniformed MCFRS personnel,** including annual physicals for career personnel and IECS-certified volunteers

d. **Provide greater access** to all health and wellness programs for uniformed MCFRS personnel through outreach

e. Establish a **behavioral health center,** including an appropriate staff (e.g., psychologist and two licensed social workers)

f. Expand **injury care** at FROMS

g. Establish a base level of **exercise equipment** for all work sites [$80,000 had been appropriated in FY06 as matching funds to a federal grant, and matching funds in that amount will be required in future MCFRS operating budgets]

h. **Provide training** for at least 100 peer fitness trainers and 60 peer behavioral health counselors

i. Improve **records/data management** and tracking capabilities

Additional wellness-fitness enhancements for consideration could include those listed below. An evaluation is needed of the most appropriate and cost-efficient approach to implementing these enhancements. Regarding the medical and fitness facilities, consideration should be given to creating **joint public safety facilities** for use by some or all of the County's public safety departments.

j. **Establish a fully staffed medical facility** capable of supporting: annual exams, return-to-work evaluations, expanded diagnostic capability to support ultrasound, CT scan ("Cat Scan"), mammography, colonoscopy; physical therapy and work hardening provided in-house

k. **Establish a full fitness facility** capable of supporting up to 40 people, with classroom capability and behavioral health lab

l. **Establish peer fitness trainers** in each work site for each shift and peer counselors in each battalion for each shift

m. Expand the **family support network**

n. Expand the **injury prevention programs**

o. **In-house nutritionist** [possibly a joint-public safety initiative]

99. Improve and expand the **firefighter-rescuer rehabilitation ("rehab") function** to fully meet the needs of MCFRS personnel, including a formal medical screening component. [See related recommendation concerning rehab under the "Apparatus and Equipment" heading

above.] In addition, improve the overall **nutritional value** of the food and beverages provided to fire-fighter-rescuers during long-duration incidents.

100. HIGH PRIORITY RECOMMENDATION: **The following safety program enhancements and goals must be pursued by the MCFRS Safety Office:**

a. **Funding of the three original Safety Captain positions** to better cover the County and the safety needs of all fire-rescue employees. **Reclassifying the Safety Captain positions to the Battalion Chief level will allow them to be integrated into the command structure; thus** placing a command level officer in charge of one of the most critical functions at major incidents.

b. Implement the 2003 MCFRS "**Safety Management Plan**"

c. Continued implementation of and adherence to the MCFRS "Safe Driving Action Plan"

d. **Establish focus teams** (one per Battalion) to assist the MCFRS Safety Office in addressing firefighter-rescuer safety

Goals of the Safety Program that must be addressed on an ongoing basis include the following:

- **Reduce** the number of preventable **employee injuries**
- **Reduce** the number of preventable **vehicle collisions**
- Realize a **reduction in workman's compensation payouts per injury/collision**
- Realize a **reduction in vehicle insurance premiums**
- Deliver **behavioral-based safety training and education** to MCFRS personnel
- **Review and revise**, as needed, **safety policies** relating to injury and collision investigation and Significant Injury Team activation

INFORMATION TECHNOLOGY

101. **An information technology (IT) strategic plan must be developed, consisting of three critical components: key data, technology, and interoperability**. The collection and consolidation of key data into a **data warehouse** is one of the strategic goals for MCFRS during the 10-year life cycle of this Master Plan. The utilization of **Voice over Internet Protocol (VoIP) and encrypted video, and continued use of the County's Fibernet** network, are also key components of the IT plan. The plan must continue to address the MCFRS' need for **data portability** into the field, as well. In addition, the IT plan must address **effective sharing of information** among all MCFRS elements, and between the MCFRS and other County departments/agencies, jurisdictions within COG and the NCR, other Maryland counties, State departments/agencies, and federal departments/agencies. Concerning public safety data sharing

and interoperability among COG and NCR jurisdictions, MCFRS should continue evaluating the capabilities of CapWIN[10] and other interoperable networks and participate in regional discussions regarding their development and use. As CapWIN is further developed by local, State, and federal agencies, its capabilities may be useful to MCFRS in the sharing of data with nearby jurisdictions and/or in the potential interfacing of CAD systems between jurisdictions. Implementation of recommendations found in the report titled "Public Safety Communications Interoperability in Maryland" (dated February 28, 2005; developed through the Maryland Association of Counties and the Governor's Office of Homeland Security) should also improve interoperability between counties in Maryland. Most notably, these recommendations address 800 MHz rebanding and the eventual switchover to the 700 MHz band by public safety agencies.

PROGRAM EVALUATION

102. **The MCFRS should expand the scope of its performance measures program to include measures that will address all programs and elements of the MCFRS and to make performance measures a routinely-used management tool by all MCFRS program managers**. In addition, **existing performance measures must be continuously assessed for needed improvements** that will better measure performance, and **standardized data gathering methods must be established** to collect and compile the comprehensive data on which performance measures are based. **MCFRS program managers must establish an ongoing routine of updating and utilizing these measures regularly (e.g., monthly or quarterly) to measure the performance of their programs. MCFRS might also find it beneficial to perform benchmarking with other fire-rescue departments**, as long as departments and jurisdictions comparable to MCFRS and Montgomery County can be included. **Another method of evaluation is the self-assessment process that an applicant fire department must conduct when seeking accreditation** from the Commission on Fire Accreditation International, Inc. (CFAI). The Master Plan recommends (below) that MCFRS seek accreditation through the CFAI.

