reducing our footprint

more community sustainable walking nature transit time





Montgomery County 2009-2011 Growth Policy Montgomery County Planning Department

Montgomery County 2009-2011 Growth Policy 6.15.09 Draft

less

deforestation grass-cutting pavement emissions nitrogen garages energy carbon sprawl waste trips cars land oil





Montgomery County 2009-2011 Growth Policy 6.15.09 Draft

executive summary 2009 – 2011 growth policy

what is the growth policy?

The role of Growth Policy is to coordinate growth with the public facilities needed to support it, specifically roads and schools. Growth Policy is implemented via the Adequate Public Facility Ordinance (APFO) and impact taxes.

The County Council adopts the APFO every two years.

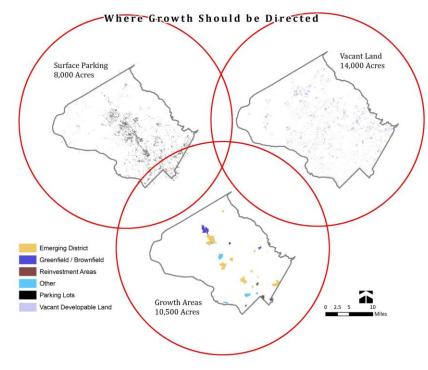
has the growth policy resulted in smart growth?

Not really. It has typically been used to manage the timing of new development with the provision of public facilities. The primary focus of APFO has been when development can occur regulated through school and road capacity. However, it has not always resulted in slowing aggregate growth, but in shifting it to where the road and school capacity exists, often into low density areas that do not have services and transit.

We have pushed to our maximum expansion boundary. Only four percent of County land zoned for development remains undeveloped. Much of these 14,000 acres cannot be built on due to slopes and environmental restrictions, so the actual total is much less.

Some master plans have contributed to sprawl. However, the growth policy has also contributed by requiring unsustainable mitigation requirements where we want the development to go, in the built areas around transit stations. These areas have higher development costs to begin with, and the cost of mitigation adds to them, especially when compared to areas nearer the big boxes and office parks surrounded by acres of vacant land.

Continuing low density suburban growth contributes to higher vehicle miles travelled (vmt) by separating homes, jobs and services and creating longer commutes. This makes traffic worse in county job centers located along transportation corridors. This pattern has a ripple effect, making it more difficult to build near the transit because the road capacity has been used up by the people driving in from areas beyond the neighborhood.



With little vacant land left, the availability of surface parking lots as well as land in smart growth locations near transit or on existing strip malls, offers a considerable supply of land upon which to build. Development on these 28,800 acres can result in smarter locations for future growth.

what changes are recommended? what is not changing?

The changes in this edition of the Growth Policy encourage sustainable growth as well as housing to replace some job capacity. The impact will be fewer cars and vehicle miles travelled.

The County uses various tools to manage growth (see table). The Local Area Transportation Review (LATR) calculation will remain the same with some proposed changes to foster better mitigation. A slight change in the school test is recommended, which impacts a monetary assessment on development but not the threshold for moratorium.

Growth Management Tool	Application	Proposed
Master plans	where	same
Zoning	how	same
Subdivision regs	how	same
School capacity	when	minor change to monetary assessment
LATR	when	minor changes to mitigation types
PAMR	when	stay within general bounds of PAMR – encourage smart growth

comparison of current and proposed requirements

The growth management tools used in the County listed along with an indication of whether changes are proposed.

Minor changes to the school capacity and LATR calculation are proposed. Three changes of substance to the PAMR calculation are proposed.

- a smart growth PAMR offset
- APF capacity trading
- rebalancing of mobility standards

6

PAMR changes

smart growth - PAMR offset

Smart growth principles of proximity to transit and basic services will reduce vmt, but not all sites in the County share the benefits of transit proximity. However, sites that are not near transit facilities can still be developed to meet smart growth principles.

A strip mall in Quince Orchard would not qualify for the proposed PAMR "proximity to transit" 100 percent offset described below. It may however, take advantage of the PAMR "proximity to basic services" 50 percent offset if development of the site provides access to ten basic services.

The recommendations present a different method for satisfying the PAMR requirement through an alternative review procedure.

- for projects located within ½ mile of a transit station or line, there would be no PAMR mitigation fee
- for projects within ½ mile of ten basic services, meaning grocery stores, dry cleaners, libraries, parks, fire stations, etc., 50 percent of the PAMR fee would be "offset"

In either scenario, specific basic requirements must be met. While builders would be exempt from paying all or 50 percent of the PAMR fee, these savings offset the costs of the following requirements:

- a minimum of 50 percent of the total floor area must be for residential use
- the project must be constructed to 75 percent or more of the floor area permitted under the zoning ordinance
- buildings must meet energy efficiency standards of 17.5 percent for new construction and 10.5 percent for renovations or produce 2.5 percent of the annual building energy cost on site
- additional moderately priced dwelling units (mpdu) and workforce housing

The PAMR mitigation may be met through other mitigation techniques generated by "proximity" to transit and services. At the same time, public benefits can be achieved through energy efficiencies, carbon reductions, and increased affordable housing.

This offset approach would still require the school impact tax for residential uses. Some of these recommendations follow LEED for new construction and LEED for neighborhoods standards as well as emerging policy in other states.

The policy encourages housing instead of more office space. Pending master plans may establish floor area density limits that limit both the overall density as well as how much of that total can be allocated for housing or commercial uses.

housing vs. office trip generation

Housing generates fewer trips than commercial development. A hundred high rise residential units take about the same amount of space as a 100,000 square foot office building, but generate just 28 percent of the peak hour vehicle trips. At the PAMR level, the recommendations reflect this reduction.

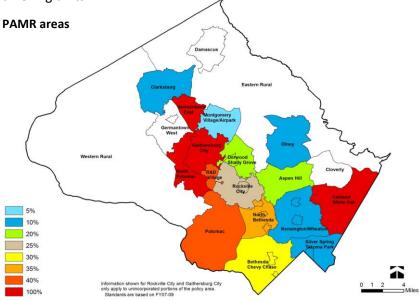
The goal is to achieve a more balanced jobs-housing ratio. In addition, the PAMR incentive to build closer to transit or basic services, reflects how strategic growth results in fewer VMTs, particularly at the PAMR scale (beyond seven intersections away from the development).

