Section V: Assessing the Effectiveness of Specific Provisions: Transportation

Introduction

In Montgomery County's Annual Growth Policy, the text devoted to transportation adequacy constitutes the bulk of the document. Although the procedures for determining how much development can be supported by the transportation network are considered somewhat complex, they are concise compared to the provisions that govern the circumstances under which development may be approved even when transportation facilities are inadequate.

The procedures that determine how much development can be supported by the transportation network are *Policy Area Transportation Review* and *Local Area Transportation Review*. Policy Area Transportation Review (PATR) sets *staging ceilings*, the maximum amount of residential and non-residential development that can be supported by the transportation network. PATR is concerned with area-wide average congestion levels. Local Area Transportation Review (LATR) determines if proposed development projects will cause nearby intersections to exceed their level of service standard, or if the intersection already exceeds the level of service standard, will make congestion at that intersection worse.

The procedures that allow development to be approved despite inadequate transportation facilities may be divided into three types:

- procedures that allow approvals because the developer agrees to mitigate the impact of his development project on the transportation network,
- procedures that allow approvals because the development project meets some other public policy objective to a degree that *fully compensates* for its negative impact on the transportation network, and
- procedures that allows approvals because the development project meets some
 other public policy objective to a degree that partially compensates for its
 negative impact on the transportation network and therefore the developer is also
 required to contribute, usually in the form of a fee, to a fund that pays for future
 transportation improvements.

This section will review both the procedures for determining how much development can be supported by the transportation network as well as the exemptions -- procedures which determine how development may be approved when publicly funded infrastructure is inadequate to support new subdivision approvals.

In the adopted FY 2002 Annual Growth Policy, the County Council specifically directed the Planning Board to address "whether Policy Area Transportation Review should remain as part of the test for transportation adequacy, and if so, whether and how to develop staging ceilings by a method other than the Total Transportation Level of Service."

Policy Area Transportation Review

What Problems with PATR Have Been Identified?

Every two years, Montgomery County addresses growth management policy issues in a document called the *AGP Policy Element*. In the most recent Policy Element, which was prepared and reviewed throughout 2001, a major issue was the "revalidation" of the process that is used to develop staging ceilings for Montgomery County's 27 policy areas. The purpose was both to "validate" the transportation model's assumptions about the relationship between development and transportation and to update the data that are key inputs for the Total Transportation Level of Service equation, which determines the amount of auto congestion permitted in each policy area. The model assumptions include mode choice, route choice, and others. The revalidation included updating or refining model inputs, including background traffic counts and transit usage.

The staging ceilings that resulted from the staging ceiling process revalidation were found to be unacceptable by the County Council. That finding was a primary impetus for the top-to-bottom review of the Annual Growth Policy that is the subject of this paper. This suggests that, of all of the aspects of the AGP that are to be studied and evaluated, it is of primary importance to develop an acceptable solution to the problem of setting staging ceilings. The problem could be resolved in a number of ways, such as:

- changing the specific aspect of the process that appears to be the primary cause of the unacceptable results;
- adopting an entirely new method for setting staging ceilings; or
- abandoning staging ceilings altogether.

It is necessary to briefly revisit the reason why the resulting staging ceilings were considered unacceptable. The primary reason was that the process produced staging ceilings that were very different from the current ceilings that appeared to be unrelated to changes in "real world." The new ceilings meant that areas of the County previously shown as having plenty of capacity for new approvals would now be in moratorium; areas that had been close to moratorium would now have capacity for many new approvals.

Staging ceiling results can always be changed by the adoption of a different level of service standard. A problem with the new process was that no standard resulted in staging ceilings that resembled those currently in effect. The planning staff attempted to resolve this issue with a recommendation that held staging ceilings in most of the County close to their current levels, reduced ceilings by relatively modest amounts in a few policy areas, and concentrated the major increases in a few policy areas. The areas with the major increases – in practical effect the staging ceilings would have allowed the approval of the zoning envelope – were the older urban and suburban areas inside the Beltway (Bethesda-Chevy Chase and Silver Spring) and some of the older suburban areas just outside the Beltway (Kensington and Wheaton). Staff's rationale was that there is a limited number of transportation improvements expected for these areas anyway, and the

"huge increases" in staging ceiling were largely theoretical since the areas are almost fully developed.

