

Infrastructure Financing



I-270/495 Interchange

INTRODUCTION

Montgomery County finances the provision of infrastructure through several mechanisms. Development impact taxes are the primary mechanism used to raise revenue for the infrastructure needs of new development. Development impact taxes are a charge on new development to pay for the construction or expansion of off-site capital improvements that are necessitated by and benefit the new development. Impact taxes provide a useful mechanism for financing the development of undeveloped land.

However, growth in Montgomery County is changing, and fewer large *greenfield* developments on raw land will be created. More and more of the growth will be infill and redevelopment. Where former growth was primarily single-family homes on raw land, much of the future growth will be multi-family units in existing developed areas.

To finance the infrastructure needs of the County, attention must be paid to the true cost of new development and to the cost of redevelopment. Although Montgomery County has been a leader in growth management, the current system of impact taxes has not proven to be a substantial source of revenue in recent years with actual revenue received below projected estimates. When the County Council approved the schools impact taxes in 2003, it did so with certain assumptions about how much money the taxes would generate. The estimates were that the taxes would generate \$24 million in fiscal year 2005 and \$28 million annually thereafter. The assumptions were detailed and included estimates of the number of additional units; the percentage of each housing type; the number of units in each of the tax districts; and the percentage of units that would be exempt from the impact taxes.

The assumptions proved to be optimistic. The taxes generated less than \$8 million in fiscal 2005 and less than \$7 million in fiscal 2006. A *permit rush* in which developers raced to submit building permit applications prior to the effective date of the impact taxes can explain much of the fiscal 2005 shortfall;

about 1,700 permits approved in fiscal 2005 were not subject to the impact tax, about half the assumed number of additional units. There is no similar explanation for the fiscal 2006 shortfall.

It is estimated that 72% of the growth in residential development for Montgomery County between 2005 and 2030 will be in multi-family dwellings. This phenomenon will further reduce the expected income stream from school impact taxes since multi-family dwellings are taxed at a lower rate than single-family homes.

The rates selected in 2003 for both the transportation and schools impact taxes were not explicitly tied to assumptions about the cost of needed transportation and school facilities or new development's appropriate share in paying for those facilities. Planning staff has reviewed options for revising the impact tax rates for both schools and transportation.

The impact tax for schools can more accurately reflect the true cost associated with school construction and expansion. When school impact taxes were introduced in 2003, the cost per household for building new schools was estimated to be \$10,300. The rate established in 2003 was set at \$8,000 for a single-family home. Bringing the impact tax closer to the cost of development will not only improve the program's revenue raising capacity, but will also better fulfill the County's goal of encouraging new development to pay for itself.

Another mechanism used to fund infrastructure is the recordation tax. The current recordation tax in Montgomery County is applied to the transfer in ownership of residential property. Revenue raised from the recordation tax is used to supplement General Obligation bond funding of the Capital Improvement Plan for Schools.

In high growth areas, such as Clarksburg, school population growth is the result of new construction; therefore impact taxes are an effective financing tool. However in most of the County, much of the enrollment pressure on schools comes from changes within the community due to neighborhood turnover, which is when the neighborhood evolves from one with an aging population to one with more school age children. The financial transaction that accompanies such turnover is the home sale, so the revenue captured by the recordation tax appears appropriate to fund school improvements necessitated by the increased pressure on existing infrastructure. In recent years, the recordation tax has generated much more revenue than the impact tax; in 2006, the recordation tax generated \$44 million compared to \$6.9 million for school impact taxes.

The development impact tax for transportation and schools and the recordation tax contribute much needed revenue to support growth in Montgomery County. After review and further research into infrastructure financing, it is recommended that revision be made to both of these programs. Planning staff has also

identified issues that we suggest merit further study. These include alternative financing methods, and/or more extensive remodeling of these programs, both of which we discuss in the report.

SCHOOLS

Impact Taxes

Impact taxes are designed to provide a mechanism whereby new development or growth can pay for the infrastructure needed to support itself. To determine if impact taxes are realistic reflections of the cost of growth for schools, two alternative methods were considered.

- The first method is to use the cost of school construction and expansion based on projected costs and growth through 2012.

The Capital Improvements Program (CIP) for Montgomery County Public Schools (MCPS) provides detailed expenditure requests for the years 2007 through 2012. Expenditures for projects that add capacity to the system reflect the cost of growth over these six years, totaling approximately \$270,666,000.

The Montgomery County Round 7.0 Cooperative Forecast provides estimates for the growth in households through 2030. Using these estimates, the number of households to be constructed through 2012 totals 27,000. Of these 27,000 housing units, 8,100 are expected to be single-family units and 18,900, multi-family units. MCPS calculates student generation rates by type of household. These generation rates are applied to the number of expected single and multi-family units. Approximately 7,934 new students will be enrolling in the Montgomery County School system during 2007-2012 as a result of new development. The cost per housing unit by type would be approximately:

- \$ 20,298 single-family detached
- \$ 15,011 single-family attached
- \$ 9,620 multi-family non high-rise
- \$ 3,889 multi-family high-rise

For single-family detached homes, 0.595 students per unit are generated. This translates into a household cost of \$20,298 for households living in single-family detached units. The generation rates for single-family attached, multi-family garden and high-rise units are 0.440, 0.282, and 0.114 respectively.

- An alternate way to calculate future school costs is to base the costs on growth and school construction costs forecasted to 2030. The total household growth forecast between 2007 and 2030 is 94,300. Assuming that approximately one-third of the units will be single-family attached and detached units and two-thirds will be multi-family, this growth in households could generate 27,185 students.

In preparation of the biennial CIP, MCPS maintains data on the standards for school construction, such as the recommended size (student capacity) and market cost of building school facilities. Using these figures, the forecasted growth in student population from new development will generate the following number of elementary, middle and high school students. The number of additional schools needed to serve these students is also shown.

	<u>Elementary</u>	<u>Middle</u>	<u>High</u>
Students generated by school type	13,670	6,758	6,767
Number of schools needed	18.5	6.8	3.4

Using current construction costs and proportioning the costs per housing type, costs would be approximately:

\$ 23,020 single-family detached
 \$ 17,023 single-family attached
 \$ 10,910 multi-family non high-rise
 \$ 4,411 multi-family high-rise

The estimated costs of school growth associated with new development produced by the above calculations are quite similar. Either of these methods provides a realistic representation of the costs of school construction and expansion generated by new development.

As noted above, in 2003 when school impact taxes were introduced, the cost per household for building new schools was estimated to be \$10,300. The rate established in 2003 (\$8,000) was less than the calculated cost. Subsequently, the Council passed legislation allowing for biennial updates to the current impact tax schedule to reflect changes in the cost of living. If the Council does not take action to change the current school impact tax schedule, the rates that will become effective in July 2007 are approximately:

\$ 9,111 single-family detached
 \$ 6,833 single-family attached
 \$ 4,555 multi-family non high-rise
 \$ 1,822 multi-family high-rise

Short Term School Impact Tax Recommendation

In light of the above cost calculations, a simple cost of living adjustment to the current taxes would not appear to represent the true cost of providing sufficient school infrastructure to support growth in Montgomery County. The Planning Department staff recommends that the County adopt the approach that school impact tax rates reflect the full cost of infrastructure. Our suggested schedule of tax rates to accomplish that approach is the following:

- \$ 21,000 single-family detached
- \$ 15,750 single-family attached
- \$ 10,500 multi-family non high-rise
- \$ 4,200 multi-family high-rise

This impact tax rate schedule more accurately reflects the cost of school construction and expansion associated with new development. In comparison to the current fee, revenue generated from this tax will fund school buildings and additions in a more timely fashion.

Recordation Tax

The development impact tax for schools is a mechanism designed to have new development pay for the infrastructure it requires. The recordation tax is a tax applied to new housing sales, resales, and the recordation of other transactions involving housing. The revenue from the recordation tax funds school improvements, modernizations and additions.

As the County continues to grow, some of the change that will occur will simply be changes in population characteristics within existing neighborhoods. As certain neighborhoods “age”, older residents will move out, younger ones in, and the school age population within the neighborhood will increase – without new development. For this source of school enrollment change, the revenue captured by a recordation tax appears appropriate to fund school improvements necessitated by the increased pressure on existing infrastructure.

The recordation tax has been a more consistent generator of revenue for schools than the school impact taxes. In 2006 the recordation tax generated \$44,860,925. The current tax in Montgomery County is \$6.90 per \$1,000 (with the first \$50,000 exempt).

Most (13) Maryland jurisdictions levy higher recordation tax rates than Montgomery: Baltimore City, Calvert, Caroline, Carroll, Charles, Dorchester, and Frederick counties charge \$10 per \$1,000, Cecil County charges \$8.20, St. Mary's County, \$8.00, Washington County, \$7.60, and Anne Arundel, Garrett, and Wicomico counties charge \$7.00.

Short Term Recordation Tax Recommendation

Planning staff notes that increasing the recordation tax to \$10.00 per thousand would be consistent with the most frequently applied levy in Maryland. This increase in revenue could be applied to schools only or the increase difference of \$3.10 could be applied to other capital improvements within Montgomery County, such as public safety facilities or libraries.

TRANSPORTATION

Impact Taxes

Transportation impact taxes remain a valuable tool to equitably distribute transportation infrastructure costs among stakeholders. Substantial changes to the transportation impact rate structure could be used to raise additional revenues and support a variety of land use policies while retaining or improving equity.

The motivation for changes to the transportation tax structure is based on the goal for the new development to pay more of the full cost of transportation infrastructure and reflects a refinement of the independent variables and rates to both better estimate future capital costs and apportion them to available growth. The revised transportation impact tax schedule incorporates the overall degree of financing appropriate considering current information on development costs and impacts, and the relative impact of different types of development on the transportation system.

More specifically, the County's *Adopted 07-12 Capital Budget* includes \$493.8M for transportation projects, or 18.5% of the total (excluding WSSC). Of this amount, \$229.0M is estimated to be for transportation system capacity expansion projects in the region's *Constrained Long Range Plan* (CLRP) (attachment 1). Another \$54.7M is for projects that are not in the FY 2007-2012 Transportation Improvement Program of the CLRP but could arguably be considered capacity expansion. It appears that over half of the local transportation budget is for operations and maintenance as compared to system expansion. The \$283.7M budgeted over the next six years equals an average annual expenditure of \$47.3M.

The 2007-2030 CLRP contains total expenditures for Montgomery County of approximately \$7.4B, of which only \$2.6B is for CLRP-type capital expenditures.¹ About \$3.8B is for operations and maintenance, the remainder is for system preservation or other types of projects. From a regional perspective, therefore,

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http://www.mwcog.org/regionaltransportationplan/documents/Draft_Final_Financial_Analysis_report_9_06.pdf, Table A.2

only about a third of the transportation budget in Montgomery County is for system expansion.

The local agency costs in the CLRP are heavily front-loaded, however. All of the projects that are both in the CLRP TIP and the CIP are assumed to be completed in a six-year timeframe. Experience indicates that in subsequent years, additional local projects will be added to the TIP as they come online through the Facility Planning process. Therefore, the 25-year cost of facility expansion projects in the CIP is estimated at \$47.3M per year for 25 years, or a total of \$1,182B.