The LATR traffic calculation would not be changed, as local trips would result for close-in development. Over time, capacity frees up as people shift from longer commutes through neighborhoods to transit and people close to the transit shift their travel patterns.

PAMR adjustments

apf capacity trading

The current list of approved but unbuilt projects with APF capacity sits at 33 million square feet of non-residential floor area and 29,000 dwelling units.



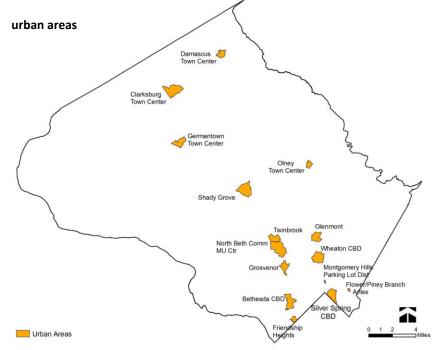
The Policy Area Mobility Review (PAMR) Trip Mitigation Areas are used to determine where mitigation requirements are currently required within a larger area surrounding a development.

The recommended PAMR adjustment allows transfer of approved apf capacity from a sending site in any PAMR trip mitigation area to a new receiving site that is located in a road code urban area within the same PAMR area as the sending site.

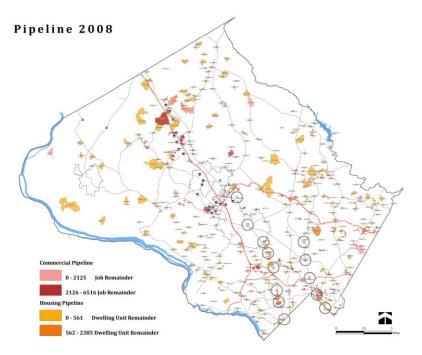
This recommendation has many benefits.

 prior to the changes to the workforce housing requirements made a few years ago, several applications were made to avoid the new requirement. Trading the apf approvals helps remove some of the projects with limited to no chance of being built while getting other projects started

- trading apf approvals can help direct development to urban areas with higher levels of transit service, more opportunity for improvements to that service generated by higher density, and proximity to basic services
- trading could also help clear the excessive backlog of approved but unbuilt projects



The Road Code Urban Area map is used to define the context for establishing appropriate roadway design standards and target speeds. A recommendation is to allow for apf capacity to be moved from approved but unbuilt projects within a PAMR Trip Mitigation Area into any urban area within the same PAMR area.



There are many approved but unbuilt projects in the development pipeline. Trading apf approvals to more dense areas would result in greater sustainability.

rebalancing mobility standards

During discussion of the current Growth Policy, staff recommended alignment of the PAMR chart to allow a level of service E for roadway capacity at the PAMR Trip Mitigation Area level for the areas of the County best served by transit. The County Council shifted the line upward to level of service D.

This policy recommends that arterial level of service (LOS) can fall to LOS E. This level of roadway service is the most efficient use of road capacity.

The current policy reinforces roadway mobility over transit and imposes mitigation fees, discouraging growth in smart locations. This promotes longer trips. The goal should not be to encourage faster commutes from places farther away from transit and existing infrastructure. Commuter trips to and through our urban areas simply add to the congestion problems for local vmt.

The policy should shift from encouraging longer commutes to the efficient use of our investment in roads and transit.

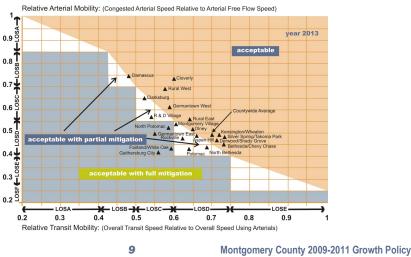
roadway efficiency

Road capacity is used most efficiently when the throughput of people and goods are maximized. This occurs at level of service E conditions, although everyone experiences some delay.

PAMR charts

The recommendation is to shift the line delineating areas that are "acceptable" to a roadway level of service E. Those areas that would move from "partial mitigation" to "acceptable" are shown. Shifting the line to a level of service E would move the Bethesda/Chevy Chase, Derwood/Shady Grove, Kensington/Wheaton, Olney, and Silver Spring/Takoma Park PAMR mitigation areas from a partial mitigation requirement to an acceptable level. There are areas where new growth should be encouraged.

year 2013 PAMR chart with "symmetrical" level of services standards



what are the impacts of the

recommendations?

The following example compares the mitigation requirements under the current Growth Policy to the proposed changes. The example is based on the following criteria.

- a 100,000 square foot site in the Twinbrook Metro Station area within the North Bethesda PAMR mitigation area
- permitted 2.0 FAR resulting in a 300,000 square foot project
- within ½ mile of the Metro station

the current growth policy criteria

- mix of office and retail uses
- applicant required to mitigate site impacts using
 - LATR
 - PAMR
 - school impacts
- total PAMR cost = \$1.34 million (35 percent PAMR mitigation requirement)
 - applicant provides this value in traffic mitigation, e.g. bus shelters, sidewalks, bike paths, transit services or master planned streets



Hypothetical building in Twinbrook.

the proposed smart growth criteria

The application has the following parameters:

 300,000 square feet with 55 percent residential component, resulting in 165,000 square feet of residential space

- a commercial component split between office (25 percent of the total building space) and retail (20 percent of the total building space)
- an average unit size of 1,000 square feet, resulting in 165 residential dwelling units, of which 12.5 percent (21 units) must be affordable and 10 percent (16 units) must be workforce.

The application:

- would generate 379 peak hour trips
- with 35 percent mitigation, 133 peak hour trips would require PAMR mitigation
- at \$11,000 a trip, the PAMR mitigation would have an expected value of \$1,463,000.

Under the smart growth criteria, the applicant could offset the PAMR mitigation requirement if 50 percent of the PAMR savings, or \$731,500, were applied toward providing additional affordable housing.

