



Montgomery County Maryland Fire and Rescue Services

Accreditation

Standard of Cover

Montgomery County Fire and Rescue Services

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MCFRS

COMMUNITY RISK ANALYSIS AND STANDARDS OF COVER

Executive Summary

Montgomery County Fire and Rescue Services (MCFRS) is an “all hazard” department protecting Montgomery County, Maryland. The county is comprised of over 1,000,000 residents distributed over 495 square miles and is located north of Washington, DC.

Residents have come to the county from just about every corner of the globe and live in a mosaic of dense urban areas, suburbs, and farmlands. This diversity of population and density creates a multitude of response challenges for MCFRS. The department has risen to these challenges and readily provides Emergency Medical, fire suppression, heavy rescue, technical rescue, and hazardous materials mitigation services. The department also provides arson and explosive investigation services. MCFRS also seeks to prevent the 911 call with an active code compliance and public education component.

MCFRS is committed to self-review, analysis and improvement in an effort to maintain and improve upon the services its community expects. This process includes Master Plan development and implementation, Headline Performance Measures and receiving accreditation through the Commission of Fire Accreditation International (CFAI). In an effort to maintain the accreditation status earned in 2007, and to improve upon our self-assessment, MCFRS has initiated the full development of a new Standard of Cover document using the latest analytical data, GIS tools, and departmental benchmarks.

MCFRS submits for review its Standard of Cover document which has been developed in house as outlined by the CFAI Standard of Cover manual, 5th edition. The first document conceived in 2007 and again in 2012 did not fully meet the expectations of the CFAI where this document fully defines in detail every aspect of this metropolitan fire department including services currently provided, community expectations and how they are being met, performance measurements, strategic goals, and a detailed description of the diverse community served.

Within this document, the many strengths of the department have been outlined as well as areas of improvement. This analysis will be utilized by MCFRS to improve, grow, and

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develop this department in an effort to keep the pace of a growing and ever changing community at large.

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VISION STATEMENT

The Montgomery County Fire and Rescue Service vision is to keep our communities safe and healthy by providing the best fire, rescue, and emergency medical services, utilizing career and volunteer

resources.

MISSION

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

GUIDING PRINCIPLES

"Our Montgomery County Fire and Rescue Service providers will:

- Deliver services to our customers with impartiality and excellence
- Promote the highest standards of safety and welfare
- Serve with integrity and mutual respect
- Recognize the importance of diversity of our workforce and communities
- Promote the efficient and effective utilization of our resources, and ensure that all organizations and personnel comprising the MCFRS share the responsibility for continuously improving their capabilities, effectiveness, and efficiency
- Be responsible for the honor of our profession and public service
- Promote equity and harmony among career and volunteer personnel
- Maintain and promote open honest communication, creativity, and competence
- Be accountable and ethical; continuously improve public confidence and trust

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A. Description of Community Served

Legal Basis

Montgomery County Fire & Rescue service over the years has evolved from a loosely knit confederation of locally based volunteer fire departments to become a single county-wide entity that is an integral part of the county government. Over the years, this progression has been marked by strife between the various stakeholders. This strife has been responsible for the generation of much of the present legal framework for the MCFRS.

The Charter of Montgomery County is the “constitution” of Montgomery County and outlines the functions of the Legislative and Executive branches of the County government.

The Montgomery County Code encompasses all of the county regulations and laws. The original code was adopted in 1948. The current code was adopted in November, 1968, with amendments made throughout the succeeding years.

Chapters 21 and 22 are the two chapters, out of 67, that regulate the county fire department and code enforcement as it pertains to fire safety and hazardous materials.

Chapter 21 of the County Code is the legal framework of the fire department. It sets the minimum standards and regulations for the operation of the Fire & Rescue Service.¹

Chapter 22 defines all of the Montgomery County fire safety code regulations including:²

- Hazardous Materials permits
- Fire Protection equipment
- Permitting and licenses
- Building and fire codes
- Fire Department accesses and water supply
- Code enforcement and fire department fees

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

- 1967** Bill 1 – Created by the County Government to have one Fire Chief to over see the 15 independent fire corporations; provided control of county funds
- 1968** Referendum to repeal Bill 1 – the 15 fire corporations banned together to repeal this bill to remain autonomous – passed, Bill 1 repealed
- 1972** Bill 25-72 – Created Department of Fire Rescue Service, Created a Director as the head of Fire Rescue for the first time
Centralized and coordinated:
- Fire Rescue Operations
 - Communications
 - Training
 - Fire Prevention
- 1979** Bill 16-79 – Created Uniformed Command Structure for all Volunteer and Career Employees in DFRS
- 1986** FLSA Law Suit – Norman Conway, Inc. et al v Takoma Park Volunteer Fire Department. At the time all paid fire fighters were employees of the individual corporations; this lawsuit resulted in the Bill 42-87
- 1987** Bill 42-87 - As a result of the FLSA lawsuit, all paid uniformed employees were transferred from the private corporations to become county merit system employees
- 1994** County Code Section 510A – Allows collective bargaining and binding arbitration for the County Fire Fighters – enacted 11/8/94
- 1996** Question E – An attempt by referendum to get a single County Fire Chief -defeated
- 1997** Bill 37-97 Created a Fire Administrator
- Department of Fire Rescue becomes the Division of Fire Rescue
 - Fire Administrator becomes the primary in control on the Fire Rescue budget passed
- 2003** Bill 36-03 Creates a Uniformed County Fire Chief
- Full operational authority over the fire rescue service, paid and volunteer
 - Full authority over the fire rescue budget
 - Became law 1/1/05
- 2010** Question A – referendum to allow for billing for ambulance transports for all EMS service provided in Montgomery County - defeated

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NFPA 1710

NFPA regulations, standards and codes are recommendations distributed to all fire service organizations in an effort to “minimize the possibility and effects of fire and other risks.”³

The NFPA standards are adopted as guidelines by the MCFRS in an effort to meet strict standards and goals. While these standards are not law and are not legally binding, MCFRS views them as the model for law, policy and SOP’s in an effort to ensure a safe working environment for the firefighters of the department and provide the best possible service for the citizens.

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History of the Agency



The land that makes up Montgomery County Maryland today was first settled in the early 1600's. Montgomery County was formed into a county in September, 1776, and was named after Richard Montgomery, (although he never set foot in Maryland). Montgomery was a British Officer who became a Brigadier General in the Colonial Army, although he never set foot in Maryland. In December 1791, the Maryland General assembly generously ceded 36 square miles of southern Montgomery County to the Federal Government, which is known today as the District of Columbia.⁴

1870-1920

From the 1770's to the 1870's, fire protection involved neighbor helping neighbor. No formal fire protection was established until the 1870s when the first 5 local fire departments were established. These departments did not officially incorporate until the early 1900's.

- Silver Spring - 1918 (4)
- Rockville - 1921 (4)
- Takoma Park - 1922 (1)
- Kensington - 1925 (4)
- Gaithersburg - 1928 (2)

*NOTE: Numbers shown in parentheses correspond to open number of stations



1920-1930

Each of these local fire departments was an independent corporation and remains as such today. In 1920 the Fire Board was created to establish cooperation and an open avenue of communication between the companies to deal with the changing needs of the ever-growing suburban community. The Board was created but the companies remained autonomous.

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1920 to 1930 brought the addition of six fire stations:

- Sandy Spring - 1924 (2)
- Bethesda - 1926 (3)
- Chevy Chase - 1927 (1)
- Hyattstown - 1929 (1)
- Glen Echo - 1933 (1)
- Cabin John - 1930 (2)



more local

In 1927 the Chevy Chase Fire Department was the first Department to be formed by legislation, which created a defined tax assessment district. This also created the introduction of the first six full time paid fire fighters in the county.

1930-1940

In 1937 the first Montgomery County Fire Training School was built which centralized training for the local departments and expanded their training opportunities. Today the Montgomery County Public Service Training Academy has grown into a world-class training facility that is used by local, national and international students year round.

