Testing the Adequacy of Public Safety Facilities

Introduction

In the most recent growth policy resolution (15-375), the Montgomery County Council instructed the Planning Board to “consider potential options for testing the adequacy of public safety (police and fire/rescue) infrastructure.” The Planning Board has reviewed available literature on testing the adequacy of public safety facilities, identified national and local examples, and discussed the issue with public safety officials in Montgomery and Prince George’s Counties.

One of the main issues that the Planning Board attempted to address is how closely measurements of public safety infrastructure (such as number of stations) track with the best measures of public safety service, such as responses times. Our research suggests that of the two types of public safety facilities (police stations and fire/rescue stations), the number and location of fire/rescue stations has the closest relationship to service adequacy. This is because fire companies and EMS/rescue squads return to stations between calls, while police cruisers and staff are highly mobile. In other words, police response times are not highly correlated with the number and location of police stations, but fire and rescue response times are highly correlated to the number and location of fire/rescue stations.

The Planning Board’s review suggests that if the County were to substantially strengthen or expand its test for the adequacy of public safety facilities, the expansion should focus on fire and rescue infrastructure, specifically stations. The Board’s understanding is that the greatest barrier to adding stations is finding suitable sites. Therefore, the Board believes that a potential expansion of the adequacy test for public safety facilities should be evaluated on the basis of whether it increases the County’s ability to acquire suitable fire/rescue station sites.

Although staffing levels are also correlated to the level of service provided, the Planning Board does not recommend that adequate public facilities tests be based on staffing levels. Strictly speaking, staffing levels are not “facilities” and the County has historically been reluctant to tie development approvals with the availability of staff. For example, the County’s school test is based on the number of classrooms rather than the number of teachers.

Recommendation

The Montgomery County Planning Board does not recommend that Montgomery County proceed with an expanded adequacy test for fire/rescue facilities at this time. The Board’s recommendation not to expand the test is based on the following:
• Declaring that certain areas of the County have inadequate public safety service has greater implications than similar declarations about roads and schools.

• Because a great deal of development has already been approved, an expanded APF test that halts development approvals due to inadequate public safety facilities would not have a real impact on demand for public safety for a considerable period.

• An expanded APF test that includes development moratoriums could easily be as complicated as the former Policy Area Transportation Review test, with perhaps an even greater level of uncertainty from period to period as to which areas of the County would be in moratorium.

• An alternative to moratoriums is an expanded APF test that charges a mitigation fee on development within areas where services is inadequate. If the County is interested in adding to the funding stream for public safety facilities, staff would suggest that an impact tax may be a better approach.

The Planning Board’s recommendation comes despite the fact there are considerable challenges facing the County as it works to provide fire and rescue service to its citizens. Much of the County cannot be reached within the Fire and Rescue Services’ six-minute response time goal. The situation may be most acute in Clarksburg, where planned development is moving rapidly through the approval process to construction, but there are significant challenges throughout the County.

Fire and Rescue Services has indicated that Montgomery County “easily” needs 12 more fire/rescue stations above the current number of 31. Some of these are already programmed in the Capital Improvements Program. The additional 12 stations would not be sufficient, however, to assure six-minute response times throughout the County. To assure six-minute response times everywhere in the County, the County would need upwards toward 76 stations – 45 more than the current number.

Fire and Rescue Services also indicated that the greatest obstacle to the provision of new fire station is finding suitable sites. Even in places like Clarksburg, Fire and Rescue Services is having difficulty finding sites in the midst of the developing area and is instead finding its options limited to locations on the periphery, which are less effective. Fire and Rescue Services acknowledges that it has not always been a full partner in the master planning process, but cites the Potomac Subregion Master Plan and the Shady Grove Sector Plan as positive recent examples.

In addition to greater participation in the master planning process, the Fire and Rescue Services has identified benefits to their stronger participation in the development review process. Fire and Rescue Services’ mission includes identifying ways to reduce the number and severity of fire and rescue calls. Fire and Rescue Services’ participation in the development review process will allow them to advise how proposed development projects can increase fire safety, fire and rescue accessibility, and other issues. It will also allow the Fire and Rescue Services to
get a better handle on the location, size and type of new development that they can expect to be serving in the future.