If the applicant could be expected to take a \$50,000 loss on each affordable housing unit (the difference between the cost to build and the sales cost), the \$731,500 would cover approximately 15 units at \$50,000 each. Therefore, to meet the smart growth criteria, the number of affordable units would need to be increased from 21 units to 36 units (while retaining the 165-unit total).

summary

The current policy results in various mitigation solutions totaling \$1.46 million. The proposed policy would generate the following benefits.

- 15 additional mpdu housing units
- an energy efficient building
- a better jobs to housing balance
- more people on the street throughout the day

conclusion

The recommendations work with the master plans as well as with their accompanying zoning. The goal is to provide incentives, not exemptions, for development that meets the proximity test to both transit and basic services, directing growth to the Urban Areas, leaving established neighborhoods as they are.

Beginning to reduce the overall vmt will reduce the growth rate of trips and encourage development in locations where the opportunity to further reduce trips will evolve over time.

Only about a ¼ of trips are made by people going to and from their jobs. The sooner we can bring the other trips in closer to everything — shops, services, amenities and homes, the faster everyone benefits.

Will the trips go away? Since residents in smart growth areas use their cars less, as more residents live in urban areas per capita trips will decline. As the number of urban residents increases over time, more and more trips will go away. A big advantage of a smart growth policy is that as people adjust their travel habits their drives either go away or they get shorter, taking more and more cars off the roads.

Imagine the center of Olney, where several sites develop as mixeduse nodes, that over time create a new environment, with many small shops providing a variety of retail and services, with people living and working above them, and curbside parking and sidewalk seating for coffee shops and small restaurants. This is the reality in Bethesda. It can also be the reality at a smaller scale, in Olney, Glenmont, Burtonsville and any suburban area across the County.

Summary of Proposed Changes					
Category	Description	Current Process	Proposed Process	Motivation for Change	Appendix
Smart Growth Criteria: Transit Proximity	Alternative Review Procedure for Policy Area Mobility Review (PAMR)	None	PAMR credits/exemption allowed for smart growth mixed-use projects near transit or basic services that exceed otherwise required energy efficiency and affordable housing criteria	Encourage mixed-use projects with proximity to transit and basic services to reduce vehicle trip generation rates. Promote affordable housing and Climate Protection Plan goals.	N
Smart Growth Criteria: Urban Area Boundaries	Expansion of Alternative Review Procedures into urban areas	Alternative Review Procedures limited to Metro Station Policy Areas	Alternative Review Procedures allowed in all urban areas	Encourage mixed-use development and placemaking through realization of already planned density in areas that already have basic services and are designated for urban design treatments	N
APFO Transportation: Balance Between Land Use and Transportation	Establish symmetry in transit and arterial LOS standards	Relative Arterial Mobility must be LOS D or better regardless of transit service	Relative Arterial Mobility of LOS E allowed in areas where Relative Transit Mobility is LOS B	Promote more efficient utilization of scarce transportation resources	М
APFO Transportation: Non-Auto Facility Values	Expand the range of candidate non- auto facility types eligible for impact mitigation and set values at \$11,000 per vehicle trip	Candidate Non-auto facilities limited to twelve types of projects, each valued based on outdated cost information, and most types no longer accepted by County DOT	Non-auto facility types expanded to include additional projects, with all but sidewalk/bike path connectivity projects valued at \$11,000 per vehicle trip.	Encourage candidate project identification based on area needs rather than lowest cost. Improve predictability for applicants. Obtain projects appropriately valued at the cost of the trips being mitigated.	М
APFO Transportation APF Transferability	Allow vested APF rights to be transferred into an urban area from an adjacent Policy Area	APF rights not transferable	APF rights transferred with joint subdivision application between sending and receiving sites to apply unused/remaining APF capacity in suburban areas.	Encourage development approvals in urban areas. Applies/reduces pipeline of approved but unbuilt projects.	М
APFO Transportation Site-specific arterial mobility	Allow PAMR satisfaction in urban areas through evaluation of mobility on specific arterials.	PAMR mitigation requirements are areawide, regardless of location of site or congestion within policy area	PAMR mitigation requirements can be satisfied if applicant demonstrates specific arterials affected by application traffic meet mobility adequacy standards.	Provide an option to customize PAMR review to facilitate site- specific solutions in urban areas while addressing traffic spillover concerns of adjacent communities.	M

Summary of Proposed Changes					
Category	Description	Current Process	Proposed Process	Motivation for Change	Appendix
APFO Transportation: TOD Trip Generation Rates	Expand the geographic application of residential trip generation rates	Customized trip generation rates provided by staff for only Bethesda, Silver Spring, and Friendship Heights CBDs	Lower residential trip generation rates based on MWCOG survey data allowed in other urban areas.	Encourage residential development near all transit stations.	Μ
APFO Transportation: White Flint APF approval process	Replace LATR and PAMR with implementation authority	LATR and PAMR applies	LATR and PAMR replaced by an implementation authority process as recommended in the Draft Sector Plan	Streamline funding and delivery of master plan transportation infrastructure.	М
Impact Tax Transportation: Urban area residential transportation impact tax reduction	Reduce residential transportation impact taxes in urban areas	Transportation impact taxes set by three geographic areas (Metro Station Policy Areas, Clarksburg, and General)	Incorporate urban areas outside Metro Station Policy Areas as fourth geographic area with rates lower than General rates reflecting proximity to transit and general services in urban areas.	Encourage residential development near basic services.	М
APFO Schools: School Facility Payment Threshol	Establish the threshold for the application of the school facility payment	The application of a school facility payment occurs when projected enrollment reaches 105% of projected program capacity at any school level by cluster	Set the threshold for application of a school facility payment at projected enrollment greater than 110% of projected program capacity at any school level by cluster	Several school clusters have a projected enrollment slightly over 105% of projected capacity, yet more significant deficits are required for CIP programming.	Μ
Other: Policy Area boundary changes	Establishment of Life Sciences Center Policy Area, revision to White Flint, Germantown Town Center, and R&D Village Policy Area boundaries	Policy Area boundaries established per 2007- 2009 Growth Policy	Changes to Policy Area boundaries as recommended in Draft Sector Plans.	Improve relationship between planned land uses, transit services, and Policy Area boundaries as recommended in Draft Sector Plans.	н

what if it was 5 minutes to the

dry cleaners restaurant day care grocer school clinics library transit plaza work park trail





Montgomery County 2009-2011 Growth Policy Montgomery County Planning Department

6.15.09 Draft

introduction

The 2009-2011 Growth Policy is about balancing growth with the needs of residents who currently live in Montgomery County, and those residents who have yet to get here.