Short Term Transportation Recommendation

Recover County portion of CLRP projects over 25-year timeframe

A starting point for the recommended comprehensive transportation impact tax rate study is described below and shown in Table 1. This proposal uses the relative trip generation rates from various land uses to proportionally allocate the estimated \$1,182B cost of the 25-year County program of transportation system improvements according to the relative trip generation of each type of land use. The table shows the following information:

- Line A shows the Round 7.0 forecast demographic growth
- Line B identifies growth we might reasonably assume to be exempt from transportation impact taxes, including MPDUs, other affordable housing, and government facilities
- Line C shows the resulting taxable growth (Line A minus Line B)
- Line D converts the projected job growth to estimated building square footage
- Line E shows the vehicle trip rates assumed for this exercise
- Line F shows the total vehicle trip ends (Line E times Line C or Line D as appropriate)
- Line G shows the proportion of vehicle trip ends within all categories (each cell in Line F divided by the sum of all cells in Line F)
- Line H shows the distribution of capital costs apportioned to each land use type (\$1.182B times Line G)
- Line I shows the resulting per-unit Transportation Impact Tax rates
- Line J provides a rough comparison of the current rates (as there is not a one-to-one comparison between existing rate categories and those used for this exercise).

In general, this exercise demonstrates that overall, transportation impact tax rates should be significantly higher than current rates, generally by a factor of two. Retail rates in particular, should be increased by a factor of almost five if they are to account for their proportional impact on vehicle trip generation

Table 1. Recover County Portion of CLRP Projects Over 25-year Timeframe

	Land Use Categories					
	Single-family residential	Multi-family residential	Office	Retail	Industrial	Other commercial
A. Forecast growth, 2005-2030	26645 DU	67655 DU	119533 jobs	18232 jobs	12208 jobs	20027 jobs
B. Assumed growth exemptions for affordable housing (25%) and government employment	6661 DU	16914 DU	38200 jobs			
C. Taxable growth	19984 DU	50741 DU	81333 jobs	18232 jobs	12208 jobs	20027 jobs
D. Square footage of commercial space			29,883,250	7,292,800	5,493,600	10,013,500
E. Vehicle trip generation rates	9.57 per DU	6.72 per DU	3.30 per job	21.47 per KGsf ²	2.77 per job	2.77 per job
F. Daily vehicle trip ends by land use type	191,247	340,980	268,399	156,577	33,816	55,475
G. Percentage of total daily vehicle trip ends	18%	33%	26%	15%	3%	5%
H. Proportional allocation of \$1,182M estimated local capital cost for facility expansion, 2005-2030	\$216M	\$385M	\$268M	\$157M	\$34M	\$55M
I. Resultant unit impact tax rates	\$10,810 / DU	\$7,591 / DU	\$10.15 per GSF	\$24.25 per GSF	\$6.95 per GSF	\$6.26 per GSF
J. Current Rates	\$2,250-\$8,250 per DU	\$1,250-\$3,500	\$2.50 - \$6.00 per GSF	\$2.25 - \$5.40 per GSF	\$1.25 - \$3.00 per GSF	\$1.25 - \$3.00 per GSF

² Assumes a 50% pass-by trip percentage

For the short term, staff has applied the general findings in Table 1 to develop a recommendation for amending the impact tax rate structure that could be implemented in 2007 by Council resolution.

Table 2 presents the recommended transportation impact tax rates, developed using the process described below.

The following rates from Table 1 were inserted into the general category of Table 2 as follows:

- The single family residential rate (\$10,810/DU) as single-family attached
- The multi-family residential rate (\$7,591/DU) as multi-family non-high rise
- The square footage rates for office (\$10.15), industrial (\$6.95), retail (\$24.25), and other non-residential (\$6.26) were used directly (with rounding to the nearest five cents).

Each of the other values in Table 2 was based on applying the categorical ratios (for types of land use and geographic areas) in the current rate structure to the six values described above. For instance, the current tax rate for a single-family detached house in Clarksburg (\$7,142) is 22.7% higher than that for a single-family attached house in the general category (\$5,819), so the recommended tax rate for a single-family detached house in Clarksburg (\$13,268) is also 22.7% higher than the recommended tax rate for a single-family detached house in the general category (\$10,810). The recommended rates for houses of worship and private schools are based on the “other non-residential” category.

Table 2. Application of Table 1 to Current Rate Structure

CURRENT RATES (THROUGH 6/30/07)

	General	Metro Station	Clarksburg
Residential (per dwelling unit)			
Single-family detached	\$5,819	\$2,910	\$8,729
Single-family attached	\$4,761	\$2,381	\$7,142
Multi-family attached (except high-rise)	\$3,703	\$1,852	\$5,555
High-rise residential	\$2,645	\$1,323	\$3,968
Multi-family senior residential	\$1,058	\$529	\$1,587
Non-residential (per square foot GFA)			
Office	\$5.30	\$2.65	\$6.35
Industrial	\$2.65	\$1.30	\$3.15
Bioscience facility	\$0.00	\$0.00	\$0.00
Retail	\$4.75	\$2.40	\$5.70
Place of worship	\$0.30	\$0.15	\$0.35
Private elementary and secondary school	\$0.40	\$0.20	\$0.55
Hospital	\$0.00	\$0.00	\$0.00
Other non-residential	\$2.65	\$1.30	\$3.15

ESCALATED RATES

	General	Metro Station	Clarksburg
Residential (per dwelling unit)			
Single-family detached	\$10,810	\$5,406	\$16,216
Single-family attached	\$8,845	\$4,423	\$13,268
Multi-family attached (except high-rise)	\$7,591	\$3,797	\$7,591
High-rise residential	\$5,422	\$2,712	\$5,422
Multi-family senior residential	\$2,169	\$1,084	\$2,169
Non-residential (per square foot GFA)			
Office	\$10.15	\$5.10	\$12.20
Industrial	\$6.95	\$3.40	\$8.25
Bioscience facility	\$0.00	\$0.00	\$0.00
Retail	\$24.25	\$12.25	\$29.10
Place of worship	\$0.70	\$0.35	\$0.80
Private elementary and secondary school	\$0.95	\$0.45	\$1.30
Hospital	\$0.00	\$0.00	\$0.00
Other non-residential	\$6.25	\$3.05	\$7.40

As stated above, in order for transportation impact tax rates to reflect the full cost of future transportation improvements, the rates should be significantly higher than current rates, generally by a factor of two. Retail rates in particular, should be increased. The schedule above indicates that for retail rates to account for their proportional impact on vehicle trip generation, their increase should be five-fold.

Similar to school impact tax, in 2003, estimates for the cost of providing transportation infrastructure per job and per household greatly exceeded the rates adopted that year. The current tax schedule for transportation will expire on June 30, 2007. If the Council takes no action to revise the current rates, an automatic increase to reflect an increase in the cost of living will be applied to the current rates. Table 3 shows the current rates with a 7.64% increase due to inflation.

Table 3. CPI Escalation

CURRENT RATES (THROUGH 6/30/07)

	General	Metro Station	Clarksburg
Residential (per dwelling unit)			
Single-family detached	\$5,819	\$2,910	\$8,729
Single-family attached	\$4,761	\$2,381	\$7,142
Multi-family attached (except high-rise)	\$3,703	\$1,852	\$5,555
High-rise residential	\$2,645	\$1,323	\$3,968
Multi-family senior residential	\$1,058	\$529	\$1,587
Non-residential (per square foot GFA)			
Office	\$5.30	\$2.65	\$6.35
Industrial	\$2.65	\$1.30	\$3.15
Bioscience facility	\$0.00	\$0.00	\$0.00
Retail	\$4.75	\$2.40	\$5.70
Place of worship	\$0.30	\$0.15	\$0.35
Private elementary and secondary school	\$0.40	\$0.20	\$0.55
Hospital	\$0.00	\$0.00	\$0.00
Other non-residential	\$2.65	\$1.30	\$3.15

ESCALATED RATES

7.64% CPI adjustment

	General	Metro Station	Clarksburg
Residential (per dwelling unit)			
Single-family detached	\$6,264	\$3,132	\$9,396
Single-family attached	\$5,125	\$2,563	\$7,688
Multi-family attached (except high-rise)	\$3,986	\$1,993	\$5,979
High-rise residential	\$2,847	\$1,424	\$4,271
Multi-family senior residential	\$1,139	\$569	\$1,708
Non-residential (per square foot GFA)			
Office	\$5.70	\$2.85	\$6.85
Industrial	\$2.85	\$1.40	\$3.40
Bioscience facility	\$0.00	\$0.00	\$0.00
Retail	\$5.10	\$2.60	\$6.15
Place of worship	\$0.30	\$0.15	\$0.40
Private elementary and secondary school	\$0.45	\$0.20	\$0.60
Hospital	\$0.00	\$0.00	\$0.00
Other non-residential	\$2.85	\$1.40	\$3.40

Long Term Transportation Recommendations

Planning staff notes that the impact tax rate structure suggested above is based on some relatively simple, but valid, assumptions and calculations. The County Council may wish to have a more sophisticated analysis conducted to support additional changes to the transportation impact tax structure. If the Council were to request a comprehensive transportation impact tax rate study, Planning staff suggests that the study accomplish the following objectives:

- Consider a time horizon based on the regional Constrained Long Range Plan (CLRP) assumptions for development and funded transportation capital projects that increase transportation system capacity.
- Establish a figure for total anticipated revenue based on the expected County expenditures toward both those projects in the CLRP as well as a factor that reflects both the County expenditure on capital projects that increase system capacity but that are “below the radar” of the CLRP, as well as an estimate of projects likely to be added to the CLRP in the out years.
- Distribute the total construction costs among forecasted land use growth based on the relative amount of vehicle trips generated by each land use type.
- Explicitly incorporate estimates of the amount of revenue lost due to both exemptions for desirable land uses such as affordable housing as well as credits for developer-constructed infrastructure. Re-examine the extent to which developer-constructed infrastructure is credited against the impact tax.

The process provided in Table 1 could be the subject of further examination, perhaps in a consultant study, to address the following:

- Consideration of using vehicle-miles of travel (VMT) rather than vehicle-trips, as a better measure of transportation system impact
- Disaggregation of the land use categories to the extent feasible in the forecasting process. In particular, office and retail categories should be disaggregated.
- Elimination of the credit for providing most LATR study off-site improvements. If an applicant provides an improvement in the then-current CLRP, that improvement should be credited. Further, if an applicant dedicates property for a master planned roadway that would otherwise not be required due to the lack of a rational nexus, such dedication should also be credited.
- Consideration of a different geographical structure to which this system could be applied.

- Consideration of incorporating forecast escalation in transportation system construction costs (relative to total inflation) due to increasing global demand for products such as steel.
- Examination of legislative changes that would be required. For instance, the Council must change the County law to change the definition of categories for which the transportation impact tax is to be charged. Staff has intended that this effort not require changes to state enabling legislation, but further research would be needed to confirm whether this proposal, or a slightly different proposal developed during the next year, required any changes to state legislation.
- Providing sufficient time to consider comments from all stakeholders during the study process.

In addition, future impact taxes could be based on an estimate of growth and transportation system needs through the most distant horizon year in the MWCOG Cooperative Forecasting arena, currently 2030. This long-range, regional approach affords us several advantages:

- The impact tax structure can be revised on a regular, periodic basis to reflect demographic, transportation system, or funding changes that occur on the regional level.
- A long-range perspective means that substantial changes to the six-year capital program (such as the initiation or close-out of a project like Montrose Parkway) would be buffered during the periodic reconsideration of impact taxes.
- A finite horizon year (rather than a master plan horizon) means that changes in land use, zoning, or master planned transportation infrastructure can be coordinated regionally and that the effects of improved information (such as our residential capacity estimate of 2005) are buffered.