During the difficult years of the depression, no new fire departments were formed but a new form of service was created. The Chevy Chase First Aid Corp was formed in 1937, providing ambulance and first-aid services. This corporation later reformed in 1945 and is now known as the Bethesda Chevy Chase Rescue Squad, providing ambulance, BLS, ALS and heavy rescue squad service.⁵

1940-1990

Over the next fifty years, as needs and the population grew, so did the need to add local fire departments:

- Hillandale (2)
- Damascus (1)
- Upper Montgomery (1)
- Burtonsville (1)
- Laytonsville (1)
- Wheaton Rescue Squad (1)
- Germantown (1) the last local department to be formed

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In addition to the MCFRS stations, there are five federal fire stations located in Montgomery County but confined to federal campuses. There is a liberal mutual aid response agreement between these stations and the MCFRS:

- Naval Medical Campus Station 50
- National Institutes of Health Campus Station 51
- David Taylor Research Center Station 52
- National Institutes of Standards and Technology Station 53
- Walter Reed Campus Station 54

The Montgomery County Fire and Rescue Service is a full spectrum life safety agency protecting nearly 1 million people who live and work in Maryland's most populous jurisdiction. MCFRS currently operates 34 fire stations, 2 rescue squads and a 56 acre Public Service training academy. Over 1200 career uniformed personnel work side by side with 800 volunteers and staff 37 engines, 13 aerials, 23 BLS units, 17 ALS units, and 9 rescue squads. A number of specialty units are staffed for response to specific incidents, including 21 boats, 2 Haz Mat units, 2 Medical Ambulance busses and support units, one mass casualty medical supply pod, 3 air supply units and 2 bomb trucks and support units. Daily there are 5 Battalion Chiefs and one Assistant Chief supervising the Division of Operations. The daily operations also include additional work sites including Fire Rescue Occupational Medical Section (FROMS), Fire Investigations and the Bomb Squad, Code Enforcement, a high tech Emergency Operations Center, (ECC), a logistics warehouse, the Central Maintenance Facility for apparatus, a central SCBA maintenance shop and headquarters.⁶

The creation of the MCFRS does not only involve the local fire departments. As the department has grown over the last 140 years it has had to adapt to Montgomery County changing from a farming community to a heavily populated urban/suburban community. With primary transportation routes through its eastern corridor, Montgomery County is challenged with unusual threats due to the proximity of our neighboring communities and eastern corridor transportation routes. MCFRS has developed into a multifaceted department answering the call for the needs of our diverse community.

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- 1949** Division of Fire Protection was created by the County Council in the first attempt to administer and centralize the laws and enforce fire codes. It also established what is now known as our Fire Investigations and Arson Unit
- 1966** Professional Fire Fighters Union was formed and certified by the International Association of Fire Fighters and recognized as IAFF Local 1664
- 1968** Chapter 21 created - section of the County Code that regulates the Montgomery County Fire Department
- 1972** Department of Fire Rescue Service was established. This created a Director that for the first time oversaw the fire department as a whole, still leaving the local fire stations to operate as independent corporations
- 1970** First Heartmobile was placed in service at station 19. The Heartmobile provided cutting edge advanced life support care, leading the way for our modern ALS medic unit



- 1973** First Fire Rescue recruit graduated from the Fire Rescue Training Academy
- 1974** First Cardiac Rescue Technician Class offered. First County to provide advanced life support in the Washington area
- 1976** Montgomery County is the first county in US to mandate residential smoke detectors by law
- 1981** SETT Team created (high angle rescue team). This team would eventually become part of the technical component of the USAR team
- 1981** Haz-Mat Team created, housed at Fire Station 7 (Chevy Chase).
- 1985** USAAR Team formed; initially called the Collapse Rescue Team then in 1989 became Maryland Task Force One, a FEMA Urban Search and Rescue Team. , The team provides heavy search and rescue, dog searches, medical care, and logistical services. Among notable deployments have been the Pentagon in 2001, the 2002 Salt Lake City Olympics, the 2004 Democratic Convention, and to Alabama and Louisiana during Katrina.
- 1988** Legislation to mandate sprinklers in townhouses
- 1988** All paid fire fighters became county merit system employees and were no longer employed by the individual local fire corporations

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1990 Swift water Rescue Team created, formally organized in 1992 to support the need for swift water rescues from the Potomac River and the flash flooding the area experiences on a regular basis. In September 2003 the team responded to Baltimore to serve as a critical part of the rescue efforts during Hurricane Isabel. More recently the team rescued several citizens from a raging river formed by a broken 8' water main on River Road in Potomac, Maryland



1994 Montgomery County placed the first arson dog in service

1998 Fire Investigation Bomb Squad was formed

Throughout Montgomery County Fire Rescue history there have been many significant incidents that have formed the landscape that we now know as the modern day MCFRS. While the department runs over 100,000 emergency calls a year, some of the more notable incidents have resulted in the formation of policy and law that affect how MCFRS does business.

1935 School bus/train collision in Rockville, 14 children killed, 13 injured

1965 Fire Station 17 and apparatus destroyed by fire

1966 Travilah Road fatal house fire, 4 person family killed

1971 Columbia Union College fire in Takoma Park

1975 Washingtonian Country Club fire

1981 Arcola Avenue nursing home fatal fire, several injured, 2 died, no sprinklers

1982 IBM office building shootings in Bethesda, 9 injured, 3 killed

1983 Gasoline spill in Takoma Park sewer caused multiple house fires

1986 Fatal farmhouse fire in Boyds, 6 fatalities

1992 Tanker explosion from a crash under I-495 overpass, 2 killed, 3 injured

1996 MARC & AMTRAK train collision in Silver Spring, 11 killed

1998 Pipe bomb explosion in Bethesda garage – 4 teenagers killed

1998 Fatal basement fire in Gaithersburg home, 2 children killed

2001 Home destroyed by natural gas explosion in White Oak, 2 killed

2002 AMTRAK double deck train derailment in Kensington, 101 injured

2002 Multi week sniper incident, 6 fatalities

2002 Fatal Gaithersburg house fire, 1 adult and 2 children killed

2002 Parking garage collapse in Rockville, 3 fatalities

2005 Fatal Leisure World fire, 1 killed, MCFRS Mayday policy rewritten and new department policies put in place for fire ground operations

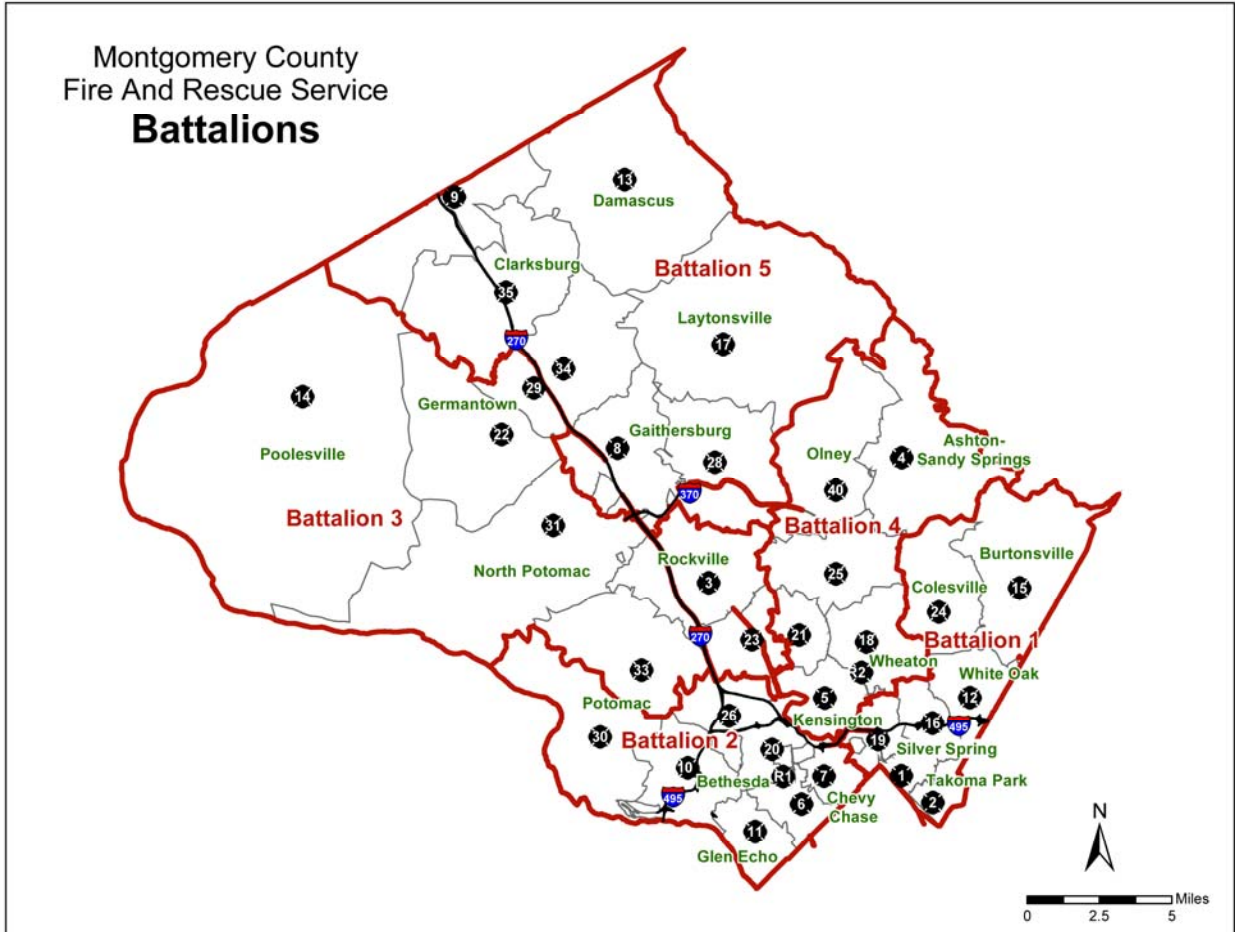
2007 Fatal Gaithersburg house fire, 2 adults, 1 child killed