Whether it's our children, grandchildren, or newcomers, they will all need homes, jobs, schools, and ways to get around. Decisions we make now about how and where to grow are critical.

To manage that growth, to provide better connections to where and how people move about their daily lives, we introduce four themes that position the County to grow sustainably and stay competitive.

environment

The Growth Policy reinforces measures designed to make the county greener.

connections

The Growth Policy encourages development closer to transit and jobs closer to where people live.

diversity

The Growth Policy provides development incentives that bring a mix of uses to residents at and near transit opportunities.

design

The Growth Policy encourages increased energy efficiency as part of smart building practices.

Combining these elements into a comprehensive growth policy can result in more energy efficient neighborhoods envisioned in future master plans. Single building sites may also add a significant contribution to redirecting how, where, and what we build. Our past Growth Policies established a system of regulation intended to slow growth in areas with low transportation and school capacity. The proposed Growth Policy provides incentives to direct growth to where the county's investment in infrastructure can be most effectively used.

The built area has pushed to the edge of our physical boundaries. We must now look inward, at how we can grow differently, to enhance the quality of place and its long term value for future residents.

One goal of the County's Climate Protection Plan is that the Growth Policy should direct development to areas with infrastructure. The Plan also refers to smart growth principles as an important part of Growth Policy. The recommendations that follow include both goals.

the challenge of growth – balance and evolution

Our past growth patterns have failed to look beyond where the County currently finds itself. There is little room left for large singlefamily home tracts, nor is the market for such growth the same as it was just a few years ago.

Our growth strategy has focused on measuring the impacts of a single building or subdivision at a time. We need to shift to thinking about how our communities will meet the challenges of growth in a sustainable way that benefits everyone.

Growth Policy should continue the commitment to adequate schools and local transportation. At the same time, public awareness, the economy, and the national agenda lead us to introduce new variables that are critical for the County to balance jobs and housing, and create quality of place. Sustained value, maintaining services, and a strong local economy depend upon it.

new variables for growing smart

- defining strategic growth
- moving from sprawl to infill development
- encouraging growth that reduces our impacts on the environment
- using existing infrastructure
- providing mobility options

The Growth Policy can encourage shorter trips, less vmt, and more walking and biking as people shift their shopping and commuting patterns. It has happened in Silver Spring and Bethesda. Increasing the residential component near transit will result in fewer people passing through and more people being there.

the past and its impact on the future

The County is expected to grow by 195,000 people by 2030. If we look back that many people ago, we return to 1990.

land consumption

To accommodate the last 195,000 residents, since 1990 40,000 acres of land was developed with 72,000 housing units and 20 million square feet of office space.

Much of the development since that time has been for office parks, malls with big surface parking lots, and wide single family lots. The big energy-consuming homes are centered on an auto-centric lifestyle with a very large carbon footprint.

single-family home statistics

- at 97,000 acres, land occupied by single-family detached houses accounts for 29.9 percent of County's land area (97,000 acres)
- 75 percent of the built area in the County is for single-family houses

Only four percent of County land zoned for development remains undeveloped. This area is only 14,000 acres, less when factoring in the environmentally sensitive areas and noting that most of this area is scattered with few large assemblies. That four percent represents only 35 percent of the land built on to house and service the last 195,000 residents.

There are few choices on how to grow. We must look to redevelop, reorganize, and be strategic about how we grow.

The amount of land developed to accommodate population and job growth is not as excessive as other parts of the country, but still leaves the County little new land to develop.

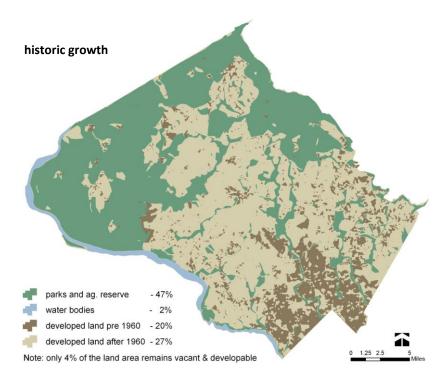
growth comparison

	1960	2008	percent increase
population	340,928	946,100	178 %
households	92,433	356,395	286 %
jobs	73,870	503,822	582 %
acres used	63,752	152,627	139 %

Between 1960 and 2008, the ratio of jobs to households has more than doubled, highlighting the County's increasing role as an employment center. This trend is expected to continue.

can growth be about more than just capacity?

It has to be. When we grow, we should consider health, infrastructure, economies of scale, vehicle miles travelled, mobility options, and the natural environment. When we encourage



The Agricultural Reserve and dedicated parkland occupy about 151,000 acres of the County. 97.5 percent of the residentially zoned land is reserved for single-family housing. As a result, less than four percent of the County remains undeveloped, much less when environmental considerations are applied.

development around transit, everyone benefits.

17

- connectivity is about more than our commute times. It is about providing the opportunities for people to drive less
- diversity is about bringing the life's daily activities closer to where people live and work and providing opportunities for different kinds of housing, work and services for an increasingly diverse population
- design of buildings and neighborhoods creates options and value
- environmental considerations can create healthier alternatives for residents through a balanced jobs-housing ratio, low impact development and a smaller carbon footprint

commuting patterns

over the past two years commuting patterns have shifted.