Long-term General Infrastructure Financing Recommendations

The Planning Department has identified several initiatives that the County could take to improve its ability to finance needed infrastructure in a timely fashion.

First, a review and analysis of the structure and methodology of impact taxes may be warranted. Planning staff's long term transportation impact tax recommendations identified issues that can be explored further. Staff also suggests that there is potential benefit in examining the merit of collecting schools taxes and/or some type of tax for affordable housing on some kinds of non-residential land uses.

Currently, taxes are based on housing type: single-family detached, single-family attached, multi-family and garden apartment. Basing the school impact taxes on residential square footage may be more appropriate, for example new large townhouses may be more attractive to families than older smaller townhouses. Additionally, residential construction in the County is changing with innovative housing types (*two-over-two townhouses, piggyback townhouses*) that may have differing student generation factors.

Additional study could also look at applying impact taxes for more than schools and transportation. To do this, a fiscal analysis of the costs of growth would be prepared that includes the costs of other facilities and services such as libraries, parks and recreation facilities. As mentioned before, the recordation tax could be used to provide funding for capital costs for more than schools.

Tax Increment Financing (TIF) districts and development districts were both considered as funding mechanisms for costs associated with growth. The classic application of TIFs is to stimulate economic development in blighted urban areas. Development districts usually impose a property tax surcharge on new development to pay off public bonds that financed growth-related infrastructure. Application of development districts saves the general taxpayer money, but shifts costs to new residents in a way that impact taxes do not. Where development districts are the best alternative, it may be useful to explore requiring developer(s) to pursue private bonding, which may streamline the timing and creation of the district. Planning staff believes that special taxing districts remain a useful tool, especially to finance facilities that have benefits that are geographically limited, and when everyone who benefits from the facility is taxed in proportion to the benefit received.

As Montgomery County moves towards build out,³ there are several anticipatory infrastructure analyses that its local government can perform. One analysis would *determine the amount of infrastructure needed at the time of build out*. This could be a long-range capital facilities plan and would reflect the infrastructure and other facilities and services that will be needed to support County residents by the time most of the planned development has occurred. A second, related analysis would *establish a relationship between the expected long-term pace at which the private sector builds out the development in the master plan and the pace at which the public sector provides the infrastructure needed to support that growth*. A long-term capital facilities plan tied explicitly to growth projections would find utility when considering the growth policy, capital improvements programming, and infrastructure financing.

The County should also consider ways to monitor the actual delivery of infrastructure. Individual master plans make development recommendations that must be supported by construction of “bricks and mortar”—improved roads, new

³ Acknowledging that *build out* is a theoretical concept similar to the *asymptote*: a destination to which one may move ever-closer but one never reaches.

or rebuilt schools, new libraries, bigger fire stations. These projects—thousands of them—go into the Capital Improvement Program, but the CIP doesn't indicate when a specific project should be finished so that it can support recommended development or redevelopment in its area. In the APFO Reform report, Planning staff recommends that the Growth Policy include master plan status reports and other analysis to review how well infrastructure is meeting the evolving needs of existing communities as well as the increased demands brought by new development.

INFRASTRUCTURE FINANCING: BACKGROUND INFORMATION

Direction from the County Council

At the March 12th PHED Committee meeting, the committee requested several items to be included in the April 15th Interim Report. The items pertaining to the Infrastructure Financing section of this report include: a history of impact taxes/taxes in Montgomery County including a calculation of the tax to home value ratio for the County and for other local jurisdictions, a summary of the changes in demographics and growth within the County, and an investigation into current changes in legislation at the state level that impact growth policy.

History of Impact Taxes in Maryland and Montgomery County

In order to impose a development impact tax or an excise tax in a Maryland jurisdiction, that jurisdiction must have explicit authority from the state's General Assembly to do so. Sixteen Maryland counties, listed on the accompanying table, impose either a development impact tax or an excise tax. These charges support public school construction, transportation, parks and recreation projects, utilities and public safety.

Jurisdictions imposing a development excise tax may set the tax amount at any reasonable level, and a connection, or nexus, between where the money is collected and where it is spent is not necessary. The General Assembly can authorize the amount of the tax and specify activities on which the tax can be imposed.

Impact taxes are more complex. Jurisdictions must study the impact of the taxes on public services and establish a connection between the amount of the tax and the new development's impact. They must also collect and spend the impact taxes in the same place.

Montgomery County and Impact Taxes

Montgomery County established an impact tax structure in 1986 for Germantown and Eastern Montgomery County. The Council and the Executive opted for this structure because they believed it could be imposed without state enabling legislation. The taxes applied to all development projects except those undertaken by the government, but could be used only for specific transportation projects. The elected officials planned to issue bonds to pay for the projects, then use the impact tax proceeds to pay a portion of the bond debt. They believed that existing residents would benefit from new transportation facilities along with new residents, so impact taxes charged as part of development should not represent the entire cost of the new facility. In Germantown, officials expected impact taxes to support half the cost of designated projects.

To calculate the taxes, which were assessed as building permits were approved, county staff determined, for Eastern Montgomery County and for Germantown, the cost of the designated transportation project and the percentage of development in each area that was yet to occur. This fraction:

$$\frac{\text{Project cost}}{\text{Percentage of remaining development}}$$

allowed for the calculation of a factor used to assess the taxes on each unit of a residential development or on the square footage of a non-residential development. Receipts from the impact taxes totaled about \$1 million a year. The tax structure included credits against the impact taxes for improvement projects that were required as conditions of development approvals, this reduced impact tax receipts. The County has since updated the taxes every two years.

Developers who objected to the tax took the matter to court, and in 1990, the state Court of Appeals held that Montgomery County had imposed a tax, not a fee, on development, and that the County had no authority under state law to impose the tax. The Council quickly re-imposed the taxes under a different section of state law, which grants jurisdictions additional taxing powers, including the right to impose development impact taxes. The legislation re-imposing the taxes was subsequently upheld by the Court of Appeals, which found that the taxes constituted an excise tax, which the county had the right to impose under the law granting jurisdictions additional taxing powers.

The County continued to collect the impact taxes in Germantown and Eastern Montgomery County until the mid-1990s, when the Council expanded the impact taxes to Clarksburg. In 2002, the Council and the Executive expanded both the scope of the impact tax structure and the areas to which it would be applied.

The Council approved the Executive's proposal to expand impact taxes to the entire County over an 18-month period. This legislation created three sets of

districts in which impact taxes would be collected: policy areas around existing Metro stations; the Clarksburg policy area; and a general district, which included all areas, including municipalities, not part of the other two categories. The taxes would continue to be collected for transportation projects, but the projects would no longer be specific. Instead, a broader range of projects, including road projects that added capacity; transit centers or park-and-ride lots; new Ride On buses; and transit or trip reduction programs, could be funded using impact taxes. The taxes were lowest in Metro Station Policy Areas and highest in Clarksburg. The taxes are adjusted every two years, based on changes in the Consumer Price Index.

The Council also increased the rate of the County's recordation tax and specified that the increment of the increase would be devoted to school projects that were part of the county's Capital Improvements Program.

In 2003, the Council approved a separate development impact tax for schools, to take effect in March 2004. This tax applied throughout the County to residential development, with a specified rate for each housing type. The taxes could be used to fund new schools or any other project that added teaching stations.

Montgomery County's Impact Tax Structure

The development impact taxes for transportation improvements and for school improvements are similarly structured. The laws recognize that growth must be accommodated through improvements to the County's transportation facilities and its schools and find impact taxes to be a reasonable method of raising funds for those purposes. Each program sets a specific time—the issuing of building permits—for the collection of the fee. Each exempts Moderately Priced Dwelling Units, and other dwelling units meeting standards based on affordability, from the impact taxes. In some cases, the transportation impact tax requires money collected to be spent where it is collected; Metro Station Policy Area funds must be spent in the same Policy Area or an adjacent Policy Area; money collected in Clarksburg must be spent in Clarksburg; and Rockville and Gaithersburg funds must be spent in those cities. General district impact taxes may be spent anywhere in the general district. The schools impact taxes may be used anywhere in the county.

Both rate structures allow developers to apply for refunds of impact taxes if the County has not appropriated the funds for a project within six fiscal years after the tax has been collected. Each impact tax allows credits if the developer constructs or contributes to a specific improvement of the type covered by the taxes (although dedications of land for new schools do not warrant a credit).

The following tables list the transportation and school impact taxes for Montgomery County.

TABLE 1
Rates for the Development Impact Tax for Transportation
Residential Units

	Rates (Prior to 7/01/05)	New Rates (Expire 7/01/07)
General		
Single-family detached	\$5,500	\$5,819
Single-family attached	\$4,500	\$4,761
Multi-family residential (except high-rise)	\$3,500	\$3,703
High-rise residential	\$2,500	\$2,645
Multi-family senior residential	\$1,000	\$1,058
Metro Station		
Single-family detached	\$2,750	\$2,910
Single-family attached	\$2,250	\$2,381
Multi-family residential (except high-rise)	\$1,750	\$1,852
High-rise residential	\$1,250	\$1,323
Multi-family senior residential	\$ 500	\$ 529
Clarksburg		
Single-family detached	\$8,250	\$8,729
Single-family attached	\$6,750	\$7,142
Multi-family residential (except high-rise)	\$5,250	\$5,555
High-rise residential	\$3,750	\$3,968
Multi-family senior residential	\$1,500	\$1,587

Non-Residential (per square foot of gross floor area)

	Rates (Prior to 7/01/05)	New Rates (Expire 7/01/07)
General		
Office	\$5.00	\$5.30
Industrial	\$2.50	\$2.65
Bioscience facility	\$0.00	\$0.00
Retail	\$4.50	\$4.75
Place of worship	\$0.30	\$0.30
Private elementary and secondary schools	\$0.40	\$0.40
Hospital	\$0.00	\$0.00
Other non-residential	\$2.50	\$2.65
Metro Station		
Office	\$2.50	\$2.65
Industrial	\$1.25	\$1.30
Bioscience facility	\$0.00	\$0.00
Retail	\$2.25	\$2.40
Place of worship	\$0.15	\$0.15
Private elementary and secondary schools	\$0.20	\$0.20
Hospital	\$0.00	\$0.00
Other non-residential	\$1.25	\$1.30
Clarksburg		
Office	\$6.00	\$6.35
Industrial	\$3.00	\$3.15
Bioscience facility	\$0.00	\$0.00
Retail	\$5.40	\$5.70
Place of worship	\$0.35	\$0.35
Private elementary and secondary schools	\$0.50	\$0.55
Hospital	\$0.00	\$0.00
Other non-residential	\$3.00	\$3.15

TABLE 2
Rates for the Development Impact Tax for Schools
Residential Units

	2003 Rates	Current Rates
General		
Single-family detached	\$8,000	\$8,464
Single-family attached	\$6,000	\$6,348
Multi-family residential (except high-rise)	\$4,000	\$4,232
High-rise residential	\$1,600	\$1,693
Multi-family senior residential	\$0	\$0

Impact tax for single-family units is increased by \$1.00 for each square foot of floor area over 4,500 sq. ft. up to 8,500 sq. ft.

