INTRODUCTION

This report contains the Planning Department’s analysis and recommendations for strengthening the Growth Policy as a tool for assessing the County’s progress in delivering infrastructure and for setting priorities for programming public facilities; for amending the Growth Policy’s school adequacy test; for considering other public facilities in the Growth Policy; and the Planning staff’s analysis of the size, age, and other characteristics of the pipeline of approved development.

In reviewing the potential for adding other public facilities to those included the Growth Policy, Planning staff identified a few land use issues connected to those facilities. Although we raise them here, we are not recommending that these issues be addressed through the Growth Policy itself.

RECOMMENDATIONS

Identifying and Prioritizing Infrastructure

Planning Department staff recommends that the biennial component of the Growth Policy review be substantially expanded to provide improved information and guidance for the Capital Improvements Program and other public decisions. The Growth Policy was designed to provide input to the Capital Improvements Program by identifying areas where public facilities are inadequate. Over the years, the Growth Policy has had varying success in meeting this responsibility. More recently, the Highway Mobility Report is succeeding in providing detailed analysis and recommendations for prioritizing roadway improvements.
Planning staff suggests that the biennial component of the Growth Policy include:

- An analysis of current and future pace and pattern of growth in the County and the factors affecting demand for public facilities in established communities.

- An update on the County’s success in meeting a set of indicators (if the County agrees to institute an indicators program, such as a Sustainability Indicators program based on General Plan principles and more that Planning staff recommends). Sample indicators: percentage of development that is mixed-use and location within one-half mile of a transit station; percentage of non-SOV commuting trips; acres of impervious surface. These indicators may also include desired levels of service for public facilities that are not regulated by the APFO: parks, libraries, community centers, etc.

- An implementation status report for each master plan and sector plan, that will include a review of how planned development is proceeding, and whether the public actions/facilities in the plan are occurring in a timely way. If the plan contains a staging element, this would be an opportunity to review the current status determine if the Growth Policy is reinforcing or working against the staging envisioned when the plan was adopted.

- A comprehensive list of priority facilities that are recommended for addition to the Capital Improvements Program. The report may also recommend other public actions needed to achieve master plan objectives, or to improve the County’s performance on its adopted set of indicators (if the County chooses to pursue an indicators program).

- The current biennial Growth Policy schedule requires a staff draft report in May and a Planning Board final draft in June in odd-numbered years. This schedule would result in Planning Board facility recommendations as the County Executive is beginning the biennial Capital Improvements Program cycle.

When the County Executive’s Recommended CIP is released, Planning staff would use the Growth Policy recommendations and analysis as the basis for preparing comments on the CIP for Planning Board review and transmittal to the County Council.

**Schools**

Revise the test so that the definition of adequacy more closely conforms to the MCPS definition of capacity by lowering the threshold that triggers the School Facilities Payment. That threshold should be based on “MCPS program capacity,” not “Growth Policy capacity” but should be inflated to avoid the problems that have kept the County from using program capacity in the past. In addition, for the purposes of determining if a School Facilities Payment is required, the practice of “borrowing” high school capacity should not be used.
Staff recommends that the threshold be when enrollment reaches 110 percent of program capacity, which would cause development in the following clusters to pay the school facilities payment: Blake, Clarksburg, Einstein, Kennedy, Northwest, Wheaton, and Wootton. If policymakers prefer to continue to use “Growth Policy capacity,” staff would recommend that the threshold for the School Facilities Payment be set at the point when enrollment reaches 95 percent of capacity. This would cause residential development to pay the School Facilities Payment in Bethesda-Chevy Chase, Blake, Clarksburg, Kennedy, Northwest, Quince Orchard, and Springbrook.

Increase the School Facilities Payment from $12,500 per student to $32,524 for each full-time equivalent elementary school student, $42,351 for each middle school student, and $47,501 for each high school student. This figure is derived from per-student costs for new schools. An alternative would be to have three school facilities payments (one each for elementary, middle, and high schools) and a development project would make a payment for each level that exceeded the threshold. So if enrollment exceeded the capacity threshold in a cluster at the elementary school level, it would pay the elementary school facilities payment only.

Retain the upper limit so that when enrollment greatly exceeds capacity, development approvals in that cluster stop. This upper limit has very rarely been exceeded, but when it was, new school facilities were promptly programmed. This suggests that this upper limit is serving an “alarm” function when enrollment and capacity are severely out of balance. Staff does not see a downside to retaining the upper limit; the current level seems to be about right, but is based of “Growth Policy capacity.”

Consider capturing development that occurs outside the subdivision process. As smaller housing units are replaced with larger ones, or are expanded with additions, some additional student generation can be expected. There is sufficient academic study of this issue to legitimately link student generation to size of home. Although the total number of additional students is small, the County could consider applying the School Facilities Payment or the School Impact Tax to these properties. Staff is not yet ready to make a recommendation on this issue because we have not reviewed the number, type and location of these replacements/expansions. Possibly this issue could be studied along with the “mansionization” issue or in future Growth Policy studies.

Make some technical corrections. The current Growth Policy Resolution implies that the Planning Board must continue to conduct the School test annually even if the Council fails to pass a new Growth Policy resolution, but explicit language is needed. The language in the Growth Policy concerning school clusters in municipalities did not anticipate that municipalities would pass APFOs that are more stringent than Montgomery County’s. As a result, the provision can be read two completely different ways.
Monitor the Office of Legislative Oversight (OLO) review of indicators for Montgomery County Public Schools to see if they serve as a basis for further modification of the School Test.

Water and Sewerage Facilities

Planning Department staff recommends no changes to the adequacy test for water and sewerage systems. For purposes of the APFO, our primary concern is the potential for new development to be approved even when water and sewerage systems are not adequate to support that development. Staff believes the current test, backed up by planning and implementation of system improvements, is working as intended.

Police

Planning Department staff recommends no changes to the adequacy test for police service. Planning staff reviewed public safety facilities and services in detail in 2005 and recommended no changes at that time. For police services in particular, staff noted that the number and location of police “facilities”—that is, police stations— is not closely related to levels of service. Staff suggests that there are benefits to having the Police Department participate in the Development Review Committee for Crime Prevention through Environmental Design (CPTED) review of new development.

Fire and Rescue Services

Planning Department staff recommends no changes to the adequacy test for fire and rescue services. Planning staff reviewed public safety facilities and services in detail in 2005 and recommended no changes at that time. For fire and rescue services in particular, staff noted that the number and location of fire stations is correlated to adequacy (as measured in response times) because, unlike police, fire and rescue personnel are located at a station until a call comes in. Staff’s 2005 research indicated that the major challenge for adding stations was finding suitable locations and that the master plan process is the best mechanism for designating those locations. Montgomery County Fire and Rescue Services representatives participate in the master plan process, and MCFRS has an up-to-date master plan.

During the course of our study this year, staff noted several aspects of fire and rescue services that may be useful for making land use recommendations during the master plan process. These include the fact that the great majority of calls are for emergency medical services, which suggests that Planning staff discuss with MCFRS the possibility of identifying locations for emergency medical units in master plans.
The observation that only 12 percent of calls are for fires, and that most of these are for brush and vehicle fires, suggests to Planning staff that there are opportunities to increase the use of smaller fire trucks in the fleet, which allows use of smaller fire stations and road turning radii. Planning staff raises this issue only from a land use perspective: larger parcels of land are becoming rare, and the future of neighborhood design depends in part on narrower streets with smaller turning radii.

**Other Public Facilities**

**Planning Department staff does not recommend adding to the list of public facilities tested in the APFO.** However, Planning staff’s review of these facilities has prompted us to offer some suggestions about how the adequacy of these facilities can be strengthened. The chief suggestion has to do with the Growth Policy itself.

**Planning staff recommends that the Recreation Guidelines applied in the regulatory process be revised.** This project is included in the Planning Department’s requested FY08 work program. Among the issues to consider: whether to eliminate provisions that allow developers to count existing public facilities as part of satisfying the recreational requirements for new development.

**Planning staff’s research indicates that additional study of parking policies and procedures is warranted.** In this study, Planning staff reviewed Parking Lot Districts (PLDs) as a “public facility” for APFO purposes. Although we don’t suggest that they be incorporated in the APFO, we note that broader application of PLDs can support trip reduction initiatives and serve revitalization objectives outside of Central Business Districts. County parking policies could bear re-examination, including the minimum parking requirements in the zoning ordinance.
DISCUSSION

The Growth Policy as a Tool for Identifying and Prioritizing Infrastructure

The County Council charged the Planning Board with developing “A recommended set of tools for managing growth and funding infrastructure to maintain and enhance Montgomery County’s quality of life, including:

- recommendations for directing future growth and managing the pace of that growth in accordance with the goals and objectives of the General Plan;
- identifying and prioritizing infrastructure needed to support existing and future residents, businesses, and visitors;
- and recommendations for strengthening the relationship between the pace of growth and the provision of public facilities, services, and infrastructure.”

The report of the Sustainable Growth team, A Vision of Sustainable Development for Montgomery County, addresses the first bullet from a sustainability perspective. This section addresses the second two bullets.

The 12 points outlined in the background portion of the Council’s resolution drew the link between the General Plan and the subsequent legislation (such as the APFO) and tools (such as the Growth Policy) designed to manage and stage growth.

The Council’s charge can be organized into a three-part problem statement:

1. How to link the facility planning process to our master plan goals,
2. How to accomplish this linkage holistically, so that both new and existing communities enjoy the quality of life envisioned in our master plans, and
3. How to determine if the process for planning and implementing facilities actually achieves the intent of the master plans.

Staff developed two concepts to help frame these problems. The first concept is that our objective is to maintain the quality of life for all residents in accordance with the visions in our master plans. Concerns about quality of life are triggered when facilities fail to keep up with development in the County. Two aspects of this concept:

- **Maintaining our existing communities**: This should be the primary goal since it is the residents (and voters) in the existing communities—not people who don’t live here yet—that are concerned about overcrowded roads and schools. Maintaining existing neighborhoods is the thrust of several of our down-County master plans.

- **Fitting new communities into the old communities**: Assuming that some degree of growth is desirable and/or inevitable, our goal should be to build the new communities envisioned in our master plans. Part of achieving this goal is looking at the provision of facilities in changing neighborhoods.
The second concept is to propose that we can establish a system that addresses all three problems. Numerous jurisdictions have attempted to create such a system. The literature on modern growth management practices describes a similarity of program structure, regardless of the type of jurisdiction, state, county, city. A sample structure or system is as follows:

- Policy statement pertaining to philosophy and towards growth.
- List of public facilities or categories of environmental goal – transportation, schools, water quality, air quality, etc.
- Standards for each listing.
- Test or performance standards- levels of service, ratios or qualitative measurements.
- Evaluation of effectiveness.
- Oversight mechanism.
- Periodic review.
- Feedback to planning and budgetary processes.