The Planning Board recommends that Fire and Rescue Services and the Department of Park and Planning develop and implement a strategy to continue to improve their collaborative working relationship:

- Strengthen the role of the Fire and Rescue Services in the land use planning process with the specific goals of identifying suitable sites for new stations within plans and reviewing proposed plans from the fire/rescue perspective.
- Find ways to use the resources of the Department of Park and Planning to assist Fire and Rescue Services to identify and evaluate candidate sites for new stations.
- Include the Fire and Rescue Services in the development review process to a greater degree than in the past.

The Planning Board notes that a new Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan, when adopted, could provide the needed “evidence that a local problem exists” that is required by the current growth policy. However, the Planning Board also notes that planned fire and rescue stations, since they are fully funded in adopted capital budgets, appear to be “countable” if a review were conducted under the current public safety APF test.

The Adequate Public Facilities Ordinance

Montgomery County’s Adequate Public Facilities Ordinance is contained in Section 50-35(k) of the Montgomery County Code. It states, in part, that:

(k) Adequate public facilities. A preliminary plan of subdivision must not be approved unless the Planning Board determines that public facilities will be adequate to support and service the area of the proposed subdivision. Public facilities and services to be examined for adequacy will include roads and public transportation facilities, sewerage and water service, schools, police stations, firehouses, and health clinics.

The Planning Board notes that the Code specifically cites police stations and firehouses, rather than public safety facilities generally.

As it has for many years, the current adopted growth policy contains the following guidelines for administering the adequate public facilities ordinance in regards to police, fire and health services.

The Planning Board and staff must consider the programmed services to be adequate for facilities such as police stations, firehouses, and health clinics unless there is evidence that a local area problem will be generated. Such a problem is one which cannot be overcome within the context of the approved Capital Improvements Program and operating budgets of the
relevant agencies. Where such evidence exists, either through agency response to the Subdivision Review committee clearinghouse, or through public commentary or Planning staff consideration, a Local Area Review must be undertaken. The Board must seek a written opinion from the relevant agency, and require, if necessary, additional data from the applicant, to facilitate the completion of the Planning staff recommendation within the statutory time frame for Planning Board action. In performing this Local Area Review, the facility capacity at the end of the sixth year of the approved CIP must be compared to the demand generated by the “most probable” forecast for the same year prepared by the Planning Department.

In Resolution 15-375, the County Council instructed the Planning Board to “consider potential options for testing the adequacy of public safety (police and fire/rescue) infrastructure.”

**National Examples**

Rare is the local government that is not highly interested in the delivery of adequate public safety services to its citizens. Among the areas of greatest emerging concern: service delivery levels in growing, low-density suburban and exurban settings. Sometimes this interest is developed after a tragic event focuses attention not on equipment or training needs, but on response times for emergency services. Despite this interest, a national search turned up few jurisdictions tying development approvals to service delivery standards for police or fire/rescue services. The following include two jurisdictions which do this and one which simply states response time goals in its plan.

**Town of Moraga, California.**

The Town of Moraga, California is located about 18 miles east of San Francisco. It is a semi-rural community of 17,000 residents. The town’s 2002 General Plan includes a Growth Management Element establishing simple police, fire, and emergency medical service standards. The standard for fire service is that emergency response drive times should be three minutes or less and that all residential and non-residential development should be within 1.5 miles of a fire station, in the absence of appropriate mitigation measures. For police, a three-minute response time for emergency calls and a seven-minute response time for non-emergency calls are the standard. In addition to meeting minimum service standards, the Plan calls for all development to contribute money toward public facilities such as police, fire, traffic capacity, and parks. These required payments are in proportion to the demand generated by project occupant and users of these services. Standards must be met concurrently with proposed development and mitigation measures may be negotiated with developers. Development proposals may be denied or deferred until standards can be met.

**Palm Beach County, Florida**

Palm Beach County lies along Florida’s eastern shore and has a resident population of more than 1.2 million people. The Fire-Rescue Services Element of the County’s Comprehensive Plan includes procedures and standards to ensure that service is adequate. The Plan calls for an annual evaluation of station location, staffing, and equipment needs as well as monthly, quarterly,
and periodic evaluation of travel times and other measures. Future service impact of new
development is estimated based on average number of calls by land use type. Overall, the target
is average response travel time of five minutes. Stations located in more heavily populated areas
bring the average time down for the county as a whole. It is recognized that the more rural areas
will effectively have a different standard, but as they develop, certain measures will trigger the
building of new facilities and the gap in service will close.