Impact Taxes in Other Jurisdictions

The PHED Committee asked for a discussion of impact taxes or similar taxes levied by other jurisdictions, and the ability of these programs to generate revenue. In addition, the Committee is also interested in the rate of growth and the characteristics of development of these jurisdictions.

Nationwide, there are 213 jurisdictions that impose a transportation impact fee. The average transportation impact tax across the nation for roads is \$2,305 on a single-family unit. On a multi-family unit the average is \$1,568, on retail (per 1000 square feet) it is \$4,562, on office it is \$2,564, and on industrial it equals \$1,587. The ratio of impact tax to median home value may provide a better idea of the relative expense of such a fee. Nationally, for single-family homebuyers a transportation impact tax is on average 1.4% of the median home value. In Montgomery County, a transportation impact tax of \$5,819 on a single-family unit represents 1.2% of the median home value.

School impact taxes, having become increasingly popular in the past decade, can appear to be quite high. Nationally, the average school impact tax is \$4,138. This represents a 2.5% tax to home value ratio. Florida and California have the highest number of impact tax programs in the country.

Florida has not only the highest number of jurisdictions that impose a development impact tax for schools, but also the highest tax to home value ratio. In Florida, the impact tax for schools can be as high as \$9,981 and as low as \$196 per single-family detached unit. Yet, the county with the highest school impact tax in Florida is not the county with the highest tax to home value ratio. The impact tax in Polk County is over \$1,000 less than the tax in Osceola, but the tax to median house value in Polk County is 8.1%. In Osceola, the tax to home value ratio is 4.7%. The average school impact tax for the state of Florida is \$4,456, which represents a 2.4% tax to home value ratio, practically equal to the national average.

California has the second highest number of school impact tax programs. But, the state legislature limits the rate of increase in these taxes. In California the range in tax to home value ratio is only 0.3% to 2.1%.

Closer to the Washington region, Richmond, Virginia imposes a school impact tax of \$2,828, which equals 1.9% of the median home value. In Jefferson County, West Virginia a \$9,877 school impact tax represents 6.6% of the median home value.

Locally, several Maryland counties impose school impact taxes. Calvert County has the lowest impact tax to home value ratio. In Calvert County, a \$3,000 school impact tax represents .9% of the median home value. In Prince George's County, an impact tax of \$12,000 represents 4.4% of the median home value. While in Montgomery County, an impact tax of \$8,464 represents 1.8% of the median home value. Montgomery County falls below 5 other counties within the State in terms of the relative expense of its school impact fee. Only three other Maryland counties have a tax to home value ratio below Montgomery's.

Table 3
Ratios of School Impact Tax to Median Home Value
Owner-Occupied Housing Units¹

	Median Home Value ²	Impact Fee ³	Ratio of Fee-to-Home Value
California			
Alameda County ⁴	\$531,300	\$7,300	1.4%
El Dorado County	\$497,800	\$5,008	1.0%
Kern County	\$210,700	\$4,480	2.1%
Los Angeles ⁵	\$273,100	\$800	0.3%
San Joaquin	\$379,600	\$5,460	1.4%
Santa Barbara	\$646,300	\$3,075	0.5%
Florida			
Brevard County	\$193,700	\$4,445	2.3%
Citrus County	\$127,900	\$1,917	1.5%
Hillsborough	\$171,100	\$196	0.1%
Lake County	\$149,000	\$7,055	4.7%
Osceola County	\$186,900	\$9,981	5.3%
Polk County	\$106,600	\$8,596	8.1%
Seminole County	\$213,300	\$1,384	0.6%
Volusia County	\$159,500	\$5,744	3.6%
Maryland⁶			
Anne Arundel	\$329,500	\$3,587	1.1%
Calvert County	\$349,500	\$3,000	0.9%
Carroll County	\$313,400	\$6,303	2.0%
Charles County	\$290,800	\$10,247	3.5%
Frederick County	\$336,100	\$10,868	3.2%
Harford County	\$243,700	\$7,442	3.1%
Montgomery	\$466,100	\$8,464	1.8%
Prince George's	\$273,600	\$12,000	4.4%
St. Mary's County	\$265,700	\$3,375	1.3%
Virginia			
Richmond	\$149,400	\$2,828	1.9%
West Virginia			
Jefferson County	\$149,500	\$9,877	6.6%

¹ Selected counties from California and Florida are presented, the counties with the highest and lowest school impact taxes are shown, as well as a random sampling of other counties in those states.

² Median House Value data is from the 2005 American Community Survey, U.S. Census Bureau.

³ Impact Tax data is from the 2006 National Impact Tax Survey, Duncan and Associates.

⁴ Hayward City, in Alameda County, California.

⁵ Lancaster City, in Los Angeles County, California.

⁶ No housing data for Queen Anne County is provided in the 2005 American Community Survey.

Compared to other Maryland jurisdictions charging impact taxes, Montgomery County's rate represents a lower tax-to-median-house-value ratio than other comparable jurisdictions, as noted above. For example, Prince George's County charges almost \$5,000 more in school impact taxes for a single family house outside the Beltway than Montgomery County charges. And, the tax-to-median-house-value ratio for Prince George's County is more than three times higher than in Montgomery County. The table below illustrates the total impact fee/excise tax imposed in each Maryland county and the revenue this tax generates.

Table 4
Impact Fee/Excise Tax Rates and Revenues
Maryland

County	Type	FY 2007 Rate Per Dwelling ¹	FY 2006 Revenues
Anne Arundel	Impact Fee	\$4,781	\$11,127,876
Calvert	Excise Tax	12,950	5,302,300
Caroline ²	Excise Tax	5,000	966,402
Carroll	Impact Fee	6,836	3,436,236
Charles	Excise Tax	10,859	8,649,532
Dorchester ³	Excise Tax	3,671	1,265,851
Frederick ⁴	Both	11,595	15,064,080
Harford	Impact Fee	7,442	3,400,200
Howard ⁵	Excise Tax	<i>See note.</i>	13,605,188
Montgomery ⁶	Excise Tax	14,283	13,212,000
Prince George's ⁷	Excise Tax	19,361	43,102,486
Queen Anne's	Impact Fee	6,606	2,474,740
St. Mary's	Impact Fee	4,500	3,789,525
Talbot ⁸	Impact Fee	5,347	1,378,430
Washington	Excise Tax	13,000	7,745,961
Wicomico ⁹	Impact Fee	5,231	96,000
Total			\$134,616,807

Reviewing Table 4, it becomes apparent that there is not a simple one-to-one correspondence between fee/tax rates and revenue across the region. Although the rates listed are generally those applicable to single-family detached dwellings, the table is followed by eight footnotes that denote program details. Several of the counties have a transportation fee that varies either by size of the dwelling or by location. A few of the school fee rates vary by location as well.

¹ Rates listed are generally those applicable to single-family detached dwellings.

² A \$750 development excise tax for agricultural land preservation is also imposed on single-family lots

³ A slightly higher rates applies outside of the Cambridge and Hurlock areas.

⁴ Roads tax ranges from \$0.10/sq.ft. to \$0.25/sq.ft.

⁵ Roads tax is \$0.80/sq.ft. School surcharge is \$1.07/sq.ft.

⁶ Excise tax is \$5,819 for transportation and \$8,464 for schools. School rate increases by \$1 for each square foot between 4,500-8,500 gross square feet. Transportation rates vary for Metro Stations and Clarksburg.

⁷ Excise tax is \$13,151 for schools and \$6,210 for public safety. School rate is \$7,671 inside the beltway, public safety rate drops to \$2,070 inside the "development tier".

⁸ A lower rate, \$4,620, applies to "in-town" development.

⁹ Approximate revenue figure. Impact tax in effect for less than 1 month at the end of fiscal 2006.

Source: State of Maryland Department of Legislative Services

This variation in rates and mode of application has a significant effect on revenue generation. Montgomery County imposes a combined impact tax rate that is 75% of the amount charged per dwelling unit in Prince George's County. Yet, Prince George's County raised almost four times more revenue from its taxes in 2006. In Anne Arundel County, the tax is only about 50% of the tax charged in Montgomery County, but the revenue collected there is almost 85% Montgomery County's revenue.

In Montgomery County, the school impact tax does not vary by location, but across dwelling types. Townhouse and multi-family units are charged a significantly lower rate than single-family detached units. Table 5 shows the construction of new housing units in several Maryland counties. Montgomery County built the most units overall, with Prince George's County not too far behind. The striking difference between these two counties is that Montgomery County built the most multi-family units by far, more than 17 times the number of units built in Prince George's County. Prince George's County, in contrast, built the most single-family units overall, almost three times as many units as any of the other counties. In addition, in Prince George's County, the school impact tax is the same across all housing types. Therefore, the level of construction as well as the rate and application of the taxes all contributed to the revenue generating capacity of the various impact tax programs.

Additionally relevant is the regional housing market. Not only which jurisdictions are building what type of unit and how many but also the market prices. To compare the regional housing market, we looked at housing sales and construction in the Maryland portion of the Washington region: Anne Arundel, Frederick, Howard, Montgomery, Prince George's Counties, (Table 6). The 2005 housing sales data⁴ show that while Montgomery County led this area (and state) in total number of housing sales, Prince George's County had more single family sales than Montgomery County, while Montgomery County had more townhouse and condo sales than the other jurisdictions. Sales prices in Howard County were very close to Montgomery County prices while Anne Arundel and Frederick County prices were similar. One reason for the large number of condo sales in Montgomery County is that 59% of the multi-family units built in the region were built in Montgomery County (these units could be either *for sale condos* or *for rent apartments*. (Table 5).

⁴ Source: Maryland Department of Planning

Table 5
Housing Unit Growth (2000 to 2006) – Selected Maryland Counties
By County and Unit Type

County	Existing Units (2000)	New Residential Construction Permits								Existing + New	Annual Growth Rate
		2000	2001	2002	2003	2004	2005	2006	2000 to 2006		
Anne Arundel											
Single-Family	151,959	2,470	2,013	2,026	2,164	1,769	1,565	1,115	13,122	165,081	1.19%
Multi-Family	31,074	608	479	333	837	595	930	319	4,101	35,175	1.79%
Total Units	183,033	3,078	2,492	2,359	3,001	2,364	2,495	1,434	17,223	200,256	1.29%
Frederick											
Single-Family	60,483	2,695	1,721	1,352	1,605	1,718	1,414	1,098	11,603	72,086	2.54%
Multi-Family	11,813	52	262	226	232	55	458	202	1,487	13,300	1.71%
Total Units	72,296	2,747	1,983	1,578	1,837	1,773	1,872	1,300	13,090	85,386	2.41%
Howard											
Single-Family	69,313	1,631	1,327	1,341	1,010	1,284	1,340	1,040	8,973	78,286	1.75%
Multi-Family	21,664	551	-	206	469	553	438	527	2,744	24,408	1.72%
Total Units	90,977	2,182	1,327	1,547	1,479	1,837	1,778	1,567	11,717	102,694	1.75%
Montgomery											
Single-Family	231,228	2,931	3,191	2,909	2,339	2,376	1,700	1,240	16,686	247,914	1.00%
Multi-Family	102,779	2,019	2,058	2,104	2,089	1,445	1,891	1,798	13,404	116,183	1.77%
Total Units	334,007	4,950	5,249	5,013	4,428	3,821	3,591	3,038	30,090	364,097	1.24%
Prince George's											
Single-Family	197,254	3,179	3,049	2,485	2,808	1,875	3,255	2,918	19,569	216,823	1.36%
Multi-Family	103,551	277	-	78	130	73	170	115	843	104,394	0.12%
Total Units	300,805	3,456	3,049	2,563	2,938	1,948	3,425	3,033	20,412	321,217	0.94%

Note: Single-family units include detached single-family homes and townhouses. Multi-Family units include units in buildings with 2-, 3-, 4- and 5+ family units.

