

DEVELOPMENT IMPACT FEES AND THE
GROWTH MANAGEMENT PROCESS

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As the concept of impact fees has spread over the past few years, many variations have been developed. In Montgomery County, Maryland, a suburban jurisdiction directly northwest of Washington, D.C., an impact fee ordinance was enacted in 1986 with several distinctive characteristics designed to fit the County's particular growth management environment. This paper will outline how the impact fee provisions in Montgomery County will add even more significance to the master plan and the development staging process.

The Problem. In terms of growth, Montgomery County can be separated into a mature down-county experiencing little new development (with the notable exception of the areas adjacent to Metrorail stations) and a rural up-county rapidly converting to a moderately dense suburban zone. The new townhouses and garden apartments that have proliferated in the up-county reflect residents who produce more vehicular travel demand per square mile than those in many more settled areas. The fact that this has occurred where most of the arterial roads (usually State highways) are hardly more than country lanes explains the curious scene of long, rush-hour backups in the countryside.

The up-county area of Germantown is a prime example of this anomaly. Located at the northern end of the I-270 research and development corridor and twenty-three miles from the center of Washington, Germantown has grown from a population of 2,800 in 1970 to an estimated 23,500 in 1985. Fully 79% of the dwellings in Germantown are townhouses or apartments, compared to 36% for the entire County. Traffic volumes have risen several-fold during the last fifteen years, yet most of the roads are still only two lanes. Another area that has seen a similar growth, although not quite as dramatic, is the US 29 radial corridor in the northeastern part of the County. That the leap from farms to mini-cities has not occurred elsewhere in Montgomery's rural fringe owes to the County's vigilant adherence to its "Wedges and Corridors" development concept, focusing most new development along I-270 and US 29.

Just as important in contributing to this situation was the sharp curtailment of the Maryland State Highway Administration's construction program in the late 1970s. Functioning with a static gallonage tax in a time of greater auto fuel economy and steeply rising maintenance costs, the funds available for new construction contracted rapidly in the 1970s. As a result, many arterial highways programmed for planning, design, or construction were dropped from the State's six-year capital improvements budget. By 1982, the crisis was severe

enough to spur the state legislature to enact a four-cents per-gallon increase, but in the meantime the state had fallen at least five years behind the demand for improvements, especially on non-Interstate highways.

In the early 1980s, the County stepped into the breach by assuming responsibility for improving certain state roads, breaking precedent in order to accelerate their completion. By 1985, the county's own six-year capital budget had assigned over \$50 million for the purpose, nearly 15% on top of what the State had programmed in the County during the same period, and over 25% of the County's own road construction budget. Despite this investment, however, it was clear that the State and County governments could not keep up with the demand generated by new growth without even greater revenue.

The Institutional Setting for Planning. Along with its master plans, Montgomery County has the means of influencing the staging of land development through its Adequate Public Facilities Ordinance (APFO). Enacted in 1973, the APFO states that, before a subdivision can be approved, there must be the assurance that facilities adequate to meet the demands of the new development will be available at the time of occupancy.

In 1982, a two-step quantitative test was developed to determine road adequacy. For the first step, the 'threshold' test, the County is divided into fifteen travel sheds called 'policy areas', which are classified into five categories of allowable congestion (Figure 1, p.23). In the lower down-county, where development density is high and transit service is extensive, an average peak-hour Level of Service (LOS) D/E is the maximum allowed in a policy area before its overall road capacity is deemed inadequate. In up-county Germantown, with its lower densities and minimal transit service, the threshold standard is LOS C. Each year, the traffic generated by existing and approved development is simulated on a network of existing and programmed transportation facilities to determine whether the threshold level of service will be met in each policy area. If the forecasted congestion is worse than the standard in a policy area, the threshold test is failed and, generally, no more development can be approved through the subdivision process until more capacity comes on line. Conversely, if the simulated level of service is higher than the standard, then the proposed development must pass the second step--the 'local area review' test--which determines whether the intersections in the immediate vicinity of the development will be no worse than LOS E in the peak hour with the development in place.