If a proposed development is deemed inadequate for a given service, the applicant may
enter into a 90-day negotiation period with the service provider to address the inadequacy. The
proposal will then be approved or denied based on the standards set forth in the Plan and through
the initial review process, which may involve multiple agencies and service providers.

City of Union City, California

The City of Union City, California is a small jurisdiction about 30 miles southeast of San
Francisco. It is comprised of just 17 square miles and has a population of 70,000. The 2002
General Plan contains a Public Facilities and Services Element that includes goals, policies, and
standards relating to police and fire/rescue services. The City seeks, to the extent allowed by law,
to have new development pay the costs of facilities associated with it. They assess a one-time
Capital Facilities Fee (residential impact fee) of approximately $12,000 per unit. Exceptions are
allowed for developments with significant public benefits, such as low-income housing. They
also establish Community Facility Districts for major new developments and assess extra fees on
an annual basis to help fund various community facilities.

The Plan sets a goal of 1.4 sworn law enforcement officers and 1.0 full time fire
department employees per 1,000 population. Police should respond to emergency calls within
four minutes. The fire department should respond to priority 1 emergency calls within five
minutes or less and 9.5 minutes for all other calls. The fire department is expected to maintain an
Insurance Services Office, Inc. (ISO) fire insurance rating of 3 or lower.

Prince George’s and Carroll Counties

Two Maryland counties, Prince George’s and Carroll Counties, are among the few
jurisdictions in the country with ordinances in place that condition development approval on the
level of police and fire / rescue services.

Prince George’s County

Prince George’s County is a well-known local example. The public safety adequacy test
was changed substantially in the past year. The new test virtually halted residential development
approvals. The test is expected to be revised substantially soon to moderate its impact.

Prince George’s County, in its 1990 Public Safety Master Plan, established detailed
criteria and maps showing service response times to use in determining whether new
developments would be adequately served with police and fire/rescue services. However,
projects that fell outside of the response envelopes were generally allowed to mitigate the inadequacy and proceed. Mitigation measures included financial contributions and or signage and other physical features that would aid responders on site.

The situation changed dramatically with enactment of County Bill - 89 (CB89) in November 2004. Simple mitigation measures are no longer available for projects that can’t meet the new response time standards. For fire and rescue services, the new standard is a ten-minute response time for advanced life support anywhere in the County, and for basic life support and fire engine response, the new standard is eight minutes in the rural tier and six minutes elsewhere. Police response times must be met in each of the six police districts. The response times are set at 10 minutes or less for emergency calls and 25 minutes for non-emergency calls. The bill also mandates that overall fire and police department staffing levels reach certain thresholds by the end of 2005 and 2006 for any residential development to be approved.

The changes enacted in CB-89 have effectively blocked all residential development proposals to date. Only two of the six police districts, along the County’s western edge and bordering on the District of Columbia, meet the new standards, and within those, projects must also meet the fire/rescue standards. The majority of residential development interest seems to be in the more suburban and rural areas of the County where the police test alone would not permit new development.

Applications for development approval in Prince George’s County must be acted on within a 70-day period and applicants may ask for a 70-day extension period. With the exception of one residential project that went through the entire review process and was denied, all other projects have been withdrawn before the end of their 140-day review period to avoid being denied.

Public officials have taken steps to amend the public safety adequacy test. At the state level, legislation was passed in May 2005 (House Bill 1129) enabling Prince George’s County to levy a $6,000 per unit public safety surcharge on all new residential developments in the rural tier and up to $2,000 per unit elsewhere. The law stipulates that if the County chooses to begin charging this fee that the minimum response time standard for fire would have to be set at seven minutes travel time, thus taking some control away from the County.

Very recently (June 8, 2005), County Bill 56 (CB-56) was introduced. It proposes to change the response time for fire and rescue service to a maximum of seven minutes travel time, which would comply with the provisions of House Bill 1129. It also provides for mitigation for plans that do not meet the standards for adequacy of public facilities. County staff is working on proposed guidelines for mitigation, and these are to be submitted to the Council not later than July 30, 2005.

