

OVERVIEW FOR THE APFO REFORM AND IMPACT TAX TEAMS

Growth management seeks to balance the supply and demand for public services. The balancing relies on calculations that relate projected growth (forecasts) to anticipated public facilities (CIP) through the Growth policy. Because an adequate public facilities ordinance focuses on the demand for public facilities generated by new development, APFOs are often instituted when a jurisdiction is in a “green fields” phase of development. This phase is characterized by a rapid pace of growth and is a period when much of the change in demand for new facilities can be attributed to growth within that jurisdiction. Montgomery County is nearing the end of its *greenfield* phase, which means that other factors are working along with “growth” to increase demand on public facilities. These include increased demand from residents and workers in existing development, demand on local facilities caused by regional growth, and others.

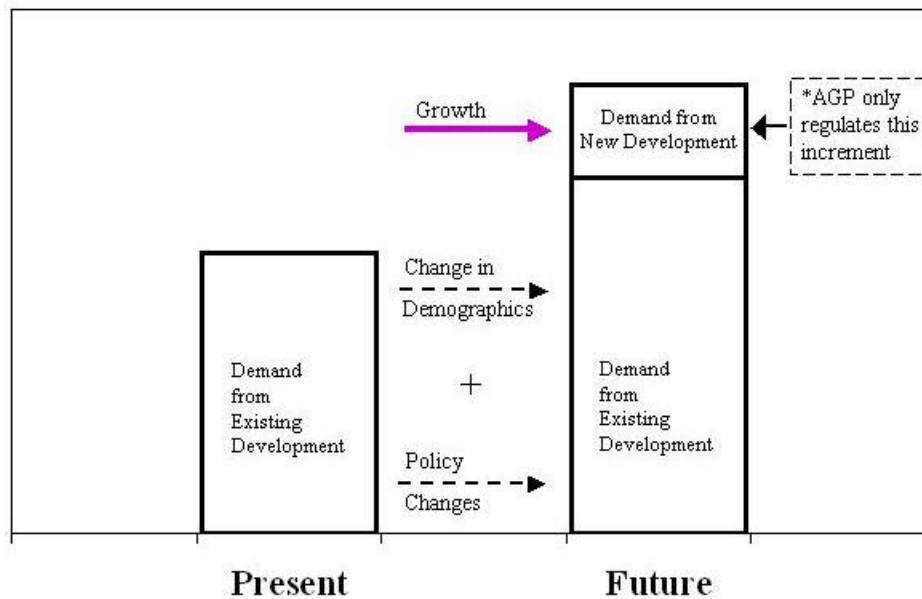
It is also evident that the baseline of public services and facilities in Montgomery County, as compared to other jurisdictions, is high. There is an expectation that the quality of life in Montgomery County -- well-regarded schools, efficient and quick fire and police response time, excellent library services, thousands of acres of parkland -- shouldn't diminish.

Future growth in Montgomery County will be very different from past growth. In the years of booming growth, especially the 1950's, 1960's and 1980's Montgomery County's population increased by more than 175,000 each decade. Forecasts for the two decades after 2010 are for growth rates of about 7.5% or 77,000 per decade. Most of the new housing units in the County will be multi-family units (which tend to have less impact on roads and schools) and many of these units will be close to Metro. Much of the development will be in-fill and redevelopment as the greenfield development diminishes. This future growth may have very different school and transportation impacts

The birth rate, after having declined slightly, is on the rise again, but the number of children in the public schools is anticipated to plateau at about 140,000. But current demographic studies reveal that the composition of the student population is very different from that served 10 years ago. English (ESOL) needs are much greater as are subsidized lunches. The Success for Every Student policy has reduced classroom size as has all day kindergarten and both policies have increased the need for more classrooms all over the county. These capacity needs are not the result of growth; the need is the result of changes in demographics and policies.

As the County reaches the point when development activity begins to focus on redevelopment and not new development, the need may quickly arise for improvements to existing schools and roads, rather than new schools and roads. Moreover, there are equally worthy endeavors that support development — sidewalks, recreation facilities, affordable housing — that cannot easily be counted as “new capacity.” It may be reasonable to consider ways to have development support a portion of those “quality of life” features. It is not clear that the current APFO or impact fee structure allows for such support.