Policy Area Transportation Review sets staging ceilings in two steps. The first step is to determine the amount of auto congestion that can be permitted in a policy area while still meeting the level of service standard. Once the standard for auto congestion for every policy areas is determined, the second step uses a traffic model to determine how much development can be approved while meeting the auto congestion standard in every policy area.

Since the 1970s the County has followed a principle that permits additional auto congestion in areas with better transit service and/or usage. In other words, the auto congestion standard for every policy area, which the traffic model uses to set staging ceilings, varies according to transit service and usage. Prior to 1994, the auto congestion standard in a policy area was determined based upon a legislative review of the transit service characteristics of the area. Based upon that legislative review, a policy area was assigned to a "group" of other policy areas with similar levels of transit service. Policy areas with little or no transit service were in Group I where the auto congestion standard was stringent; policy areas with the best transit service – those containing Metro stations – had the least stringent auto congestion standard (Group VI).

The group system was criticized for two main reasons – the system was not sensitive to improvements in transit service, and it did not adequately take transit usage into account. The insensitivity of the system to transit improvements was not intentional but it revealed itself when the addition of a new Metro station in the Kensington/Wheaton policy area was not a sufficient improvement in transit service for the policy area to change groups. The fact that transit usage was not a major component of the system was criticized because it was felt that improvements to transit service should not "count" unless they actually attract ridership. The prospect of increasing staging ceilings due to a transit improvement nobody used was referred to as "counting empty buses."

The reaction to the group system was to replace it with a continuous equation that would be more sensitive to smaller increments of improvement to the transit system and would explicitly weight transit service and auto congestion by usage. The equation, called Total Transportation Level of Service (TTLOS), specifies that that in each policy area, the combination of transit service (weighted by transit usage) and auto congestion (weighted by auto usage) must always equal the same number.

The TTLOS equation measures transit service through a "regional transit accessibility" index, or RTA index. The RTA index is a measure, from 0 to 1 with zero being the best score, of the accessibility of a policy area to jobs and housing units in the rest of the region. Specifically, the RTA index is an indexed figure measuring the proximity by transit of jobs in the metropolitan area to households in that policy area, as well as the proximity of jobs in that policy area to households in the metropolitan area.

Ironically, it appeared that it was the two reforms of the old "group" system that caused the problems during the staging ceiling revalidation in 2001: the RTA index method of calculating transit service, and the weighting of transit service by transit usage.

Transportation planners in 2001 attempted to apply the same methodology used in 1994 to develop the RTA index scores using up-to-date data, but the new RTA index scores seemed to be inconsistent with what was known about which policy areas had improved transit service and which did not. Part of the difficulty is that the RTA index is a *relative* score; policy areas are scored as a result of where their RTA falls between the policy area with the best score (in 1994 it was Silver Spring CBD) and the policy areas with the worst score (in 1994 it was Damascus). Between 1994 and 2001, then, while there were changes to levels of transit service, there were also changes to the scale for measuring transit service, including the definitions of "best," "worst," and the "distance" between those two scores.

It is not clear that the TTLOS equation is more sensitive to improvements in the transit network than the old group system. Rather, analysis indicates that transit accessibility is primarily determined by proximity to high density job and housing centers, according to the Transportation Planning staff.