In Montgomery County, current growth management efforts focus on the first four components with much less emphasis on the second four. In other words, we have do not have the full system. The challenge is to better integrate the missing or weak components to strengthen the Growth Policy process. A stronger and more coherent system provides the basis for addressing the issue of whether or not facilities and services are adequate and, critically, how to pay to for such services and facilities.

The Current Growth Policy and the Capital Improvements Program

The Growth Policy provides guidance for synchronizing new development and the provision of public facilities. The Growth Policy is responsible for identifying areas where public facilities are inadequate (indicating where the County should add new facilities to the CIP), possibly pausing development until those facilities are made adequate through the CIP, and/or determining the responsibility of private development to provide the public facilities needed to meet the increased demand that is the result of growth. Over the years, the Growth Policy has had varying success in meeting this responsibility. More recently, the Highway Mobility Report is succeeding in providing detailed analysis and recommendations for prioritizing roadway improvements.

That classic relationship between the Growth Policy and the CIP only indirectly takes into account the public facilities needed to support existing communities within Montgomery County. The Growth Policy’s role is incomplete because the CIP responds to both the growing and to the mature areas in the county. Facilities that are programmed in the mature portion of the County include new facilities as well as expansions, modifications and renovations. Comparing the facilities being supplied to both new and old development with demand from new development alone obscures the issue of supply and demand. There is real benefit in considering the facility demands
from both existing and new development somewhere in the Growth Policy process, particularly since the CIP does.

FIGURE 1

Figure 1 graphically represents the fact that existing development and infrastructure are much greater in importance than new development and new facilities. Most residents and businesses are housed in “existing” development and they depend on “existing” facilities to perform daily activities and for a high quality of life. The Growth Policy places greatest emphasis on the top of the pyramid with the expectation that other mechanisms are taking care of the rest of the pyramid.

Figure 1 also suggests a notion that existing residents be principally interested in the supply of public facilities serving existing development, and that new development take responsibility for providing the facilities needed to support growth.

Implementing the Growth Policy Through Development Review

The Growth Policy is implemented on a case-by-case basis through the regulatory process.

There are two means of ensuring “adequate facilities” through the development review process. For certain types of facilities, such as roads and schools, the Growth Policy tests individual development proposals through a complex process that seeks to ensure overall supply and demand for road and school capacity are kept in balance. For other types of facilities, the County does not apply a “test;” instead, we apply standards through the regulatory process to require new development pay for incremental impacts, thereby preserving whatever equilibrium already existed. This method responds to growth rather than attempts to manage it.

Examples of the latter approach include parking and recreation facilities. The development standards in the Zoning Ordinance require that certain facilities (e.g.,
parking, recreation facilities) be provided by the private sector to support proposed development. For example, developers must provide on-site parking to address the expected demand (or pay parking district taxes in the CBDs so that the County can provide the necessary parking). Similarly, we apply the recreational guidelines to new residential projects to ensure that the new communities will have facilities that would otherwise be provided publicly as neighborhood parks. In this example, the County transfers the costs of constructing and maintaining recreational facilities to the private sector. As with parking standards, the application of formulas during the development approval process is used to secure the facilities needed to satisfy the anticipated increase in demand.

These methods concentrate on the “top of the pyramid” in Figure 1. They address the needs resulting from growth but do not consider the needs that continually evolve in existing communities. In addition, it is not always easy to find the clear link between the public facility requirements in the development review process and the planning goals expressed in our master plans. In this way, the feedback loop is incomplete without a means to measure our progress in achieving our master plan.

Recommendations for Strengthening the Growth Policy a Tool for Identifying and Prioritizing Infrastructure

In order to address the challenges identified above, Planning Department staff recommends that the biennial component of the Growth Policy review be substantially expanded to provide improved information and guidance for the Capital Improvements Program and other public decisions.

This recommendation does not involve changes to the guidelines for administering the APFO during the development review process. Instead, it would strengthen the Growth Policy’s role as an input into the budget process, particularly the Capital Improvements Program. It would add regularly-updated reports on the status of the implementation of master plans to the material that is used to recommend priority public facilities. If the County elects to pursue a Sustainability Indicators program (or similar program), the updated status of those indicators could also be included in this review. Sustainability indicators could also be among criteria used to select the public facilities recommended for higher priority.

The Growth Policy schedule allows for a review of policy issues on a biennial basis; not coincidentally, the “on” years from the Growth Policy alternate with the “off” years for the CIP. This means that Growth Policy recommendations are well-timed for consideration in the biennial capital budget process.

Planning staff suggests that the biennial component of the Growth Policy include:

- The biennial Growth Policy would include analysis of current and future pace and pattern of growth in the County. This analysis would also include demographic and other changes affecting existing communities, especially factors influencing existing communities’ need for public services.
• The report would also include an implementation status report for each master
  plan and sector plan. Components would be: a review of how planned
  development is proceeding, and whether the public actions/facilities in the plan
  are occurring in a timely way. If the plan contains a staging element, this would
  be an opportunity to review the current status determine if the Growth Policy is
  reinforcing or working against the staging envisioned when the plan was
  adopted.

• If the County agrees to institute an indicators program, such as a Sustainability
  Indicators program based on General Plan principles and more that Planning
  staff recommends), the report could include updated indicator statistics. Sample
  indicators: percentage of new development that is mixed-use and location within
  one-half mile of a transit station; percentage of non-SOV commuting trips; and
  acres of impervious surface. These indicators could include measures of new
  and existing development. They may also include desired levels of service for
  public facilities that are not regulated by the APFO: parks, libraries, community
  centers, etc.

• These materials would be used by the Planning Board to develop a
  comprehensive list of priority facilities that the Board would recommend for
  addition to the Capital Improvements Program. The report may also recommend
  other public actions needed to achieve master plan objectives, or to improve the
  County's performance on its adopted set of indicators (if the County chooses to
  pursue an indicators program).

• The current biennial Growth Policy schedule requires a staff draft report in May
  and a Planning Board final draft in June in odd-numbered years. This schedule
  would result in Planning Board facility recommendations as the County Executive
  is beginning the biennial Capital Improvements Program cycle.

• When the County Executive's Recommended CIP is released, Planning staff
  would use the Growth Policy recommendations as the basis for preparing
  comments for Planning Board review and transmittal to the County Council.

  This recommended process incorporates Planning Department responsibilities
  that have been conducted separately (Highway Mobility Report, CIP Review) or
  irregularly (master plan status reports). The potential for an indicators program is the
  main new element.
Montgomery County Public Schools

Since 1986, when the Annual Growth Policy (Growth Policy) was first applied, Montgomery County Public Schools (MCPS) enrollment has grown from 94,460 to 137,798 students. This is an increase of almost 50 percent. Although, there was a decline in enrollments in the 1970s and early 1980s, the public school student population grew steadily through the 1990s. By 2006 school enrollment reached a plateau and declined slightly, according to data contained in the FY 2008 Recommended Capital Budget and Amendments to the FY 2007-2012 Capital Improvements Program. This is the first school year with an enrollment decline since 1983. Enrollment is projected to rise again in a few years because the increase in the number of births was higher since 2000. Annual births have exceeded 13,000 since 2000.

In 2003, when staff last analyzed the school test, enrollment was 138,891 students and MCPS was in the process of modernizing and building additions to many of the existing schools, as well as opening new schools. MCPS has made a concerted effort over the last few years to reduce the number of relocatable classrooms. The approved FY 2007-2012 MCPS Capital Improvements Program (CIP) is still addressing the number of relocatable classrooms through additions and modernizations. This CIP report notes that by the end of the current CIP the number of relocatable classrooms projected to be in use will be 337. This is a reduction from the 719 previously in use in 2005-06. MCPS proposes to further reduce the relocatable classrooms to 229 by the 2012-13 school year if additional funding is provided. MCPS facility planning is increasingly directed at school additions and modernizations rather than new schools. There are 179 elementary schools, 38 middle schools, 25 high school, 6 special schools, and one career and technology center in the system.

School Test Methodology

The County Council approves the school test methodology in the Growth Policy resolution. Once the Council approves the CIP, MCPS recalculates the projected school capacity (based on final determination of funded capacity) and provides all data for the school test as required by the Adequate Public Facilities Ordinance (APFO).

The current Growth Policy school test uses a definition of capacity based on a standard multiplier. For example, kindergarten capacity is set at 22 students per classroom; grades 1-5 at 25 students per classroom and grades 6-12 are set at a capacity of 22.5 students per classroom. The test compares capacity available in the 6th year of the funded CIP to enrollment projections for the same year. (This is equivalent to the 5th year of the Growth Policy test.) Forecasts of enrollment and capacity are prepared by MCPS staff and reviewed by the Montgomery County Planning Board staff before the Council reviews the school test.
The School Test language in the Growth Policy is:

**Public School Facilities**

**S1 Geographic Areas**

For the purposes of public school analysis and local area review of school facilities at time of subdivision, the County has been divided into 24 areas called high school clusters, as shown in Map 32. These areas coincide with the cluster boundaries used by the Montgomery County Public School system.

The groupings used are only to administer the Adequate Public Facilities Ordinance and do not in any way require action by the Board of Education in exercising its power to designate school service boundaries.

**S2 School Capacity Measures**

The Planning Board must evaluate available capacity in each high school cluster and compare enrollment projected by Montgomery County Public Schools for each fiscal year with projected school capacity in 5 years. If sufficient high school capacity will not be available in any cluster, the Planning Board must determine whether an adjacent cluster will have sufficient high school capacity to cover the projected deficit.

The Planning Board must use 100% of Council-funded capacity at the high school level and 105% of Council-funded capacity at the middle and elementary school level as its measures of adequate school capacity. This capacity measure does not count relocatable classrooms in computing a school's permanent capacity.

Council-funded regular program classroom capacity is based on calculations that assign 25 students for grades 1-6, 44 students for half day kindergarten where it is currently provided, 22 students for all day kindergarten where it is currently provided, and an effective class size of 22.5 students for secondary grades.

**S3 Grade Levels**

Each cluster must be assessed separately at each of the three grade levels -- elementary, intermediate/middle, and high school.

**S4 Determination of Adequacy**

After the Council has approved the FY 2005-2010 CIP, the Planning Board must recalculate the projected school capacity at all grade levels in each high school cluster. If the Board finds that public school capacity will be inadequate at any grade level in any cluster, but the projected enrollment at that level will not exceed 110% of capacity, the Board may approve a residential subdivision in that cluster during FY 2005 if the applicant commits to pay a School Facilities Payment as provided in County law before receiving a building permit for any building in that subdivision. If projected enrollment at any grade level in that cluster will exceed 110% of capacity, the Board must not approve any residential subdivision in that cluster during FY 2005.
After the Council in 2005 has approved the amended FY 2005-2010 CIP, the Planning Board again must recalculate school capacity. If capacity at any level is projected to be inadequate, the Board must take the actions specified in the preceding paragraph in FY 2006.

S5 Senior Housing

If public school capacity is inadequate in any cluster, the Planning Board may nevertheless approve a subdivision in that cluster if the subdivision consists solely of multifamily housing and related facilities for elderly or handicapped persons or multifamily housing units located in the age-restricted section of a planned retirement community.