- 93 billion mile reduction nationwide in annual vmt between
 2006 and 2008, with a one percent drop in Montgomery County
- Five percent increase in transit use nationally in 2008 compared to 2007, with 13 million additional riders (a three percent increase) on the WMATA system alone



Would we accept higher levels of congestion in exchange for greener buildings where people can walk to services or transit? The answer should be yes. Growth policy should consider:

- where growth occurs
- how it occurs
- when it occurs

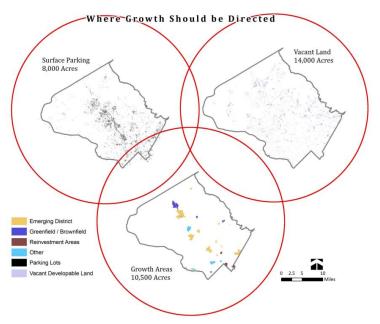
Master plans paved the way for the Growth Policy to direct development to greenfield sites. The master plans underway are intended to reverse this trend. Twinbrook, Germantown, Gaithersburg West, White Flint, Kensington, Takoma/Langley Crossroads, and Wheaton plan for balanced jobs-housing ratios. Each plan builds on current or planned better transit infrastructure investment to create better connections, diverse activities, improved pedestrian design, and a greener environment.

can growth be more strategic?

It has to be. With little new land left to develop, growth can no longer be pushed into uncongested areas.

where can we grow?

Growth in built areas means accepting different capacities. Infilling on parking lots along Rockville Pike or Route 29 brings a different set of challenges than building 1,000 new single-family homes in Cabin Branch. It also brings about a different set of expectations.



Developable land is a scarce resource in Montgomery County. Only 14,000 acres are left as greenfields to develop and 10,500 acres are identified as growth areas in master plans. Surface parking lots cover about 8,000 acres, representing a redevelopment opportunity currently being examined throughout the County.

Considering the overlap between these areas, future growth should be guided toward a limited supply of about 28,800 acres of land, or about nine percent of the County.

Infill and higher densities at strategic locations benefit the community:

- greater efficiencies using existing utilities, transit, parks, and other infrastructure
- lower maintenance costs for existing and future facilities and services
- redevelopment of strip malls into mixed-use centers improves connectivity for existing and new residents
- better pedestrian environments for all residents
- decreased vmt per capita
- lower carbon emissions per capita
- more housing closer to employment opportunities.

neighborhood typologies

The Strategic Growth map illustrates land typologies, based on the character of the existing neighborhoods, to illustrate a clear pattern of where infill development should occur.

The map has been built using a number of variables:

- the locations of surface parking lots
- radius around transit stations
- areas of established residential neighborhoods
- recyclable land uses like
- shopping malls.

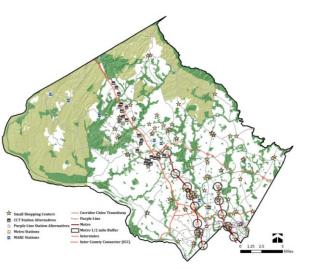
Strategic infill can be directed through the master planning process, taking advantage of existing infrastructure while preserving established neighborhoods. The areas around Metro stations as well as the many strip malls represent opportunities for strategic growth.

land typologies

established neighborhoods These neighborhoods are firmly established and will see little change. Development may occur in the form of small lot infill and strengthening neighborhood retail at existing locations.

greenfield/brownfield

There are few greenfield areas left, and much of it is difficult to build on or prohibited through environmental controls. The County brownfield areas should be reserved for light industry that offers services and job development, close to residential areas.





Infill housing on Georgia Avenue



Brownfield near Rockville Pike

reinvestment areas

Downtown Silver Spring is an example of successful reinvestment. Proximity to Metro, new businesses, and an enhanced pedestrian environment have revitalized the area.

Wheaton and Takoma/Langley Crossroads provide other opportunities to replicate that success. The pending master plans will address how we can strengthen those community centers with a mix of new uses.

emerging districts

The plans for White Flint and Gaithersburg West both advance strategic new districts that focus on transit station planning and life sciences. A future planning area that fits this category is the FDA site on New Hampshire Avenue.

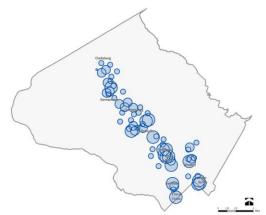


Wheaton Cenralr Business District



In Gaithersburg West planners envision a vibrant pedestrian environment near transit.

The 2009-2011 Growth Policy for the first time prepares for the impact of running out of land to build single family houses and proposes ideas to encourage strategic infill development. New ideas such as **LEED for Neighborhoods** as well as emerging trends to encourage smarter growth near transit are factored into the growth equation.



The White Flint, Germantown, and Gaithersburg West plans account for much of the growth along the I-270 Corridor projected out to 2030, outside of Rockville and Gaithersburg.

Communities around the nation are coming to grips with the same challenges. Can we live with increased traffic congestion if we have smarter buildings and smarter neighborhoods?

The approach recommended for this Growth Policy is a first for Montgomery County and would be a national model for assessing the potential of the suburbs.

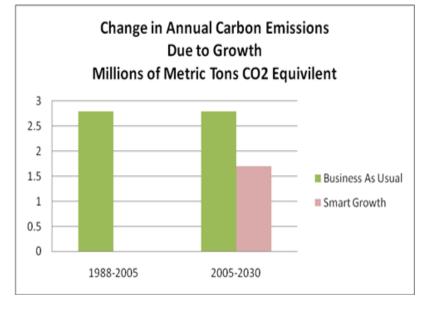
can we achieve greener growth?

We must. Our car-centric communities have staggering carbon footprints with health and economic impacts that limit children, the elderly, and those who can't afford a car from fully experiencing life in the County.

carbon impacts

Since 1990, just 38 percent of the 72,000 dwelling units built in the County have been multifamily units. Between now and 2030 we forecast that 80 percent of the new dwellings units will be multifamily units. Future growth will therefore help reduce the rate of growth in carbon emissions. A dwelling unit in a multi-unit building uses about 40 percent less energy than a single-family detached house (EPA).

greener growth



The next 195,000 people in the County will have a dramatically smaller carbon footprint than the last 195,000 people, due in large part to the higher number of multi-unit buildings vs. the past pattern of single-family home construction.

energy consumption

Montgomery County is a big energy consumer due to our focus on construction of single-family houses. The average condominium or apartment uses 40 percent less energy than a single-family detached house. Our past development has been "energy negative."

The County's surface parking lots contribute to stream pollution, increase heat island impacts, reduce tree cover, and waste land.