Demand for Public Facilities



The above diagram illustrates the *demand* side of the APFO equation. At the individual level, there are at least three major factors that influence the demand for a public good: relative cost; convenience of use; and quality of the good. With regard to transportation demand, for example, one can identify the specific factors that result in overall consumer demand:

Demand for transportation is affected by the **cost of driving**, which is influenced by some things that are not under local control (e.g., the cost of gasoline) but there are certain aspects that are under local public control. Typically, once someone commits to purchasing, maintaining and insuring a vehicle, additional costs are minor in comparison. The use of roadways is usually a free good unless tolls are charged (a direct cost) although the time lost to congestion is also an indirect cost. Parking—which tends to attract cars—is often perceived as a free good unless drivers must pay to park. Consumers tend to consider only the *immediate* costs of driving (gasoline, tools, and parking costs) when comparing it to the alternatives of taking transit or walking.

Convenience — inconvenience, to be precise – is a major reason that road congestion is such an issue. Of course, “convenience” encompasses real impacts in terms of lost time and other costs. Increases in the supply of transportation facilities will be met by increases in demand. Although some of this increase will be from sources that the

County cannot control (such as growth outside the County), some of the increase can be limited by regulating new development and by addressing variables that influence the convenience of driving, including the availability of parking and the relative convenience of transit as an alternative to driving.

The **quality** of some facilities can affect demand, particularly for the more affluent members of our society. If local public school quality is only fair or poor, wealthier parents may chose alternatives, such a private schools or changing home location. Similarly, for those who can afford it, country clubs can also be an alternative to public golf courses, swimming pools and parks. For most facilities, however, there isn't a privately provided alternative that is available to most people. For example, all drivers must use the same roads. Drivers may choose one route over another, however, based upon cost and congestion levels.

The assessment above underlines the point that a goal of the transportation adequate public facilities ordinance – managing the growth in demand for roadway facilities – is also addressed by managing the key factors that influence overall consumer demand for transportation facilities, such as cost and convenience.

APFO Reform Team Interim Report

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Problem Statement

To what extent can we use the growth policy to ensure that every service area meets County policy goals? With respect to each facility (schools, roads, fire and rescue, water and sewer), the APFO Reform Team is asking:

- Is the growth policy, as it is now structured, effective?
- If the current growth policy isn't effective, how can it be modified to be effective?
- Would other tools be more reasonable and effective?

We have organized this analysis according to type of facility

- Schools
- Transportation, including local impacts and the larger, area-wide network area
- Water and sewerage
- Police
- Fire and Rescue Service
- Other facilities

For each facility, we will review the current process for evaluating adequacy, the key factors of change in the demand side, and what we will be looking at in the coming weeks as a team.

SCHOOLS

Current Procedures

- The growth policy's school test is reviewed annual prior to adoption of the Capital Improvement Program (CIP) and adopted by Planning Board after the CIP is adopted. The methodology is approved by the County Council in the growth policy resolution. Test uses a definition of capacity that is a standard multiplier; for example, all classrooms for grades 1-5 have a capacity of 25 students and all classrooms for grades 6-12 have a capacity of 22.5 students.
- The test compares capacity available by the 5th year of the CIP compared to enrollment projections for the same year. Forecasts of enrollment and capacity

are prepared by Montgomery County Public Schools' staff and reviewed by the Montgomery County Planning Board and staff before acceptance.

- Enrollment reached a plateau in 2002 and went down in 2006. Current forecasts as of January 29, 2007, indicate enrollment is still tending lower but will go up again because 2006 births have increased over 2005. Forecasters use birth rates to set the kindergarten cohort; a "cohort survivorship model" is used to forecast enrollment in higher grades.
- The forecast is also modified by in/out migration and factors affecting specific schools. Proposed development is tracked closely and students from new development are added to the forecast when it appears the development will come online during the test period (the next five years). The forecasts are checked twice annually, September and January, by comparing them to actual enrollment figures.

Sources of Change in Demand for School Capacity

- Factors Considered by MCPS: Enrollment by grade, birth rate, Migration, propensity to enroll in private schools, housing costs.
- Evidence of Change
 - Total enrollment declined; net migration is variable; net immigration (foreign born students) is significant but declined
 - Percentage enrollment in public schools (rather than private schools) fluctuated between 81% and 82% for last 15 years, increased from 81.4% to 82.6% in 2005-2006.
 - Costs of housing
 - Median sales of single-family units (attached and detached) rose dramatically between 2000 and 2005.
 - Rental housing increasing between 1999- 2006.
 - Composition of student body (Focus, FARM)
 - Enrollment in non-focus schools up; focus schools down: became evident in 2003.
 - Ethnic composition very different from 1970; shift began in 1980s, white enrollment down, increase in all others.
 - FARMS (Free and Reduced Price Meals) enrollment rising.
 - Focus school enrollment for ethnic groups other than white increasing.