S6 Clusters in municipalities

If public school capacity will be inadequate in any cluster that is wholly or partly located in Rockville, Gaithersburg, or Poolesville, the Planning Board may nevertheless approve residential subdivisions in that cluster unless the respective municipality restricts the approval of similar subdivisions in its part of the cluster because of inadequate school capacity.

The final clause, S6, was written before Gaithersburg and Rockville adopted school tests that are more stringent than Montgomery County’s. As a result, the provision can be read two completely different ways. It was intended to allow the Planning Board to continue to approve subdivisions in policy areas that the Growth Policy test showed as inadequate if the municipality did not honor the County-imposed moratorium. It can now be read to suggest that the Montgomery County Planning Board may not approve subdivisions in a cluster that overlaps a municipality if that municipality declares that schools are inadequate.

Gaithersburg and Rockville

The MCPS serves the entire county including the municipalities. School demographers incorporate new residential development from the municipalities with development approval authority into enrollment forecasts. Rockville and Gaithersburg have recently adopted adequate public facilities ordinances that include a schools adequacy test.

The City of Gaithersburg Ordinance No.01-107, approved in 2007, amends Chapter 24 of the City Code, and states “…. residential development shall not be approved if the subject property is within the attendance area … forecasted to have a student population that exceeds 110 percent of the Montgomery Public Schools Program Capacity two years in the future.” Sharing of capacity between schools is not permitted.

The City of Rockville adopted an APFO with standards on November 1, 2005 that limits residential development where enrollment surpasses school program capacity. The determination of adequacy is based on program capacity as reported to the Board of Education with an increase of 105 percent for elementary and middle schools and 100 percent for high schools within a 2 year time frame, no borrowing permitted. Adequacy is determined by school, not cluster.
Both Rockville and Gaithersburg define adequacy as a percentage over school program capacity with no borrowing – in contrast to the County’s school test, which uses “Growth Policy Capacity” and allows borrowing at the high school level. While Rockville and Gaithersburg’s schools tests are stricter than the County’s test, Rockville’s is the stricter of the two and under current forecasts; a number of elementary schools serving the city are over capacity.¹

**Factors Considered by MCPS**

Adequate school capacity is a calculation that compares projected enrollment numbers and existing and planned facility capacity based on program needs.

**Enrollment**

MCPS staff develops the enrollment numbers by using actual birth rates to establish a base kindergarten cohort for the year and then projects enrollment through 12th grade using a “cohort survivorship model.” The forecast is adjusted for in/out migration; factors that apply to specific schools and growth from newly approved but not yet built development. Students from new development are added to the forecast when it appears that the development will be online during the six-year forecast period. The number of students generated from new development is calculated by housing unit type. Enrollment forecasts are developed every year in September and revised in March.

**MCPS Program Capacity**

The Superintendent’s Recommended FY 2008 CIP contains modifications to the previous CIP school capacity calculations. The completion of phasing in full-day kindergarten eliminated the need to calculate half-day kindergarten. Middle school capacity had been calculated at a factor of 0.9, which apparently overstated capacity, and was adjusted to a capacity factor of 0.85.

**Growth Policy Capacity**

The Growth Policy school test uses its own capacity calculation based on a standard multiplier, which is then compared to the forecasts for enrollment for the 6th year of the CIP (5th year of the Growth Policy test). This Growth Policy capacity is multiplied by 105 percent to set elementary and middle school test capacities. High school capacity is 100 percent with borrowing allowed between clusters in the test. The Growth Policy capacity is greater than MCPS program capacity. The greatest amount of difference occurs when Growth Policy capacity is used for elementary schools with class-size reduction.

¹ September 12, 2005 Table, Enrollment Trends…Within the City of Rockville, page 17, APFO Ordinance.
Evidence of Change

The success of the school system is dependent on the quality of the facilities and services provided to students and the continuous improvements and adaptations to the learning environment. The School Board acknowledges this in their policy statement regarding facilities planning:

“Enrollment in MCPS is constantly changing. The fundamental goal of facilities planning is to provide a sound educational environment for changing enrollment. The number of students, their geographic distribution, and the demographic characteristics of this population all impact facilities planning. Net enrollment changes are driven by factors including birthrates, movement within the school system and into the school system from other parts of the United States and the world.”

Enrollment forecasts change for a number of reasons, both demographic and economic, and actual enrollment may differ from projected enrollment. One example of the possible influence of the local economic effects is the cost of housing. Median sales of single-family units (attached and detached) as well as rental housing rose dramatically between 2000 and 2005. School demographers think that this is contributing to a decline in enrollment in previously affordable areas of the county.

Changes to school capacity also reflect policy changes. For example, all day kindergarten requires more classroom space. The on-going initiative to reduce the inventory of relocatable classrooms translates into more school additions. Other policies have translated into smaller classroom size for elementary grades and gymnasiums in all elementary schools. Middle school policies are under current scrutiny.

MCPS staff briefed the Council regarding demographic trends earlier this year. Findings in the report include:

- Total enrollment declined this year; net migration is variable; net immigration (foreign born students) is significant but declining.
- Percentage enrollment in public schools (rather than private schools) has been stable at 81 to 82 percent of county school population for the last 15 years.
- Enrollment in non-focus schools is up but down at focus schools (class-size reduction schools) since 2003, however focus school enrollment for ethnic groups other than white is increasing.
- FARMS (Free and Reduced Price Meals) enrollment is rising.
- The demographic composition of the student body is very different from that in 1970. This shift began in 1980s; since then, white enrollment has been steadily decreasing, while enrollment in all other race/ethnic categories has increased.

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2 January 29, 2007 Education Committee Briefing on MCPS Demographic Trends.
During the 2003 review of the schools test, MCPS staff prepared a report, *Factors Affecting Montgomery County Public Schools, Enrollment Change* (February 11, 2003). MCPS staff updated that report for this study and it was included in the second growth policy study interim report. A comparison between the 2003 and 2007 reports underscores the conclusion that the composition of enrollment is experiencing change: FARMS participation in 2003 was 22 percent compared to 23.5 percent in 2007 and ESOL enrollment in 2003 was 8.5 percent as compared to 10.7 percent in 2007. The projected births as compared to actual births for the same years were accurate, within 1 or 2 percent.

**TABLE 1: Comparison of Projected and Actual Births**

<table>
<thead>
<tr>
<th>Years</th>
<th>2003 Births Projected</th>
<th>2007 Births Actual</th>
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<tr>
<td>2002</td>
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<tr>
<td>2005</td>
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</table>

Source: MCPS Staff Report, March 23, 2007

MCPS continually reviews the enrollment factors and finds that changes in enrollment stem from both new construction and turnover of existing housing. Examples of this observation are noted in the March 23, 2007 update. College Gardens and Rosemont Elementary Schools serve the King Farm in Rockville. Although more than 3,000 units were built in the King Farm development, enrollment remained at the same level as before development began, because enrollment was declining in other parts of the school’s service area. When the existing housing in these neighborhoods turns over, however, there may be impacts on enrollment. In the case of Spark Matsunaga Elementary School, there was no older community and housing completions came on line faster than anticipated. Enrollment there is higher than anticipated even with the opening of a second elementary school.

Analysis

Is the current school test effective?

MNCPPC staff in 2003 conducted an extensive review of the school test and made five recommendations to the school test, which the County Council enacted.

- Continue to use the current definition of school capacity;
- Consider schools to be adequate at 105% of Growth Policy capacity for elementary and middle schools and 100% of Growth Policy capacity for high schools;
- Discontinue the practice of borrowing for elementary and middle schools;
• Require developers to make a payment when projected enrollment exceed the standard (proposed 105% and 100%) but does not exceed 110%;
• Impose an absolute moratorium when enrollment exceeds 110%.

The analysis explained and reviewed the definition and calculation of capacity, including program capacity, adjusted Growth Policy capacity, state rated capacity and core capacity and concluded that standard multipliers were the best approach. The review included the standard of adequacy, the geography (cluster) the adjacent capacity (borrowing), point of application and exemptions/de minimis.

The FY 2007 Growth Policy schools test shows that all the clusters are adequate (Appendix 1); the same finding made in FY 2006. In fact, the test has resulted in only one finding of inadequacy since 1986. Perhaps the test is extremely effective – stimulating the construction of school facilities to a degree that keeps pace with growing demand – or perhaps the test is a paper exercise, designed to report a finding of adequacy no matter what the “real life” conditions.

There is some truth to both sides. The County has come close to failing the school test on several occasions and the public response was to program more school facilities, not relax the adequacy standard. On the other hand, there is a gap between the growth policy adequacy standard and the capacity standard used by the school system. That difference is the reason that the school test has (almost) always found every cluster to be adequate. If the MCPS program capacity were used, several clusters would be over capacity and would fail the Growth Policy test.

The school test calculation has been modified over the years and has gotten progressively tighter. In previous years, the Growth Policy test used a standard of 110 percent of capacity to accommodate over enrollment and allowed borrowing between school clusters at the elementary and middle school levels. In 2003, the school test was adjusted so that the capacity is set at 105 percent (except for high schools) and no borrowing is permitted at the elementary and middle school levels. That step would have brought several clusters into moratorium, if not for a huge increase in school capacity added to the County’s CIP.

If there is a desire to have a school test that is more sensitive to the effects of new development and other changes in school enrollment, a logical option would be to tighten the schools test in some way, such as setting the adequacy standard at 100 percent of Growth Policy capacity (or switching to MCPS program capacity) and eliminating the provision for borrowing.

The enrollment figures indicate that the school test is not sensitive only to the effects of new development. Test results reflect change all over the County, including older, already-developed areas. In the Bethesda-Chevy Chase (BCC) cluster, for example, there is a projected elementary enrollment of 3,036 in 2011 and the cluster is deemed adequate under the school test. However, there is a need for CIP projects in the cluster to address overcapacity at the high school, middle and elementary school levels. In the
case of the B-CC cluster, the capacity issue can’t be linked to growth from new
development, because the cluster is in an established area where there has been little
new development. The growth is related to a turnover in the neighborhoods or the
tearing down and rebuilding of existing housing stock.

Are there aspects of the methodology that should be changed?

Capacity

One issue with the methodology is 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 each classroom’s use). MCPS
recently changed the calculation of the program capacity number for middle schools.
According to the FY 2008 CIP, the multiplier for middle school program capacity was
changed because it was found that the existing method overstated capacity. The
multiplier was reduced from .9 to .85 (page3-1, 2008 CIP).

Current program capacity reflects the small classroom initiative for designated “Focus”
schools. This initiative requires smaller classroom sizes for kindergarten and grades 1
and 2: kindergarten classes have 15 students per classroom and the first and second
grades have 17 per classroom. This staffing level requires more classrooms per Focus
school and many of those schools are currently overcapacity.