ISO RATING IMPROVEMENT

103. HIGH PRIORITY RECOMMENDATION: Montgomery County should implement improvements to the County's overall fire protection capabilities with the goal to improve the County's ISO rating. **Initial focus should be aimed at implementing water supply/application and other operational improvements within the portion of the County having an ISO Class 9 rating** (i.e., area lacking hydrants but within 5 miles of a

[10] The Capital Wireless Integrated Network (CapWIN) is a partnership between Maryland, Virginia, and the District of Columbia to develop an interoperable first-responder data/information sharing network. As of 2005, CapWIN was being used by the U.S. Park Police, Maryland State Police, and several municipal police departments within the Washington DC Metropolitan Area. In 2005, fire departments within the metropolitan area were still evaluating its usefulness for their operations and functions.

fire station) in hopes of ISO lowering that rating to a Class 8 or lower. This reduction would lower property owners' insurance premiums considerably within the ISO Class 9 area. Subsequent efforts should focus on improving the ISO Class 4 rating within the urban portion of the County. Implementation of these improvements will assist the MCFRS in attaining accreditation, as well.

ACCREDITATION

104. HIGH PRIORITY RECOMMENDATION: The **MCFRS should seek accreditation status** through the Commission on Fire Accreditation International, Inc. (CFAI). In implementing many of the recommendations in this Master Plan, the MCFRS will meet many of the accreditation criteria. When eventually meeting the 47 accreditation criteria, the MCFRS will become a much improved organization better able to meet the needs of its customers.

MASTER PLAN IMPLEMENTATION

Master Plan implementation is addressed in Section 7 of this Plan. The "Strategic Plan for the Implementation of Master Plan Priorities" identifies the highest priority recommendations within the Master Plan and associated cost estimates. Priorities in the Strategic Plan include those requiring full or, in some cases, partial implementation within the initial two to three years of approval of this Master Plan. While each Master Plan recommendation is important in its own right, a small percentage of the recommendations have been determined to be of the highest priority requiring immediate attention. Section 7 addresses these highest priorities.

Implementation of the remaining Master Plan recommendations will be addressed in future updates of the Strategic Plan, beginning with the next set of MCFRS priorities as determined by the Fire Chief.

Note: A table summarizing Master Plan recommendations and priorities appears below in Figure 6.1.

Figure 6.1. PRIORITIES ASSIGNED TO MASTER PLAN RECOMMENDATIONS

		← Priority →		
FRS Goal	**Master Plan Recommendations**	A	B	C
11	1. Planning initiatives	X		
3/12	2. New or renovated stations in FY05-10 CIP	X		
3/12	3A. Relocation of Station 18	X		
3/12	3B. Shady Grove station	X		
3/12	3C. Station 11 renovation		X	
3/12	3D. Station 17 renovation or relocation		X	
3/12	3E. Station 28 renovation or relocation		X	
3/12	3F. Station 14 relocation			X
3/12	4. MCFRS warehouse	X		
3/12	5. MCFRS heavy equipment maintenance facilities	X		
3	6. Establish ready reserve fleet			X
3/12	7. Future PSCC/ECC		X	
4/12	8. Establish live-burn training facility		X	
11	9. Establish station numbering system			X
11/12	10. Establish site location and site suitability criteria		X	
12	11. Land reservation for fire-rescue stations		X	
12	12. Development of station design manual			X
12	13. Assignment of new stations	X		
12	14. Environmentally-compatible facilities		X	
3	15. Implementation of *Apparatus Management Plan*	X		
3	16. Implement Class A and Class B foam strategies	X		
3	17. Acquire 2nd set of turnout gear for firefighter-rescuers		X	
3	18. Fully equip all reserve apparatus		X	
3/7	19. Acquire dedicated rehab vehicle or rehab shelter			X
3	20. Replace Mass Casualty Support Units			X
3/11	21. Establish alternate sources of fuel for emergencies			X
3	22. Stockpile special gear, medical supplies, and equip.			X
3	23. Stockpile provisions at stations to support callbacks			X
3	24. Stockpile medications & supplies for special events			X
3	25. Purchase 1500 gpm pumpers and 3500 gal tankers		X	
3	26. Standardize hose appliances on engines		X	
3	27. Achieve aerial fleet of 75% towers/25% tractor drawn		X	
3	28. Equip squads with thermal imagers & blast shields		X	
8	29. Pilot testing of apparatus and equipment per Plan			X
8	30.Stay abreast of new technologies and innovations			X
3	31. Assess staffing needs continuously		X	