Procedures and Issues to be Investigated Further

- What are the expectations for the school test, and does the current school test meet those expectations? Under what circumstances is a moratorium on development approvals a useful means to safeguard school adequacy?
- If the current school test isn't effective, can it be modified to be effective?
- Would other tools be more reasonable and effective?
- Are there aspects of the methodology that should be changed?

- How classroom capacity is calculated, including what constitutes a “classroom” and whether to use *growth policy capacity* (standard multiplier) or MCPS *program capacity* (determined by use)
- Policies that affect overstate/understate the need for classroom capacity.
- The ability to borrow capacity from adjacent clusters at the high school level, and the use of an adequacy standard above 100% capacity for elementary /middle schools.
- Gaithersburg and Rockville: These jurisdictions have adopted APFOs with different school test adequacy standards since the County’s growth policy was last modified.
- Accuracy of forecasts: All forecasts are less accurate at end states; inflection points (where a trend changes direction) are especially challenging to forecast. The forecast in 2003 for 2007 enrollment was 145,000; actual 2007 enrollment was under 140,000.
- Student generation rates: The Census Update Survey shows that fewer students are generated from non single-family detached units. School demographers have evidence that neo-traditional/transit oriented development generates even fewer students. These student generation rate assumptions and the statistics underlying them will be reviewed, along with a review of how the changing nature of planned housing will affect student enrollment growth.

TRANSPORTATION

From 1986 to 2003, the growth policy contained two tests for transportation adequacy: Policy Area Transportation Review and Local Area Transportation Review. Policy Area Transportation Review was designed to take into account that transportation is a large network and development approved in one part of the County could have impacts “downstream” in other parts of the County. It also took into account regionally-generated traffic that affected County roads. Local Area Transportation Review was designed to ensure that, even if development’s Countywide or regional impact was acceptable, development’s effect on nearby intersections is also acceptable.

In 2003, Policy Area Transportation Review was dropped from the growth policy, and Local Area Transportation Review strengthened by making the standards a bit more stringent and by making it apply to smaller projects.

Local Area Transportation Review

The Local Area Transportation Review (LATR) test looks at the individual intersections affected by a new development project. The process is established by the general guidance provided in the growth policy resolution. To complement the growth policy, the Planning Board has adopted Local Area Transportation Review Guidelines, which set up the technical process for carrying out the growth policy’s LATR provisions. The latest version of the LATR Guidelines was adopted in June 2004, reflecting the Council’s changes to the growth policy made in October 2003. The Planning Department

staff reviews about traffic studies submitted by developers to meet LATR requirements. All must be compliant with the LATR Guidelines to be found acceptable.

LATR is the test that most closely measures the traffic on the road in the near-term. This traffic is composed of current traffic, traffic from already-approved but not yet built development (background), and the traffic generated by the specific development project under review. It uses trip generation rates for the background traffic and the proposed development project. For most types of development, trip generation rates are based on studies of existing development in Montgomery County. The morning and evening peak hours are considered, although other times can be required to be analyzed if some very special circumstances warrant it. The intersection analysis procedure is known as Critical Lane Volume (CLV) and it has been found repeatedly to be more appropriate than other procedures for the review of future development in Montgomery County.

In their update to the growth policy in October 2003, the County Council eliminated Policy Area Transportation Review and tightened the LATR procedures. The Local Area Transportation Review test was modified to reduce the acceptable levels of intersection congestion and lower the trip threshold for requiring a full LATR traffic analysis. The 2003 changes also gave the Planning Board the ability to a) require Trip Mitigation in lieu of intersection modifications and b) require that intersections farther away from the site be taken into consideration, among other changes.

With the elimination of Policy Area Transportation Review, the Council directed the Planning Board to prepare an annual report documenting traffic congestion trends in the County. Called the Highway Mobility Report, the most recent edition of this study was prepared in the summer of 2006.

Policy Area Transportation Review

From 1986 through 2003, the transportation facilities adequacy test was administered on a policy area and local area basis. The policy area test was called Policy Area Transportation Review (PATR).