The gap between program capacity and Growth Policy capacity becomes clearer when
the Growth Policy capacity is set at 100 percent or 105 percent (current test). Table 2
(Options 1A and 1B) prepared by MCPS, illustrates those different options. At 105
percent Growth Policy capacity, Clarksburg elementary school capacity is adequate. If
capacity is calculated at 100 % Growth Policy capacity, Clarksburg fails. When MCPS
program capacity is used (Table 2, Option 2A, 2B and 2C) for the Growth Policy test,
many clusters fail. At 100% of MCPS program capacity, 15 clusters fail at the
elementary level, two at the middle school level, two at the high school level (when no
borrowing is allowed). As the percentage increases to 110% of MCPS program
capacity, the failure rate decreases, but Clarksburg Middle School continues to fail and
elementary schools in the Blake, Einstein and Kennedy clusters continue to fail. Of
these clusters, only in Clarksburg can overcapacity be fully related to new housing
growth. In other clusters, changing demographics in the built-up part of the County
results in findings of inadequacy under the program capacity options. Table 2, Options
3A, 3B and 3 C show a Growth Policy test only for the Clarksburg cluster, illustrating an
idea to apply the school test only in areas of the County where new development clearly
plays the greatest rolls in students enrollment changes.

There has been discussion regarding using core capacity as the standard. Core
capacity is the part of the school needed to support the school curriculum, such the
lunchroom, and gymnasium and media center. For example, new elementary schools
and ones undergoing modernization are designed with a core that can support
approximately 640 or 740 students. However, great variability of core size among older schools makes it impossible to use core capacity as a useful concept.

Accuracy of Forecasts

All forecasts are less accurate as the forecast horizon is extended. Inflection points (where a trend changes direction) are especially difficult to forecast. The forecast in 2003 for 2006 enrollment was 143,800 and actual 2006 enrollment was under 140,000.

Student Generation from New Developments

The Census Update Survey shows that fewer students are generated from higher density units, such as townhouses, apartments and condominiums. School demographers have evidence that neo-traditional/transit oriented development generates even fewer students. These student generation rate assumptions and the statistics underlying them are constantly reviewed, along with review of the changing nature of planned housing.

More detailed analysis of student generation from different housing types, and a comparison between student generations rates from new units and enrollments in older neighborhoods helps adjust these multipliers for local conditions. The MCPS staff conducts this type of sampling to refine enrollment forecasts.

MCPS staff and MNCPPC Research staff have discussed whether a special survey of neo-traditional/transit-oriented development is warranted to document the observed low student generation rates. At this time, we do not believe a survey would be helpful because of the small sample size and the somewhat loose definition of this type of development. However, staff is considering adding a question about house size or number of bedrooms to the next Census Update Survey, the answers to which would have uses beyond student generation rates.

Conclusions/Recommendations

**Revise the test so that the definition of adequacy more closely conforms to the MCPS definition of capacity** by lowering the threshold that triggers the School Facilities Payment. That threshold should be based on “MCPS program capacity,” not “Growth Policy capacity” but should be inflated to avoid the problems that have kept the County from using program capacity in the past.

In addition, for the purposes of determining if a School Facilities Payment is required, the practice of “borrowing” high school capacity should not be used. Staff recommends that the threshold be when enrollment reaches 110 percent of program capacity, which would cause development in the following clusters to pay the school facilities payment: Blake, Clarksburg, Einstein, Kennedy, Northwest, Wheaton, and Wootton. If policymakers prefer to continue to use “Growth Policy capacity,” staff would recommend that the threshold for the School Facilities Payment be set at the point when enrollment
reaches 95 percent of capacity. This would cause residential development to pay the School Facilities Payment in Bethesda-Chevy Chase, Blake, Clarksburg, Kennedy, Northwest, Quince Orchard, and Springbrook.

Staff understands that some may believe that a threshold be set at 110 percent of program capacity is too high and argue that any threshold over 100 percent of capacity is out of step with the best possible measurement of capacity. Staff considered this point of view because the school test already partially addresses the concern about using program capacity because it basically averages enrollment and capacity for all schools in the cluster. Staff remains with the 110 percent recommendation in large part to account for the relative effect of new and existing development on school capacity.

The purpose of this recommendation is two-fold: to have the adequacy test contribute toward understanding which schools require additional investments, and to trigger contributions from new development at a point closer to when schools are over-capacity. The current school test provides little in the way of information to guide capital investments, nor has it ever resulted in the School Facilities Payment being paid, despite the fact that subdivisions are being approved in clusters that are over capacity.

Increase the School Facilities Payment from $12,500 per student to $32,524 for each full-time equivalent elementary school student, $42,351 for each middle school student, and $47,501 for each high school student. This figure is derived from per-student costs for new schools, a calculation that is explained in some detail in the Infrastructure Financing section.

This is approximately the full cost-per-student of new school facilities. With this recommendation, staff is supporting a point of view that when facilities are inadequate, new development should not make the problem worse.

This recommendation would assess the school facilities payments separately for each level: elementary, middle, and high schools. If a development project were located in a cluster where only the elementary schools are inadequate, it would make the payment for each elementary school student generated. Each single-family detached home generates, on average, 0.32 elementary students, so the School Facilities Payment in this case would be $10,407.

Retain the upper limit so that when enrollment greatly exceeds capacity, development approvals in that cluster stop. This upper limit, which is the threshold for imposing a strict moratorium on new development that generates students, has very rarely been exceeded, but when it was, new school facilities were promptly programmed. This suggests to staff that there is some utility to retaining a standard that serves an "alarm" function when enrollment and capacity are severely out of balance. Currently, the strict moratorium threshold is based on "Growth Policy capacity." If the threshold for a School Facilities Payment is changed to be expressed as program capacity, staff would suggest that a threshold for the strict moratorium, equivalent to the current threshold but expressed as program capacity, be found.
Consider capturing development that occurs outside the subdivision process. As smaller housing units are replaced with larger ones, or are expanded with additions, some additional student generation can be expected. There is sufficient academic study of this issue to legitimately link student generation to size of home. Although the total number of additional students is small, the County could consider applying the School Facilities Payment or the School Impact Tax to these properties. Staff is not yet ready to make a recommendation on this issue because we have not reviewed the number, type and location of these replacements/expansions. Possibly this issue could be studied along with the “mansionization” issue or in future Growth Policy studies.

It is clear from the MCPS data that change is occurring in older areas where no new or sizable development is occurring. GIS could be used to determine if changes in older neighborhoods are creating school capacity issues by tracking building permit and other data. Development such as teardowns, large additions including bedrooms, and minor subdivision approvals, may not add lots, but may generate new students.

Make some technical corrections. The current Growth Policy Resolution implies that the Planning Board must continue to conduct the School test annually even if the Council fails to pass a new Growth Policy resolution, but explicit language is needed. The language in the Growth Policy concerning school clusters in municipalities did not anticipate that municipalities would pass APFOs that are more stringent than Montgomery County's. As a result, the provision can be read two completely different ways.

Monitor the Office of Legislative Oversight (OLO) review of indicators for Montgomery County Public Schools to see if they serve as a basis for further modification of the School Test.

The Office of Legislative Oversight (OLO), Key Fiscal Indicators for Montgomery County Public Schools, indicates that although enrollment has reached a plateau, the FY 07 MCPS operating budget was 31% larger than four years ago. The study focused on the operating budget and found that the increase in the number of teachers, costs of special education and costs associated with the salaries and benefits contributed to increased operating costs. The study included discussion of expanding the indicators to include measuring the efficiency and effectiveness of ‘successful’ students in addition to the costs of educating each student. The OLO report recommended that the County Council consider assigning OLO a FY 08 Work Program project to develop a parallel package of key fiscal indicators for MCPS Capital Budget and Capital Improvements Program. Adaptations of the indicators study, as suggested by OLO, to measure the timing of the delivery of facilities included in the CIP, either by cluster or at the individual school level, would provide a more detailed picture of local and countywide conditions.
Water and Sewerage Facilities

Overview

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 preparation by the Montgomery County Department of Environmental Protection (DEP) 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 (WSSC) Capital Improvement Plan (CIP) programs 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 development project submissions as a member of the Development Review Committee and approves the service extensions or not.

Current Adequacy Test

Based first on the Health Article and later the Environment Article in Maryland law, all of Montgomery County has been placed within one of six category areas for both water and sewerage service. 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 to 1 and 2.

To apply a more restrictive policy to the entire county and capture properties not going through the subdivision process would require redrafting the current service area maps as part of the comprehensive water and sewer plan triennial update this year.

At the current time, the draft 2006-2015 Comprehensive Water Supply and Sewerage Systems Plan is in preparation by DEP. There should still be time to recommend inclusion of Growth Policy directives that would serve to implement County Council Resolution No. 16-17 in the final plan. The draft plan will be submitted for staff review and Planning Board action later in 2007.
State Involvement

State law (Environmental Article Title 9-Subtitle 5) and regulation (COMAR 26.03) require the preparation and processing of Water and Sewerage Plans by local and state government. Water and Sewerage (W&S) Plans are required to ensure the provision of safe and adequate water and wastewater systems to meet existing and future demands. The law and regulations specify information to be included and processes to be followed.

W&S Plans must be consistent with county and municipal comprehensive plans. In cases where the county and municipal comprehensive plans conflict, the Maryland Department of the Environment (MDE) will work with the affected local governments and Maryland Department of Planning (MDP) to resolve such conflicts with respect to the W&S Plan approval process.

The county planning agency must certify that the W&S Plan, revision or amendment is consistent with the county comprehensive plan. In accordance with the law, MDE seeks the advice of MDP on the consistency of the proposal with the local comprehensive plan and other appropriate matters. Where MDP and the local government disagree on the consistency of a plan, revision, or amendment, MDE requests that the state and local agencies meet to resolve the matter.

The law requires local governments to review the county plan annually and once every three years provide a report of this review to MDE. The county must adopt and submit to MDE a revision or amendment if the governing body deems a revision or amendment necessary or if MDE requires a revision or amendment. If a county is in the process of updating the plan but will not be able to complete the update in three years, a report to MDE indicating progress will suffice to meet the law.

Draft W&S Plan updates, revisions and amendments must be submitted to appropriate multi-county or regional comprehensive planning agencies, MDE, MDP and the Maryland Department of Natural Resources (DNR) prior to the local public hearing required by state law before local plan adoption. The submittal of plans in draft form to MDE and MDP helps avoid disagreements on a plan after the local governing body has formally adopted the plan, revision or amendment.

The water and sewerage regulations require the inclusion of information in the W&S Plans about existing and future projected populations, existing and planned water and wastewater facilities, compliance with state effluent limitations and protection of water uses, the water and wastewater system processes, levels and types of treatment, operation and maintenance costs, and means of financing improvements.

Many local governments have sophisticated capital improvement programs (CIP) that annually publish the budget and five year projections for all capital expenditures in the jurisdiction. MDE may accept the excerpted portion of the local CIP that meets the
requirements of the regulation, or incorporation by reference, of the entire adopted local CIP. Any documents incorporated by reference should be readily available to the public in the same location as the Water and Sewerage Plan.