		← Priority →		
FRS Goal	**Master Plan Recommendations**	A	B	C
3	32. Increase minimum staffing to 4 personnel on engines, aerial units, and rescue squads	X		
3	33.Create a 6th battalion and Battalion Chief 6 position		X	
3	34. Establish battalion-based resources	X		
5	35. Support recruitment/retention of a diverse workforce	X		
11	36. Identify needs in areas not studied (Phases 3-7)	X		
3	37. Deploy new units & personnel per Plan	X		
3/11	38. Establish 2500 call load per unit threshold	X		
3	39. Deployment at FS29 after Germantown stations open		X	
3	40.Establish dedicated staffing for HIRT & Bomb Squad		X	
9	41. Evaluate EMS system for needed improvements		X	
3	42. Provide dedicated ALS support to specialty teams		X	
3	43. Develop plan for supporting special events		X	
3	44. Maximize effectiveness of ALS skills		X	
3	45. Minimize on-scene time at EMS incidents		X	
3	46. Minimize EMS incident "cycle" time		X	
9	47. Establish guidelines for BLS & ALS quality assurance		X	
3	48. Increase the number of EMS providers		X	
7	49. Increase the safety of EMS providers' work environ.		X	
2	50. Interact with community on non-emergency basis			X
13	51. Reduce EMS call load		X	
10	52.Maintain effective relationship w/health care facilities			X
8/11	53. Establish/maintain state-of-art record management sys			X
1	54. Standardize EMS response across career and volunteer components of MCFRS			X
3	55. Address remaining Water Study recommendations	X		
4	56. Ensure firefighters' proficiency, incl. water supply		X	
9	57. Continue panel reviews of large-scale incidents			X
3	58. Replace primary HIRT unit	X		
8	59. Continually seek funding for the latest hazmat and counter-WMD technology and training		X	
7	60.Evaluate need for an explosives canine within MCFRS		X	
3	61. Increase number of certified bomb technicians		X	
3	62. Acquire state-of-the-art equipment for the HIRT and the Bomb Squad		X	
3	63.Achieve goals and initiatives of Collapse Rescue Team		X	
3	64. Achieve goals and initiatives of RRATS Team		X	
3	65. Establish Special Operations "Technical First Responder" capability at FS25 and other locations		X	

		← Priority →		
FRS Goal	**Master Plan Recommendations**	A	B	C
3/7	66. Improve MCFRS decontamination capabilities		X	
3/8	67. Achieve emergency communications initiatives	X		
3	68.Establish revised response time goals		X	
3	69. Acquire mobile traffic signal control system			X
3	70. Establish response time goals for specialty teams			X
3	71. Establish response time goals for command staff			X
3	72. Ensure response readiness for large-scale incidents		X	
8/11	73.Identify/implement improvements to incd. command		X	
10	74. Participate in COG-, State- and federally-sponsored planning and training on regional incident command		X	
10	75. Continue developing the IMT concept			X
10	76. Participate in federal MIMS/MIMT initiative		X	
2/13	77. Provide EMS risk reduction and injury prevention education to public		X	
2/13	78. Provide risk reduction programs		X	
2	79. Implement upgrades to the Public Information & Community Outreach program		X	
2/13	80. Implement new risk reduction initiatives		X	
3/13	81. Implement Water Supply Study recommendations related to fire risk reduction		X	
2/13	82. Promote fire risk reduction practices by prop. owners		X	
13	83.Lead effort to enact law requiring sprinkler retrofit	X		
13	84. Minimize risk of mulch fires spreading to structures			X
13	85.Address fire risk associated with abandoned buildings			X
3/13	86. Implement risk reduction efforts concerning hazardous materials, destructive devices and WMD		X	
2/13	87. Implement risk reduction efforts for water hazards		X	
13	88. Develop/lead fire risk reduction legislative initiatives	X		
3	89.Achieve goals of Fire-Explosive Investigations Office		X	
3	90. Implement fire code enforcement enhancements		X	
4	91.Pursue Fire-Rescue Training Academy enhancements		X	
4	92. Maintain EMT-P, -I, and -B curricula at the current national-level standard		X	
4	93. Implement new training requirement for personnel comprising minimum staffing on rescue squads		X	
4	94. Provide training to command staff on use of MCFRS Mobile Command Post			X
4	95. Maximize training opportunities for volunteers		X	

FRS Goal	Master Plan Recommendations	A	B	C
3	96.Implement initiative to gain more fire code inspectors			X
6	97. Pursue initiative to offer optional foreign language courses to firefighter-rescuers			X
7	98. Pursue wellness initiatives for firefighter-rescuers		X	
7	99. Implement firefighter-rescuer rehab improvements		X	
7	100. Implement safety program enhancements	X		
11	101. Develop an IT strategic plan for MCFRS		X	
9	102. Expand program evaluation to entire Department		X	
3	103. Implement improvements to County's fire protection capabilities to improve ISO rating	X		
9	104. Seek departmental accreditation from CFAI	X		

NOTE: For comparison purposes, Priority A is higher than B, and Priority B is higher than C. Priorities B and C should not be interpreted as low priorities.