Under PATR, the County was divided into 27 policy areas plus the cities of Rockville and Gaithersburg. For each policy area, the process calculated the maximum amount of development capacity (expressed in jobs and housing units) that could be adequately supported by the existing and programmed (first five years of the CIP and CTP) transportation network. This maximum amount of development capacity was called a policy area's staging ceiling and was approved by the Planning Board and adopted by the County Council on an annual basis.

If the Planning Board approved additional development in an area where the staging ceiling had not yet been reached that area was said to have positive net remaining capacity. If more development was approved in an area than could be supported by a

policy area's transportation network that area was said to have negative net remaining capacity, and would be in moratorium for new subdivision approvals.

In this context, the pipeline of approved development was the list of development projects that had passed the PATR and LATR tests, but had not yet been constructed. Once a project was approved, it retained the "rights" to that capacity for between 5 and 12 years, thus potentially putting the policy area in a moratorium and preventing projects from being approved.

New approvals could occur in policy areas that were otherwise in moratorium through several procedures (i.e., exceptions). These were:

1. ***The Special Ceiling Allocation for Affordable Housing:*** permitted a limited amount of housing to be approved if the project contained a significant affordable housing component.
2. ***DeMinimus Development:*** projects generating 5 or fewer weekday peak-hour automobile trips could be approved in moratorium areas.
3. ***Developer Participation:*** permitted projects to be approved if the developer provided the needed transportation facilities or otherwise mitigated the trips from his/her project.
4. ***Development Districts:*** landowners could form development districts to finance the transportation improvements needed to pass growth policy tests.
5. ***Alternative Review Procedure for Metro Station Policy Areas:*** allowed development in the compact areas within close proximity to Metro stations to meet policy area (staging ceiling) and local area (intersection) transportation test obligations by mitigating 50 percent of their trips, making a payment toward transportation improvements, and participating in an area's transportation management organization.

The staging ceiling calculation was dependent on a complex travel demand model that simulated auto and transit travel on the County's transportation network based on existing and approved land uses. The model took into account not only traffic generated by land uses within the County but also regional traffic that uses County roadways.

In order to calculate how much development was acceptable, the PATR process determined the standard for acceptable auto congestion in each policy area. That is, what was the maximum level of congestion that could be tolerated before a moratorium on new development should be imposed?

The PATR process reflected a County policy to concentrate development where transit service was highest and to limit development where transit service was lowest. In part, the rationale was that higher levels of congestion are tolerable when there are high-

quality alternatives to automobile travel. In order to allow concentrations of development in certain areas, normally where transit service was excellent, the PATR process allowed higher levels of congestion in those areas than it allowed elsewhere. For as long as the PATR test was in place, there was some procedure for determining a policy area's auto congestion standard based upon the level of transit service in the area.

Beginning with the *FY 1994 Annual Growth policy*, the PATR process used an equation, called "Total Transportation Level of Service" or TTLOS, to determine how much auto congestion should be permitted based on transit service and usage. The two main inputs were transit usage, the source of which was the Census or Census Update Survey, and a transit service measure called the Regional Transit Accessibility (RTA) Index. The RTA Index was a comprehensive measure of how well jobs and housing units are connected by transit.

For the *2001-2003 Growth Policy "Policy Element,"* which was reviewed by the Planning Board and County Council during 2001, staff was initially directed to update many of inputs used to set staging ceilings. These included using a revalidated travel demand model (using updated traffic counts), and the two components of the TTLOS: transit usage and the RTA Index.

The County Council was not satisfied with the staging ceilings that resulted from the updated statistics, and the Planning Board agreed. A particular source of dissatisfaction was the RTA Index, which yielded some results that appeared contrary to common experience. On the whole, it was agreed that the method for relating auto congestion standards to transit level of service needed to be replaced. This was a main impetus for the 2003 "Top-to-Bottom" Review of the growth policy. A major outcome of which was the elimination of PATR on July 1, 2004.

Prior to the use of the TTLOS equation, the PATR process used a "group system" to translate transit service into auto congestion standards. The group system was eventually abandoned because it was felt it was not sufficiently sensitive to improvements in the transit network. One of the options for Policy Area Transportation Review that was investigated in 2003 was a return to the group system, albeit a more sophisticated version.

Sources of Change in Demand for Transportation Capacity

Traffic on the roadway network is due to a variety of changing conditions. Some of these can be more easily accounted for in LATR than others. Some larger-scale items such as changing demographics or economic conditions that results in more travel, can best be looked at in a policy area review using a computer forecasting model. Others, primarily related to the growth due to new development, can be incorporated into LATR. One area of possible revisions to the current process is to account for growth in through traffic on the larger roads, the arterials, where the influence of non-local trips is more uniform over time than on the more local system. How to accomplish this without double-counting the trips from nearby unbuilt but approved development has been a major barrier to adding this analysis to the LATR process.