System Constraints

Concern has been expressed to be sure that the current water and sewer systems are working as intended and that there is capacity for development that is approved. System capacities are determined by a combination of physical characteristics and policy directives. Extensive monitoring is required to provide the necessary information to make approval judgments before system failures. In the case of water and sewer systems, the WSSC is the operating, maintenance and monitoring agency responsible.

Some portions of the water and sewerage networks are currently constrained due to the physical attributes of the system. An example would be the sewage flow allowed to pass into the District of Columbia at Rock Creek. Another historical example would be the moratorium placed on the county due to inadequate sewage treatment capacity. For water systems, it might be inadequate pressure necessary for fire suppression requirements. System constraints are revealed through the WSSC. System constraints usually affect areas already developed, that are being redeveloped or modified in such a way as to increase demand for service.

The WSSC performs studies to determine what system improvements or modifications are needed to provide service or correct deficiencies. With Planning Department assistance in identifying the timing, location and demand for water and sewerage service, the WSSC can program and perform quantitative analyses and specify improvements and schedule necessary to implement County Council Growth Policy objectives.

The WSSC provides a reliable supply of safe drinking water, and has always met or exceeded United States Environmental Protection Agency health standards. As WSSC approaches 90 years of service, it is facing problems of decaying old pipes and valves. Aging and breaking pipes affect more than the skilled WSSC crews who respond 24 hours a day to fix broken water mains and sewer pipes. A major water main break results in a shut-down of water delivery to homes and businesses. It has the potential to flood roadways and affect electrical service. Streams and rivers are directly impacted when chlorinated water enters a waterway or when sewage discharges break through. Plans are already underway to speed up the replacement cycle for pipes, especially in established areas where the pipes are quickly reaching the end of their reliability.

WSSC System Extension (Formerly Authorization) Process

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. A description of the
funding of system improvements and extensions is quite detailed and beyond this very simplified abstract. Greater details can be obtained by referring to a current WSSC Capital Improvements Program which are prepared every year. If there is to be more consideration of the authorization and funding processes for water and sewer systems, there must be convened a group that included the WSSC and county DEP. Examination of these processes could include the program size facilities that appear in a capital improvement program, and/or the non-program size facilities that serve smaller areas.

WSSC CIP Process

The principal objective of the WSSC Capital Improvements Program is the programming of planning, design, land acquisition, and construction activities on a yearly basis for major water and sewerage facilities. These facilities may be necessary for system improvements and/or service to existing customers; to comply with federal and/or state environmental mandates; and to support new development in accordance with county approved plans and policies for orderly growth and development.

Expenditures for the six-year program are divided into three main categories; projects needed for growth, projects needed to implement environmental regulations, and projects needed for systems maintenance and reinforcement. The categories are defined as follows:

- **Growth** - Any water or sewerage project, or part of a project, that increases the demand for treatment and delivery of potable water and/or increases system requirements to collect and treat more sewage in response to new, first time, service hookups to WSSC’s existing customer base.

- **Environmental Regulations** - Any improvement to an existing facility which is required to meet changes in federal regulations, such as the Clean Water Act, or in response to more stringent state operating permit requirements, but does not increase system capacity. Any part of this type of a project that provides for additional capacity is for growth.

- **System Improvements** - Any project which improves or replaces components of existing water and sewerage systems or provides for mainline relocations required in response to county or state transportation department road projects where the intended purpose is not to increase the capacity of any system components. This category also includes program-sized water main extensions for which the primary function is to provide water supply redundancy to pressure zones or smaller areas in the Sanitary District. Any part of this type of a project not dictated by maintenance or rehabilitation needs and that provides for additional capacity is for growth.

**Funding Growth**

The portion of the current WSSC CIP needed to accommodate growth is approximately $275 million, which equals 32% of all expenditures in the six-year program. The major
funding sources for this part of the program are the System Development Charge revenues, payments by applicants under system extension permits, and developer contributions. In the event that growth costs are greater than the income generated by growth funding sources, rate-supported water/sewer bonds may be used to close any gap.

The System Development Charge (SDC) was first approved by the Maryland General Assembly in 1993. This WSSC imposed charge is on new development to pay for that part of WSSC’s CIP, which is needed to accommodate growth in their customer base. Subsequent modifications have established a process for approving partial and full exemptions for elderly housing and biotechnology properties, as well as exemptions for properties in designated economic revitalization areas. For FY 2007, the Montgomery County Council has maintained the current rate of $203 per fixture unit. Policies and information associated with the SDC can be found in WSSC CIP documents.

WSSC Service Extensions

Montgomery County plans for the extension of non-program size water and sewer lines as part of the Comprehensive Water Supply and Sewerage Systems Plan service area designations. This plan is used, in part, to designate properties that are eligible to apply to the WSSC for new main extensions. Properties that are in categories 4, 5 or 6 must be moved up in priority through a category change to area 3 to qualify for service. Neither the county nor the WSSC are responsible for initiating or financing these water or sewer extensions.

Recommendations

Planning Department staff recommends no changes to the adequacy test for water and sewerage systems. For purposes of the APFO, our primary concern is the potential for new development to be approved even when water and sewerage systems are not adequate to support that development. Staff believes the current test, backed up by planning and implementation of system improvements, is working as intended.

Police Services

Current Conditions

The majority of police services in the County are provided by the Montgomery County Department of Police, with critical services provided by other agencies including MNCPPC Park Police.

The Montgomery County Department of Police prepared a Police Facilities Master Plan in 1997. There is no statutory requirement for the police to prepare a master plan or to seek Council adoption of this plan. The 1997 plan envisions that Police Headquarters will be improved and relocated to a campus-like setting and proposes that a sixth district
be added to serve the County’s needs through the year 2016. The current districts include: 1st District Rockville, 2nd District Bethesda, 3rd District Silver Spring, 4th District Wheaton, 5th District Germantown, and 6th District Gaithersburg.

Although not a requirement, the Department produces an annual Strategic Plan, the most recent of which is for 2007-2009. This plan outlines the goals and the objectives of the Department. The goals are as follows:

- Reduce crime and the fear of crime
- Improve traffic and pedestrian safety
- Strengthen departmental relationships
- Develop a more diverse, dedicated, and highly skilled workforce
- Provide the best available resources for the department’s employees
- Emergency preparedness

Quarterly reports are planned through December 31, 2009, with an end of the year report due every December. A three-year summary of the Strategic Plan is scheduled to be completed by February 1, 2010.

Montgomery County Department of Police (MCPD) has an operating budget of $206 million. The majority of the budget supports the staffing needs of the Department. Currently there are about 1.2 patrol officers per 1,000 people, one of the lowest police/population ratios in the region. There are currently about 1,200 officers within the Department. The bulk of the work of a patrol officer involves responding to “calls-for-service.” In 2006, the police responded to 246,263 calls-for-service. The largest call concentrations come from the 3rd District (Silver Spring), 4th District (Wheaton), and 6th District (Gaithersburg/Montgomery Village). The formula used to allocate patrol resources is based on community needs and calls-for-service. Due to changing community conditions, there is a constant need to rebalance patrol resources. This re-balancing can result in changes within the department as officers are re-assigned or shifted to another district.

Unlike fire and rescue, public schools, and public libraries that are facilities-driven, the Police Department relies on its operating budget to hire more patrol officers to supplement patrol strength and improve County police services. It should be noted, however, that MCPD occupies 30 different “fixed” facilities throughout the County that have operating needs as well. There are five general facility types: Headquarters, District Stations, Satellite Facilities, Leased Facilities, and other specialized facilities, such as the Public Services Training Academy, the 911 Center, and others. The FY07-12 Capital Improvements Program (CIP) for the Police Department contains eight ongoing projects which will total expenditures of $59.1 million over the next six years. Three new projects are proposed: the renovation/relocation of the 1st District (Rockville) and 2nd District (Bethesda) Police Stations and the Outdoor Firearms and Training Center.
Sources of Change in Demand

- Demographic, economic and social changes in the County.
- Number of calls-for-service/officer initiated calls within the districts.
- Development in rural areas.
- National security emergency status

Current Test

The current Growth Policy resolution addresses police, fire and health facilities in the same way. The following paragraph is from the current Growth Policy and constitutes the entire “test” for adequacy of these facilities:

 Guidelines for 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.

Recommendations

Planning Department staff recommends no changes to the adequacy test for police service. Planning staff reviewed public safety facilities and services in detail in 2005 and recommended no changes at that time. For police services in particular, staff noted that the number and location of police “facilities”—that is, police stations – is not closely related to levels of service. Staff suggests that there are benefits to having the Police Department participate in the Development Review Committee for Crime Prevention through Environmental Design (CPTED) review of new development.

Unlike the Fire and Rescue Service, the Police Department is not required to submit comments to the Planning Department on all preliminary plans reviewed by the Department. The police could contribute to the regulatory process by reviewing proposed developments for Crime Prevention through Environmental Design (CPTED) as a part of the Development Review Committee. MCPD could provide public safety expertise and design comments when new plans are reviewed which in turn may lead to the reduction of the fear of crime and incidence of crime. CPTED strategies such as natural surveillance, defining private and public spaces, designing public routes, and
reviewing safe building access can be very helpful to planners. Design concepts from police could keep intruders easily observable and promote visibility of people in parking areas and building entrances. Lighting and landscaping comments would also prove useful from the Department.

Fire and Rescue

Current Conditions

County Code Section 21-12 requires the Montgomery County Fire and Rescue Service (MCFRS) to maintain, review, and amend a Master, Fire, Rescue, and Emergency Medical Services Plan. The original Master Plan was approved in 1994. The stated purposes are:

- To describe how the Fire and Rescue Service fulfills its responsibilities
- To explain how changes in the County are likely to affect service delivery, and
- To provide direction for the future through recommendations that address the steps necessary to provide a desired level and of quality of service.

The original master plan addressed demographic and service demand trends, factors affecting service demand, and an overview of the service delivery system, life safety programs, and fire investigation program. The 1994 Master Plan also described the need for new facilities, apparatus, equipment, and communication/data systems. Considerable attention was given to describing the seven “Fire and Rescue Planning Areas” in terms of demographics, characteristics, service demand and service delivery trends, and resources (existing and future needs). The seven areas included: Down County Area, Route 29 Area, Potomac Area, I-270 Corridor, Poolesville Area, Damascus Area, and Georgia Avenue Area.

MCFRS facilities have not kept up with the pace of growth during the ten-year period following the approval of the master plan in 1994. During that 1994-2004 period, no additional stations were built. The last station to be built was Germantown Station 29, which was completed in 1980. The original master plan called for the construction of new stations in the Clarksburg and Travilah areas. Both stations have been programmed in the CIP as well as two others (W, Germantown and E. Germantown are included in the FY05-10 CIP).