Carroll County

Carroll County’s Adequate Public Facilities and Concurrency Management Ordinance, originally adopted in 1998, was substantially revised in April 2004 to include specific measures
of adequacy for police and fire/rescue services for residential development. The first step in determining adequacy is establishing the annual Available Threshold Capacity (ATC) for each facility and service, which includes accounting for approved but unbuilt projects as well as capacity increases from programmed facilities in the Capital Improvement Program. Projects in areas where ATC does not exist or is projected to be less than adequate can be placed in a queue and may also be subject to phasing requirements that allow no more than 25 units per year per subdivision.

Police services are deemed adequate if the projected ratio of sworn law enforcement officers to population is 1.3:1,000. For fire and emergency medical services, there are three tests that must all be passed for a project to be considered adequate. First, the total number of late responses (as determined by the Carroll County Volunteer Emergency Services Association) and no responses must be less than 15%, and the total number of no responses must be less than 4%. The second is that the average response time, from time to dispatch to on-scene arrival, over the previous 12 months, must be 8 minutes or less. The last test is that all roads and bridges for the direct route or acceptable secondary route to the project site must be adequate to support fire and emergency response apparatus.

The provisions relating to police and fire/rescue have only been in effect for about a year and there haven’t been many situations yet that test implementation. One recent example is four-lot subdivision that was affected by the public safety provisions. Because of the level of police service, the four lots were approved as a two-phase development. The County is also expecting a large development proposal to be submitted in the near future in a rural part of the county for which capacity will likely be determined as inadequate.

**Measuring Adequacy**

Measuring the adequacy of public facilities requires the selection of an indicators to measure (for example, response times), a unit of measurement (for example, minutes), and a standard of adequacy (for example, six minutes). The Planning Board has divided the measures of adequacy of police and fire/rescue facilities and services into the three categories: project level measures and standards (which are the simplest), equipment and personnel measures and standards, and response times measures and standards (which are the most complex).

**Project-level Measures and Standards**

The most basic level of measurement and standard govern attributes of the development project itself. They include such items as physical conditions of buildings, subdivision streets widths and turning radii, and water supply for fire suppression. These kinds of standards are the easiest to measure and administer and are typically included in building codes or in a locality’s subdivision ordinance. Because they are essentially project level standards, they have little or nothing to do with the adequacy of public facilities serving a larger area. Additionally, national standards have been set for many items in this category that can easily be adopted by localities. Indeed, much of Chapter 22 (Fire Safety Code – Regulations) of the Montgomery County Code is consistent with the National Fire Protection Association’s National Fire Codes.
Equipment and Personnel Measures and Standards

The next level of standard deals with equipment and personnel. Relating the levels of equipment and personnel to each other makes sense and is a relatively straightforward exercise. If you have a fire engine, it needs to be housed in a station along with certain maintenance equipment and it needs to be staffed by a certain number of people with training and skills for each position.

The number of personnel or equipment that should serve certain geographic areas or be available for each 1,000 residents varies by locality. Few jurisdictions attempt to regulate new development based on equipment or staffing measures. Instead, many jurisdictions include these kinds of measures, even if only as broad policy goals, in facility planning and in budgeting for equipment and staffing. Typically, the burden is placed on the jurisdiction, and not on developers or landowners, to ensure that equipment and personnel standards or goals are met over time.

The appropriate level of staffing for police or fire/rescue services depends on such local conditions as development density and kind of development, topography, climate and so forth. The International Association of Chiefs of Police, in their Patrol Staffing and Deployment Study, is fairly blunt about staffing ratios: “Ratios, such as officers-per-thousand population, are totally inappropriate as a basis for staffing decisions.” The study goes on to explain the myriad complexities involved that require a tailored solution to meet local conditions. That is not to say that tailored solutions are not available or that setting general staffing goals is not a valuable activity. However, the following examples highlight the imprecise nature of even jurisdiction-specific measures in accurately portraying levels of service.

One challenge in establishing a standard for staffing is that deployment decisions can be highly variable in the short run. For example, the deployment of law enforcement officers often shifts to meet temporal and geographic shifts in crime related to problems such as gang activity, car theft, muggings, or burglaries. This shifting deployment makes any relation to population within subareas difficult, if not impossible, to measure. Additionally, law enforcement within a county is typically comprised of several uniformed services from the county, state, and municipal levels, each deploying according to its own needs. This deployment principle also applies to fire and rescue personnel in the event that personnel from one station are out on call and not available to respond to another call in the vicinity of their station. This was the case last year during the courthouse fire in Prince George’s County: although the fire station is very close by, key personnel and equipment from that station were responding to another call miles away.