Source: Maryland Department of Planning, Planning Data Services.

Table 6
Housing Sales and Values – Selected Maryland Counties (2005)
By County and Unit Type

	Median Sales Price*	Residential Sales*	Median Housing Value**
Anne Arundel County			
All Residential Units	\$319,308	12,490	\$329,500
Single-family	n/a	11,547	
Detached Single-family	\$370,000	7,300	
Townhouse	\$275,000	4,247	
Condo	\$244,450	920	
Howard County			
All Residential Units	\$390,000	6,218	\$425,400
Single-family	n/a	5,415	
Detached Single-family	\$532,900	2,999	
Townhouse	\$326,600	2,416	
Condo	\$231,070	797	
Frederick County			
All Residential Units	\$318,000	6,239	\$336,100
Single-family	n/a	5,676	
Detached Single-family	\$415,000	3,272	
Townhouse	\$275,000	2,404	
Condo	\$211,615	553	
Montgomery County			
All Residential Units	\$419,000	21,707	\$466,100
Single-family	n/a	16,883	
Detached Single-family	\$560,000	10,530	
Townhouse	\$347,000	6,353	
Condo	\$275,000	4,823	
Prince George's County			
All Residential Units	\$281,500	18,762	\$273,600
Single-family	n/a	16,000	
Detached Single-family	\$325,000	11,929	
Townhouse	\$246,000	4,071	
Condo	\$157,000	2,755	

* **Source:** Maryland Department of Planning, Planning Data Services. Mobile homes and unclassified residential units removed.

** Owner-occupied units. **Source:** U.S. Census, 2005 American Community Survey.

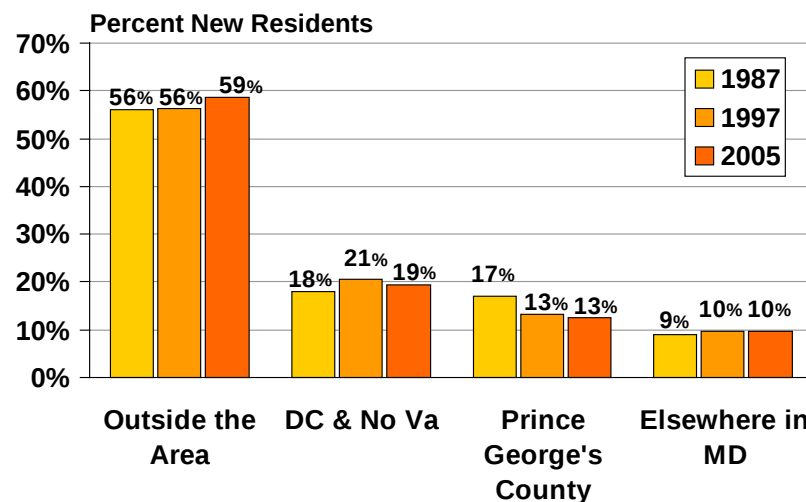
Changes in Demographics and Growth Within the County

New Residents to Montgomery County

One out of 5, or approximately 72,000 households, moved into Montgomery County between 2000 and 2005. The majority of newcomers (59%) are from outside the Washington metropolitan region and the remainder, in about equal numbers, hail from elsewhere in Maryland or from the District of Columbia and Northern Virginia areas.

In-movers

More than half from outside the area



 Research & Technology Center

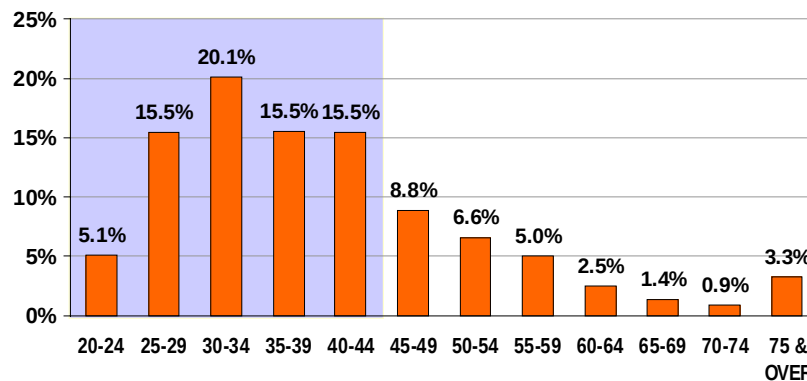
Source: MNCPPC 2005 Census Update Survey

Most of the new households, 37%, choose garden apartments as their first residence with single-family detached houses the second favorite option at 28%. The majority of households new to the area (55%) rent their first home and are twice as likely to rent their dwelling than the County's households overall (26%). The 2004 median household income of the new resident households at \$72,035 is about \$12,000 below the median for the County (\$83,880). This difference may be attributed to the relative youthfulness of the in-comers who have not entered the prime wage earning years of ages 45 and older. The average new householder age is 40 years old compared to 51 across the County.

New Residents to Montgomery County

In-movers by householder age

Over 70% of in-movers are under 45



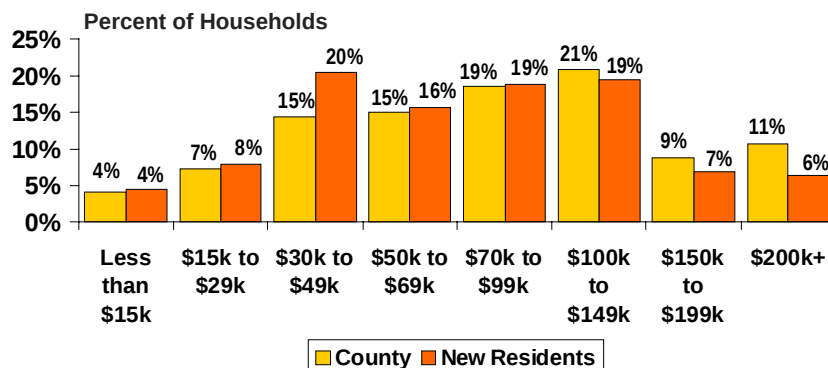
Research & Technology Center

Source: MNCPPC 2005 Census Update Survey

Approximately 181,000 people, or 20% of the population, are new Montgomery County residents since 2000. Moving, for the most part is an occupation of the young, as the propensity to move decreases with age. This is illustrated in the accompanying chart detailing the age ranges of the in-mover head of household. In the total in-mover population, more than one-third of the newcomers range in ages between 30 and 44 and many are in families bringing toddlers and school age children (respectively, 11% and 17% of the in-movers). Less than 4% of the in-movers are ages 65 and older.

2004 household income

Youthful in-movers yet to enter prime wage earning years



Research & Technology Center

Source: MNCPPC 2005 Census Update Survey

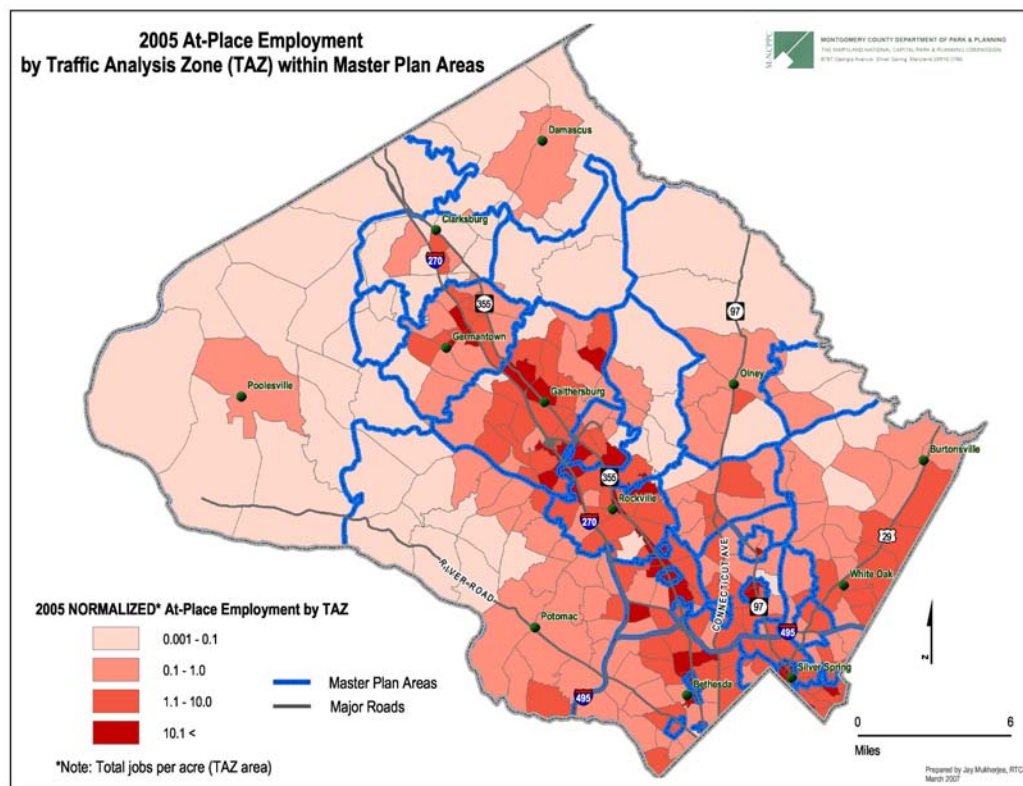
Montgomery County grew increasingly racially diverse during the 1990s and this trend continues into this decade. Of the new residents, 20% are Black or African American, 17% are Hispanic/Latino, and 15% are Asian or Pacific Islander.

These percentages are only slightly higher than what characterizes the County overall (17%, 14%, and 13%, respectively). The new foreign-born residents (and new residents in general) are usually highly educated with 72% of foreign-born adults ages 25 and older having a Bachelor's, Graduate, or Doctoral degree. The 2004 median income for the foreign-born, in-movers is \$67,400 compared to \$83,880 for the County.