Master Plan Update

Montgomery County Code requires that the master plan be updated every ten years. In addition to this mandate, there were other rationales for establishing a new plan: population growth (up by 17% since 1994) and an increase in diversity (minorities and elderly). Some parts of the County had experienced considerable growth, including Germantown, Gaithersburg, Rockville, North Potomac, Burtonsville, White Oak, Silver Spring, Bethesda, Aspen Hill, and the Layhill area. The 2004 plan was written to
address the demographic and growth related trends the County was facing. In addition to changes in growth and demographics, incident call load had increased to a much higher rate and the rate of certain call loads, mainly EMS, had risen sharply.

The *Fire, Rescue, Emergency Medical Service, and Community Risk Reduction Master Plan* serves as a guideline for the Executive, Council, and Fire Chief in making decisions regarding the delivery of fire and rescue services. The plan does not have the force of law nor does it impose legal obligation on any party. The County Council approved the current plan on October 11, 2005. It is currently being updated as the plan was developed between two organizational restructurings (a chief was hired on Jan 1, 2005).

The purpose of the plan is to set “forward thinking, rational, and attainable course for the continued delivery of effective and efficient fire, rescue, emergency medical services, and the community risk reduction services.” The plan guides the MCFRS in how best the services “can meet the needs and expectations of its customers and address the overall level of fire-rescue related risk facing the County.” The plan accomplishes this task by:

- addressing what emergency and non-emergency programs are needed,
- what apparatus and equipment are needed and where,
- what facilities are needed and where, and
- how to best train and deploy MCFRS personnel.

The MCFRS serves residents, business owners, visitors to the County, County departments and agencies, municipalities located in Montgomery County, private sector emergency service organizations serving the County, state departments/agencies, and federal departments/agencies.

**Laws and Standards**

Several laws and standards impact the MCFRS in terms of organizational structure, administration, authorities and responsibilities, legal matters, and service delivery. Laws that govern the MCFRS include Chapters 2, 21, and 22 of the County Code. Standards that impact the MCFRS include response time goals and deployment criteria are voluntary national standards to which Montgomery County plans to comply.

In addition to the master plan and any amendments, planning assumptions include:

- The MCFRS will remain a combination system of career and volunteer personnel.
- The MCFRS will receive adequate appropriations and support from the County that will allow the continued operation of existing programs/services, new programs deemed necessary by the Chief, and continued delivery of quality service to the public.
The call load in the County will continue to increase in relation to population growth, pace of development and other socioeconomic factors.

The ongoing trend of EMS incidents will continue to be the vast majority of incident responses.

The Countywide risk for terrorism will remain. The MCFRS will continue to increase its level of preparedness to a level commensurate with the perceived threat and risk.

Planning for large-scale emergencies will be addressed at a more regional scale than in the past to ensure the most effective means of protecting the public.

The growth of people over 65 will outpace all other age groups by a sizable margin. Due to this increase in elderly population, the EMS call load will sharply rise.

The trend of increasingly large numbers of ethnically diverse populations residing in the County will continue.

Residential and business development throughout the County will continue to grow at a steady rate between 2005 and 2015, particularly along the I-270 corridor. Transportation infrastructure (highway and rail) will continue to expand within the County as well.

Demand projections are based on the following:

- Population projections (including age, income) using M-NCPPC Research & Technology Center and Census data
- Building density
- Location of healthcare facilities

MCFRS anticipates demand by charting (using GIS) incident reports, projected needs. It projects need based on land use (elderly facilities, nursing homes, etc.) and population statistics.

Supply is projected based on:

- Adding staff and flex units to areas of need.
- Assistance from the private sector.
- Automatic mutual aid or assistance from federal sites that provide their own fire and rescue services.

Sources of Change in Demand

- Demographic, economic and social changes in the county.
- Changes in intensity and types of uses in existing nonresidential buildings can alter service demands on both police and fire/rescue departments.
• Development trends (i.e., more high-rise development, reuse)
• Development in the agricultural areas.
• Changes in national standards that affect response times, etc.
• National security emergency status

MCFRS indicates that they have a good relationship with the federal facilities inside and outside the County and report that Federal partners assist the County whenever they can. After September 11, 2001, the relationship strengthened with added Homeland Security policies. MCFRS has specialty teams who are trained to respond to local and national disasters and they include: Hazmat, urban search and rescue team, dive team, evacuation and tactics teams, and bomb squad.

Current Test

The current Growth Policy resolution addresses police, fire and health facilities in the same way. The following paragraph is from the current Growth Policy and constitutes the entire “test” for adequacy of these facilities:

Guidelines for 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.

Evaluation

The MCFRS is evaluated in the “Montgomery Measures Up!” initiative. This initiative focuses on reporting the performance of selected County programs and program elements using a “family” of measures – input, output, outcome, service quality, and efficiency measures. Montgomery Measures Up! is designed to provide departments with a powerful tool to help the County achieve its vision of “efficient, effective and responsive government that delivers quality services.” Indeed, the regular measurement, reporting, and use of performance measures by County departments and programs are expected to play key roles in managing the County during the coming years. With a budget of over $180 million, the MCFRS will likely continue to need trained staff and facilities to provide the best emergency fire and rescue services that County residents expect.
Recommendations

Planning Department staff recommends no changes to the adequacy test for fire and rescue services. Planning staff reviewed public safety facilities and services in detail in 2005 and recommended no changes at that time. For fire and rescue services in particular, staff noted that the number and location of fire stations is correlated to adequacy (as measured in response times) because, unlike police, fire and rescue personnel are located at a station until a call comes in. Staff’s 2005 research indicated that the major challenge for adding stations was finding suitable locations and that the master plan process is the best mechanism for designating those locations. Montgomery County Fire and Rescue Services representatives participate in the master plan process, and MCFRS has an up-to-date master plan.

During the course of our study this year, staff noted several aspects of fire and rescue services that may be useful for making land use recommendations during the master plan process. These include the fact that the great majority of calls are for emergency medical services, which suggests that Planning staff discuss with MCFRS the possibility of identifying locations for emergency medical units in master plans.

The observation that only 12 percent of calls are for fires, and that most of these are for brush and vehicle fires, suggests to Planning staff that there are opportunities to increase the use of smaller fire trucks in the fleet, which allows use of smaller fire stations and road turning radii. Planning staff raises this issue only from a land use perspective: larger parcels of land are becoming rare, and the future of neighborhood design depends in part on narrower streets with smaller turning radii.

Parks and Recreation

Current Procedures

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

Demand

Every six years the M-NCPPC staff prepares the Land Preservation, Parks, and Recreation Plan (LPPRP) for Planning Board 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 or 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 Parks staff has insufficient user data to develop a participation rate. Ball-field 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

Public facilities at 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, developers may also be required to develop the park. There are frequent park dedications required for protection of natural resources and trail connections.

The use of the recreation guidelines already provides most of the potential benefits of including park and recreation services in the Growth Policy. The guidelines allow the Planning Board to require park and recreation facilities at subdivision, and they, along with the LPPRP, provide standards and analysis as to where park and recreation facilities are needed. Inclusion within the Growth Policy would allow the Planning Board to deny subdivisions on the basis of inadequate park and recreation facilities.

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3 In 1989, the Montgomery County Planning Board requested that staff prepare recreation guidelines for use when the Board reviews site plans for proposed subdivisions. These private recreational facilities offer an important supplement to the public park system. The Guidelines were approved in 1992 with an advisory work group to assure the adequacy of recreation in terms of quantity, quality, location, linkages, and layout. They include a quantitative method as well as a site design and facilities criteria. The quantitative system is based on Montgomery County demographics and is intended to ensure a consistent and adequate level of recreation for the population of any project. The system provides a standard of measure for estimating the recreation demand of the future population of a proposed project and evaluating the supply of recreational opportunities within the proposed facilities. The provision of recreation facilities is considered adequate when the supply meets the demand.

The estimate of demand for recreation is based on the demographics of Montgomery County. The demographic data are weighed against other factors, such as density. The demand is estimated for each population category: tots, children, teens, adults, and seniors. The demand is estimated for each housing type: single-family detached, townhouse, garden apartments, and high-rise apartments.
Sources of Change in Demand

- Changing participation rates
- Changing demographics (aging of population, increased diversity)
- Emerging park uses (e.g., BMX biking, dog parks, skate 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)

Issues Related to Developing an Adequacy Test at Subdivision

A number of issues would likely be raised if parks and recreation facilities were to be considered for an adequacy test to be administered at subdivision through the Growth Policy. These are not necessarily problems, per se, but highlight subject areas where decisions or adjustments would need to be made. These include:

- Whether to use the survey results that are the basis for the LPPRP or per-capita park and recreation standards.
- The current formulas make no distinctions based on criteria that may be important when evaluating individual subdivisions:
  - Larger 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).
- Would inclusion of parks and recreation facilities in the APFO further a shift from meeting demand through the provision of neighborhood walk-to parks that must be publicly maintained in favor of facilities that are provided and maintained privately?
- The Recreation Guidelines would have to be revised before they could be used as the basis for an adequacy test. Revised Recreation Guidelines may provide all of the important benefits of a APFO test for parks.
  - The application of Recreation Guidelines is essentially a local area test, conducted on a subdivision-by-subdivision basis, but we plan parks and recreation facilities using larger geographies and on the basis of participation data. Participation data is not available 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 removed from the new project. They have not been updated to account for emerging needs (e.g., for urban recreation facilities).

• The current measures of park and recreation facility capacity are insufficient for an adequacy test for new development.

Planning staff recommends that the Recreation Guidelines applied in the regulatory process be revised. This project is included in the Planning Department’s requested FY08 work program. Among the issues to consider: whether to eliminate provisions that allow developers to count existing public facilities as part of satisfying the recreational requirements for new development.

Community Center Facilities

The Recreation Department began constructing larger recreation centers in the 1980s. The current prototype for these facilities meets resident’s needs much more effectively. The Department currently has 17 Community and Neighborhood Recreation Centers located throughout the County which host programs for the Department as well as other County agencies and community organizations. These centers provide leisure activity, social interaction, family participation, neighborhood civic involvement, and promote community cohesion and identity. Programs for all ages are available in centers. These facilities are designed to support sports, fitness, dance, social activities, and arts programs. Activities include instructional programs, organized competitions, performances and exhibitions, recreational clubs and hobby groups, access initiatives for special populations, and summer camps/playgrounds. In addition, they offer important community meeting space. Center spaces are available for rentals, receptions, special events, and meetings. User fees are charged for rentals and other programs and services offered at each facility.

Future Needs for Community Centers

In the FY07-12 Capital Improvements Program, there are 9 new centers proposed, including one in Friendship Heights that will be built by a developer. Additionally, renovations are proposed for the older centers. In 2003, the Recreation Department proposed a larger prototype building to maximize efficiency in programming and operation. The new prototype will be 33,000 net square feet and will include more integrated space for senior citizen services. The LPPRP concentrates primarily on these larger centers operated by the Recreation Department. Additionally, it was suggested that the 33,000 square foot model serves an optimum population of approximately 30,000 or about 1,100 square feet of recreation space for every 1,000 individuals. A
coordinated effort has been conducted with the Recreation Department participation
data to determine appropriate geographic service areas and capacities. Research has
determined that most people attending recreation classes do not travel more than three
to five miles to their activity. Beyond the three to five mile distance from a center, the
participation rate of residents drops dramatically. When the service area of recreation is
related to population density, gaps in existing service coverage are apparent.