The APFO threshold test for roads initially defined a programmed improvement as one that was at least 50% funded for construction in the state or county six-year construction program; it also identified approved developments as those which had received sewer authorizations. Over the past few years, as it became obvious that road capacity was not coming on line as soon as expected, this definition was adjusted tighter and tighter: to projects 80% funded in

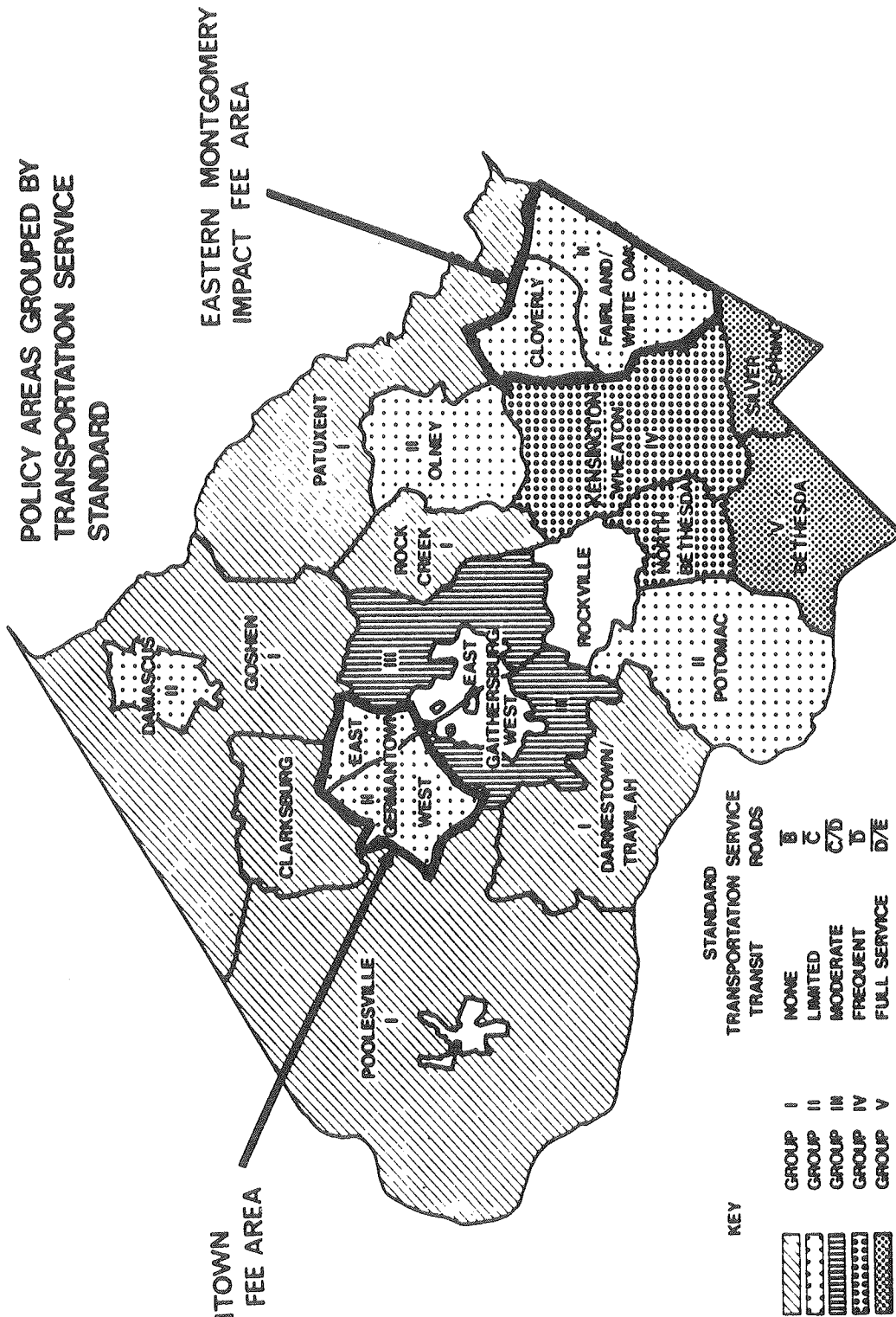


Figure 1: Policy Areas Grouped by Transportation Service Standards, with the Germantown and Eastern Montgomery Impact Fee Areas Superimposed

(Source of policy area map: Montgomery County Planning Board, 1985 Comprehensive Planning Policies Report)

six years, to 100% in six years, to the present measure of 100% funded in the first four years. While these and other modifications were taken to keep growth from outpacing new capacity, they also had the effect, to the development industry, of "shutting down" activity in the very areas where the wedges and corridors concept had targeted growth. They also did not address the lack of arterial road construction that would be needed ultimately to reverse the shortfall of capacity.