The revalidation also revealed some problems associated with the weighting of transit service by transit usage. Although there is excellent data about transit usage by place of residence (decennial Census data are supplemented by the County's detailed Census Update Survey twice a decade), the data about transit usage by place of work are incomplete (employer-based surveys are completed annually but only in a few transportation management districts). The TTLOS system addressed this problem by relying on the household data from the 1994 Census Update Survey; when planners updated the TTOS equation using the 1997 Census Update Survey data, they noted that transit usage declined in the Silver Spring CBD. All other things being equal, applying the lower transit usage figures for Silver Spring CBD would have lowered staging ceilings in the area. Silver Spring CBD is the focus of an enormous redevelopment effort, and the current ceilings are just high enough to accommodate planned development for the near future, especially on the jobs side. Reducing the amount of development capacity in the Silver Spring CBD, therefore, was not a welcome option.

In addition, the 2001 revalidation analysis also revealed an incongruity with the weighting scheme. A policy area with a relatively poor RTA could achieve a better overall TTLOS score by *reducing* its transit usage, which is counter to the desired outcome. If Damascus, for example, had increased its transit usage, the TTLOS equation would give added weight to the Damascus RTA index score, which is below average. Application of the TTLOS equation would result in a lowering of the level of auto congestion permitted in Damascus and a consequent lowering of its staging ceilings.

It should be emphasized that the 2001 revalidation effort did not produce concerns about the traffic model that is the other major component of Policy Area Transportation

Review. The revalidation of the model itself was successful. Measures of "actual" traffic showed that it closely followed what the model predicted.

In addition to concerns about the TTLOS methodology raised during the 2001 AGP Policy Element, there were also concerns raised during a second in-depth review of the County's transportation planning conducted somewhat contemporaneously. Called the "Transportation Policy Report, Phase II," the review looked at the transportation infrastructure needed by the long-range (up to 50 years and beyond) development forecast. The TPR II process was directed by a large advisory committee composed of representatives of a broad range of interests. Although the AGP was not an explicit part of the review (since focus was on the balance of transportation and land use at "end state" and not on how they would be balanced along the way), some concerns about how auto congestion is measured were raised.

Some of the concerns that were raised are incorporated into the "overall evaluation" in Section IV of this paper. Those that address more the more specific aspects of PATR emphasize how the TTLOS equation measures auto congestion – the Average Congestion Index, or ACI. The ACI is, like the RTA index, measured from zero to one, with zero being the best score. Its measure of congestion is the average volume-to-capacity ratio on the major roads of the policy area, weighted by vehicle-miles of travel. Congestion on freeways (the Beltway and I-270) is measured separately and not assigned to any one policy area.

The main concerns with PATR raised by the TPR task force are:

- PM peak hour analysis does not capture the true extent of congestion. Also need to include AM peak, off-peak and weekend traffic conditions.
- The Average Congestion Index is not sufficiently sensitive to capacity additions.
- The process should not average peak and non-peak directions.
- The process does not give freeway congestion enough weight. The standard of 0.90 is too high, especially since the off-peak direction is included.
- Link-based capacity measures ignore the impact of intersection delay on congestion.
- There is a concern that the transportation standards used in the AGP and the master plans are not the same.
- There needs to be a countywide evaluation of transportation performance; we need to measure trends in congestion to determine if congestion is getting worse. If it is, then the AGP is not working.
- There needs to be a review of the percentage of the County's traffic that is externally generated beyond the County's control such from Frederick and Howard Counties.
- Some aspects of transportation are captured poorly or not at all by the PATR:
 - o Non-recurring congestion; i.e., accidents
 - o Transportation demand management, parking pricing and availability
 - Transit centers and transit quality of experience (comfort of ride, ease of use, etc)

- o Intersection improvements such as turn lanes, signalization
- o Safety improvements
- Walk and bike friendliness
- o Advanced transportation management systems (ATMS)
- o Traffic on local neighborhood streets.

Recommendations for Assessing Potential Changes to PATR

Some of the assessment recommendations in Section IV of this paper will be helpful in addressing the question of whether the AGP should continue to set staging ceilings; that is continue with some form of Policy Area Transportation Review. They include the assessments of whether Montgomery County is relatively better off, transportation-wise, than other counties and the assessment of whether there is sufficient remaining development to justify continuing to staging its approval.