Another challenge is that demand from existing development can change over time. Shifting neighborhood demographics and changes in intensity and types of uses in existing non-residential buildings can alter service demands on both police and fire/rescue departments. For example, an aging population will tend to generate more emergency medical service calls. This makes it difficult to predict with certainty the level of future combined demand from existing development, approved projects in the pipeline, and proposed development.
Response Times

The most sophisticated and complex approaches to ensuring the concurrent provision of police and fire/rescue services rely on measures of service call response times. Two major approaches are utilized. One involves measuring a response time perimeter surrounding a facility such as a fire station. Prince George’s County has calculated these service envelopes by assuming an average travel speed of 40 mph along the existing network. In Montgomery County, the Fire & Rescue Service assumes that the first 1.7 miles constitutes a six-minute response distance. A significant drawback to this approach is that even if the community is fully covered by these response envelopes, as soon as the units from one station are on a call, a hole in coverage is created.

The second major way that jurisdictions set response time standards is by setting a standard for actual average response times reported over a recent period. An example of this is Carroll County, where the 12-month rolling average response time in an area (the average changes each month for the preceding 12 months) must be below a certain level. Although this means that the average response time does not change dramatically each reporting period, it also means that improvements to the system will take some time to “show up” in the rolling average.

Montgomery County Fire & Rescue Services

Montgomery County Fire and Rescue Services is in the process of updating their Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan. The draft plan was presented to the County Council’s Public Safety Committee on June 13, 2003. Among the many issues addressed by the plan are standards for delivery of services and need for future station sites.

Generally, the goal of the Montgomery County Fire and Rescue Services to achieve six minute response times for both fire and emergency medical services. However, the draft Master Plan recognizes that it is not possible to serve all parts of the County with the same level of service. This is reflected in the draft Master Plan’s definition of acceptable risk:

Acceptable (or Unprotected) Risk - That risk which the County is willing to accept rather than providing the enormous amount of resources and programs to eliminate, or nearly eliminate, all fire/rescue-related risk throughout the county.

The draft Master Plan divides the County into three areas, for which MCFRS differentiates service delivery:

- the rural area (comprising 38 percent of the County’s land area but only 2.6 percent of the County’s population);
- the suburban area (comprising 33.6 percent of the County’s land area and 22.5 percent of its population); and
- the urban area (comprising 28.4 percent of the land area and 74.9 percent of the County’s population).

A map of these areas is included in this report, labeled “Figure 5.7: Fire-Rescue Density Zones for 2015.” Additionally, the 2000 Master Plan includes a table showing how Montgomery County Fire and Rescue Services differentiates service requirements based on the urban, suburban and rural densities shown on the map. This table, labeled “Appendix L,” shows a comparison between the National Fire Protection Association (NFPA) requirements for career fire departments and the Montgomery County Fire & Rescue Service requirements. The NFPA requirements assume that a jurisdiction has only urban densities.

A second map from the draft Master Plan shows the land area of the County that can be reached within MCFRS’s six-minute response time goal, assuming all 31 current stations and the five planned stations. Although much of the area defined as “urban” by MCFRS is within a six-minute response time, there are gaps. A smaller fraction of the “suburban” area is within the six-minute response time, and most of the “rural” area is not.

**Call Volume**

Fire and Rescue Services cautions that call volume is as important as distance in calculating the area that can be served within the six-minute response time. When one company is out on call, it creates a hole in service. As a result, it is desirable to do more than have each station’s six-minute response time envelope meet – rather, it is preferable to have the six-minute envelopes overlap. MCFRS receives over 100,000 calls per year and some stations have very high call volumes. MCFRS notes that the station in Gaithersburg at Montgomery Village Avenue and Russell Avenue receive 31 calls per day, and the new Germantown East station will be the County’s second busiest station when it opens.

MCFRS notes that, in general, stable residential neighborhoods have somewhat stable call volumes, but this can change in neighborhoods where demographics are changing. Socioeconomic factors, including age, income, and education, can affect call volumes. As area, such as meteor stations, become more urban and more densely developed, call volumes can increase.