Traffic congestion is essentially the manifestation of a mobility problem, which is that too many people want to move at the same time each day. Efficient operation of the economy and our school systems require that people go to work, go to school, and run errands during about the same hours of the day so they can interact with each other. We cannot alter that basic requirement without crippling our economy and society. This problem marks every major metropolitan area in the world. Montgomery County is typical in this regard. The amount of regional traffic on the roadway network can be affected by several factors, for example:

- ***Shifts in economic activity*** - Increased traffic congestion can be a sign of strong regional prosperity, due to more commuter trips and more shopping and other discretionary trips. Conversely, reduced traffic congestion can signal an economic downturn as these trips are not made.
- ***Population growth*** - More people mean more vehicles. But the total amount of vehicle travel has grown much faster than population, in part because of declining real gas prices (corrected for inflation) and increased vehicle fuel efficiency (i.e., more miles per gallon) has caused the real cost of each mile driven to fall over time. Affluence has also allowed for more vehicles per household now than in past times, resulting in more trip making by vehicles.
- ***Regional Land Use Patterns*** - Many areas outside the Urban Ring or the freeway corridors have densities that are too low for public transit to be cost effective. Hence the residents of these areas are compelled to rely on private vehicles for almost all of their travel, including trips during peak hours.

Procedures and Issues to Investigate Further

The current LATR process is a model example of what is nationally known as site impact analysis, and is consistent with the best practices in recent update to the Institute of Transportation Engineering Recommended Practice on this topic. Nevertheless, it is desirable to look closely at the transportation tests to see if improvements can be made. Topics considered will include:

- Means of measuring traffic congestion, and to the extent possible, current and projected Montgomery County congestion levels according to those measurement methods.
- Reinstating PATR or other test that considers area-wide traffic impacts.
- Possible changes to LATR including:
 - Using the Highway Capacity Manual delay-based procedures
 - Changing the CLV standards in some locations.
- Including a measure of growth in through traffic.
- Better accounting for large Federal facilities that will effect local intersections
- Cordon analysis.
- Transit network capacity.

- General recommendations for addition study or action.

Staff will review previous Policy Area Transportation Review (PATR) alternatives considered as part of the 2003 growth policy debate. Based on this review, selected alternatives will be more fully developed and the results reported using various geographies of the County (i.e., selected aggregations of existing policy areas). Examples of the alternatives to be reviewed include, but may not be limited to:

- A “simple staging” option which allocates development capacity based on the amount of remaining planned but unbuilt development and planned but unbuilt transportation infrastructure; and
- A more flexible “group” system option which allocates development capacity based on area-wide levels of auto congestion and area-wide levels of transit service availability. This option would require the use of a travel demand model to account for traffic external to the County and “upstream/downstream” traffic effects.

WATER AND SEWERAGE SYSTEMS

The provision of water and sewer service in Montgomery County is comprehensively planned and provided. Policy guidance and comprehensive planning information is given by Park and Planning staff to the County Executive for the Department of Environmental Protection (DEP) preparation of triennial ten year water and sewer plans. Geographic service area maps identify overall priority for service expansions. These maps are reviewed six times per calendar year through a category change process reviewed by the Planning Board. Service area priorities are also reviewed by planning staff and the Planning Board during preparation of area master plans. County Council approval of the water and sewer plan guides the WSSC in scheduling and construction of the systems. Major water and sewer facilities are detailed in annual Washington Suburban Sanitary Commission CIP programs that are reviewed by the Planning Board and approved by the County Council. All funding is obtained and administered by the WSSC through a mix of federal, state, developer, applicant and customer charges for the construction, operation and maintenance of both networks.

At the time of development review, the WSSC evaluates project submissions as a member of the Development Review Committee and approves the service extensions or not.