The 2001 model revalidation and the Transportation Policy Report task force criticisms suggest that each of the components of TTLOS should be evaluated. Although the TPR task force expressed some frustration that the traffic model is not more sensitive, the main concerns appear to be not with the model but the TTLOS formula. Options for reassessment include:

Move from average LOS to some other measure, possibly minimum LOS standards: To some degree it is unfair to charge that the AGP's averaging of level of service makes the AGP insensitive to the worst (and best) of auto congestion, transit service, etc., since the AGP weights each transportation condition, good or bad, by the number of people experiencing that condition and, as in the case of auto congestion, by the distance that they travel in those conditions. Averaging peak and non-peak directions also allows the AGP to add more jobs capacity to areas that are mostly housing and add housing in areas that are job-rich. The idea is that balancing the jobs-housing ratio can result in shorter average trip lengths. In other words, averaging has some utility, and the AGP minimizes some of the negative effects of averaging through the use of weighting.

However, there are alternatives to the averaging methods that PATR uses that can be explored. These include averaging only the peak directions, or not averaging at all but setting minimum congestion standards for every roadway link that is now averaged.

2. Examine alternatives for measuring transit service, and in turn, for determining congestion standards for each policy area. This could include the replacement of accessibility as the measure of transit service, or changing how the Regional Transit Accessibility index is calculated – for example, changing it from a relative measure to a fixed measure. Accessibility's sophistication as a measure lies in the fact that it incorporates changes in land use as well as literal changes in transit service. For the purposes of setting staging ceilings, this has an odd circular

effect: increases in staging ceilings (if they result in construction) themselves improve accessibility, which in turn can increase staging ceilings.

There are several methods for measuring accessibility; a part of this analysis should be to review each to determine if any are less prone to the problems identified during the revalidation effort. This effort should include a wide-ranging literature review but also discussions with leading experts in the field.

- 3. Assess a policy of adopting current ceilings as starting point for all future analyses. The annual AGP Ceiling Element is a procedure where all current ceilings are held constant and only the development capacity provided by new transportation infrastructure is assessed. The lesson from the staging ceiling revalidation effort in 2001 may be that there is too much invested in current ceilings expectations by landowners, residents, and public officials to change them as a result of revisions to a formula. Such a procedure might involve a return to a legislative determination of the auto congestion standard for each policy area based upon a review of transit service and other factors.
- 4. Use staging elements in master plans to replace the practice of setting staging ceilings in the AGP. Plans adopted in the early-to-mid 1990s the Bethesda CBD Sector Plan and the North Bethesda Master Plan, for example, and to a lesser extent the Glenmont Sector Plan contained "staging elements" that were intended to address issues of staging development that were seen as beyond the ability of the AGP. These staging elements list conditions under which a master plan area can move from Stage I to Stage II to Stage III. Generally, the conditions are public facilities that must be provided, such as intersection improvements or a bikeway network, but in the case of Bethesda CBD and North Bethesda, the conditions also include attainment of a specific transit or non-driver mode share. The staging elements prohibit the AGP from increasing the staging ceilings in an area until the conditions for the next stage are met.

Meeting the conditions for moving from Stage I to Stage II in a master plan, for example, does not by itself create additional development capacity. When Stage II was declared in North Bethesda, the staging ceilings were not immediately increased. Rather, the next increase in staging ceilings in North Bethesda was due to the programming of a new interchange on the east spur of I-270. So staging elements typically rely on the AGP to determine by how much staging ceilings will increase. In other words, staging elements in master plans don't replace the AGP staging, rather they add additional constraints to AGP staging.