2007 Fatal Kensington house fire, 2 elderly killed, genesis of the Senior Citizen Fire Safety Task Force Report

2007 Fatal Burtonsville townhouse fire, 1 adult and 3 children killed

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- 2008 Fatal Twinbrook apartment fire, one resident killed, 3 fire fighters severely injured, further revision of the Mayday policy
- 2011 500 acre Darnestown brush fire, largest MCFRS resource deployment to date



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Service Milestones

Throughout the decade MCFRS purchased a total of 110 new pieces of apparatus: 39 CAFS engines, 5 all Steer rear mount aerial trucks, 6 new tractor drawn aerials, 3 midship aerial towers, 45 ambulances, 3 bomb support units, 2 mass casualty busses and 2 support units, 3 heavy rescue squads, 2 Haz-Mat units. This standardized inventories for consistency throughout the county.



- 2000** Water Supply Study – identified need for CAFS engines, increased number of tankers, large diameter supply lines, standardization of engines/apparatus, and rural water supply SOPs
- 2001** Responded to the Pentagon for the 9/11 attack
- 2001** Aerial Unit Study – studied relocation of aerial trucks in the county, benefits of tractor drawn vs. tower ladders, and strategic deployment of aerial units, recommendations made in master plan based on this study
- 2002** Fire Rescue Occupation Medical Section opened and MCFRS adopted The IAFF Wellness Fitness Initiative
- 2002** Command Development Center established
- 2003** Switched radio system to 800 MHz trunked
- 2003** MCFRS Command Bus placed in service
- 2004** 24-hour safety officer coverage and full time safety office created
- 2004** Rescue Squad Study – studied squad locations, tiered response to collisions, integration of rescue trucks, created 9 recommendations
- 2004** Residential Sprinkler enacted to mandate sprinklers in single family homes
- 2004** Creation of Special Operations Section headed by an Assistant Chief overseeing stations 7, 20, 10, 30, 29, 31, 25, & 28, consolidating operations of USAR, Hazmat, Swift Water Rescue, Investigations, Planning, Emergency Operations and NCIMT (National Capital Incident Management Team)
- 2004** Centralized SCBA repair facility opens
- 2005** County Fire Chief takes over MCFRS – created a single Chief in charge of MCFRS
- 2005** Introduction and adoption of NIMS
- 2005** Opened Station 35 – Clarksburg, 1st new station in 25 years
- 2005** Opened Logistics – uniforms, gear, emergency equipment
- 2005** Cooperative DFRS/MCP/Sheriff/public works response to New Orleans to assist the NO FD after Katrina
- 2006** 1&1 ALS model – one medic with one EMT expanding ALS first responder units, decreasing response to patient time for critical care patients
- 2006** Initiated 4 person staffing implementation adding additional



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- units every year – up to 11 units per year
- 2006** Opened Station 1 - Silver Spring joint police/fire/public education building
 - 2007** Change to Council of Governments (COG) numbers, consistent with surrounding jurisdictions
 - 2007** Added 2 flex ambulances to accommodate the growing needs of our commuter community operating during peak hours of 0800-2000
 - 2008** Added 2 new EMS duty officers, making a total of 3 to accommodate the need for addressing EMS issues with over 80% of call EMS
 - 2008** Medical Ambulance Bus & Medical Support Unit placed in service as part of the Urban Area Security Initiative federal grant (UASI)
 - 2009** Opened Station 22 – West Germantown
 - 2009** Opened CMF and CMF training facility - consolidating fleet management
 - 2009** Implemented the ePCR, (electronic patient care reporting) program
 - 2009** Driving training facility opens – multi agency training facility high speed track, cone course and lecture rooms, at the Public Service Training Academy
 - 2010** Opened Station 34 – East Germantown
 - 2010** Flex units eliminated due to lack of funding
 - 2010** Eliminated the extra EMS duty officers, now only have one due of lack of funding
 - 2012** The implementation of ambulance billing goes into effect
 - 2013** Aerial Service at FS24 and an additional EMS Duty Officer are re-established in the FY2014 budget



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Financial Basis

Funding for the Montgomery County Fire Department has come a long way since the days when the local departments received funds based on the length of hose they housed in their stations. The first tax assessment districts were formed by legislation in 1927 in Chevy Chase and Silver Spring. The other local departments relied on bingo, bake sales, carnivals, and other fund raisers to support their equipment purchases and station management needs. In 1933, the state of Maryland passed legislation authorizing local jurisdictions to assess fire taxes throughout their counties. In 1949, a fire tax district was created for every local fire department in the county. A number of the departments refused the tax money until the 1960's, fearing it would take away their independence. These departments continued to rely on donations and fund raising for operations.

The local departments have always managed their own monies that are obtained through donations. In the past, the Fire Board, the county's previous Fire Department managing entity, had budget and fiscal responsibility over tax distribution. Bill 37-97 enacted in 1997, shifted control of the fire department budget to the Fire Administrator. Bill 30-03, signed into law on January 1, 2005, created a County Fire Chief, giving him full budgetary authority over the fire department. For FY 2013 the operating budget is \$204,946,888, which is an increase of \$25,177,018 from the previous year.⁷

The budget process never really ends. Once one year is submitted for approval, the next year's process begins. Analysis on previous years spending trends is assessed, future needs are created, and baselines are listed. Every year fire rescue is given a mark by the Office of Management and Budget based on expected revenue that includes but is not limited to, property tax, fire tax, and fire code enforcement fees.

Although the fire tax is listed as a line item on county property tax bills; fire tax revenues do not go directly or solely into the fire rescue budget. Instead, the fire tax revenues go into the county general fund. The fire rescue budget is distributed from the general fund and may or may not correlate with the amount collected from the fire tax. In addition to annual

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operational expenditures, the fire tax also sometimes supports multi-year Capital Improvement Projects.

(CIP). A little known fact is that the fire tax is actually a variable tax from year to year based on the fire rescue annual budget.

Chapter 21 and the County Code also dictate how and when the entire budget is created, submitted and implemented. The law dictates the dates it must be submitted by the Executive, the dates the Council must complete its review and the date it must be finalized. Fire Rescue is just one of many county departments required to work within the fiscal and logistical constraints of the county budget as a whole. Recent years have pitted department against department fighting for fewer and fewer funds.⁸

There are two phases of the Montgomery County budget process. Phase one is submitted as the full expected operating costs. Included in these costs are personnel and benefits (80% of the annual costs) equipment costs, fuel, building, maintenance, and gear. The second phase is the “reduction phase” or the revised slimmed down version that includes the mandated cuts per the Council based on the expected decreased revenue.