Montgomery County Round 7.0 2005 and 2030 Forecasts by Master Plan Areas

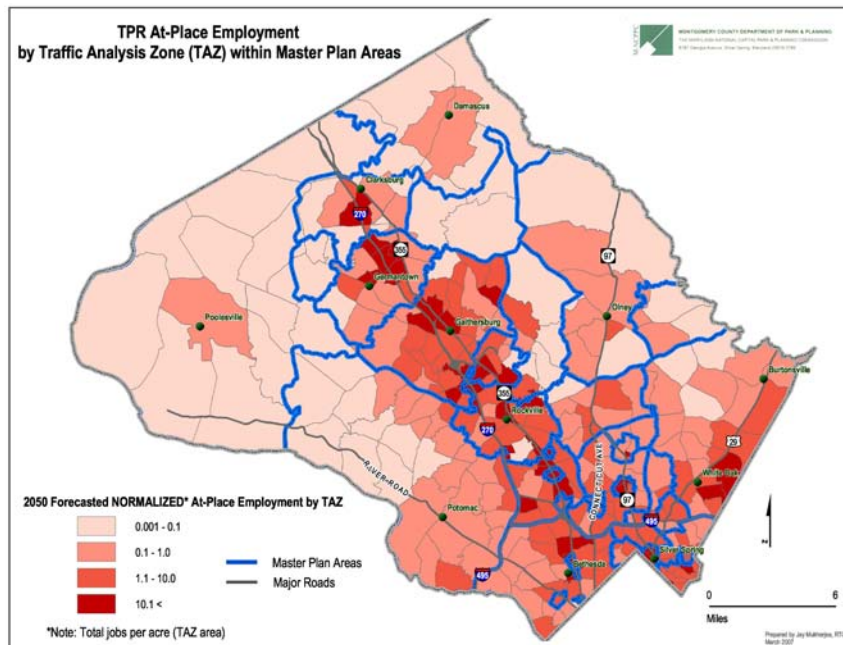
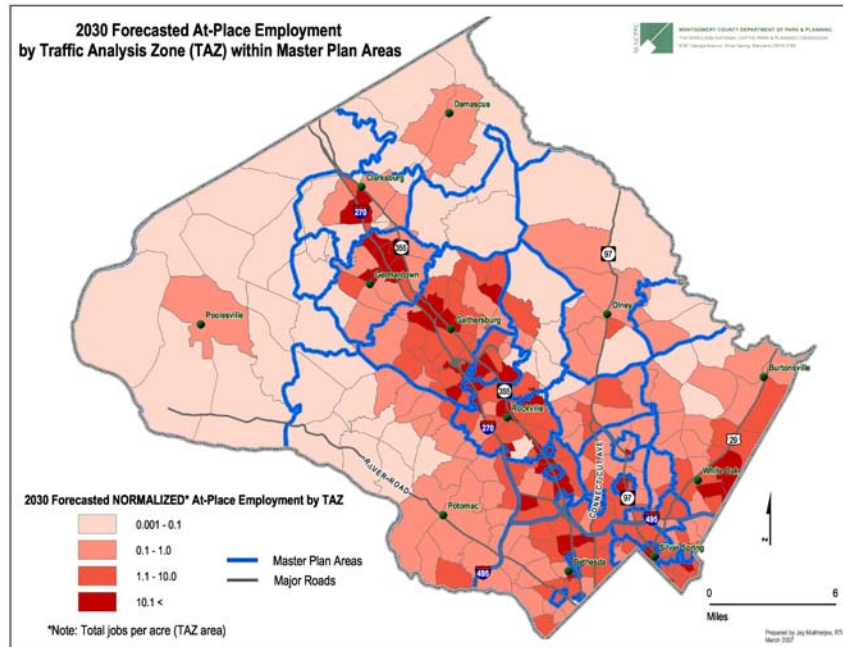
Jobs

In 2005, there were 500,000 jobs in the County. Almost 70 percent of these jobs were in two planning areas, about 37 percent in the I-270 Corridor and about 32 percent in Bethesda Chevy Chase/North Bethesda.



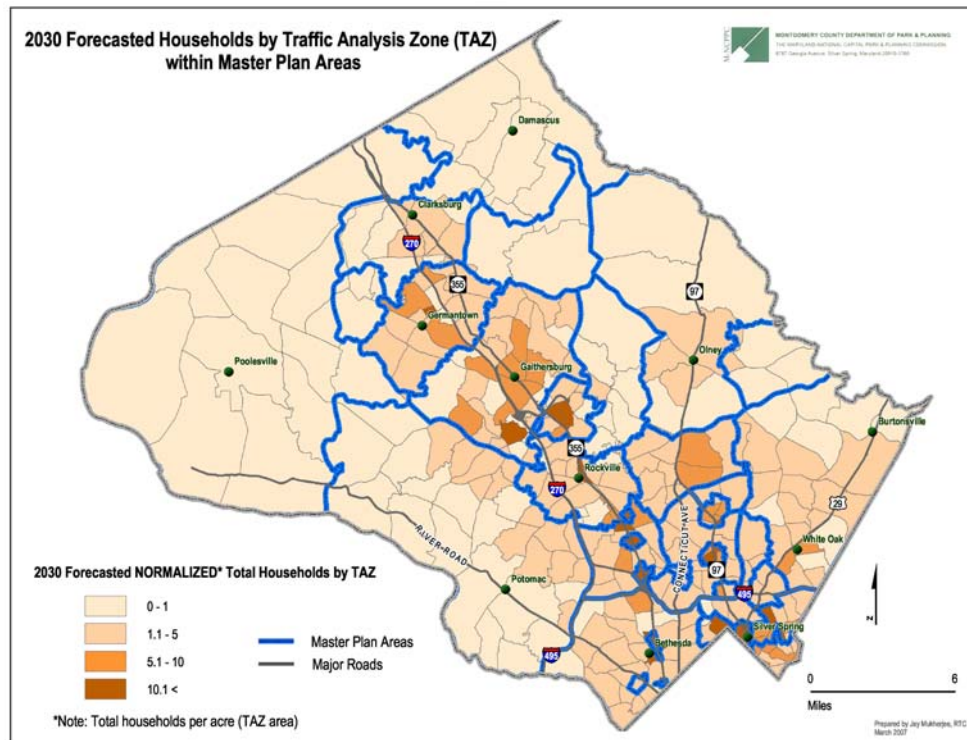
By 2030 the County's jobs are expected to reach 670,000, an increase of 34 percent or 170,000 jobs compared to 2005. The I-270 Corridor will have 60 percent of this growth, 102,000 jobs. The Bethesda Chevy Chase/North Bethesda Planning Area ranks second with 21 percent of the County's job growth, almost 36,000 jobs. These two areas are projected to have 81 percent of the County's job growth.

The following maps show jobs per acre in 2030 and as suggested in the Transportation Policy Report.



Households

The County's households are not as concentrated as the County's jobs. In 2005, the I-270 Corridor had about 102,000 of the County's 347,000 households, about 29 percent. The Georgia Avenue planning area ranks second with almost 23 percent of the County's households.



Forecasts show the County's households increasing to 441,300 by 2030, an increase of 27 percent or 94,300 households. Most of the County's household growth, 68 percent, will be in the same two areas that will lead in job growth. The I-270 Corridor ranks first with 46 percent of the County's household growth, 43,500 households. Bethesda Chevy Chase/North Bethesda ranks second with 22 percent of the County's household growth, 21,000 households.

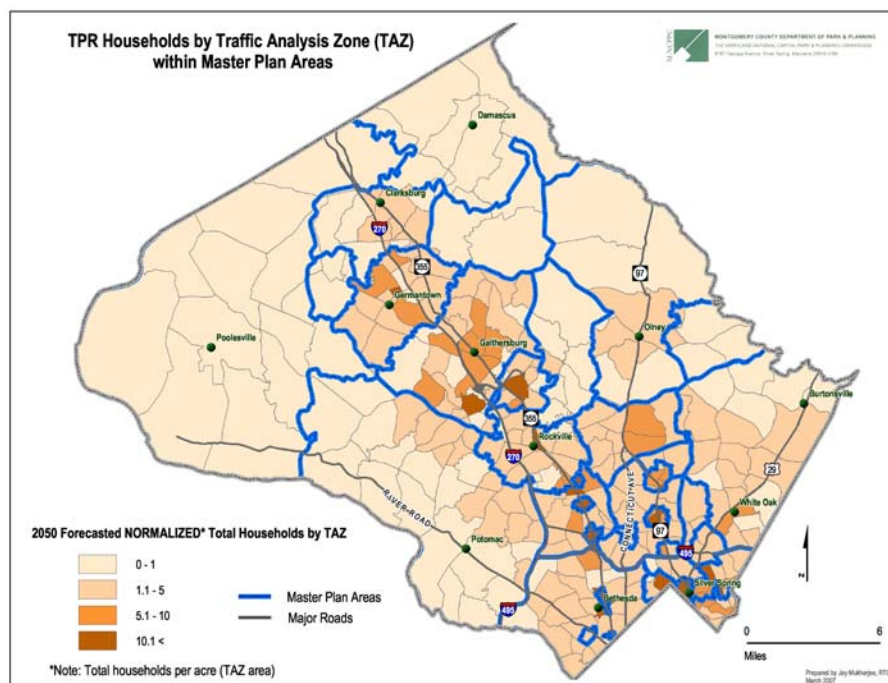
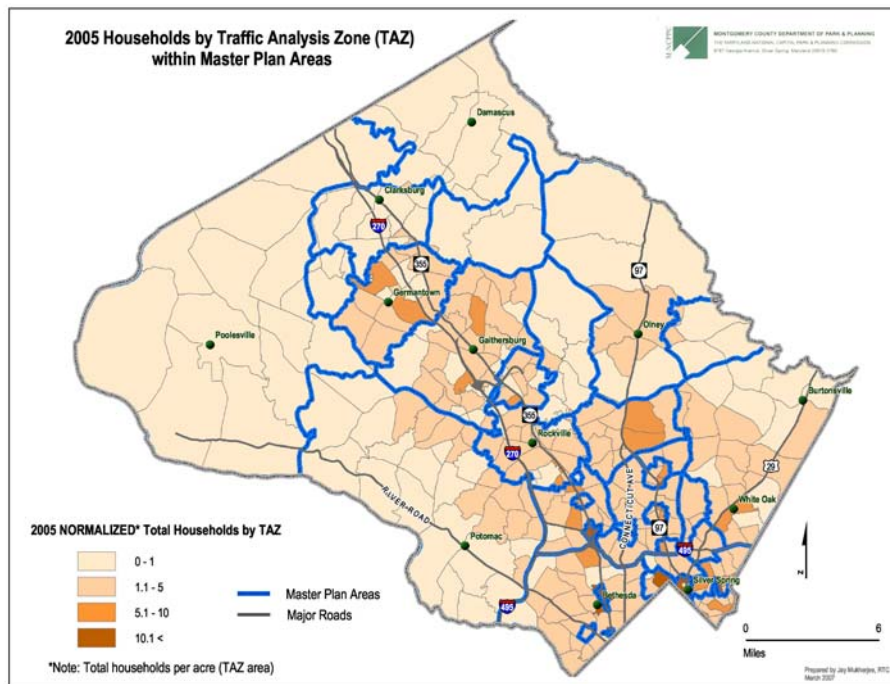


Table 7

Round 7.0 Cooperative Household Forecast for Households

Montgomery County, MD

Household Growth by Unit Type (2000 to 2030)

	2000	2005	2010	2015	2020	2025	2030
Single-Family	226,737	239,321	247,525	256,385	262,610	264,935	265,966
Multi-Family	97,828	107,679	122,475	133,615	145,290	159,865	175,334
Total Households	324,565	347,000	370,000	390,000	407,900	424,800	441,300

New Households by Unit Type

	2000	2005	2010	2015	2020	2025	2030	2000 to 2030
Single-Family	-	12,584	8,204	8,860	6,225	2,325	1,031	39,229
Multi-Family	-	9,851	14,796	11,140	11,675	14,575	15,469	77,506
Total New Households	-	22,435	23,000	20,000	17,900	16,900	16,500	116,735

Share of New Households by Unit Type

	2000	2005	2010	2015	2020	2025	2030	2000 to 2030
Single-Family	-	56%	36%	44%	35%	14%	6%	33.6%
Multi-Family	-	44%	64%	56%	65%	86%	94%	66.4%

Source: Montgomery County Planning Department, Research and Technology Center, July 2005.