The Development Impact Fee Ordinance. In this context of rising congestion, funding limitations, and de facto development moratoria in much of the up-county, development impact fees were imposed in the spring of 1986. Although initially opposed by most developers, they were eventually accepted as a means of ending moratoria in Germantown and Eastern Montgomery County. Developers also preferred impact fees over two other proposals seriously considered: a county-wide excise tax applied to new development and a three-year cap on building permits.

According to the new ordinance, a fee would be paid at the issuance of a building permit for all new development in Germantown and Eastern Montgomery County. The two fee schedules, which are classified according to land use, are as follows:

<u>Land Use</u>	<u>Germantown</u>	<u>Eastern Montgomery</u>
Single-family residential	\$1489/unit	\$1591/unit
Multi-family residential	992/unit	1161/unit
Office	\$3.36/sq.ft.	\$3.59/sq.ft.
Retail	3.04/sq.ft.	3.24/sq.ft.
Industrial	1.46/sq.ft.	1.56/sq.ft.
Places of worship	.18/sq.ft.	.19/sq.ft.
Private elementary and secondary schools	.29/sq.ft.	.31/sq.ft.
Other non-residential	3.36/sq.ft.	3.59/sq.ft.

The law calls for these schedules to be recalculated every two years to reflect changing conditions.

In the debate over impact fees, the concern was raised that this new revenue source would somehow overwhelm the County's master plan and staging plan processes. If developers were to pay for certain improvements, would they be relieved of certain planning and staging requirements? Would the existence of a dedicated funding source warp the County's programming priorities? Would the master plan and Adequate Public Facilities Ordinance recede in importance? The answer is 'no' on all counts. The Development Impact Fee Ordinance does not rescind any existing subdivision and master plan requirements. Secondly, since government would still be bearing at least half the cost of new roads in Germantown and Eastern Montgomery County, it is unlikely the County would schedule construction of an unnecessary improvement in these areas. Finally, the impact fee provisions are so

closely tied to the master plan and APFO that the planning instruments are even more powerful than they have been. They regulate the type, amount, and timing of development. The master plan and APFO now influence the cost of development through their linkages to impact fees. These linkages merit close examination.

The Selection of Impact Fee Areas. The two areas chosen for impact fees comprise planning policy areas that currently fail the APFO threshold test: The Germantown Impact Fee Area comprises the Germantown East and Germantown West Policy Areas; the Eastern Montgomery County Impact Fee Area consists of the Cloverly and Fairland/White Oak Policy Areas (Figure 1). Furthermore, the Development Impact Fee Ordinance states that only policy areas at or above threshold capacity can become impact fee areas. There are several other criteria the County Council must consider prior to designating an impact fee area--such as whether there are substantial unbuilt master-planned highways in the area--but the lack of threshold capacity is a mandatory condition. Once a policy area (or a combination of them) is designated as an impact fee area, it must remain one until build-out (unless the entire ordinance is repealed). Thus, the APFO and its threshold test have a direct effect on whether impact fees are assessed at all. A definitional change of what constitutes a programmed improvement in the threshold test can conceivably lead to the imposition of impact fees in an area for the next thirty years.

The Private Sector Share of Impact Highway Costs. New arterial highway construction is beneficial not only to the new development it serves, but to the general public. Any substantial new highway will relieve congestion on existing roads to some extent. Some of the traffic using the new roads will be from local development that existed prior to the imposition of the fee. Furthermore, the new development eventually will generate property tax revenue that would help fund arterial highways in other areas. Equity calls for a portion of the new facility cost to be borne by general revenues.