The County is legally obligated to negotiate with the fire fighters representative, IAFF Local 1664, for a collective bargaining agreement. Negotiations occur the year before the CBA expires, be it a one, two or three year contract. The Union negotiates with county and department representatives for wages, conditions of work, benefits, safety issues, gear, and equipment. Once an agreement is reached, either through negotiations, mediation or arbitration, the contract is ratified by the membership and it is then the law that the County Executive include the CBA costs in the budget submittal to council. The County Council then decides whether to fund the agreement as it is submitted. Although the arbitration is binding, the Executive can choose not to include the CBA in his budget, which he did in 2011.⁹

Financing a department with over 1200 career employees, 800 volunteers, county owned buildings and apparatus, and corporation owned buildings and apparatus can be challenging

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at best. The corporations are funded in part through the county budget with tax dollars. Each corporation submits a budget to operate the stations they own to be included in the overall tax funded Fire Department budget. This could include utilities, station supplies, small tools, and building maintenance. The final approved amount of each of the 33 “mini” budgets is then distributed to each corporation for them to manage for the fiscal year. However, the county has recently moved to centralize all of these station support functions and plans to substantially cut the amount of tax funds given to the corporations. The individual corporations still have the opportunity to earn income through events, fire hall rentals or fundraisers through citizens or business donations. This money is controlled solely by the volunteers to cover items not included (or allowed) in the county budget or items not allowed to be in the budget.¹⁰

Another avenue of funds for the volunteer corporations is the Senator Amos Fund (so called 508 monies), a Maryland state grant specifically available for volunteer fire companies in Maryland. Annually, an average of \$1.3-1.4 million dollars is given to Montgomery County to distribute to the corporations. This money is to be used strictly for volunteer operations such as recruiting, station operations and equipment.¹¹

The County Code, Chapter 21, Section 21-21, mandates a program that rewards long time volunteers with a compensation benefit. The Length of Service Awards Program, LOSAP, is managed by and included in the annual operating budget of the Fire Rescue Service. The LOSAP award is a monthly stipend earned by volunteers based on age and years of service. The monthly benefits paid out based on this criteria range from \$92/mo to a maximum of \$345/mo. Also offered to the volunteers are a \$5000 death benefit, disability benefits, and a survivor’s benefit.¹² The Montgomery County Volunteer Rescue Association is the duly authorized representative bargaining agent for the county volunteers of the Local Fire and Rescue Departments (LFRD) in the direct negotiation process set forth in Chapter 21-6 of the Montgomery County Code. In 2007, the MCVFRA became the first volunteer organization in the country to bargain for volunteer benefits, such as improved death benefits, additional medical expenses associated with annual physicals, apparel, and nominal fee payments. As with the CBA for the uniformed fire fighters, this agreement is mandated by law to be included as part of the fiscal budget submittal to the County Council.¹³ Grants have recently

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become an important part of funding special events or items not funded by the current budget. Recent grants awarded to Montgomery County include the Federal UASI, NCI, and USAR grants. One of the most recent grants has been the FEMA SAFER grant that funded the hire of new recruits.

The volunteer corporations can apply for and be awarded grants as well. They regularly earn grants to purchase equipment, provide for recruiting, or purchase gear.

There are a number of considerations when applying for and using a grant:

- The time constraints placed on the user
- The strict rules on what the grant can be spent on
- The strict time limit of the grant
- The peripheral costs not included in the grant that will be incurred (e.g. the cost of gear and benefits associated with the hiring of the recruits with the FEMA SAFER grant).

Usually these incidental costs are far outweighed by the grant funding. In the tight economic times we are in today, working around a few challenging obstacles to better serve the public and personnel is worth the grant and its restrictions.

Code enforcement fees are another form of little known revenue for MCFRS. Chapter 22 allows for fees to be set and revised on a yearly basis to cover the cost of the fire code enforcement office and operation. This revenue is included in the projected revenue as the budget is set. The FY '10 fee included in county revenue was \$3.7 million.

Occasionally the need for a supplemental or emergency request arises. A supplemental request would be for an item that was not planned for in a fiscal year, but is considered important enough not to wait for. An emergency item would be an item that was budgeted for but the costs rose and the budget was not able to cover it in the fiscal year. Fuels costs are a good example of emergency requests over the last few years!

With a new decade brings new fiscal belt tightening. Because of the cut backs in the Fire Rescue budget, in 2011 the Fire Chief made some radical changes in the way the department budgeted, procured, and operated in the past. As noted, the volunteer corporations had a lot of authority over station operations, EMS supply inventory and purchasing, station maintenance, supplies, small tools, and apparatus maintenance. This in essence created 33

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separate purchasing centers. The Chief felt a more centralized approach would better suit our large department, streamline operations, save money and solve a number of logistical problems. With the new plan, the county will be the primary purchaser and MCFRS will have:

- Centralized EMS supply purchasing and repair
- Centralized station supply
- Centralized apparatus maintenance and supply
- Centralized small tools repair
- Centralized fuel purchasing

In the spring of 2012, the Montgomery County Council approved the Emergency medical Services Transport Reimbursement Program (EMST). The intent of the EMS billing program is to generate additional revenue streams by billing insurance companies for services by which Montgomery County residents are currently covered under. The projected revenue anticipated from this program is estimated to generate \$18 million per year with a projected \$8.3 million for FY13. This projected revenue serves to support FY14 budgeted items including:

- Staffing for the new Travilah Station (FS32)
- New EMS Supervisors
- Increased apparatus replacements

Master Plan Report and Studies

Much of the way Montgomery County Fire Rescue does business has been formed and dictated over the years by Master Plans, and various studies and reports. The first of these was written in 1958. These documents assess service delivery and resource needs in light of current and future trends, so the needs of the community and the department are met. The reports have covered subjects such as equipment, station locations, apparatus relocation, and delivery models in the context of the ever changing population, demographics and hazards of the County and the world today.

The first report drafted in 1958 was a recommendation for stations to be built and future locations. As we look back at this report, the stations that have been built since are very

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close to these recommendations. In 1973, this report was reviewed and new station locations and future station needs were assessed. Once again, many of the recommendations presented in this report were what created the fire station locations we are working out of today.

In 1980, the Fire Rescue Commission, the governing body of the department at that time, mandated that a Master Plan was needed for the ever growing Fire Rescue and Emergency Medical Services of Montgomery County. Chapter 21 of the Montgomery County Code requires the department to draft a Master Plan, thus making Fire Rescue the only department in the County mandated to develop one. The Master Plan covers a period of 10 years but is reassessed and updated annually. The 10 year plan and subsequent amendments must be approved by the County Council. The first Master Plan was adopted in October 1994. The plan defines its purpose as:

“It gives County residents a comprehensive description of how the fire rescue and emergency medical service fulfills their many public safety functions for which it is responsible and how changes in the County are likely to affect the delivery of service. Second, it provides direction for the present and the future through a set of recommendations that specifically address the steps to provide a desired level and quality of service.”

This Master Plan addressed trends in:

- Service Demands
 - Building fires
 - Types of EMS calls
 - Dispatch times
 - Travel Times
 - Traffic issues
 - County construction trends
- Delivery of Service
 - Life Safety Services
 - Prevention
 - Investigations
 - Code enforcement
- Personnel
 - Staffing
 - Training
- Facilities
 - New
 - Existing
- Vehicles

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- New
 - Existing
- Communications
 - Network
 - Radio
 - Record Management
- Funding
- Future Planning
- Fire Rescue Planning Area

In 1996, the Fire Rescue Commission initiated a massive multi faceted examination of six issues highlighted in the 1994 Master Plan. In 1998, the first Master Priorities Issues Study was completed. The issues addressed in this study were:

- Technology
- Data Management
- Communications
- Risk Analysis
- Response Times
- Staffing

Six workgroups were created and over the course of two years they produced a very thorough and comprehensive set of conclusions and recommendations to improve upon each of these priority issues. For the first time in the history of Montgomery Fire Rescue, a report was crafted with input from the field personnel through surveys. This allowed the end user in the stations to bring field knowledge to the work group reports. By 2011, 75% of the recommendations from the '98 report had been implemented.

The most recent Master Plan, approved by the County Council in October 2005, is an updated and revised version of the 1994 plan. All of the old trends addressed in the first plan are included in this document as well as new issues and trends that have come about due to the community growth, changes in the world and increasing hazards. This new Master Plan will shape and define the Fire Rescue and EMS service for the next 10 years.¹⁴

The most recent Amendment in 2009, which required council approval, covered incident response time goals and guides our operations today.

Montgomery County FRS is an all hazards service provider:

- EMS

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- Fire
- HazMat
- Water Rescue
- Arson Investigations
- Code Enforcement
- Bomb Squad
- Communications
- Public Education
- Mass Casualty
- Special Events
- Disaster Management
- And many non emergency functions

This creates a special challenge to manage and deliver on all levels expected by the citizens. The Master Plan provides goals and expectations from the department, the governing bodies of Montgomery County, and the citizens we serve.

In addition to the Master Plan and Master Plan Issues Study, three major special studies have been completed over the last ten years which have had a substantial impact on current MCFRS operations.