Staging elements in master plans and sector plans, could, however, replace PATR for the staging of development. One of the two main barriers to doing so is that master plans are intended to last 20 years or so, and it is difficult to know in advance the best or most likely sequence of planning events that will occur. It is not rare for expected development projects or public facility additions to change substantially over time. A second barrier is that master plans are hard to amend,

not simply from a procedural standpoint, but also because they represent a covenant among the residents, the landowners, and the public sector.

An alternative to the staging elements in master plans, as they have been implemented thus far, is a concept approached but not used in the Fairland and White Oak Master Plans. In that case, the concept was to first develop an end-state where land use and transportation were balanced. The second step was to identify the transportation facility additions (or transit usage changes) that would be needed to balance the end-state land use. The third step divided the amount of development remaining to be approved among the planned transportation facilities. It was not necessary in this concept to precisely determine for each individual transportation improvement the amount of development that improvement could support, because if the staging ceiling increase due to one improvement was too high, it would necessarily be balanced by the staging ceiling allocated for the other improvements, since the it had already been determined that the whole package of transportation improvements was balanced with the planned land uses.

Obviously it will be a little more complicated to attempt to replicate this approach on a countywide basis. This approach may have some merit, however, if it is determined that some policy areas are already so close to buildout that staging development no longer makes sense. In that case, staging would be limited to the remaining policy areas with substantial development yet to be approved, and this procedure might be useful in those limited cases.

- 5. Revisit the analysis that supported the 1994 conversion to the TTLOS method. The analysis that ultimately resulted in the adoption of TTLOS reviewed a number of options that were not adopted, including alternatives to transit accessibility as a measure for transit level of service. That analysis also resulted in the current method of treating freeway level of service so that major portions of Montgomery County were not closed to new development because of development approved outside the County.
- 6. Explore opportunities provided by Advanced Transportation Management Systems (ATMS). These are also known as "Automated Transportation Management Systems." Montgomery County began in 1996 an ambitious program to implement a variety of traffic management systems, such as advanced traffic responsive traffic signal control for up to 1,500 signals, automated variable message and route guidance sign control system, 200 camera video surveillance system, sophisticated electronic transportation monitoring systems, a time critical Geographic Information System (GIS), an automated transportation information system, integrated transit and traffic operations, GPS and other technology based vehicle tracking system, an automated incident detection and management system, automated integration with police/fire computer aided dispatch systems, and automated transportation planning support.

¹ List from the website of the Montgomery County Department of Public Works and Transportation.

For several years transportation planners have been looking forward to the opportunity to use the data generated by ATMS. One objective is to measure the effectiveness of ATMS to determine if operational improvements can add capacity to augment or substitute for new infrastructure. For example, applying a variety of ATMS technologies to a corridor might provide a similar benefit as an additional lane of pavement. The AGP's PATR could develop a procedure for determining by how staging ceilings could be increased due to ATMS improvements and developers could offer to fund ATMS operations to meet their adequate public facilities requirements. Alternatively, the County could adopt a policy of using ATMS to improve the quality of vehicle trips (auto and roadway-based transit) while limiting staging ceiling increases to those occasioned by infrastructure improvements.

Local Area Transportation Review

What Problems with LATR Have Been Identified?

Although the basic idea of testing proposed development for its impact on nearby intersections is a common one, there is still room for debate on how the procedure should be implemented. Even more than Policy Area Transportation Review, Local Area Transportation Review (LATR) has been the subject of nearly continual analysis, particularly over the past half-decade. These analyses have looked at:

- How well does LATR account for forecasts in background traffic? This analysis in the 1999-2001 AGP Policy Element showed that the traffic studies used for LATR accurately forecast traffic impact for the first 6 years after an development was approved, and less accurate thereafter. The results of this analysis helped justify a change to a shorter time limit on a finding of adequate public facilities from 12 years for all subdivisions to 5 years for all by the largest subdivisions.
- What is the actual capacity of an intersection? The goal of this analysis in the 2001-2003 AGP Policy Element was to justify the current LATR congestion standards by policy area or develop new ones. The study found evidence from national studies that intersection capacities have increased marginally since the standards were adopted, but did not recommend that the Montgomery County's intersection congestion standards be changed. This analysis also justified a previous adjustment in lane-use factors. The adjustment was based upon findings and recommendations by the Institute of Transportation Engineers, but some felt that because the result was an assumption that slightly more cars can move through an intersection in an hour, that the lane-use factor adjustment amounted to a de facto loosening of the LATR congestion standards. This was a continuation of a major study in 1997 called "Monitoring and Evaluating Standards Used In Local Area Transportation Reviews."
- Should the Critical Lane Volume technique be retained, or should some other method be used? This issue has been the subject of on-and-off debate for well

over a decade, as the CLV method has been used in Montgomery County for 25 years. Critics of the Critical Lane Volume technique believe that it does not adequately measure the actual experience of a driver or passenger at an intersection because intersections with similar CLV scores can theoretically experience much different levels of delay. Park and Planning staff reviewed this issue in great detail in the "Monitoring and Evaluating Standards Used In Local Area Transportation Reviews" report. The report found that the CLV method produces a "conservative estimate of intersection congestion and is comparable to and consistent with the 1994 Highway Capacity Manual's Planning Method, the other nationally-accepted method for calculating intersection congestion for planning applications."

- Should LATR be modified for use in analyzing development near Metro stations? The rules for applying LATR in the Silver Spring CBD policy area have been different that those applied in other areas of Montgomery County for over a decade. LATR in the Silver Spring CBD is a two-tier test: if proposed development fails the usual Critical Lane Volume test, it doesn't automatically fail LATR. Instead, a second test is applied, called a queuing analysis. Proposed development can pass LATR, even if it fails the CLV test, if the queue of cars waiting to go through the intersection does not extend more than 80-90 percent of the way back to the previous intersection (whether it is 80 or 90 percent depends upon the intersection). In the 2001-2003 AGP Policy Element, staff was asked to evaluate whether this provision should be retained. Staff recommended, and the Planning Board and the County Council approved, applying the queuing analysis rule to all Montgomery County Metro Station Policy Areas. New LATR Guidelines have been prepared to implement this change, and these guidelines were released for public comment on May 2, 2002.
- The zoning ordinance requires a test for adequacy of public facilities when property is rezoned. What is the relationship between the test at zoning and LATR, which is the test at subdivision? This issue was the subject of discussion and analysis for the 2001-2003 AGP Policy Element. The concern was that the test at zoning was not defined and was inconsistently applied, so that sometimes a rezoning applicant would be required to study, and sometimes to mitigate congestion, at more or different intersections than other rezoning applicants. Further, because rezoning occurs earlier in the development review process than subdivision, projects were also subject to the LATR test at the time of subdivision. The County Council directed staff to develop a zoning text amendment that is expected to be introduced in the next few weeks that will define the intersection congestion test at zoning.

² Quoted from the report's summary in the 1997-1999 AGP Policy Element, page 48.

Recommendations for Assessing Potential Changes to LATR

Despite all of these recent analyses, it would not be accurate to suggest that all LATR-related issues have been resolved to everyone's satisfaction. Whether LATR allows too much congestion or is too stringent will continue to be the subject of debate. For the immediate future, however, it appears that the main analytical issue will be to track the implementation of the queuing analysis method in Metro Station Policy Areas other than Silver Spring CBD. Some of these other policy areas, especially in Bethesda and North Bethesda, have a large amount of pending development that will provide a test to the queuing analysis method when they go through the approval process.

One other potential avenue of exploration would result if the County seriously considers eliminating the staging of development through Policy Area Transportation Review. PATR was created because of the sense that LATR-type analysis was insufficient since it did not account for upstream-downstream impacts. In other words, relying solely on an intersection congestion test could spur sprawl as development moved outward looking for less-congested intersections. If PATR were eliminated or substantially changed then it is possible LATR would need to be changed as well, possibly to better account for the more distant effects of development on traffic.