The technique used to apportion costs between the private sector and government in an impact fee area is the ratio of the remaining development that can be permitted under the master plan to the total development at build-out. If this ratio exceeds 50%--that is, if more than half of the possible development in an area has yet to occur--the private sector share is held at 50%, under the assumption that the general public will reap at least half the benefits from the improvements. The ratio is fixed at the time an impact fee is established; it does not decline over time. In Eastern Montgomery County, where an estimated 44.75% of the build-out remains, that is the percentage of cost covered by impact fees. In Germantown, where more than half the planned development is in the future, the rate is set at 50%. The amount of development in a master plan at the time an area is selected for impact fees will have a direct effect on the size of the fees. Master plan amendments and rezonings prior to the imposition of impact fees take on added importance, therefore.

The Calculation of the Fee Schedule. Other than the private sector share, there are three major components in the impact fee calculus: the cost of the improvements in the impact fee program, the amount of development remaining to build-out in each land use category, and the relative traffic impact of each category. Each component is influenced to different degrees by the master plan and the APFO process. The calculation of the Germantown fee schedule is exhibited in Figure 2.

In most impact fee areas around the country, the fee calculation is expressed either as a direct relation to traffic generation (as in Palm Beach County, Florida) or as a share of an intermediate-range construction program (Broward County, Florida). Neither model has an explicit tie to a master plan. In Montgomery County's ordinance, however, the amount of fees to be collected is determined by the private sector share of unbuilt improvements specifically described in the master plan. All roads functionally classified in the master plan as 'Major Arterials' or 'Arterials' are included in the impact fee program (with the exception of some Arterials that would likely serve a single developer; these would likely be constructed by the developer as a requirement of subdivision). Mainline freeway improvements primarily serving general traffic are excluded from the fee calculations. On the other end of the functional scale, new neighborhood collector streets serving only new subdivisions are assumed to be provided by the builder, and are also left out of the program.

The amount of development remaining to build-out in each land use category is derived from the master plan and the zoning plan which follows from it. The relative traffic impact of each category is measured similarly to how traffic is gauged in APFO tests: peak-hour trip generation as modified by percent pass-by trips and trip length. This produces a travel impact index for each land use category, which, when multiplied by the remaining development in that category, in turn produces a trip impact value representing peak-hour vehicle-miles of travel. The impact fee per unit of land use (dwelling unit or non-residential square feet) is the product of an area's impact fee road cost, divided by the product of the remaining development for that use and the total trip impact value summed over all uses. One result of this share method is that the per unit fee for a particular use varies from one area to another, as three of the four factors (private sector share, road program cost, and remaining development by use) differ.

Every two years the fee schedules are to be recalculated to reflect changes to the component inputs. The private sector share will not change, and neither will the relative traffic impact by category, unless ongoing observation and research point to a more accurate representation of trip generation. On the other hand, periodic changes in program costs and the amount of remaining development can be expected. Road costs will change with inflation and with modifications in the master plan. All else held equal, deleting an improvement from a master plan in the future will reduce the area's

Figure 2: Calculation of Germantown Impact Fee Schedule

Land Use Category	Remaining Development	Travel Impact Index (a)	Trip Impact Value (b)	Funds Generated by Category (c)	Fee per Dwelling Unit or GFA(d)
Single-family residential	14,124 units	7.65	108,049	\$21,021,000	\$1489/unit
Multi-family residential	5,876 units	5.10	29,968	\$ 5,830,000	\$ 992/unit
Office	9,390,000 sq. ft.	17.25	161,978	\$31,513,000	\$3.36/sq. ft.
Retail	1,186,000 sq. ft.	15.60	18,502	\$ 3,600,000	\$3.04/sq. ft.
Industrial	2,445,000 sq. ft.	7.50	18,338	\$ 3,568,000	\$1.46/sq. ft.
Places of worship	150,000 sq. ft.	0.90	135	\$ 26,000	\$.18/sq. ft.
Private elementary & secondary schools	100,000 sq. ft.	1.50	150	\$ 29,000	\$.29/sq. ft.
Other non-residential	492,000 sq. ft.	17.25	8,487	\$ 1,651,000	\$3.36/sq. ft.
TOTAL			345,607	\$67,238,000	

Funds generated by impact fees = (Germantown impact fee improvements cost x private sector share) + Road Club Credit
 = (\$131,894,000 x .50) + \$1,291,000
 = \$67,238,000