Traffic and transportation conditions also have an impact on call volume. Traffic congestion affects response times. About 10-12 percent of calls are for vehicle collisions and for pedestrian incidents.

**System at Capacity**

Fire and Rescue Services states that there is “no excess capacity” in the current system. The draft Master Plan points out that 2,500 unit responses a year is the threshold for identifying a unit that has become overextended and that may require the addition of another unit in the same station or nearby station. During calendar year 2004, twenty-eight units exceeded the 2,500 response threshold. Sixteen of these units, mostly EMS units, surpassed 3,000 responses.
Figure 5.7: Fire-Rescue Density Zones for 2015

Legend
- Proposed Fire & Rescue Stations
- Fire & Rescue Stations
- First Due Areas

ZONE
- Rural - 36% Land area, 2.6% Population
- Suburban - 33.6% Land area, 22.5% Population
- Urban - 29.4% Land area, 74.9% Population

[Map with zones labeled with numbers]
### APPENDIX L
### COMPARISON OF NFPA 1710 REQUIREMENTS TO 2003 MCFRS REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>NFPA 1710</th>
<th>MCFRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum staffing of Engine</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Minimum staffing of Truck</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Minimum staffing of BLS Unit</td>
<td>Per state requirement (2 in MD)</td>
<td>2</td>
</tr>
<tr>
<td>Minimum staffing of ALS Unit</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Number of personnel on initial structure fire assignment</td>
<td>15</td>
<td>22 (+ 2 on EMS unit)</td>
</tr>
<tr>
<td>Number of personnel on subsequent alarms</td>
<td>≥3*</td>
<td>7-22**</td>
</tr>
<tr>
<td>Minimum uninterrupted water supply for structure fire</td>
<td>≥400 gpm for 30 min.</td>
<td>≥500 gpm for 30 min.</td>
</tr>
<tr>
<td>Minimum water application rate for structure fire</td>
<td>≥300 gpm</td>
<td>≥500 gpm</td>
</tr>
<tr>
<td>Minimum number of handlines for structure fire</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Minimum water application rate for wildland fire</td>
<td>≥30 gpm</td>
<td>No standard</td>
</tr>
<tr>
<td>Minimum number of handlines for wildland fire (1½ inch, 500 ft.)</td>
<td>2</td>
<td>No standard</td>
</tr>
<tr>
<td>Minimum number of personnel for wildland fire suppression</td>
<td>7</td>
<td>No standard</td>
</tr>
<tr>
<td>Response time (travel time) for 1st due Engine</td>
<td>4 min. to 90% of incds.</td>
<td>4 mins. to 85% of urban population</td>
</tr>
<tr>
<td>Response time (travel time) for initial assignment to structure fire</td>
<td>8 min. to 90% of incds.</td>
<td>8 mins. to 90% of pop.</td>
</tr>
<tr>
<td>Response time (travel time) for BLS Unit to BLS incident</td>
<td>4 min. to 90% of incds.</td>
<td>4 min. to 85% of urban pop.</td>
</tr>
<tr>
<td>Response time (travel time) for ALS Unit to ALS incident</td>
<td>8 min. to 90% of incds.</td>
<td>6 min. to 95% of urban pop.</td>
</tr>
</tbody>
</table>

**Note:** “Response time” in NFPA 1710 equates to travel time only. NFPA also allows a maximum of 1 minute for 911 call processing and dispatch (per NFPA 1221) and 1 minute for turnout time (per NFPA 1710) that must be added to travel time to match the MCFRS definition of response time. MCFRS defines response time as elapsed time between 911 call and arrival on scene. Added to travel time are two additional minutes allowing for 911 processing, dispatch, and turnout time. In order to compare equivalent times, **only travel time is presented above for both NFPA 1710 and MCFRS**. NFPA 1710 assumes that a municipality has only urban density.