In 2000 a Water Supply Work Group issued a report listing recommendations and an implementation plan based on the work group's review of the county's water supply resources, deficiencies, delivery capabilities, equipment and water supply SOPs. Many of the recommendations have been implemented or are in progress. A few highlights are:

- Legislation mandating residential sprinklers in new construction enacted
- New rural water supply SOP enacted
- 4 additional tankers placed in service – three front line, one reserve
- Tankers added to fire response for all streets in non-hydranted areas
- Development of GIS maps with locations of hydrants, connections and static water supplies
- Replacement of all 3" supply lines with 4"
- Compressed air foam engines to be considered – 36 purchased and placed in service¹⁵

In 2001, brought the department concluded a year long study of aerial units. This unit study report after a year of analysis of the Montgomery County aerial unit inventory and needs of the county. The study reviewed the long and short term solutions for the strategic deployment of MCFRS aerial units. The criteria for this review included response times, area risk

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assessment, efficiency, and effectiveness of the deployment of these resources and improvements to public safety. From this work group, recommendations were made to relocate a number of aerial units and place one truck permanently out of service.¹⁶

In January 2004, ten recommendations were offered from the Rescue Squad Work Group which was formed in 2001 to review past squad reports and assess squad response times, locations, vehicles, tiered response, the mission and utilization of the squad, staffing, inventory, SOP's and training required for squad work. Many of the recommendations made by this group have been implemented, including:

Rescue squad locations – stations 3, 15, 29, R1, R2, 17

- Extrication equipped unit locations
- Dispatch changes to personal injury collisions based on speed limit of road, roll over, level of injury reported, and the number of cars involved
- Change in response time goals
- Training required to be squad qualified
- Equipment recommendations – thermal imagers mandated and blast shields on cascade systems¹⁷

The Station Location study is an eight phase study reviewing current and future locations of fire stations. This study is a cooperative effort between the county, local incorporated cities and the National Capital Park and Planning Commission. Major transportation plans, future county development and relocation trends are studied to determine the needs for fire and rescue. MCFRS is working in a proactive manner with this study to ensure the departments needs coincide with the needs of county development. For purposes of the study, the county has been divided into eight sections. Each phase studies one of the eight areas in depth and assesses the need for the relocation of existing stations and/or the need for new stations.¹⁸

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Area Description

Topography

Montgomery County is the 5th largest county in the State of Maryland and the most populous. The County is positioned in the southern portion of central Maryland and is bordered by the Potomac River to the West, Frederick County to the North, Prince Georges County to the East and Washington DC to the South. The county consists of 495.5 square miles or 324,428 acres. 318,150 acres are land and 6,278 acres are water.¹⁹

The highest point of elevation in Montgomery County is in the north eastern tip of the county at 880 feet above sea level. The lowest point is 10 feet above sea level at the bank of the



Potomac River at Little Falls. Montgomery County is a relatively flat land mass with no major high points or “mountains.” There are gentle rolling hills in the northern rural portion of the county.

The Potomac River is the western border of the county and draws many hikers, bikers, kayakers and tourists. This is the only official river in the county.

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Running parallel to the river is the C & O Canal National Park. The canal is 184.5 miles long running from Georgetown to Cumberland, Maryland. The Canal was built in the mid 1800's over the course of 22 years to provide a route free of river rapids for industry, travel and transport of goods. The Canal is now a national park and is popular with hikers and bikers. Approximately 36 miles of the Canal run through Montgomery County.

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

While there are many smaller bodies of water in the county, there are three major reservoirs in Montgomery County: the Tridelphia and Rocky Gorge reservoirs, and Little Seneca Lake. The first two of these reservoirs take up approximately 800 acres each. Both reservoirs span the Montgomery/Howard County line. They are both maintained as a source for drinking water for the metropolitan area by the Washington Suburban Sanitary Commission. As with the Potomac River, these bodies of water attract many outdoor enthusiasts, for paddling, bird watching, hiking and fishing.

Climate

Located in the center of the Mid Atlantic region of the United States, Montgomery County enjoys four separate and distinct seasons. Because the county lies in the humid subtropical climate zone, summers tend to be humid and warm to hot. The summer months can bring pleasant days in the 80's as well as runs of days in the mid to high 90's. Winters are generally mild although the thermometer can hit zero during the occasional major winter event. Most snow storms occur during January, February and March.²⁰

Average Winter Low	24 degrees
Average Summer High	86 degrees
Average Summer Low	65 degrees
Average Annual Precipitation	43"
Average Annual Snowfall	22"
Average Humidity	70%

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The state of Maryland sees an average of 3.2 tornados a year. These tornados are relatively small with minimal damage and rarely occur in Montgomery County. The County has experienced only 18 documented tornadoes between 1879 and 2001. None were greater than a F2/F3 with the majority (fifteen) graded as a F0/F1. The last noted death from a tornado was in 1929.

Wind is the enemy of an aging community that has older above ground power lines and large trees. Montgomery County suffers an increased call load every spring and summer dealing with high wind events that bring down trees and power lines alike. The county is working aggressively with PEPCO, the local power company, to trim many of the large overhanging trees to prevent these annual crisis events.

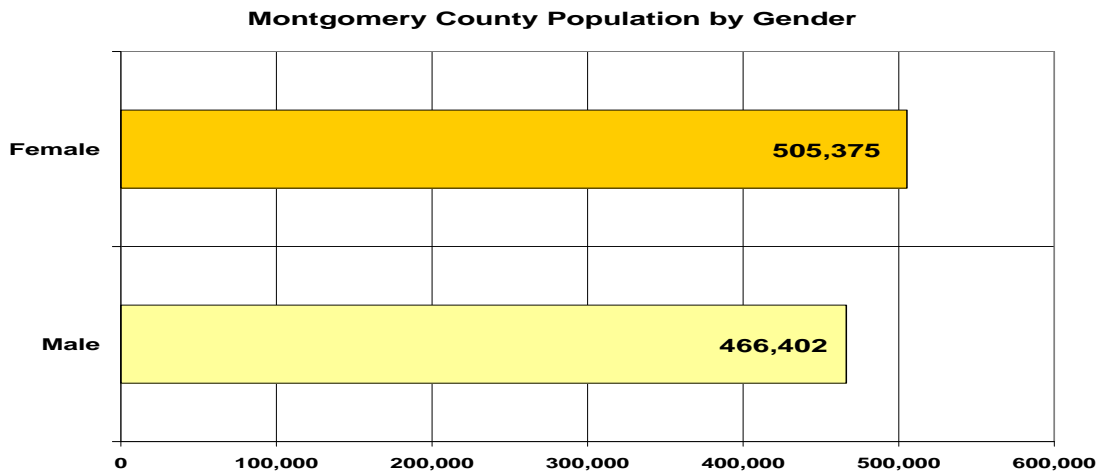
The State of Maryland has had 64 recorded earthquakes since 1758. None of these quakes was over 3.7. Montgomery County had has never been the epicenter of an earthquake until July 16, 2010. On that date, a 3.6 earthquake, centered in Gaithersburg, rattled the residents out of bed in the early morning hours.

Montgomery County's biggest natural disaster threat comes from hurricanes and tropical storms. While the hit is rarely direct, Montgomery County has often had to deal with residual damages. September is the most dangerous and vulnerable month for hurricane damage. Due to the proximity to the Potomac River, flooding is a common occurrence when a hurricane hits the Mid Atlantic. The storm surge and runoff will cause the river to breach its banks and make a raging river of violent rapids at Great Falls. There are also a number of notorious low areas and small creeks throughout the county that are prone to flash flooding. All Montgomery County fire rescue personnel are trained in the most basic of water rescue techniques. Every county fire unit is equipped with personal floatation devices and throw bags. When the flooding and need exceeds the basic capabilities, the River Rescue team is alerted and dispatched where needed.

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Population

Montgomery County is the 42nd most populous county in the United States. It is the 2nd largest jurisdiction in the Washington DC region. The population grew by 51% between 1980 and 2000. While the growth has slowed in recent years to an average of 1.5% annually, Montgomery County is still expected to reach 1 million residents by 2015. According to the U.S. Census as of July 2012, the new official County population served by the Montgomery County Fire Rescue Service totaled 1,004,709; this is an increase of almost 130,000 residents since 2000. Montgomery County is made up of “in movers” meaning 90% of Montgomery County adult residents were born outside of Maryland.



Census data is showing that the households in Montgomery County are taking on a very different look since 2000. There was nearly a 20% increase in households headed by women. Traditional two parent families have declined by 2%.²¹

Population by Age

The median age of Montgomery County is up to 38.5 from 36.8 in 2000. Females outnumber males in the 18 and over age group as well as the 65 and over group.

Under 5	5-14	15-24	25-44	45-59	60-74	75-84	Over 85	Median Age
63,732	128,963	113,893	272,958	219,301	115,695	37,797	19,431	38.5
6.60%	13.3%	11.8%	28.1%	22.6%	11.9%	3.9%	2.0%	

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Over the last 10 years the number of households with a person 65 years or older increased by 25%. The aging population in Montgomery County has not only economic and planning implications but is also a new challenge for the Fire Rescue service.

On average, there are 2.7 persons per household in Montgomery County. The breakdown of household types is.