Population

The household population forecasts mirror the household forecasts. The I-270 Corridor and Bethesda Chevy Chase/North Bethesda areas are expected to have most of the County's population growth.

Jobs Housing Ratio

A jobs-to-housing ratio of 1.5 to 1.6 jobs per household is considered balanced. In 2005, the County's jobs-to-housing ratio was 1.44 indicating that the County is slightly imbalanced toward housing. None of the master planning areas have a balanced jobs-to-housing ratio. The Bethesda Chevy Chase/North Bethesda and I-270 Corridor are the County's employment areas with jobs housing ratios of 2.76 and 1.84 respectively. Silver Spring/Takoma Park's 1.32 jobs-to-housing ratio is close to balanced but is more housing oriented. Potomac, Georgia Avenue, and Eastern County all have jobs-to-housing ratios less than 1 indicating that these areas are serving as a labor force pool for the I-270 Corridor and Bethesda Chevy Chase/North Bethesda employment areas as well as employment areas in other jurisdictions.

Between 2005 and 2030, job growth is projected to exceed household growth enough so that that the County's jobs-to-housing ratio will be 1.52, a better balance between jobs and housing. In 2030, none of the areas have a balanced jobs-to-housing ratio. Bethesda Chevy Chase/North Bethesda and the I-270 Corridor remain the employment areas with jobs-to-housing ratios of 2.48 and 1.99 respectively. The Bethesda Chevy Chase/North Bethesda area is becoming more balanced, its jobs-to-housing ratio dropping from 2.76 in 2005 to 2.48 in 2030. The I-270 Corridor is expected to become slightly more job oriented going from a jobs-to-housing ratio of 1.84 in 2005 to 1.99 in 2030. The other areas remain predominately housing areas but in 2030, Eastern County's ratio exceeds 1 indicating it will become more of a job center.

Examining jobs-to-housing ratios based on the forecast growth between 2005 and 2030 shows that the County's jobs-to-housing ratio is 1.80. Eastern County and the I-270 Corridor will be adding far more jobs than housing. The Eastern County's is forecast to add 5 times more jobs than households, a jobs-to-housing ratio of 5.11. Much of this expected job growth is due to the Food and Drug Administration's consolidation in White Oak and the proposed Technology Park near Calverton. The I-270 Corridor is forecast to add more than twice as many jobs as households, a jobs-to-housing ratio of 2.34. In the northern areas of the I-270 Corridor; Gaithersburg, Germantown, and Clarksburg; housing growth has exceeded employment growth. The 2005 to 2030 forecast expects job growth to catch up to the housing that has already been built in these areas.

Possible Changes in Legislation that Impact Growth Policy

House Bill 1220 – The Chesapeake and Coastal Bays Green Fund

House Bill 1220, creating a Chesapeake and Atlantic Coastal Bays Green Fund, is currently under consideration in the 2007 Maryland State legislative session. The Fund is intended to ensure that the State can, and will, meet its commitments to reduce pollution to the State's rivers, streams, and the Bay, by funding essential Tributary Strategy practices. This bill would establish the Fund and prohibit local governments from granting specified permits for new development until an impervious surface tax is paid. All new impervious surfaces will be subject to the fee, with exemptions for specified projects. Local jurisdictions will be required to collect the tax, based on the imperviousness associated with building permit requests. The bill will require the Comptroller to distribute the Fund to specified units of State government and the Chesapeake Bay Trust, to be made available to local governments through matching grants. In addition, the bill would establish a Chesapeake and Atlantic Coastal Bays Green Fund Oversight and Accountability Committee, made up of state and nongovernmental representatives, which will establish performance benchmarks and monitor financial and other accountability measures.

The Chesapeake and Atlantic Coastal Bays Green Fund is expected to generate, on average, about \$130 million per year, providing critical funding for implementing restoration and pollution-reduction practices within the Tributary Strategies. It will also provide critical planning and technical assistance tools, consistent with nutrient pollution reductions and Smart Growth policies. It is intended to benefit all Marylanders, including, but not limited to: farmers, local governments, conservation groups, watermen, citizens, and academic institutions.

HB 1220 has passed the House and is now in the Senate. In its original form, the rate of the impervious surface tax depended, according to a simple formula, on whether new development is in a Priority Funding Area (PFA), or not. The version that passed the House, however, is significantly more complicated in how the tax would be assessed, and in the tax rate structure. Depending on Senate action, it may be modified extensively yet again. Many observers at present, however, do not expect it to pass.

Transportation Impact Tax Methodology

The transportation impact tax rate structure in Montgomery County is generally progressive and most of the general approaches used are also used in other urbanized areas to both raise revenues and guide growth. Some jurisdictions have adopted innovative tools to calculate taxes based on more complex

modeling approaches and focus tax application to specific modal or project initiatives.

In establishing transportation impact taxes, Montgomery County includes certain elements in its program that are commonly used by other jurisdictions:

- The impact tax amounts are considered a pro-rata share of the cost of needed area wide improvements, rooted in an estimate of the costs of unbuilt roadway capacity distributed among estimated development growth.
- Developers are typically required to address localized impacts by providing additional transportation infrastructure and the cost of that infrastructure is counted as a credit against their impact tax payment.

The literature review conducted to date identifies two areas, however, where other jurisdictions are following more aggressive, or progressive, transportation impact tax procedures:

- Many jurisdictions have established rates based on more finely grained vehicle trip generation and or vehicle trip-length assessments, and
- Some jurisdictions have notably higher impact taxes than we do, in part due to the fine-grained process noted in the prior bullet.

An August 2006 survey of taxes from Duncan Associates contains summary comparisons of impact taxes for some 200 jurisdictions nationwide. While Montgomery County's transportation impact tax rates remain higher than the national average, as a percentage of median home value, the rate on single-family detached units was lower than the national average. The survey provides a fairly simplistic comparison of rates across jurisdictions. Most jurisdictions, including Montgomery County, have a more complex impact tax rate structure. Some jurisdictions are shifting to more innovative means for establishing impact tax rates. For instance, Broward County, Florida, has established a separate Transit Oriented Concurrency (TOC) tax in eight of their ten concurrency districts, based on a pro-rata share of implementing a five-year adopted Transit Development Plan.

ISSUES

The Council has raised a number of interesting questions regarding the proportion of travel in the County due to a variety of causes, including through traffic and federal government facilities. These issues will be addressed first, followed by additional issues affecting the current transportation impact tax program.

Through Traffic

Through traffic consists of automobile trips that pass through a jurisdiction without having either an origin or destination in that jurisdiction. They create a quandary because these trips are beyond the reach of local growth management and infrastructure financing programs. Prior analyses have estimated that about one-third of the traffic entering the County is through traffic, primarily associated with the Capital Beltway.

Regardless of the actual amount of through travel in the County, staff finds that there is no effective way other than user taxes (such as tolls collected at the County boundary) to reduce the impact of through traffic. Some limits have been placed on traffic entering the County through the agricultural reserve by adopting master plans that constrain roadway widening (limiting I-270 to six lanes at the Frederick County line, US 29 to four lanes at the Howard County line, and all other roadways to two lanes). Most techniques to constrain through traffic, however, including capacity constraints and toll facilities, work equally to impede both traffic destined to jobs or housing *within* the County as well as *through* traffic.

Government Employment

Table 8 provides an estimate of the proportion of office employment in Montgomery County due to federal, state, and local government. This estimate is derived by comparing Maryland DLLR government employment data for 2006 to our Cooperative Forecast total office employment for 2005.

As indicated in Table 8, total government employment in Montgomery County accounts for about a third of our office workforce, divided evenly between federal and local government employees. While the combination of these two sources may not be completely accurate, the conclusion remains that we owe a significant portion of our economy to the government workforce.

Table 8
Government and Private Sector Employment
Montgomery County

Office Employment Type	Number	Percent
Federal Government	39,642	16%
State Government	1,006	<1%
Local Government	38,661	16%
Government Subtotal	79,309	32%
Private Sector	168,472	68%
Total Employment	247,781	100%

The 2006 *Economic Forces* report estimates that the projected growth rate in employment (both federal and civilian contractors) at Montgomery County federal facilities from 2006 to 2020 is 18%. Our estimate of total county employment for

the period 2005 to 2020 is 23%. Thus, it appears that the proportion of government employment will remain fairly constant over time. By 2030, the office workforce in Montgomery County may include:

- 19,100 additional federal government employees
- 500 additional state government employees
- 18,600 additional local government employees
- 81,300 additional private-sector employees

Funding Apportionments, Impacts, and Responsibilities

Most local jurisdictions base transportation impact taxes on projected demographic growth and the local government share of transportation system capacity expansion. This practice is generally limited by enabling state legislation which generally allows the assessment of an impact tax or excise tax to cover the cost of adequate public facilities, but not to cover operating or maintenance costs or to raise general revenues.

In the 2003 document “A New Vision for Managing Growth in Montgomery County”, staff noted that if the total cost for providing master-planned infrastructure in Montgomery County (then estimated at \$5.9B) were divided evenly among every new job and new dwelling unit, the cost per job and cost per unit would be about \$26,000. However, the delegation of transportation system responsibilities among federal, state, and local agencies is complex. The consideration of how new development impact taxes in Montgomery County might be used to subsidize federal highway system funding or enable renegotiation of the WMATA Compact would be an interesting academic exercise, but probably not very pragmatic.

Therefore, our analysis does not anticipate major changes in the apportionment of transportation system funding among federal, state, regional and local agencies, which reflects existing agreements regarding impacts and responsibilities. Planning staff leaves identifying opportunities to increase state and federal funding to another forum, and focuses on the analysis of the impact tax system that can strengthen local funding of needed transportation system improvements.

Analysis Timeframe

In an effort to “think regionally; act locally”, any analyses on impact taxes could be based on work prepared for the Metropolitan Washington Council of Governments (MWCOG) from both the demographic forecasting and transportation system perspectives. Future impact tax rates could be based on an estimate of growth and transportation system needs through the most distant

horizon year in the MWCOG Cooperative Forecasting arena, currently 2030. This long-range, regional approach provides several advantages:

- The impact tax rate structure can be revised on a regular, periodic basis to reflect demographic, transportation system, or funding changes that occur on the regional level.
- A long-range perspective means that substantial changes to the six-year capital program (such as the initiation or close-out of a project like Montrose Parkway) would be buffered during the periodic reconsideration of impact tax rates.
- A finite horizon year (rather than a master plan horizon) means that changes in land use, zoning, or master planned transportation infrastructure can be coordinated regionally and that the effects of improved information (such as our residential capacity estimate of 2005) are buffered.

Revision to developer credits for transportation impact taxes

Predicting revenues from Montgomery County's transportation impact taxes is complicated by the developers' ability to take impact tax credits for projects they must construct or contribute to as a condition of a development approval. Although the County assesses a developer the entire calculated impact tax for each unit he builds, the Planning Board may also require him to construct specific transportation improvements. A key question is whether these improvements should be instead of, or in addition to, the impact taxes assessed.

The Planning Board referenced this issue in its discussion of the first interim report of the Growth Policy Study. The Planning Board discussed a policy basis for establishing that new development has a responsibility to contribute to the existing network of public facilities. Board members noted that the Washington Suburban Sanitary Commission charges new development a "systems development charge" – a concept that could be applied to other public facilities. That idea recognizes that much of the development potential of any parcel of land is the result of previous, and massive, public investments in infrastructure. Land that is not served by roads, transit, schools, water and sewer, or public safety is land with modest development potential. A development excise tax could be structured as a means of recapturing some of the added land value resulting from previous public investments.