* Two for upgrading IRIC to a full RIC, plus one safety officer

** MCFRS requirement varies depending on type of dispatch: Safety, Task Force, or 2nd alarm
According to the draft Master Plan, the County Council approved the need for four new/additional fire-rescue stations in Montgomery County in 2000. The new stations will be the first additional stations built in the County since Germantown Station 29 in 1981. The four new stations will include the following:

- Germantown West, at the intersection of Routes 117 and 118, projected to open in FY07;
- Germantown East, within close proximity of Route 355 and Boland Farm Road, projected to open in FY08;
- Clarksburg, within the general vicinity of Routes 355 and 121, projected to open in FY09; and
- Travilah, near the intersection of Darnestown Road and Travilah Road (on the Public Safety Training Academy site), projected to open in FY09.

The first three stations were included in the FY03-08 Capital Improvements Program and the Travilah station was included in the FY05-10 CIP.

The draft Master Plan recommends a fifth new/additional station for the Shady Grove area, in the vicinity of Route 355 and Shady Grove Road. According to the draft Master Plan:

*The station would cover a considerable gap in MCFRS’ 6-minute response time coverage located between the County’s two busiest stations – Stations 8 and 3. The Shady Grove station’s first-due area would include King Farm, Shady Grove Metro Station, future high-density development surrounding the Metro station, the southern part of the Corridor Cities Transitway, the Walnut Hills area, portions of Derwood, and the commercial area along Shady Grove Road between Route 355 and I-270. Interstate 370 and portions of I-270 and the future Inter County Connector would be within this station’s first-due area, as well...*

*...Between 2005 and 2015, the MCFRS Planning and Research Office will be conducting additional phases of the Station Location and Resource Allocation Study to determine whether additional fire-rescue stations will be needed and where. Should the need for additional stations be identified, this Master Plan will be amended, as appropriate, to include the stations.*

**Clarksburg Station**

The Clarksburg station was the focus of a County Council Public Safety Committee discussion on June 13, 2005. The committee’s packet states that:

*The Montgomery County Department of Fire and Rescue Services Strategic Plan for the Implementation of Fire, Rescue, EMS and Community Risk Reduction Master Plan Priorities noted that development in Clarksburg is occurring faster than was anticipated, and recommended moving up completion of the new Clarksburg fire station from FY10 to FY08, or establishing an interim Clarksburg fire and rescue station if the permanent station cannot be accelerated.*
Last fiscal year, the Council agreed to accelerate the project, but could accelerate it by only one year because of potential problems with the preferred site, including a declaration by the Army Corps or Engineers and Md. Department of the Environment that an ‘intermittent stream’ exists.” More recently (July 2005), MCFRS reports that the preferred site may work after all.

Alternative sites are less desirable, from Fire and Rescue Services’ perspective, because those sites are located on the periphery of Clarksburg, which means that less of Clarksburg will be accessible within the desired six-minute time frame.

In addition, the Montgomery County Council recently approved funding for an interim fire station in the Clarksburg area which could begin operating early this fall.

**Clarksburg**

The Clarksburg Master Plan was approved in 1992. The Plan’s discussion of fire department facilities is located on page 167 and states that the County should:

- Consider locating a station in Clarksburg, close to the Town Center (including the possibility of relocating station #9 from Hyattstown).
- Utilize, if feasible, the site owned by the Hyattstown V.F.D.
- Maximize access to the Study Area’s road network.

Beginning approximately in the year 2000, Fire and Rescue Services began working more closely with Park and Planning in order to reserve land for stations. The Potomac Plan of 2001 was the first to jointly identify sites for future stations.

A significant amount of planned development in Clarksburg has been approved or is currently pending. Park and Planning’s July 2003 Residential Capacity Estimate shows Clarksburg’s residential capacity at 6,580 single-family detached units, 3,295 townhouses, and 1,971 multi-family units, which is a total of 11,846 units.

Of these 11,846 units, approximately 8,900 are already in the pipeline of approved development. Approximately 800-1,000 units are pending before the Planning Board.

Since the July 2003 residential capacity estimate, 875 housing units have been completed in Clarksburg (as of March 2005).

On the non-residential side, there is just under 2.5 million square feet of approved development in Clarksburg’s pipeline. Park and Planning staff estimate that there is another 900,000 square feet pending before the Planning Board.
Montgomery County Department of Police

Among the findings and observations of the Planning Board’s review of police facilities and operations are:

- The Montgomery County Department of Police assigns officers using six districts, but essentially there are 5.5 stations. The station in District 5 is on leased land and the Department reports that it is somewhat inadequate. A full station is truly a public building. It handles fingerprinting, public records requests, parking fine payments, etc. It is also distinguished from a satellite facility in its having a holding tank.

  o The Department of Police would like opportunities to collocate facilities in newly constructed county buildings. Currently exploring opportunities to collocate a station (without holding cell) with Montgomery County Fire and Rescue in Shady Grove

  o The Department of Police does not have a master plan showing the need for new facilities. The Department would justify a request for a new facility based on the number of officers projected by geography, and this would be based on density of resident population. The Department believes it will need a 7th district soon.