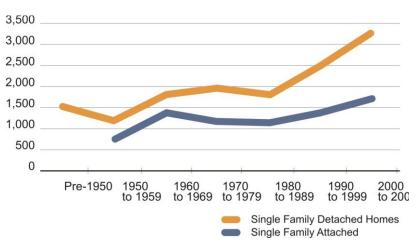
county climate protection plan

The Plan states that "The Growth Policy should direct growth to areas with significant existing or planned transit resources, and promote development that fulfills smart growth criteria such as those required as part of the LEED for Neighborhood Development or more stringent County standards."

single-family homes

In 1960 the average County house had 3.6 residents. In 2008, that number dropped to just over 2.5 residents. Despite this decrease, house size continues to increase. Even the new larger, more energy efficient homes require more energy for basic maintenance needs.

house size



Single-family house size continues to increase in the County despite energy costs, affordability issues, and smaller households. Over time, the average house size has more than doubled.

lot size

Even as the number of people in a house decreased, lot sizes increased, consuming large amounts of land. From an environmental

standpoint, County housing trends are unsustainable on several fronts.

- land consumption patterns have now proven to be unsustainable
 we have almost no new land to develop
- the amount of building materials consumed per house increased
- energy used per person increased
- energy consumed to get to and from houses located farther away increased
- the amount of land consumed is inefficient, relative to the number of people being housed

Growing smarter means considering what we are building, not just where we are building it. Encouraging growth near transit stations will result in significant energy reductions if the new units are in a multi-unit building.

Recent subdivisions in the Pacific Northwest are more compact, neighborhood oriented, pedestrian friendly, and are geared to a range of lifestyles. House sizes range between 800 and 2,200 square feet.



The average lot size for a single-family detached house built in the County after 1980 is 58 percent larger than lots created before 1980. Lot sizes for townhouses decreased 23 percent during the same time period, showing a more efficient use of land.

Since 1980, the average lot size for a new single-family detached house is 16 times greater than a townhouse lot. The difference increases dramatically if comparing houses to multi-unit buildings.



A typical Montgomery County subdivision relies on large lots, big houses, car-centric design, and clustered commercial activity requiring car trips for daily errands. Inefficient site planning dominates the landscape.

can we grow healthier?

We must. The average suburban dweller is likely to be more overweight than the same person living in a more compact community where services and jobs are accessible by walking. Obesity levels, especially among children have increased through the decades as we have built car-centric environments farther away from schools, services, and jobs.

Several new schools in the County do not have sidewalks. Children are actually discouraged from walking or riding their bikes to school. A survey of 83 metro areas (McCann) shows that only 18 percent of children walk or bike to school compared to the rate of 71 percent when their parents attended school.

housing density and obesity

Housing density in Europe is three times greater than the USA while the level of obesity there is 1/3 of what it is in this country. Several studies have linked suburban growth patterns to increases in obesity. In sprawling counties, 21 percent of residents are obese as compared to 19 percent of residents in compactly developed counties.

connections

The statistics are surprising. On average, 86 percent of daily trips taken by Americans are made in a car. As a result, the average American only walks about 5,000 steps a day, or just about half what is recommended to sustain a healthy lifestyle.

In America only 9.4 percent of daily trips are made on a bicycle or by walking. The percentage drops to six percent for persons over the age of 75. Many towns and cities around the country are providing opportunities for residents to walk to services and work.

In Montgomery County, the built environment often discourages walking through design that makes it dangerous and unpleasant.

Seventy percent of boardings at the Bethesda Metro Station are people who walk there, demonstrating how smart growth can improve transit connections.

diversity/design

Recent development in downtown Silver Spring highlights how design and the diversity of services can result in greater numbers of people walking to services, transit, and work. With two grocery stores within blocks of each other, and services like dry cleaners, restaurants, and coffee shops, a lot of people can be seen on the street with shopping bags walking from home to destinations.

If the opportunity is presented and services are provided along the street, people will choose a healthier way to move through the built environment. Residents should be provided these amenities.

can we be more economically efficient?

We must be. Higher densities at strategic locations equal greener growth through increased economies of scale. Less land is consumed, less infrastructure serves more people, fewer trips are taken by car, safety increases, and more services are provided.

more density is cost efficient

For every one percent increase in density (persons per acre) infrastructure costs decrease by \$1.86 per person.

the need for growth

The County's assets—top public schools, both legs of the Red Line, recreation and cultural opportunities, working farmland, and urban and suburban lifestyle choices—are the foundations on which we can build the future.

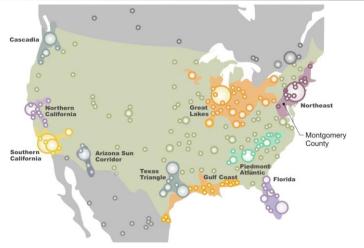
megaregions

The County is an important part of the Northeast megaregion. Researchers have divided the country into 11 such regions based on the interrelationships that exist between population centers.

The growth in the country over the next 25 years far exceeds what happened in the past 25 years. Immigration levels will increase. It is expected that 80 percent of the growth and 70 percent of the new residents will occur within the megaregions (America 2050.org). The growth will prompt an unprecedented construction boom.

megaregions

- 100 million new people in the US by 2040
- most of the growth will be through immigration and minority population increase
- 35 million new residential units (EPA)



Source: America 2050.org

The D.C. region is within the Northeast megaregion extending from Virginia to Maine. The region produces 20 percent of the nation's gross domestic product with 18 percent of the population and only two percent of the land area (America2050.org).

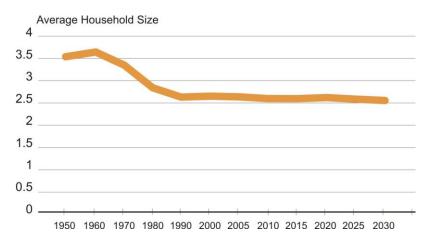
Montgomery County will experience pressures from this growth, especially considering its historical position as a first suburb to Washington.

population growth

The 1960's general plan for the County projected a year 2000 population of 994,894. The actual census total for that year was 873,341. The estimate for January 2008 is 946,100. So we're still a little behind the old forecast, yet close for a 40 year-old estimate.