The uncertainty associated with impact tax credits contributed to a Council decision in September 2005 to reduce the revenue projections for the impact tax from \$12.5 million in fiscal 2007 to \$8 million, and to adjust its projections for the remaining CIP years accordingly.

SCHOOL IMPACT TAX ISSUES

Funds Generated from Impact Taxes

When the County Council approved the schools impact taxes in 2003, it did so with certain assumptions about how much money the taxes would generate. The Council was advised that the taxes would generate an estimated \$24 million in fiscal year 2005 and \$28 million annually thereafter. The assumptions were detailed and included estimates of the number of additional units; the percentage of each housing type; the number of units in each of the tax districts; and the percentage of units that would be exempt from the impact taxes.

The revenue assumptions proved to be optimistic. The taxes generated less than \$8 million in fiscal 2005 and less than \$7 million in fiscal 2006. A *permit rush* in which developers raced to submit building permit applications prior to the effective date of the impact taxes can explain much of the fiscal 2005 shortfall; about 1,700 permits approved in fiscal 2005 were not subject to the impact tax, about half the assumed number of additional units. Of course, this effect does not extend to the fiscal 2006 shortfall.

It is estimated that 72% of the growth in residential development for Montgomery County between 2005 and 2030 will be in multi-family dwellings. This phenomenon will further limit the expected income stream from school impact taxes since multi-family dwellings are taxed at a lower rate than single-family homes.

Other jurisdictions base their impact tax rates differently. Rather than base the rate on the type of dwelling unit (single-family detached, single-family attached, etc.), the rate is based on the number of bedrooms or size of the unit. The literature on impact taxes has suggested that there are benefits to using this approach. It allows a closer correlation to actual impact, because student generation does vary by number of bedrooms and size of housing unit, with some manageable limitations (a locality that charged by the bedroom has found an increase in the number of rooms called “dens;” student generation increases as square footage increases, but only up to a point). It is also less regressive.

In addition, the Council could consider the imposition of some type of development related tax on commercial property. This revenue could be used for a variety of programs, including schools. Any development, including infill and redevelopment, that brings jobs to an area also brings workers. These workers will use the transportation network, their children will go to school, and their families will use parks and libraries and other public services. But, most importantly, employees for the jobs created by development and redevelopment will need housing they can afford.

Funds Generated from the Recordation Tax

The current recordation tax in Montgomery County is applied to the transfer in ownership of residential property. A major source of the pressure on schools comes from changes within a community due to neighborhood turnover whereby the neighborhood evolves from one with an aging population to one with more school age children. For this source of school enrollment change, the revenue captured by a recordation tax appears appropriate to fund school improvements necessitated by the increased pressure on existing infrastructure.

In high growth areas, such as Clarksburg, school population growth is the result of new construction; therefore impact taxes can effectively finance a large proportion of school capacity needs. However, in most of the County, school population growth is due to turnover in existing housing stock and redevelopment of existing homes. The recordation tax does a better job of capturing revenue for schools from this growth and turnover. In recent years, the recordation tax has generated much more revenue than the impact tax; in 2006, the recordation tax generated \$44 million compared to \$6.9 million for school impact taxes.

The relatively modest revenue raising capacity of impact taxes and the expected future growth within the County attributable to redevelopment or infill suggest that, changes in the recordation tax on residential property transfers should be included among the options for increasing revenues for financing school capacity.

CONSIDERATION OF ALTERNATIVE FINANCING

Two alternative methods for financing infrastructure growth are Tax Increment Financing and Development Districts.

Tax Increment Financing

The Infrastructure Financing team researched literature related to *Tax Increment Financing (TIFs)* and had discussions about *TIFs* with the Montgomery County Department of Finance. *TIFs* are often used to stimulate economic development in blighted urban areas. Capital improvements are financed by selling bonds that are paid off using the additional tax revenue (the tax increment) generated by the improvements. In Maryland, all counties and municipalities, other than Baltimore City, are authorized by the *Tax Increment Financing Act* to use tax increment financing for the purposes of financing the development of industrial, commercial or residential areas.

The use of *TIFs* seems fairly straightforward. Essentially, the local government determines the property tax revenue it is collecting in a given area before redevelopment occurs. Bonds are issued to the local government, and the

proceeds of this are used to improve and redevelop the area. As redevelopment occurs, tax revenue increases, and the excess tax revenue above the pre-redevelopment state is used to pay off the loans or bonds.

However, there are potential problems with *TIFs*. If tax increment financing is imposed where it is not needed to encourage development – where development would have occurred in the absence of the *TIF* – then the tax increment cuts into general tax revenue that the local government would have otherwise received. This is especially true when the program is set up to freeze property valuations for general tax assessment at the pre-*TIF* level. The tax increment also deprives other governmental bodies that receive property tax revenue – school districts, other special districts, and so forth – of the increase they would have otherwise received.

Another potential problem is the possibility that increased development within the district will fail to generate sufficient revenue to retire the bonds, leaving the government with the responsibility of servicing the debt from the general fund.

Development Districts

In 1994 the Montgomery County Council enacted legislation to authorize the creation of development districts and the issuance of County bonds to finance the construction of certain infrastructure improvements in development districts. As stated in the legislation, the purpose of the development district is to create a method to finance infrastructure improvements necessary for the development of land areas of the County identified for new development. The bill authorizes taxes and assessments on the property within the district to pay for the bonds, which finance the construction of the improvements. Development districts have been used in Germantown and in Clarksburg. In Clarksburg, two districts are under review and a third one has been formed, however, the third district has not yet sold any bonds to finance infrastructure improvements.

The development district concept, particularly as it is used to finance infrastructure required by the adequate public facilities ordinance, is typically applied to large areas of mostly-vacant parcels that the owners are ready to develop. It is seen as “fair” if all or most residents within the district are both paying to retire the bonds and also benefiting from the infrastructure that has been built. In areas where new growth is interspersed among existing development, it can be more problematic to assess some landowners an added increment on their tax bill and not their next door neighbor.

It has become evident that development districts raise a number of other issues, including the transparency of the process and “who pays” for the infrastructure to support growth. Impact taxes are probably more transparent than development districts – developers should be adept at incorporating an impact tax into their construction *pro formas*, but potential homebuyers will have more difficulty

comparing the initial price and future tax burden of a home *inside* a development district to the initial price and future tax burden of a home *outside* of a development district. Because of greater transparency, and because of the backwards capitalization effect mentioned at the beginning of this paper, the use of impact taxes are therefore more likely to achieve a result where the “developer pays” rather than the homebuyer. Development districts are, of course, much more complicated to implement than an impact tax.

Although Planning staff is generally less enthusiastic about these two district-level taxing mechanisms (TIFs and development districts) than we are about impact taxes, we note that district-level taxing mechanisms or fee-supported district level programs can be effective. If, for example, the County were considering a new Metro stop somewhere along the Red Line, it could be appropriate to assess an added tax on landowners near the new station that would benefit from it.

CONCLUSION

The current system of impact taxes is yielding a fairly modest revenue stream – in the case of transportation, modest compared to needs; in the case of schools, modest compared to expectations. Given the forecasts of future growth within the County, revenues from impact taxes will not increase substantially without changes to the program.

The number of households in Montgomery County is expected to increase approximately 27% by 2030. It is further estimated that 72% of the growth in residential development for the same time period will be in multi-family dwellings. With respect to schools, this type of growth will result in less revenue than was once predicted. As stated earlier, multi-family dwellings are taxed at a lower rate than single-family units. Thus school impact taxes cannot generate the revenue once predicted whereby many more single-family units were forecast. The recordation tax has proven to be a more dependable source of revenue for schools.

Transportation impact taxes have provided a more predictable stream of revenue than the school impact tax. Transportation impact tax rates vary by region within the County and across various land uses. These program characteristics are based on the same findings and objectives as the County’s growth management systems. The current tax rate structure varies rates by geography and land use, primarily, to reflect the variations in auto trip generation that also occur by geography and land use. Rates vary geographically because development in close proximity to Metro generates fewer auto trips, and because in Clarksburg the amount of needed transportation infrastructure is large. In theory, a variation in impact tax rates can help steer development to lower-rate locations provide an

incentive to developers when making location decisions, although it is not clear that the current variation is sufficient to influence developer decisions.

The transportation impact taxes could be based on an estimate of growth and transportation system needs through a long-range approach using a more distant horizon year. Predicting revenues from the transportation impact taxes is particularly difficult because of developers' ability to take impact tax credits for projects they must construct or contribute to as a condition of a development approval. Although the County assesses a developer the entire calculated impact tax for each unit he builds, his project may also include a requirement to construct millions of dollars in intersection improvements, which can offset his impact taxes on a dollar for dollar basis.

The goal of analyzing both the school and transportation impact tax programs is to improve our ability to efficiently and equitably fund the infrastructure needs of the County, either by modifying the rates and/or application of the taxes for both school and transportation programs. In addition, if improving the revenue raising capacity of the program is also a goal, alternative-financing mechanisms should be considered.

Attachment 1. CIP and CLRP Capital Expansion Projects

PROJECT	In CLRP	In CIP, but not in CLRP
509928: Brookville Service Park		14456
500522: North County Maintenance Depot	21703	
500433: Equipment and Maintenance Operations Center (EMOC)	2962	
500552: Glenmont Metro Parking Expansion	17094	
500714: Montgomery Mall Transit Center	750	
500723: Northern Damascus Park and Ridge Lot		860
509974: Silver Spring Transit Center	67222	
500715: Takoma/Langley Park Transit Center		2500
500602: White Oak Transit Center		1476
509525: Facility Planning: Parking		3086
509976: Forest Glen Pedestrian Bridge	405	
500718: MacArthur Blvd Bikeway Improvements	1100	
500400: Matthew Henson Trail	2867	
500600: Shady Grove Access Bike Path	2328	
509975: Silver Spring Green Trail	4975	
500500: Burtonsville Access Road	5392	
500719: Chapman Avenue Extended	620	
500310: Citadel Avenue Extended	2104	
509337: Facility Planning-Transportation		17549
500402: Fairland Road Improvement	8007	
500516: Father Hurley Blvd. Extended	15389	
500100: Greencastle Road	2056	
500717: Montrose Parkway East	2287	
500311: Montrose Parkway West	32343	
500528: Montrose Road Extended (Land Acquisition)		2716
500401: Nebel Street Extended	7281	
507310: Public Facilities Roads		3048
500502: Quince Orchard Road	1609	
500434: Rockville Town Center	6960	
500403: Stringtown Road Extended	2999	
500101: Travilah Road	6018	
509944: Valley Park Drive	211	
500151: Woodfield Road Extended	8990	
509995: Conference Center Intersection Improvements		846
500322: Friendship Heights Pedestrian-Transit Enhancement	396	
507017: Intersection and Spot Improvements		5099
500010: Redland Rd From Crabbs Branch Way to Needwood Rd	3720	
508716: Silver Spring Traffic Improvements		3041
Rockville Town Center Loop Shuttle vehicles (in CLRP, but not CIP)	1230	
SUBTOTALS	229018	54677

Sources:

http://www.montgomerycountymd.gov/content/omb/FY07/appr/vol3/transportation_cip230.pdf

<http://www.mwcog.org/regionaltransportationplan/documents/FY2007-2012TIP.pdf>