- Response Times and Staffing

  o The Department of Police’s current response time goal is seven minutes countywide for all types of calls. Although response times are reported Countywide, the Department indicated that response times in outlying areas, such as District 5, are greater.

  o Staffing is the critical “adequacy” issue, rather than stations. Officers are highly mobile and may not visit the station often during a shift.
The Department of Police currently has a ratio of 1.1 officers per 1,000 population, as calculated for all uniformed personnel within the county boundaries, including city and transit police officers. Would like to have 2.0. Thinks this is more in line with local, regional, and national averages for fairly urban jurisdictions such as this.

Allocations of staff: Officers do not rotate among the districts, and each district is operates as a contained unit. High call volume in one district would not result in officer responses from another district. Instead, officers from that district might be held over for longer shifts and/or other officers called in early or from off-duty days. Each district has 3 Sectors. Officers are deployed within these sectors. For the day shift, there may be 4-8 officers operating as a team, but often the night shift in a given sector will have just one officer on duty.

Districts 3, 4, and 6 deploy officers by geography / density. That is, officers are concentrated in areas with greater concentrations of people and calls. Districts 1, 2, and 5 will begin doing so in August.

The Department of Police works cooperatively with other police, through memorandums of understanding with other departments, such as Cities of Rockville and Gaithersburg. The relationships may vary according to jurisdiction; for example, the City of Takoma Park is 100% responsible for their area.

Calls are categorized in three levels. 1 – must respond immediately, life threatening situation, 2 – the incident is occurring presently, but won’t use sirens in response, and 3 – calls that are important but not urgent. The nature of calls is different in different locations. Generally speaking, there is a higher percentage of higher priority calls in Silver Spring and more lifestyle issue-related calls in Bethesda (graffiti, nuisance crimes).

The Park and Planning’s forecast data could help the Department of Police in planning for staffing and deployment.

Planning/Land Use issues: Department of Police staff discussed some of the planning and land use related issues that affect

- Lighting is changing. Newer developments tend to have lower street lights that leave more peripheral areas unlit and therefore pose safety challenges.
- Line of sight issues affect traffic safety. Information about traffic safety issues is used to solve problems: collision data is collected on state forms, which are then reviewed by the Operations Division. The police then work with the Department of Public Works and Transportation to address deficiencies.
- CPTED – Crime Prevention Through Environmental Design. As was reported by the Department of Fire and Rescue, the Department of Police is interested in actions that help prevent problems. This includes land use planning and development design that minimizes opportunities for crime.
Planning Board Conclusions

The Planning Board’s review of the draft Fire, Rescue, Emergency Medical Services, and Community Risk Reduction Master Plan and the discussions with the staff of Montgomery County Fire and Rescue Services and the Department of Police, suggest that:

- the primary linkage between land use planning and public safety is the identification and securing of suitable sites for fire/rescue stations;
- that additional fire/rescue and police station sites continue to be an issue, now and for the foreseeable future;
- that there has been some collaboration between public safety agencies (Fire and Rescue Services and the Department of Police) and the Department of Park and Planning, and this collaboration has improved since the Clarksburg Master Plan was approved;
- that there are potential benefits of a closer working relationship between the public safety and planning departments, particularly in the identification of suitable sites but also to reduce community risks in master plans and development projects.

Therefore, the Planning Board is directing its staff to work with Montgomery County public safety agencies to develop specific goals for improve collaboration and identify the best ways to achieve them. Issues will include how should public safety issues be addressed in master plans and how should the Department of Police’s and MCFRS’s review of proposed development projects be managed.

(Footnotes)

1 To aid in the reading of the table, the following acronyms are defined: BLS - Basic Life Support, ALS - Advanced Life Support, IRIC - Initial Rapid Intervention Crew, RIC - Rapid Intervention Crew.