**Parking Facilities**

**Current Procedures**

The Zoning Ordinance stipulates that each new development must provide sufficient
parking to satisfy its own demand. Parking ratios are provided in the ordinance for each
type of use (e.g., parking spaces per thousand square feet of commercial development).
Generally speaking, the parking provided privately pursuant to the requirements in the
Zoning Ordinance appears to be adequate in most cases to satisfy the demand from
new development. As a result, the rest of this section will focus on the provision of
parking in the urban areas of Montgomery County where the supply of parking is
provided in part by the public sector using funds generated by new development plus
fees from the users of public parking facilities.

Chapter 60 of the County Code permits development projects in the County’s four
Parking Lot Districts (PLDs) to pay a PLD tax in lieu of providing parking on-site. Each
PLD uses the tax revenues, fees from the use of public parking facilities, and the
revenues from fines to fund the provision, maintenance and operation of public parking
facilities. The monies in each PLD fund can also be transferred within prescribed limits
to other County uses, e.g., mass transit.

The Montgomery County Department of Public Works and Transportation (DPWT)
manages the four PLDs and attempts to ensure that the supply of public parking in each
district is sufficient to satisfy the demand. Each PLD is essentially a system to itself,
although the County Council sets the parking rates and PLD tax rates.

Every five years, a supply and demand analysis is undertaken for each PLD. For
analysis purposes, the PLDs are divided into quadrants. The analysis involves an
inventory of privately provided parking within the district, an inventory of County-owned
parking on- and off-street, and field observation of the turnover and utilization rates for
public parking spaces. DPWT projects the total future demand for parking based on
existing and approved development, additional development plans that have been
submitted for approval by the Planning Board, other potential projects being considered
by developers, and various economic indicators (e.g., job growth) that reflect regional
economic health. DPWT then compares the projected parking demand to supply and
determines whether and where additional facilities are needed.

This process is intended to ensure the provision of sufficient parking to support
development in the PLDs, some of which are designated revitalization areas. However,
the ability of each PLD to provide the parking needed to satisfy demand is limited, particularly within each quadrant of a PLD. Obstacles include the following:

- Sites for new public parking facilities in the CBDs are scarce and expensive.
- The cost of constructing new facilities is high and increasing. The most recent parking facility in Bethesda cost $60,000 for each underground parking space, exclusive of the land cost. (The shallow bedrock in Silver Spring makes underground parking facilities particularly expensive.)
- Each PLD is also under some pressure to divert funds for other purposes. A significant portion of the PLD funds are diverted to fund mass transit and to support the County’s Urban Districts.
- The construction of above-grade public parking limits the amount of private development that can be constructed on top of the parking because the height limits in the zone are generally not increased when buildings are constructed above parking.

Supporting the mass transit fund is consistent with the two seemingly contradictory objectives of the PLDs: In addition to providing parking for drivers, the PLDs are intended to encourage people not to drive. They accomplish the second objective by helping to fund mass transit; by providing parking for transit riders; and by restricting the supply of certain types of parking.

The County’s provision of public parking at relatively low rates tends to discourage both the provision of private parking garages and the provision of parking in new projects in excess of Code requirements. This may work to constrain the total supply of parking. The reliance on shared-use public parking to support the mixed use urban environment is considered more efficient than requiring every developer to undergo an adequacy test and provide on-site parking for every project.

**Sources of Change in Demand for Publicly-Provided Parking**

- The various factors that are considered in the County’s parking and supply and demand analyses, including the pace of new development.
- The changing mix of uses in new development due to market conditions.
- The ability of seemingly complimentary uses to share parking.
- The degree to which the parking ratios in the Zoning Ordinance reflect actual behavior.
- The County’s success in encouraging transit use (i.e., encouraging people not to drive) affects parking utilization rates.
- New technology (e.g., electronic parking payment).
- Changing environmental standards (e.g., for storm water management or the application of chemicals).
• The disposition of PLD property for other uses (e.g., United Therapeutics and the Cameron Hills townhouses).

Issues for Further Investigation

The Planning Department is not recommending that parking be regarded as a “public facility” in the Adequate Public Facilities Ordinance, although parking policies have a clear relationship to the County’s ability to manage traffic congestion and support vitality in the County’s centers. Among the parking issues that may be suitable for further study:

• Should the parking requirements in the zoning ordinance be changed?
• Does the provision of “excessive” public or private parking encourage driving and road congestion, discourage production of private parking, or both? What is “excessive”?
• Should older, deteriorating facilities be demolished and replaced with new parking facilities in the quadrants of each PLD where underserved demand currently exists? Or are there other issues that need to be explored?
• How are specific PLD operating decisions, such as parking rates, PLD tax rates and the transfer of PLD funds to other purposes, supporting the County’s transportation and other policy goals?
• Is there utility in a broader funding mechanism for public parking, such as a countywide parking tax?
• How can sites be obtained for the construction of new public parking facilities? Should there be incentives or requirements for private development to provide a public parking component instead of, or in addition to, private parking?
• How can street activating uses on the ground floor of public parking facilities be encouraged?
• Are new PLDs needed in places like Long Branch?

Libraries

Current Procedures

The Montgomery County Public Libraries Strategic Facilities Plan 2004-2009 was prepared in March 2004. It makes no reference to an approval procedure either with the Executive Branch or the County Council. Further, there is no statutory requirement for the County’s library system to prepare a master plan. The purpose of the current Strategic Plan is to serve as a guide to the County for renovating existing library facilities and assessing the need for new public library facilities. The plan profiles the current library system facilities and establishes a timetable for future renovations. It
also identifies areas where new facilities may be needed due to population growth or other programmatic factors.

Population projection information is supplied by the MNCPPC Research & Technology Center and is used to determine where to build new libraries or to expand existing libraries. According to the current Strategic Plan, the library system acknowledges the County’s General Plan and expects the growth to be focused in the I-270 Corridor, at Metro stations, and infill in existing urban areas.

There are 22 library facilities in the County. Each library in the Montgomery County Department of Public Libraries system serves its immediate community. The population of the area and the distance from other library facilities determines the size of the library. The primary service radius for each facility is generally two miles. The following criteria are used when establishing a new facility: a minimum population of 5,000 people for a small storefront facility and 16,000 people for a full-size facility. Residents in the urban areas of the County should have a library no more than three miles from home. Residents in rural areas of the County should have no more than a 20-minute drive to a library.

The Montgomery County Department of Public Libraries has an approved operating budget for FY07 of $38 million. Personnel costs comprise 79.4 percent of the budget for 375 full-time positions and 252 part-time positions. Operating expenses account for the remaining 20.6 percent of the FY07 budget. Library services continue to be primarily facilities-based.

Sources of Change in Demand for Library Services

- Demographic, ethnic, economic and social changes in the county.
- Population growth occurring in areas of the County that do not presently have nearby libraries.
- Population growth in densely populated areas of the County that continue to grow with nearby libraries.
- Program/service changes due to changes in the information technologies
  - Demand for increased electronic areas in libraries,
  - Demand for new and emerging formats of information and materials, and
  - Routine activities, such as checkout, will continue to move toward self-service.

Recommendations

The Planning Department does not recommend applying an adequate public facilities test to new development for library facilities.
Time Limits of a Finding of Adequate Public Facilities

Background

In Montgomery County, proposed development is tested for the adequacy of public facilities serving that development. Typically, the testing of public facilities occurs at the time of the Planning Board’s review of a preliminary plan of subdivision. Chapter 50 of the Montgomery County Code addresses the testing of subdivisions for public facilities adequacy, as does the Growth Policy resolution adopted by the County Council every two years.

Two years ago, staff was asked to address the issue of time limits of a finding of adequate public facilities as well as the issue of APF findings for recorded lots. Based on Planning staff’s analysis (in Chapter 1 of the Final Draft 2005-2007 Growth Policy), the Montgomery County Planning Board recommended changes to the Montgomery County Code. These were enacted by the County Council as SRA 05-03 (which clarified the conditions and limits for extending a finding of adequate public facilities) and Bill 28-05, which revised the standards and process for conducting APF reviews of recorded lots to be analogous to those used at subdivision.

Testing Public Facilities Adequacy at Subdivision

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential Subdivisions</th>
<th>Commercial Subdivisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to 7/25/1989</td>
<td>No time limits on APF finding</td>
<td>12 years*</td>
</tr>
<tr>
<td>7/25/1989 to 10/19/1999</td>
<td>12 years</td>
<td>12 years</td>
</tr>
<tr>
<td>Since 10/19/1999</td>
<td>No less than 5 and no more than 12 years, as determined by the Planning Board at the time of subdivision.</td>
<td>No less than 5 and no more than 12 years, as determined by the Planning Board at the time of subdivision.</td>
</tr>
</tbody>
</table>

When the Planning Board finds that public facilities are adequate to support a subdivision, that finding has a limited validity period. Regulations governing the length of this validity period have changed three times in the past 30 years, with the last change being in 1999.

Section 20 of Chapter 50 contains language setting the time limits of a finding of adequate public facilities by the Planning Board and the language that determines the conditions under which the Planning Board may grant an extension of the validity period for a finding of adequate public facilities. Time limits for an extension of a finding of adequacy public facilities are generally limited to one-half of the period of the original finding. A project with an original APF time limit of 5 years could receive an extension up to 2 ½ years long.
Development projects are eligible for an extension if they are partially complete and show recent development activity. In 2005, the Council added a provision that permits but does not require the Planning Board to extend an APF time limit for certain projects that have not yet begun construction. One project in Germantown has requested an extension under this provision and this request is pending before the Board.

In December 2006, the County Council passed a resolution requesting that the Planning Board include in its 2007 Growth Policy study an update of the 2005 review. This report contains that review.

Review of Pipeline of Approved Development

Planning Department staff reviewed the current pipeline of approved development to show how the current set of time limits has shaped the characteristics of approved development in Montgomery County.

Tables 1.1 and 1.2 show the year of expiration for housing units and non-residential square footage in the pipeline as of January 1, 2007. The majority of plans will expire by 2011, which is expected since most plans are now given a five-year expiration period. Eighty-seven percent of the residential pipeline and ninety-two percent of the commercial pipeline will expire within five years.

<table>
<thead>
<tr>
<th>Year of APF Expiration</th>
<th>Units Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1,000</td>
</tr>
<tr>
<td>2008</td>
<td>1,000</td>
</tr>
<tr>
<td>2009</td>
<td>1,000</td>
</tr>
<tr>
<td>2010</td>
<td>5,000</td>
</tr>
<tr>
<td>2011</td>
<td>4,000</td>
</tr>
<tr>
<td>2012</td>
<td>2,000</td>
</tr>
<tr>
<td>2013</td>
<td>2,000</td>
</tr>
<tr>
<td>2014</td>
<td>2,000</td>
</tr>
<tr>
<td>2016</td>
<td>2,000</td>
</tr>
<tr>
<td>No Expiration</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1.1 Residential Pipeline by Year of APF Expiration
Table 1.3 shows the residential projects in the pipeline that were approved prior to July 25, 1989 do not have an expiration date the majority of these plans fall within the Fairland/White Oak, Potomac, and Rural Policy Areas, respectively.