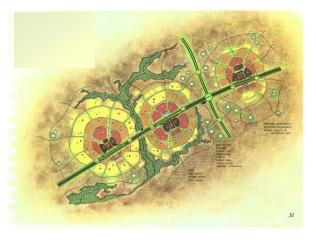
population growth by 2030

- County growth 194,900 new residents, a 21 percent increase
- regional growth 1.3 million people, a 25 percent increase
- national growth 67 million people, a 22 percent increase



The average number of persons living in a household in the County has generally been dropping since a peak in 1960.

The 1962 On Wedges and Corridors plan set the pattern for growth in the County. The envisioned nodes have developed, though their jobs-housing ratios are not ideal. The adverse environmental effects of single-family sprawl were not anticipated. This Growth Policy reinforces the concepts first laid out 40 years ago.



migration trends

From 2002 to 2007, greater domestic out-migration exceeded foreign immigration with the net loss of 60,500 residents leaving the County offsetting the entry of 45,100 international immigrants. This trend reversed in 2008 when a consistent gain of 7,100 foreign immigrants outpaced the sharply reduced net outflow of 5,600 residents due to the recession.

an aging population

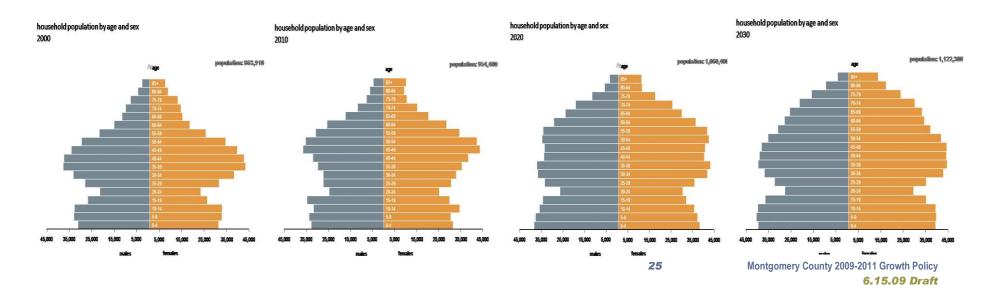
The County population is aging. Estimates show an 81 percent increase in persons 65 years or older by 2030. To maintain a balanced population, the County needs to attract and maintain a corresponding increase in residents 25 to 60 years old to fill the loss of high income wage earners left as people retire.

population pyramids

The number of County residents in each age category is expected to shift to a larger percentage of the population over 60 years old. The County needs to attract new residents to fill the age groups under that age.

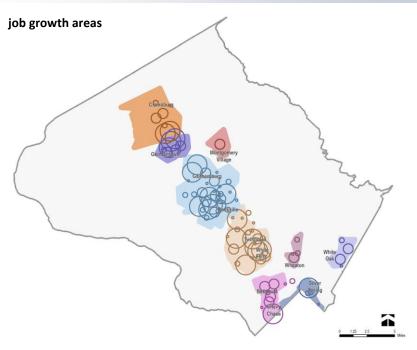
job growth

Job growth will continue to be strong and is an important consideration in growth policy. A key objective of pending master plans is to improve the jobs-housing balance and to identify how to bring people and jobs closer together, either shortening commutes or enabling people to walk or ride transit



job growth

By 2030, the number of jobs in the County is expected to increase by 166,200, a 33 percent increase. Regionally the growth is predicted at one million jobs, a 32 percent increase.



The White Flint, Germantown, and Gaithersburg West plans will help balance jobs and housing along the I-270 Corridor. This map highlights the changes in job growth between 2008 and 2030.

Appendix B includes a table that projects the population, housing and number of jobs to 2030, by Policy Area. For those areas in pending master plans, one objective is to improve the jobs to housing ratio. Overall the projections show an improvement over the next 20+ years as the ratio moves from 1.41 to 1.52, closer to the target ratio of 1.6.

coordinating growth policy, master plans, and zoning

Within a year, the Planning Department will have introduced five area master plans and three functional plans including the Purple Line. Three of the master plans are "game changers" of a nature that redefine how growth can occur.

These will be followed within months by another area master plan as well as two more functional plans dealing with the environment. All these efforts embody the approach outlined by this Growth Policy, sustainable development that matches our current and future needs.

Strategic infill offers a different set of challenges. In higher density areas, motorists perceive congestion differently, accepting higher levels as expectations of travel time are not the same. More people shift modes of transit and lifestyles, changing how they go about their daily lives.

transit development

People moving to transit-adjacent development areas are twice as likely not to own a car. (tcrp report 128)

zoning

The current rewrite of the zoning ordinance is addressing transit proximity, green building techniques, and promotion of diverse retail and services that will bring activities closer together, reducing vmt. This approach mirrors the recommendations of the Growth Policy. The coordination of the Growth Policy, master plans, and zoning creates a unified approach to encouraging new development. With similar incentives such as green building techniques, proximity to transit and basic services, and additional affordable housing the costs can be common to the incentives in both the zoning and the Growth Policy.

recommendations summary

smart growth criteria

The 2009 – 2011 Growth Policy, introduces smart growth elements to achieve a better balance between capacity and more sustainable development. This is a first step to further work and research into how this approach can evolve with the next Growth Policy two years from now.

The proposed smart growth approach is divided into two categories – transit and basic services proximity, and urban area boundaries.

transit and basic services proximity

The Growth Policy must evolve into more than just a capacity measure. It should promote sustainability through design and infrastructure. If a project is designed to encourage walking to jobs or transit, and if it produces less carbon, these factors should be considered concurrently with traffic and school capacity. Studies have shown that people living within a half mile of transit are more likely to commute via transit than car. California has recently led the nation in mandating higher densities near transit, citing the positive benefits of more compact growth.

transit proximity

"The most effective strategy to increase ridership is to increase development densities in close proximity to transit." (tcrp report 128)

This Growth Policy includes recommendations for incentives to be provided for smart growth development. A revised Alternative Review Procedure is proposed that would allow for projects meeting certain criteria to benefit from either a 100 percent or 50 percent PAMR offset. The amount would depend upon proximity to either transit, or basic services such as grocery stores, dry cleaners, community facilities, and restaurants. This approach is based on pioneering sustainability initiatives.