Exemptions to the Transportation Tests

Introduction

Section II reviews the exemptions to the transportation tests that are currently in effect, as well as those that were put in pace in the 1990s but are no longer in effect. As mentioned at the beginning of this section, "exemptions" is a term used to describe the procedures that allow development to be approved despite inadequate transportation facilities may be divided into three types:

- procedures that allow approvals because the developer agrees to mitigate the impact of his development project on the transportation network,
- procedures that allow approvals because the development project meets some other public policy objective to a degree that *fully compensates* for its negative impact on the transportation network, and
- procedures that allows approvals because the development project meets some other public policy objective to a degree that *partially compensates* for its negative impact on the transportation network and therefore the developer is also required to contribute, usually in the form of a fee, to a fund that pays for future transportation improvements ("pay-and-go provisions").

Developer Participation Provisions

The procedures which allow a developer to mitigate the impact of his development on the transportation network are called "staging ceiling flexibility for developer participation projects." A developer may provide infrastructure that creates at least as much development capacity as his project will need or he may sponsor a trip

mitigation program that removes as many trips from the policy area's roads as his project would generate for a period of 12 years. An example of a trip mitigation program might be a shuttle bus to the nearest Metro station. Developers that elect to provide infrastructure can fund it themselves or through a development district, which uses County bonding authority to help finance the infrastructure.

As this study progresses it may become clear that there are issues that need to be addressed regarding the developer participation provisions, but at this time there are not obvious candidates for study, especially considering all of the other issues that will have to be addressed. One issue that has arisen in the past and may again in the future is the efficacy of trip mitigation programs. There is concern about what happens when the programs conclude at the end of 12 years, and concern that developers may not always keep their commitment to the program for the full time period. However, use of this provision is fairly limited.

Full Exemptions for Public Policy Reasons

There are three procedures that completely exempt development projects from transportation tests because the development project meets some other public policy objective to a degree that fully compensates for its negative impact on the transportation network. One, the *de minimis* provision, is a policy finding that development projects that generate 5 or few peak hour trips are too small to be subject to Policy Area Transportation Review; and projects which generate fewer than 50 trips are too small to be subject to Local Area Transportation Review. The second is a provision that exempts from Policy Area Transportation Review free-standing child day care centers located adjacent to policy areas that are not in moratorium. This is a new provision that is expected to apply to a very small number of applicants. The third is the *Special Ceiling Allocation for Affordable Housing*.

The Special Ceiling Allocation for Affordable Housing has been part of the AGP since the AGP's inception. The Special Ceiling Allocation is intended to help encourage the production of affordable housing by allowing the approval of subdivisions with an added component of affordable housing to be approved in areas that are otherwise in moratorium because of inadequate transportation facilities. A stated justification for this procedure is that growth management systems such as the AGP may have the effect of increasing the cost of housing as a result of limiting supply. It has not been established that there is a link from the AGP to an increment of housing price increase, but the need for affordable housing in the County is undeniable.

There have been several issues related to the Special Ceiling Allocation that have been studied in recent years. These include: a concern that the persistent moratoria in some parts of the County have led to an over-concentration of affordable housing in those areas and a concern that provisions enacted in 1994 to stimulate the production of housing undermined the attractiveness to developers of the Special Ceiling Allocation. Both of these issues have been resolved, the first by limiting the total number of housing

units that can be approved under the provision in any one policy area, and the second by eliminating the competing provision in October 2001.

Montgomery County also has Moderately-Priced Dwelling Unit program, which requires a percentage of MPDUs in any residential subdivision of more than 50 units. Although the MPDU program is not related to the AGP (provision of MPDUs does not confer upon a developer any special status under the AGP), there have also been studies of MPDU issues that can illuminate a discussion of the AGP's Special Ceiling Allocation. The series of housing studies is on-going; there is a full schedule of studies currently underway for the next fiscal year and beyond. These include studies to determine the demand for various types of housing based upon the types of jobs being created in the County and a detailed analysis of the buildout potential of the residential zoning envelope. This second study will help determine the utility of continued staging of residential development in each policy area.