- (a) The Travel impact index is the product of the trip generation rate, the proportion of trips generated that are not pass-by trips, and a relative index of trip length.
- (b) The trip impact value is the product of the remaining development and the travel impact index.
- (c) The funds generated by category is the trip impact value divided by the total trip impact value (here, 345,607), multiplied by the total funds generated (here, \$67,238,000).
- (d) The fee is the funds generated by category divided by the remaining development.

fees in the next biennial recalculation, while adding a project will have the opposite effect. Changes in master plan densities will have the converse effect: reducing density will mean that the cost will be spread over fewer units, thus raising the entire schedule, while increasing density will lower fees. A balanced master plan will counter a change in density with a change in facilities, such that the cumulative effect on the fee structure will tend to be minor. Nonetheless, future master plan updates will no longer just provide guidance to development, they will have a direct fiscal consequence for developers.

Participation Agreements and Credit Provisions. Prior to impact fees, major developers in Germantown and Eastern Montgomery County struck agreements with the county to provide the road capacity necessary to meet APFO threshold and local area review requirements. Sometimes the developer would build the roads, and other times the developer would pay the County part of the cost for the road. In Germantown during the early 1980s, several builders banded together in a 'road club' to jointly fund a set of improvements. These ad hoc participation contracts are a clumsy means of accomplishing the completion of a project. They consume inordinate legal resources from both the builder and the County and, more importantly for the builder, delays the progress of the development. With impact fees, the terms of participation are set, so unnecessary cost, delay, and uncertainty are avoided. In addition, smaller builders, who have been able to use the excess capacity paid for by major developers without any contribution of their own, will now pay their proportional share of the cost of the new facilities.

Despite the increased capacity to be provided with impact fee revenue, a developer still may choose to build an impact fee road sooner than government can. In such a case, the ordinance allows the builder to take a credit against his fee equal to his expenditure on the project. In a situation where a builder must construct most of the roads immediately but has plans for a staged build-out of his development, the credit can be drawn down over time. It is conceivable that a builder may even be willing to pay more for roads than he would ever owe in impact fees; in this case, he would not receive a rebate, but since the revenue needed for the overall program consequently would be reduced, the fee schedule would be lowered at the next biennial recalculation (again, all else being equal), benefitting future developers.

Indirect Supports. The added significance that impact fees will bring directly to the master plan and the development staging process has been outlined. The existence of fees will buttress these planning tools indirectly, too. First of all, it will support the legal foundation of the Adequate Public Facilities Ordinance. The ability of government to delay development until adequate facilities are provided is defensible only if the delay is not indefinite; otherwise, the staging plan in threshold-deficient areas like Germantown might be construed as a taking. Impact fees are revenues dedicated to supplying

the necessary adequate facilities. As the Development Impact Fee Ordinance requires steady investment of fee revenue in such facilities (the temporal 'rational nexus' between payments and benefits), government can demonstrate that adequate highways are on line and that the development delays due to staging requirements are not permanent.

The economic effect of impact fees will also support the objectives of the APFO. The increased cost to builders in Germantown and Eastern Montgomery County will place an added disadvantage to developing there. To the extent this competitive disadvantage will divert development away from these areas and towards other areas where threshold capacity is available, then a more favorable balance between growth and its supporting facilities will have been achieved.

An underlying assumption in the calculation of fees is that an area's master plan is balanced: that the mix of total development and transportation capacity at build-out will produce a level of traffic service equal to or better than the APFO standard level of service at that time. This will require planners to be explicit about the level of service objective in each master plan update, and to design the development/facility mix accordingly. This will strengthen the cogency of the master plan even more.

Conclusion. Properly constructed, an impact fee program can reinforce rather than supplant existing planning tools. The key is to integrate it with the pertinent elements of the master plan and staging plan: the planned facilities, the planned development mix and density, and the level of service requirements.

IMPACT FEES, A CLOSER LOOK

by

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It has been common practice as part of local subdivision approval to require that developers provide on-site improvements including water and sewer facilities, curbs and gutters, internal roads, and sidewalks. Providing internal road improvement has been viewed as a legitimate exercise of a locality's police power for over 30 years.(1) A more recent phenomenon has been for local officials to expect developers to pay for off-site road improvements serving traffic generated by a new development. The use of impact fees is one device communities have used to require developers to fund off-site improvements.

Impact fees are charges collected by a locality during its approval of land development to support public facilities needed to