Current Procedures

In dealing with water and sewerage systems, one encounters the original networks that were used to manage growth on which subsequent facilities were added over time. Original *State Article 43*, §387 required the adoption of county comprehensive plans for the provision of both adequate water supply systems and sewerage systems throughout the county and state, including all towns, municipal corporations, and sanitary districts therein. *Public health* is the basis for this legislation. Its purpose was to establish the

foundation for orderly extension of networks throughout the state and also to plan and schedule a time period for their construction. Subsequent changes created the *environmental Article* representing material repealed or transferred from other articles of the Annotated Code of Maryland. The current article was enacted by Chapter 240 of Acts 1982 and chapter 306 of Acts 1987 and consists of sixteen titles. Title 9 deals with *Water, Ice, and Sanitary Facilities*. Subtitle 5 deals with *County Water and Sewerage Plans*. The first such plan was due 1 January 1970 and annually thereafter. Subsequent amendments require triennial updates. The latest version is currently under preparation by the Montgomery County DEP.

Based first on the Health Article and later the Environment Article, all of Montgomery County has been placed within one of six category areas for both water and sewerage service. The designated water and sewer service categories determine a property's eligibility to receive community water and/or sewer service and indicates the time frame for the County Government and Washington Suburban Sanitary Commission to program utility extensions to serve properties. The test for adequacy is identified in the subdivision regulations Chapter 50, Sec. 35, Montgomery County Code, as properties existing in either category 1, 2 or 3. No new subdivision dependent on community water and/or sewerage systems may be approved unless it is, at the time of Planning Board action, in one of these three categories. This in effect means that the water and/or sewerage system exists, either abutting the new property to be subdivided, or generally, service will be provided within 2 years. If a more restrictive test were desired, approvals could be limited to areas in category 1 or 1 and 2.

Sources of Change in Demand for Water and Sewer Capacity

Among the sources of change in demand for water and sewer capacity are new development and increased demand from existing users. Other factors that affect the ability of the water and sewer network to handle demand, or place additional requirements on the service provider, are:

- Deterioration of infrastructure, requiring replacement or refurbishment.
- Changes in Federal standards.
- Improved technology with greater efficiency.

Procedures and Issues to be Investigated Further

Applicants desiring water and/or sewer service provide necessary information to the WSSC. If approved by the Commission, the applicant is advised of the conditions of approval that must be met prior to construction. An authorization is valid as long as a preliminary plan is valid, or indefinitely if the plat has been recorded. WSSC Capital Improvements Program are prepared every year. Program changes would take the full cooperation of the WSSC and County DEP as well as the Planning Department. At the current time, the draft 2006-2015 *Comprehensive Water Supply and Sewerage Systems Plan* is in preparation by the County Department of Environmental Protection. If the growth policy study results in changes to the water and sewer adequacy test, there should

still be time to include them in the final plan. The draft plan will be submitted for planning staff review and Planning Board action later in 2007.

The general course of business over the previous decade has not highlighted problems with the water and sewer adequacy test in the growth policy. The emphasis in the balance of this area of the growth policy study will be to ensure that the current procedures are working appropriately. This will include answering the following questions:

- Do the current procedures allow a development project to be approved only when there is sufficient capacity to serve that project?
- Are the other sources of increased demand for capacity properly taken into account?

FIRE AND RESCUE SERVICES (FRS)

Current Procedures

- There is currently no formal test of adequacy. Preliminary plans before the Planning Board must have a letter from Fire and Rescue stating that the current facilities are adequate for the project. No plans to date have been rejected due to inadequate facilities.
- Much of Montgomery County is not accessible within the Fire and Rescue Services' six-minute response time goal.
- According to the *Final Draft 2005-2007 Growth Policy*, Fire and Rescue Services indicated that Montgomery County needs at least 12 fire/rescue stations in addition to the current 31 stations. Some of these are already programmed in the CIP. 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 as many as 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 that are still developing, 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.

Sources of Change in Demand for Fire and Rescue Services

- Shifting neighborhood demographics. 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.
- Changes in intensity and types of uses in existing nonresidential buildings can alter service demands on both police and fire/rescue departments.
- Development Trends: more high-rise development can require more ladder trucks