"Pay-and-Go Provisions"

Past research indicates that most communities with adequate public facilities ordinances rely on provisions that allow developers to pay their way out of a moratorium to a greater extent than Montgomery County has. Until 1994, Montgomery County had no provision at all that allowed the payment of a fee in lieu of the actual provision of infrastructure or a trip mitigation program. Although Montgomery County briefly had a provision that was colloquially referred to as "pay-and-go," the term is now used to refer any AGP provision where a developer can satisfy the transportation adequacy requirements of his development by paying a fee.

In 1994, the first two provisions were added, and these were the *Alternative Review Procedure for Residential Development* and the *Alterative Review Procedure for Metro Station Policy Areas*. The first was intended to stimulate the construction of residential development; the second to address a perception that Local Area Transportation Review was a barrier to development near Metro stations. It is useful to note that the 1991 recession hit Montgomery County harder than previous recessions, exacerbated as it was by federal job losses and an extremely overbuilt commercial development market. The first provision exempted residential development from both PATR and LATR with the payment of a relatively substantial fee; the second exempted development in Metro Station Policy Areas from LATR upon payment of the same fee, called the Development Approval Payment.

In 1997, a second set of provisions were added. These were added to further stimulate construction, which was only beginning to recover from the recession six years before. Technically called the Alternative Review Procedure for Expedited Development Approval, the procedure permitted both residential and non-residential development to avoid both PATR and LATR upon payment of a different fee, lower than the Development Approval Payment. This provision proved extremely popular for residential subdivisions and the Council acted to end the program less than 6 months after it went

into effect. The provision for non-residential approvals lasted for another year, at which point it was suspended.

Of these major "pay-and-go" provisions, only one remains and in fact was substantially expanded during the October 2001 AGP Policy Element. This is the *Alternative Review Procedure for Metro Station Policy Areas*, which had been virtually unused since its approval. Determining that there are benefits to concentrating development at Metro stations and determining that there are cost and other barriers to Metro station area development, the County Council voted to strengthen this provision. Development projects may now meet their PATR and LATR requirements with the payment of a fee that is equivalent to one-half of the impact tax for the surrounding area and by meeting a non-driver mode share goal of 50 percent.

While most of the major "pay-and-go" provisions have been eliminated, several "special provisions" have been added in recent years to allow the approval of specific types of highly-valued development. The basic theme among them is that they allow the expansion of the headquarters sites of major employers at their current locations and all require the payment of the Development Approval Payment.

A final provision added in October 2001 is a two-year pilot that, if successful, may come to replace the various "special provisions" described above. This provision allows the County executive to designate, subject to the County Council's veto, "strategic economic development projects" which will be eligible to meet both PATR and LATR conditions upon payment of the Development Approval Payment.

The main concern of all of these "pay-and-go" style provisions is that the contribution by the developer in terms of fees is less than the cost of infrastructure needed to support the development (if the infrastructure were cheaper, the developer would most likely choose to make the infrastructure improvement himself). The debate has always been whether there are other public benefits that outweigh the degradation in transportation service resulting from approvals under the procedures. A second debate is whether a few exemption provisions can be crafted that anticipate most instances where exemption from the APFO is warranted, or whether there will always be instances where individual development projects are proposed for special treatment for a variety of reasons.

In researching how other communities implement their adequate public facilities ordinances, this study will pay close attention to exemption provisions to see of there are approaches that might better balance public policy objectives. Additionally, there will potentially be sufficient experience with both the revised *Alternative Review Procedure* for Metro Station Policy Areas and the procedure for Strategic Economic Development Projects to determine if these can adequately meet the majority of the need for exemptions. If so, possibly some of the special provisions currently in pace could be subsumed into one or the other.