<table>
<thead>
<tr>
<th>Policy Area</th>
<th>Plans</th>
<th>Approved Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspen Hill</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Cloverly</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Damascus</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fairland/White Oak</td>
<td>3</td>
<td>146</td>
</tr>
<tr>
<td>Kensington/Wheaton</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Montgomery Village/Airpark</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>North Potomac</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Potomac</td>
<td>9</td>
<td>120</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>11</td>
<td>99</td>
</tr>
<tr>
<td>Silver Spring/Takoma Park</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

APF Extensions

There are only a handful of plans each year that are granted extensions. All of the extensions granted thus far have been subdivisions that qualified under the rules...
requiring a demonstration of "activity:" (40-60 percent complete, 5-10 percent completed within previous four years.)

Tables 1.4 shows that seventy-six percent of the total residential units in the pipeline have a five-year APFO limit. Twelve percent have APF periods of twelve years and thirty-one plans representing eight percent, are plans approved prior to July 25th 1989 and do not have an expiration date. The average size of these thirty-one plans is twelve units. In the commercial pipeline (Table 1.5) thirty-nine percent of the approved square footage expires in five years, thirty-two percent has a twelve-year expiration. Four plans constituting six percent of the square footage expires after twelve years. The average size of these four plans is 262,793 sq ft.

<table>
<thead>
<tr>
<th>Length of APF Period</th>
<th>Plans Approved</th>
<th>Units Approved</th>
<th>Average Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>272</td>
<td>12,778</td>
<td>47</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>915</td>
<td>131</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>386</td>
<td>193</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>2,654</td>
<td>2,654</td>
</tr>
<tr>
<td>12</td>
<td>43</td>
<td>8,792</td>
<td>204</td>
</tr>
<tr>
<td>No expiration</td>
<td>31</td>
<td>383</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>357</td>
<td>25,922</td>
<td>73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of APF Period</th>
<th>Plans Approved</th>
<th>Sq Ft Approved</th>
<th>Average Sq Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>62</td>
<td>6,314,842</td>
<td>101,852</td>
</tr>
<tr>
<td>6</td>
<td>25</td>
<td>2,814,912</td>
<td>112,596</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>800,670</td>
<td>200,168</td>
</tr>
<tr>
<td>12</td>
<td>17</td>
<td>5,280,669</td>
<td>310,628</td>
</tr>
<tr>
<td>18</td>
<td>4</td>
<td>1,051,172</td>
<td>262,793</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>16,262,265</td>
<td></td>
</tr>
</tbody>
</table>

Years to Completion

A look at plans completed in the three years between 2004 and 2006 shows that the average time to completion for non-residential plans was 8.5 years and the average time to completion for residential plans was 8.6 years. The weighted average – calculated by taking the square footage or units, multiplying by number of years to completion, and then dividing by the total square footage or units – tells a different story. The 19 non-residential plans completed during this time had a weighted average time to completion of 9.3 years, which means that larger projects are taking longer to complete than the smaller projects. The reverse is true for residential development. The
weighted average of the 127 plans completed between 2004 and 2006 is 4.6 years, meaning that the bigger projects were completed faster than the small ones.

Tables 1.6 and 1.7 show the length of time between the approval and completion date for the pipeline. Eighty-one percent of the residential completions and fifty-eight percent of the commercial completions occurring between 2004 and 2006 occurred in less than 4 years. Between the fourth and fifth year after a plans initial approval there was only an increase in completions of six percent for residential units and five percent for commercial square footage. For completions between 2004 and 2006 the average length of time for residential completions was 8.5 years and 8.6 years for commercial completions. These average time frames are skewed due to 14% of the residential plans and 6% of the commercial plans completed had taken between 13 to 22 years to complete. These plans represented approvals that occurred prior to July 25th, 1989.

<table>
<thead>
<tr>
<th>Years</th>
<th>Number of projects</th>
<th>Percent of Plans Completed within this time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>8</td>
<td>42.11%</td>
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<tr>
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<td>3</td>
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<td>5.26%</td>
</tr>
<tr>
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</tr>
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</tr>
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</tr>
<tr>
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<td>1</td>
<td>5.26%</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>5.26%</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>100%</td>
</tr>
<tr>
<td>Number of Years to Complete</td>
<td>Number of Projects</td>
<td>% Plans Completed</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>1.57%</td>
</tr>
<tr>
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<td>15</td>
<td>11.81%</td>
</tr>
<tr>
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<td>41</td>
<td>32.28%</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>21.26%</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>14.17%</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>5.51%</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0.79%</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>2.36%</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>2.36%</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>0.79%</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>0.79%</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>0.79%</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>3.15%</td>
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<tr>
<td>17</td>
<td>2</td>
<td>1.57%</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>0.79%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Completion Status

Tables 1.8 and 1.9 show the completion status through October 31, 2006 of residential subdivisions approved between November 1, 1999 and October 31, 2006. The tables show that there were 27,966 housing units approved between November 1, 1999 and October 31, 2006. Plans approved before October 31, 2003 have more than sixty-four percent of the units completed. Plans approved after November 1, 2006 have less than seven percent of the units completed. The 5-year APF time limit went into effect in October 1999. Plans approved five years ago between November 1, 2001 and October 31, 2002 have over half of the units completed. Fifty-seven of the 92 subdivisions approved during that period are completely built, while 25 subdivisions were less than 50 percent built by January 1, 2007.
Table 1.8: Completion Status of Residential Subdivisions Approved 11/1/1999 to 10/31/2006

<table>
<thead>
<tr>
<th>When Approved</th>
<th>Units Approved</th>
<th>Units Remaining</th>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SF</td>
<td>TH</td>
<td>MF</td>
</tr>
<tr>
<td>11/1/1999-10/31/2000</td>
<td>752</td>
<td>912</td>
<td>1,265</td>
</tr>
<tr>
<td>11/1/2000-10/31/2001</td>
<td>1,833</td>
<td>1,411</td>
<td>1,976</td>
</tr>
<tr>
<td>11/1/2001-10/31/2002</td>
<td>1,303</td>
<td>1,150</td>
<td>2,298</td>
</tr>
<tr>
<td>11/1/2002-10/31/2003</td>
<td>717</td>
<td>484</td>
<td>2,493</td>
</tr>
<tr>
<td>11/1/2003-10/31/2004</td>
<td>1,912</td>
<td>339</td>
<td>3,729</td>
</tr>
<tr>
<td>11/1/2004-10/31/2005</td>
<td>1,111</td>
<td>626</td>
<td>1,154</td>
</tr>
<tr>
<td>11/1/2005-10/31/2006</td>
<td>640</td>
<td>462</td>
<td>1,399</td>
</tr>
<tr>
<td>Total</td>
<td>8,268</td>
<td>5,384</td>
<td>14,314</td>
</tr>
</tbody>
</table>

Table 1.9: Completion Status of Non-Residential Subdivisions Approved 11/1/1999 to 10/31/2006

<table>
<thead>
<tr>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>When Approved</td>
</tr>
<tr>
<td>11/1/1999-10/31/2000</td>
</tr>
<tr>
<td>11/1/2000-10/31/2001</td>
</tr>
<tr>
<td>11/1/2001-10/31/2002</td>
</tr>
<tr>
<td>11/1/2002-10/31/2003</td>
</tr>
<tr>
<td>11/1/2003-10/31/2004</td>
</tr>
<tr>
<td>11/1/2004-10/31/2005</td>
</tr>
<tr>
<td>11/1/2005-10/31/2006</td>
</tr>
</tbody>
</table>

Tables 1.10 and 1.11 show the completion status through October 31, 2006 of non-residential subdivisions approved between November 1, 1999 and October 31, 2006. The tables show that 21,090,725 square feet of non-residential space was approved between November 1, 1999 (the first year that the 5-year rule was in effect) and October 31, 2006. Plans approved before October 31, 2003 have more then fifty-three percent of the square footage completed. Plans approved after November 1, 2003 have less then eight percent of the square footage completed. Plans approved five years ago between November 1, 2001 and October 31, 2002 have over fifty-six percent of the square footage completed. Thirty of the 31 commercial approvals during that period are completely built, while one of the commercial approvals is between 50-75% built as of January 1, 2007. Of the 34 plans approved four years ago between November 1, 2002 and October 31, 2003 thirty-two are complete, 1 is between 50-75% complete and the other is under 50% complete as of January 1, 2007.
### Table 1.10: Completion Status of Residential Subdivisions Approved 11/1/1999 to 10/31/2006

<table>
<thead>
<tr>
<th>When Approved</th>
<th>Square Feet Approved</th>
<th>Square Feet Remaining</th>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/1999-10/31/2000</td>
<td>847,659</td>
<td>59,690</td>
<td>92.96%</td>
</tr>
<tr>
<td>11/1/2000-10/31/2001</td>
<td>3,417,168</td>
<td>530,400</td>
<td>84.48%</td>
</tr>
<tr>
<td>11/1/2001-10/31/2002</td>
<td>2,580,290</td>
<td>1,120,446</td>
<td>56.58%</td>
</tr>
<tr>
<td>11/1/2002-10/31/2003</td>
<td>3,226,411</td>
<td>1,503,547</td>
<td>53.40%</td>
</tr>
<tr>
<td>11/1/2003-13/31/2004</td>
<td>6,798,025</td>
<td>6,277,149</td>
<td>7.66%</td>
</tr>
<tr>
<td>11/1/2004-10/31/2005</td>
<td>2,900,884</td>
<td>2,897,604</td>
<td>0.11%</td>
</tr>
<tr>
<td>11/1/2005-10/31/2006</td>
<td>1,320,288</td>
<td>1,304,796</td>
<td>1.17%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21,090,725</strong></td>
<td><strong>13,693,632</strong></td>
<td>--</td>
</tr>
</tbody>
</table>

### Table 1.11: Completion Status of Non-Residential Subdivisions Approved 11/1/1999 to 10/31/2006

<table>
<thead>
<tr>
<th>When Approved</th>
<th>Plans Approved</th>
<th>100%</th>
<th>75-100%</th>
<th>50-75%</th>
<th>0-50%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/1999-10/31/2000</td>
<td>14</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>11/1/2000-10/31/2001</td>
<td>22</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>11/1/2001-10/31/2002</td>
<td>31</td>
<td>30</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>11/1/2002-10/31/2003</td>
<td>34</td>
<td>32</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td>11/1/2003-13/31/2004</td>
<td>23</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>11/1/2004-10/31/2005</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>11/1/2005-10/31/2006</td>
<td>28</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>26</td>
<td>28</td>
</tr>
</tbody>
</table>