Procedures and Issues to be Investigated Further

- If preliminary plans are not being denied when they are outside of the 6-minute response time area (the FRS goal), is the adequacy of this type of service really being used to regulate growth? In Prince Georges County a response time test was implemented; initially, no subdivision was able to meet the test, and it was eventually eliminated.
- Since the FRS feels they can provide adequate service in most cases, where doesn't FRS feel that service is adequate and why?
- What public or private actions can be taken when the test shows inadequate facilities, other than building a new fire station which takes many years to accomplish?
- Is there a better way of measuring adequacy of service? (i.e., better than the established standard of adequacy at 6 minutes)? In Montgomery County, the Fire & Rescue Service assumes that the first 1.7 miles constitutes a six-minute response distance.
- Should we be measuring something different than the response time perimeter surrounding a facility such as a fire station? For example, should the measure of adequacy factor in both travel distances and call volumes?
 - Should a standard be set based on actual average response times reported over a recent period?
 - What if call volumes are up and there is a gap in service? 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 gap in service.
 - Is it desirable to do more than have each station's six-minute response time envelope overlap? MCFRS receives over 100,000 calls per year and some stations have very high call volumes.
 - 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 areas, such as metro stations, become more urban and more densely developed, call volumes can increase. Traffic and transportation conditions also have an impact on response times.
- Should we deny new development that would create a hardship on our fire and rescue services?
- Are certain projects more hazardous than others (i.e., bio-safety labs, residential, etc.)? Are there policies that handle laboratories or buildings with additional requirements?

POLICE SERVICES

Current Procedures

- As in the case of Fire and Rescue Services, there is currently no formal test of adequacy for police services. Preliminary plans before the Planning Board must have a letter from the Department of Police stating that the current facilities are adequate for the project. No plans to date have been rejected due to inadequate facilities.
- 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 are greater. Staffing is the critical "adequacy" issue, rather than stations. Officers are highly mobile and may not visit the station often during a shift.

Sources of Change in Demand for Police Services

- Population shifts, changing demographics, or both, affect staffing levels needed, including number and distribution.
- Neighborhood stability or instability affects distribution. 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 sub-areas difficult, if not impossible, to measure.
- National security level changes affect staffing levels.
- Newer developments outside the CBDs tend to have less street lighting and this can pose safety challenges.
- Changes to the physical environment affect public safety.

Procedures and Issues to be Investigated Further

- Since there is no adequacy test for police, should there be?
- What tools would be effective at measuring police adequacy?
- How can the Police participate most effectively in the regulatory process?

PARK FACILITIES

Current Procedures

The demand and supply for many park and recreational facilities is calculated as follows:

Demand

Every six years the Department of Parks' planning staff prepares the PROS (now Land Preservation, Parks and Recreation Plan or LPRP) Plan for Planning Board final approval as required by the State in order to obtain Program Open Space funds. The

calculation for each type of facility utilizes one of three different geographic units (countywide, community-based planning area, and master plan area); the geographic unit depends upon the type of facility being evaluated. There is currently no methodology for determining demand for smaller geographies.

Needs for a total of 19 facilities are estimated by the 2005 Plan to the year 2020. The methodology for most facilities is determined by using user estimates from surveys, permit data, and population forecasts developed by the Research and Technology Center. This yields data reflecting the total demand for these public park and recreation facilities. Existing and programmed facilities are deducted in order to determine the remaining need. The formula does not apply *per capita* needs as is done in some jurisdictions except for Dog Exercise Areas for which Montgomery County had insufficient user data to develop a participation rate. Ballfield facilities are categorized by geometric shape and size (e.g., small diamonds, large rectangles) in order to build in flexibility for use by more than one sport.

Supply

Facilities at both parks and schools help meet needs for recreation facilities. School facilities are counted to the degree that they are available to the general public (aside from school use). As use of existing private facilities does not count in the participation rates, privately provided facilities that are obtained through the application of the recreation guidelines to new projects are not counted to meet public facility needs unless they will be on parkland and available to the general public. It is assumed that the private facilities provide neighborhood type facilities for the residents of the new development in combination with more regional facilities provided by the public sector. Public parks shown on approved master plans are required from developers, and in large subdivisions, they also develop the park. There are frequent park dedications required for protection of natural resources and trail connections.

Sources of Change in the Demand for Park and Recreation Facilities

- Changing participation rates
- Changing demographics (aging of population, increased diversity)
- Emerging sports (e.g., BMX biking, dog parks)
- Neighborhood life cycles
- Changing philosophy regarding the role of the public sector as a provider
- Policy changes
- Environmental policies
- Fiscal concerns leading to deferred maintenance
- Policy regarding the portion of regional parks that can be developed (one-third)

Procedures and Issues to Investigate Further

If a test of adequacy of park facilities were to be added to the growth policy, doing so would likely involve detailed exploration of how demand and supply is

measured. The current methods can be wholly appropriate for park planning but unsuitable for applying to the regulation of subdivision approvals. Factors that might need to be examined are:

- The reliability of the surveys used to develop facility participation rates; also whether the survey can be sensitive to shifts in demands when it only looks at current users, not those who are not being served
- The validity of long range population forecasts (compared to adequacy tests done at subdivision)
- The formula makes no distinctions based on important criteria:
 - Large areas vs. smaller areas
 - Urban facility demands vs. suburban vs. rural
 - More vs. less diverse areas
- The scope of the LPPRP covers a wide range of issues that may not be directly related to the adequacy of local parks for daily use (e.g., agricultural land preservation, natural resources preservation, and cultural resources preservation)
- LPPRP does not address the need to recycle existing facilities as needs change in terms of specific proposals.
- There has been a shift from meeting demand through the provision of neighborhood walk-to parks that must be publicly maintained, in favor facilities that are provided and maintained privately. Is this appropriate?
- There are significant problems with the application of the Recreation Guidelines to address public needs.
 - The requirements for private provision of facilities is applied through the recreation guidelines on a subdivision-by-subdivision basis, making it difficult to ascertain whether or not the facilities make sense overall. TM-NCPPC has no participation data for privately provided facilities.
 - The recreation guidelines apply only to new development; they do not address changing needs in existing communities.
 - The guidelines have specific flaws. Developers can count existing facilities as available to satisfy the need from their development even though the facilities may be heavily utilized and physically distant from the new project.
 - The guidelines have not been updated for some time to address the procedural flaws or emerging needs (e.g., for urban recreation facilities). Updating the recreation guidelines is proposed for the FY08 Planning Department work program.
 - We would need better measures of park capacity in order to do a legitimate adequacy test for new development.

These factors suggest that basing subdivision approvals on the adequacy of park facilities, would be complex. There may be other tools, including impacts taxes, which may be more appropriate to account for new development's impact on park and recreation facility adequacy.

OTHER PUBLIC FACILITIES

There are additional facilities that have been evaluated by other jurisdictions nationally. This study will go into these at a lesser level of detail depending on the availability of staff resources.

- Libraries
- Off-Street Parking

GROWTH POLICY IMPLEMENTATION THROUGH SUBDIVISION

Current Conditions

Are changes in the preliminary plan approval criteria or process needed to better implement the County Adequate Public Facilities Ordinance? This is a question that has been raised by some community members when they felt development would overburden current or future facilities.

Section 50-35(k) of the Subdivision Regulations provides that the Planning Board must not approve a preliminary plan of subdivision unless the Board finds 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 include roads and public transportation facilities, sewerage and water service, schools, police stations, firehouses, and health clinics. The guidelines to determine adequacy must be established by County Council resolution and, in the past, the Annual Growth Policy (growth policy) has served this purpose.

The Regulations require that each preliminary plan of subdivision submit sufficient information on the proposed subdivision to demonstrate the expected impact on and use of public facilities and services by occupants of the subdivision. This requirement is currently not being met for public facilities other than roads. As noted in the previous sections:

- *For schools:* The Planning Board makes an annual finding based upon information supplied by Montgomery County Public Schools and using procedures adopted by the County Council. This annual finding does not require subdivision applications to include specific information about its impact on schools, or information about the current status of schools in the general vicinity of the development project.
- *For water and sewer:* This test is administered by the WSSC and not directly examined by the Planning Board. Therefore, the Board's approvals have not specifically been including a finding regarding adequacy of water and sewer facilities, although other agencies are providing findings in specific areas.

Possible Topics to Investigate Further

- Should the Planning Board be considering additional information as part of their approval?
- What are the best roles for the Planning Board and relevant County agencies in the determination of adequacy of non-transportation public facilities (schools, fire, police, etc.)
- In light of the recent complaints about the one area of the growth policy that the Board does consistently review – traffic impacts – is LATR, and specifically the use of intersection critical lane volumes, the proper test? Should/can adequacy, safety and function of the existing roads (between intersections also be analyzed? (Addressed in the Transportation section)
- At what stage in the entitlement process should the adequacy of public facilities be tested? The advantages and disadvantages of each of the following test points will be examined:
 - Zoning - probably too early, as zoning often does not include a concrete development proposal, and development may be years away.
 - Development/subdivision application.
 - Building permit - probably too late, as building permits are typically ministerial actions that do not allow much agency discretion, the project has already been entitled by a prior development/subdivision application and the developer has made major investment.
- How is the accuracy of the APFO process affected by instances in which a public dedication for road, school, park, or other purposes is required, but the recipient public agency does not accept the dedication? To avoid such a circumstance, is it possible to word conditions of approval to require an “irrevocable offer to dedicate,” which can be accepted by the public agency at any time in the future?