HOUSEHOLD TYPE	2010	2010
Total households	357,086	100.0
Family households ¹	244,898	68.6
With own children under 18 years	118,482	33.2
Husband-wife family	190,571	53.4
With own children under 18 years	91,481	25.6
Female householder, no husband present	40,469	11.3
With own children under 18 years	21,051	5.9
Nonfamily households ¹	112,188	31.4
Householder living alone	89,264	25.0
Householder 65 years and over	30,624	8.6
Households with individuals under 18 years	127,583	35.7
Households with individuals 65 years and over	86,105	24.1

Education

Montgomery County residents are among the most educated in the nation. Nearly 80% of adults, age 25 and over, have some level of higher education.

The Census Bureau ranks Montgomery County first in the nation for the percentage of adults with advanced degrees and third for the percentage of college graduates.

Level of Education	# of Population	% of Population
Advanced degree	180,000	36%
Bachelors Degree	350,000	56%
Some Post Secondary Education	475,000	78%
Completed High School	-----	91%

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Diversity

The diversity of the Montgomery County population is also shifting. The Latino/Hispanic community grew to outnumber all other ethnicities in the county at 165,398. The white, non Hispanic, population was the only group in Montgomery County to decline over the last 10 years. The majority of Montgomery County’s population now consists of minorities.

Population by Race and Hispanic Origin Montgomery County, Maryland (2000 to 2010)						
Race and Hispanic Origin	2000		2010		Change, 2000 to 2010	
	Number	Populatio n Share	Numbe r	Populatio n Share	Numb er	Percent
White (non-Hispanic)	519,318	59.5%	478,765	49.3%	-40,553	-7.8%
Hispanic or Latino	100,604	11.5%	165,398	17.0%	64,794	64.4%
Black	129,371	14.8%	161,689	16.6%	32,318	25.0%
Asian and Pacific Islander	98,632	11.3%	135,104	13.9%	36,472	37.0%
Other	25,416	2.9%	30,821	3.2%	5,405	21.3%
Total Population	873,341	100%	971,777	100%	98,436	11.3%
Minority Population	354,023	40.5%	493,012	50.7%	138,989	39.3%

The Hispanic population is approximately 26% Salvadorian in origin with the remaining members evenly divided between Mexican, Puerto Rican, Peruvian and Guatemalan origins. There are 140 languages spoken in the Montgomery County school system.^{22 23}

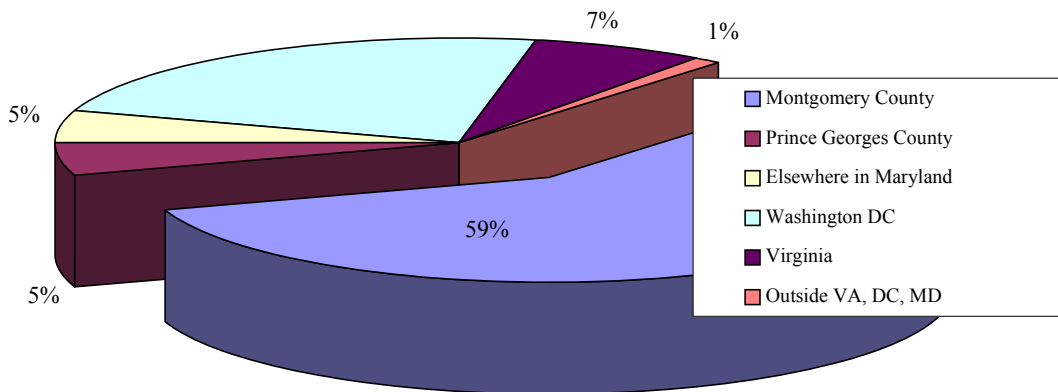
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Employment

There were 510,000 jobs and 33,166 employers in Montgomery County as of January, 2010. Montgomery County has a large cross section of both government and publicly supported organizations as well as many private corporations.

10 Largest Public Sector Employers	10 Largest Private Sector Employers
National Institutes of Health	Adventist Health
Montgomery County Public Schools	Lockheed Martin
National Naval Medical Center	Giant Food
US Food and Drug Administration	Marriot
Nat. Oceanic and Atmospheric Admin.	Holy Cross Health
US Health and Human Services	BAE
Nat. Institute of Standards and	IBM
Nuclear Regulatory Commission	Long and Foster Real Estate
US Department of Energy	Suburban Hospital
Walter Reed Medical Center	Hughes Network Systems

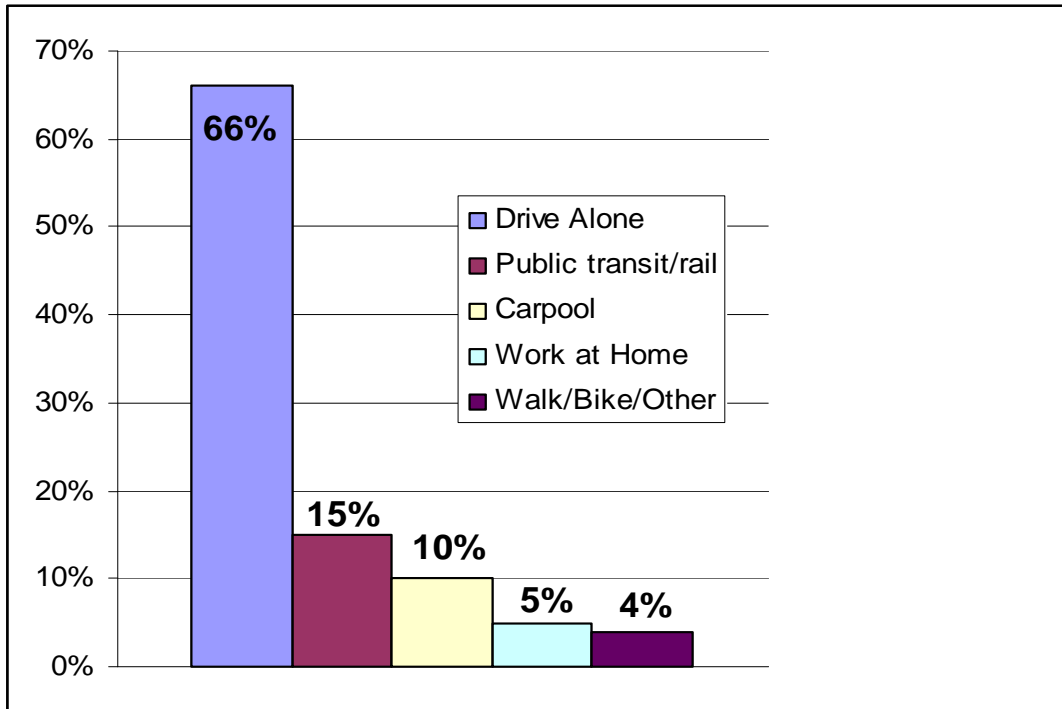
While the jobs in Montgomery County are diverse and varied, approximately 40% of all employed workers that live in Montgomery County travel outside of the County line to go to work.



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Traveling to work on the Montgomery County highways and byways is a challenging proposition on any given day. The Washington DC area is ranked as having the fourth worst traffic congestion in the United States. Even though the Washington Metropolitan area provides an extensive public transportation system, the commuters of Montgomery County prefer to drive alone over any other mode of transportation. The average commute time is 33 minutes for workers who live and work in the county. Commute times to surrounding jurisdictions are much greater.²⁴

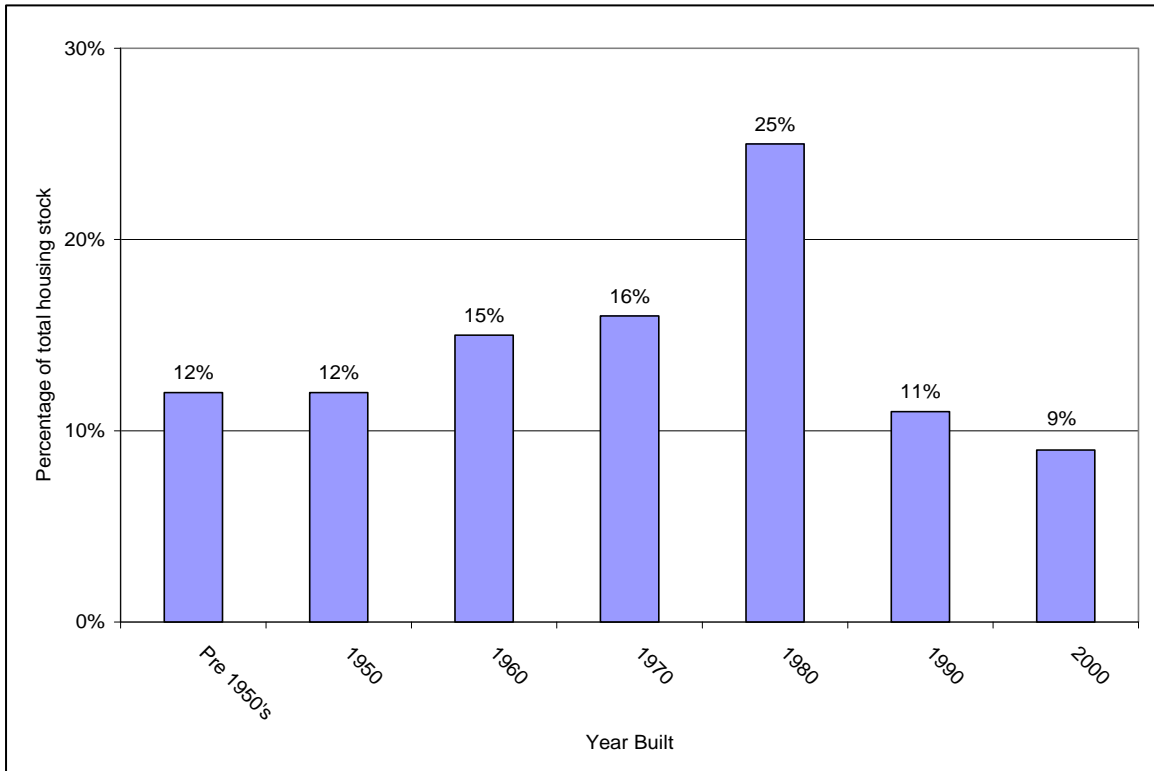


Housing Stock

55% of Montgomery County housing was built before 1980. The housing boom of the 1980's built 25% of the housing units in the county and introduced light weight construction, the majority of which is in the northern portions of the county. Only about 20% of the housing units have been built since 1990.

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Montgomery County was one of the first jurisdictions in the United States to adopt the Moderately Priced Dwelling Unit program. MPDU's are affordable dwelling units integrated in developing neighborhoods.



This program forced socio-economically mixed neighborhoods and schools. They allowed lower income families to purchase new housing at a reduced rate in new developments. Since the 1970's developers have been required to include MPDU's in every development built. There have been 8,210 units built since 1980. The MPDU's are subject to limits on resale, rents and owner occupancy.²⁵

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Median sales prices of Montgomery County homes are much higher than the national average.

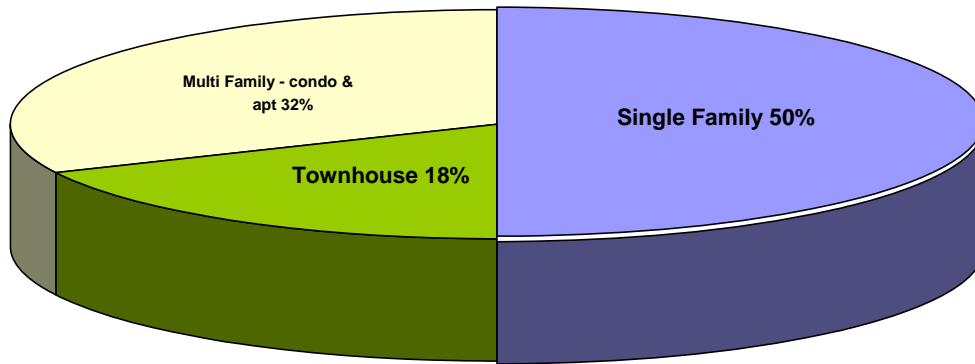
- Single family detached \$460,000
- Townhouse \$280,000
- Condominium \$262,575

These prices have dropped, on average, 28% since the housing bubble in 2006.

Homes Owned vs. Rented



Housing Stock by Type



Disaster Potentials

High Profile Threat

Due to the proximity to Washington DC, Montgomery County has a number of very high profile events. Our Special Ops division is regularly involved in arranging protection for these events, making Montgomery County an approachable, but well protected area.

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Area Development

Montgomery County is a robust commercial/business center. Due to the proximity of Washington DC, there are many US federal government agencies that call the county home. Montgomery County is the epicenter of biotechnology in the mid-Atlantic region with over 200 biotech firms. The convenient location to the nation's capital and easy access to international gateways has lured many international firms to headquarter in Montgomery County. Locating in Montgomery County gives employees access to world class health care, entertainment, shopping and other big city benefits with the option to choose urban, suburban or rural living.^{26 27}

With limited commercial space in the District of Columbia, many government agencies are based in Bethesda, Rockville, Gaithersburg and Germantown. Some of the more prominent agencies include:

- Food and Drug Administration – FDA
- National Institutes of Health – NIH
- Walter Reed Army Institute
- Naval Medical Center
- Consumer Product Safety Commission
- Nuclear Regulatory Commission – NRC
- Naval Surface Warfare Center, Carderock Division
- National Institutes of Standards and Technology – NIST
- National Oceanic and Atmospheric Administration – NOAA

Large private corporations have based their operations in Montgomery County due to the location, a quality work force and top notch services and benefits. Some of the more prominent companies include:

- Discovery Communications
- Marriott International
- Ritz Carlton
- Choice Hotels
- Hughes Network Systems
- GEICO Insurance
- Lockheed Martin
- BAE Systems
- Travel Channel
- Coventry Health Care
- Seventh Day Adventist Church

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Montgomery County is the home of DNA mapping and many of the recent cutting edge biotechnology research studies. The I-270 Biotech Corridor is the 3rd largest biotech center in the United States. A few of the well known biotech companies that are based in Rockville, Bethesda and Gaithersburg include:

- Medimmune
- Human Genome Sciences
- Howard Hughes Medical Institute

Demographic Features

Higher Education

Montgomery County offers many premier higher education options:

- Montgomery College
- The Universities @ Shady Grove
- Johns Hopkins University

Medical Care

Montgomery County residents are not wanting for superior health care. There are six hospitals, one of which is a trauma center, and one remote stand alone emergency center.²⁸

Facility	Location	# of Beds	Specialty
Suburban Hospital	Bethesda	338	Trauma Center, Cardiac Cath Lab, Stroke Center
Montgomery General	Olney	213	Stroke Center
Holy Cross Hospital	Silver Spring	448	Cardiac Cath Lab, Stroke Center
Washington Adventist Hospital	Takoma Park	281	Cardiac Care
Shady Grove Adventist Hospital	Rockville	336	Cardiac Cath Lab, Stroke Center
Naval Medical Center	Bethesda	205	Military care

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Germantown Emergency Center	Germantown	21	stand alone emergency center
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Urban Centers

The primary urban hubs in Montgomery County are Bethesda, Silver Spring and Rockville, which are all currently undergoing redevelopment and re-urbanization. These three high density mixed use areas are pedestrian centers offering shopping, entertainment, residential living options and commercial spaces. The majority of the county’s high rise structures are concentrated in these areas, although recent years have also brought a new surge of high rise living in North Bethesda. This area will likely be the next major urbanized area for Montgomery County.

Rockville Town Center is the county seat. The new redevelopment of this area has brought 644 residential units and 175,000 square feet of shops and restaurants.

The Silver Spring Urban District is an older area of the county that has been given new life as an urban center. Over 1 million square feet of commercial, retail and restaurant space and METRO access, makes Silver Spring a desirable area to live, work and play.^{29 30 31}

Shopping

Montgomery County offers world class shopping. There are four major shopping malls and three major mixed used shopping centers and 16 large strip shopping centers and pedestrian shopping areas. High end boutique shopping is centered in Chevy Chase and the four malls cater to the varied demographics of Montgomery County. There are 33 major department stores and 743 specialty stores and boutiques in Montgomery County.³²

Mall	Location	Square footage	# of stores	Anchors
White Flint Mall	North Bethesda	800,000	125	Bloomingdales, Lord & Taylor
Westfield Montgomery Mall	Bethesda	1,224,195	203	Sears, Nordstrom, Macy's
Westfield Wheaton	Wheaton	1,650,334	195	JC Penny, Macy's, Target

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Lakeforest Mall	Gaithersburg	1,046,000	145	Macy's, Lord & Taylor, JC Penny, Sears
Washingtonian Center	Gaithersburg	760,000	45	Target, Kohls, Barnes & Noble, Dicks Sporting
Collection @ Chevy Chase	Chevy Chase	112,000	9	Tiffany, Jimmy Choo, Ralph Lauren, Cartier
Milestone ShoppingChopping Center	Germantown	868,000	22	Home Depot, Target, Best Buy, Kohls

The Arts

The governing body of Montgomery County holds the arts in high regard and they are willing to support local arts programs and facilities.

- Strathmore Hall, a 1,976 seat concert hall, opened in 2005. It is home to the Baltimore Symphony Orchestra and the National Philharmonic and hosts a varied offering of musical, theatrical and stage entertainment.
- The Black Rock Arts Center, located in Germantown, opened in 2002. The center offers art and theater classes to the community as well as hosting a variety of live shows.
- The AFI Silver Theater in Silver Spring was redeveloped during the initial re-urbanization of downtown Silver Spring. The American Film Institute calls the Silver Theater home and many events and film festivals are offered throughout the year.
- The Filmore in Silver Spring is the latest arts project headed up by Montgomery County, slated to open September 2011. In this unusual public/private partnership, Montgomery County will own the land and the facility and enter into a lease with Live Nation to manage and operate the 750 seat music venue with a very famous name. This unusual partnership will create a cash windfall for the county with very little involvement with the facility.
- The renovation of the historic JC Penny building is also part of the re-urbanization of Silver Spring and the development of the Silver Spring Arts District.³³

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Recreation

The largest recreational area in Montgomery County is the Discovery Sports Center and Soccerplex. This complex located in Germantown opened in 2000 and was home to the former Washington Freedom Soccer Team. The facility hosts regional and national sporting events year round. The Discovery Sports Center is a 66,000 square foot complex with a 46,000 square foot indoor arena field. The Soccerplex is a premier soccer facility offering 19 full sized soccer fields and a 3,200 seat stadium. Over 60,000 spectators a year gather for a variety of events.³⁴

The Montgomery County Fairgrounds in Gaithersburg is the destination for the annual Montgomery County Fair and a number of festivals through out the year.

Potomac has two first rate golf courses. Both of these courses have been used for major international golf events, most recently the Tiger Wood Buick Invitational and the US Open at the Congressional Country Club.

All of these recreation sites bring thousands of spectators and tourists to Montgomery County. Montgomery County Fire Rescue Special Operations works tirelessly to provide fire protection and EMS during these major events.

Residential Communities

Many developments have been built in Montgomery County to address the living needs of seniors. Independent living, assisted living, and nursing homes, (registered and independent), span every corner of the county. The increase of senior residents poses new challenges to MCFRS and the EMS services. MCFRS is dedicated to providing the best care and education for seniors and has created a Senior Task Force to address the needs of the ever growing elderly population.

5% of the county housing is age restricted, 55 and older. There are six major age restricted communities in Montgomery County. They offer a variety of care from independent living to end of life care.

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Facility	Residents	Acres	Living Options
Leisure World	8,500	610	Independent Living
National Lutheran Home	550	30	Independent Living, Alzheimer's Care, Nursing Home
Riderwood	2283 units	120	Independent Living, Assisted living, Nursing Home and end of life care
Charles Smith - Hebrew Home	1,000	6 buildings	Independent Living, Assisted living, Nursing Home and end of life care
Asbury Methodist Village	1194 units	130	Independent Living, Assisted living, Nursing Home and end of life care
Brooke Grove	316 units	220	Independent Living, Assisted living, Nursing Home and end of life care

There are 263 registered and independent Nursing Home facilities in Montgomery County and 117 assisted living facilities.^{35 36 37}

Planned Communities

Planned communities are a new development trend that is popping up throughout the county. These communities bring open spaces, community shopping centers, and mixed residential options. This combination of amenities attracts a wide range of residents. Currently there are 5 planned communities, with more being developed.

Community	# of Homes	Acres
Lakelands	1,410	340
King Farm	3,200	430
Kentlands	1,800	352
Fallsgrove	Approx 1,200	257
Clarksburg Town Center	1,300	268

Kentlands was the first of these communities developed in 1990. These communities are attractive to residents but pose a challenge to the fire rescue service. The homes are all light weight construction on zero lot lines with massive exposure issues. The small roads and alley ways make for charming neighborhoods, but severely limit fire apparatus access.

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The overall building stock in Montgomery County is relatively new; however, 55% of the residential units were built before 1980. The majority of these are small post World War II era masonry cottages in the down county area.

There are two designated historic districts; Rockville and Kensington. The homes in these areas are late 1800 Victorian balloon frame homes.

As Montgomery County became more suburban, the housing boom peaked in the 1980's in Gaithersburg and Germantown. This growth spurt brought thousands of lightweight construction single family homes and town homes to the area. While the majority single family homes in Montgomery County are averaged sized, 1,000 – 2,000 square feet, there are a number of areas that feature homes in the 3,000 – 4,000 square foot range.

Potomac has the highest area median income along with the highest housing costs. Homes in this area are in the 10,000 or greater square foot range.³⁸

Area	Population	Density/Square Mile	# Of Housing Units	Median Household Income
Germantown	86,395	7,999	31,807	\$71,226
Rockville	62,476	4,532	17,786	\$86,085
Bethesda	55,277	4,205	24,368	\$117,723
Silver Spring	71,452	7,584	31,208	\$51,653
Gaithersburg	59,933	5,902	20,674	\$54,883
Potomac	44,822	1,780	15,960	\$154,370
Poolesville	4,883	1,193	1,630	\$85,092

The majority of new high rise residential construction is concentrated in the North Bethesda area with 1,200 units in four new high rises with more in the planning stage. Rockville Town Center is a close second with 644 high rise units.

Montgomery County is at the fore front of fire suppression laws. In 1978, a county law, the first of its kind, mandated smoke detectors in all residences. In January 2004, a law was enacted that requires all new homes to have sprinkler systems.

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ISO Rating

The Insurance Services Office, ISO, is an independent organization that rates fire departments. This rating is considered when setting insurance premiums. The major elements of a community's fire suppression ability, including location of stations, water supply access, apparatus and equipment are assessed and given a numerical grade from 1 to 10. Montgomery County has exhibited a split rating; ISO 4/9 for several years. The 4 rating represents urban areas within five miles of a fire station that are served by hydrants. The 9 rating represents the rural areas of the county that are within 5 miles of a fire station but are not served by a hydrant system.

In January of 2013, MCFRS completed a rigorous ISO Fire Suppression Rating Schedule (FSRS) for both hydranted and non-hydranted areas. The evaluation process spanned over several months as the Insurance Services Offices field section evaluated needed fire flow, our receipt and handling of fire alarms, water supply, and various other elements within our Fire Department. The conclusion of the evaluation yielded a successful increase of our Community Classification Rating in non-hydranted areas from a 9/10 to a 6/10 and for hydranted areas from a 4/10 to a 3/10. Montgomery County's split ISO rating is now 3/6; a marketable increase from our previous rating of 4/9.

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Summary

Montgomery County Maryland has developed from a rural farm community to become a metropolitan center that attracts world-class business headquarters and serves a community of 1,004,709 diverse residents. Montgomery County is the most populated county in the state of Maryland, and is traversed by major highways, rail lines and a river. The challenges of serving this community are exacerbated by the homeland security and high profile threats due to the proximity to Washington DC.

Montgomery County Fire and Rescue Service is a full spectrum life safety agency providing fire, EMS, Haz-Mat, river rescue, Urban Search and Rescue, code enforcement, arson investigation and public education programs. Over the last 140 years MCFRS has undergone many transformations from a 100% volunteer run organization to a government operated career/combination service funded by tax revenue.

The services provided by this department make the MCFRS a world class fire department responding to over 100,000 incidents per year making our 34 fire stations, over 1,200 career employees and 800 volunteers some of the busiest in the nation. In an effort to keep pace with the demands and expectations of the community, MCFRS regularly evaluates its performance, response time goals and actual response times. To maintain these services, MCFRS reviews the location of apparatus throughout the service area, the need for new stations as the population increases and the addition of new services as need dictates. MCFRS regularly reviews its strategies for improving the services through a 10-year master plan.

The expectations of the Montgomery County residents are very high. Montgomery County is one of the highest taxed communities in the mid-Atlantic region allowing the citizens to demand more from their government agencies. MCFRS is expected to “prevent, be prepared, respond to and mitigate fire, hazardous, environmental or medical emergencies to a reasonable sense of normalcy.” MCFRS does this through education, highly trained personnel, incident response and after incident support.

MCFRS COMMUNITY RISK ANALYSIS AND STANDARDS OF COVER

The Standard of Cover document will review in detail, the services provided, and the goals and expectations the County Government, the department and the citizens have for their fire department. We will address and follow up on the strategic recommendations developed from our 2007 CFAI accreditation process and review the current response to areas that are in need of improvement.

MCFRS has been an evolving department for 140 years and it continues to evolve, adapt and change to meet the growing needs of the population, the community and the County as a whole.