- proximity to transit is the cornerstone of new California legislation to halt sprawl and incentivize development close to transit facilities
- the LEED for Neighborhoods scoring system grades developments that bring sustainability features to neighborhood development
- LEED for Buildings encourages energy efficiency standards in new development
- the Montgomery County Moderately Priced Dwelling Unit requirement and Workforce Housing initiative

car ownership and transit proximity

People living near transit typically own fewer cars, live in smaller houses and take advantage of the transit. (tcrp report 128)

To qualify for the 100 percent or 50 percent PAMR offset, any project would have to meet minimum requirements that support smart growth principles. Appendix N contains additional details and describes how the offset would apply to a hypothetical project.

minimum criteria

- projects must be mixed use with a minimum of 50 percent residential uses
- the project must be built to a minimum of 75 percent of the allowable density to ensure land is developed achieve the potential benefits of transit-oriented development
- buildings must meet minimum energy efficiency standards, different for new (17.5 percent) vs. existing buildings (10.5 percent) and/or generate 2.5 percent of their energy cost on site
- provide either mpdu's or workforce housing at rates based on trip mitigation requirements of the overall project

Once the above criteria are established, a project would then be assessed under one of the two following categories.

development within 1/2 mile of a transit station

Developments within ½ mile of an existing or planned major transit stop or high quality transit corridor, including Metro, MARC, or a major bus station, would be eligible for a 100 percent PAMR offset. A planned transit stop or corridor must be funded for construction in the first four years of the Consolidation Transportation Program or the Capital Improvement Program.

development within 1/2 mile of ten basic services

This category recognizes that not all development in the County will be near a major transit corridor. Many of the 106 strip malls in the County do not qualify. However, they should be redeveloped in a more sustainable manner.

A strip mall on Route 29 could offer amenities that would reduce vehicle trips through mixed uses and a minimum of stores that provide services and products that residents and workers use on a daily basis, or what LEED for New Construction and Major Renovation defines as "basic services."

Basic services include grocery stores, dry cleaners, fire stations, medical office, and fitness centers. People who live near these services frequently walk to them, reducing car trips. For projects that qualify, the PAMR requirement would be offset by 50 percent.

zoning

The zoning proposed for White Flint, Kensington, Takoma Park, and other master plan areas applies similar principles. The base floor area requirements are set lower than the maximum limit. To achieve the permitted FAR, specific amenities are required. The largest amenity is transit proximity, based upon a ¼ mile, ½ mile or one mile distances from transit. Additional amenities include energy production, green building feature, and proximity to basic services.

The new CR Zone (commercial – residential), mirrors the smart growth incentive recommended for the new Growth Policy. This coordinated approach simplifies the development process and brings predictability as well as incentives for more sustainable development.

The impact of this incentive is outlined in development examples comparing the current and proposed growth policies included in the executive summary as well as the appendices.

urban area boundaries

Currently, an Alternative Review Procedure for PAMR is offered to projects in Metro Station Policy Areas. This Growth Policy includes the PAMR offset options as well as expanding the Alternative Review Procedures into all urban areas.

These changes are intended to encourage mixed use development in areas that are well-served by transit or by basic services. Moving capacity from commercial to residential development contributes to housing affordability and energy efficiency.

conclusion - smart growth incentives

The smart growth approach to growth policy combines several positive elements of important initiatives that are surfacing across the country.

- transit proximity
- green building technology
- retail and service diversity
- compact development

Encouraging mixed-use projects close to transit and basic services will help reduce vehicle trips and promotes the County's Climate Protection Plan goals.

recommendations – smart growth initiatives

1. Provide a PAMR offset for projects meeting the following criteria:

- 100 percent for projects within ½ mile of a major transit station or corridor
- 50 percent for projects within ½ mile of ten basic services.

The projects must provide:

- a minimum of 50 percent of the floor area for residential use
- be a minimum of 75 percent of the permitted density under the zoning ordinance
- meet energy efficiency standards of 17.5 percent for new construction and 10.5 percent for renovations or produce 2.5 percent of the annual building energy cost on site
- provide moderately priced dwelling units and workforce housing at a set rate described in appendix N

2. Expand the new Alternative Review Procedure to all *Road Code* Urban Areas. These areas are already designated for urban street design and in most cases already have transit services and basic community and retail services.

adequate public school facilities

current school adequacy thresholds

School adequacy evaluation is based on three factors.

- Montgomery County Public Schools (MCPS) enrollment projections
- existing capacities of schools
- any additional capacity (additions and new schools) programmed though the County Council adopted Capital Improvements Program (CIP)

The school system evaluates 25 school clusters each year in the school test, to measure facility capacity in the coming five years. The five-year period represents the estimated time for development to proceed through the review and construction phases to occupancy. Additional students are counted at occupancy.

If a cluster's projected enrollment exceeds projected capacity, residential subdivision approvals can be halted or assessed. The Growth Policy is used to determine the level of "overcrowding" that warrants an assessment (school facility payment) or moratorium.

In the 2007-2009 Growth Policy, at each level—elementary, middle, and high school—enrollment must not exceed 105 percent of program capacity. Borrowing capacity from adjacent clusters is not permitted. If projected enrollment at any level exceeds 105 percent of program capacity, residential subdivisions in the affected cluster will be required to make a school facility payment.

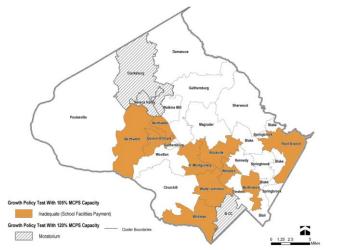
Montgomery County Public School

The school facility payment is derived from the per-student cost for new schools, using student generation rates for each school level by housing type.



In FY2010, residential development in nine school clusters will require a school facility payment to proceed.

FY2010 School Test Results at 110Percent



A residential development in any of these nine school clusters will require a School Facility Payment to proceed. Three other clusters, Bethesda/Chevy Chase, Clarksburg, and Seneca Valley are in moratorium and no new residential developments can occur until funds are programmed to construct additional classroom space.

In addition, at all three school levels, if projected enrollment exceeds 120 percent of projected program capacity ("borrowing" prohibited), residential subdivisions in the affected cluster will be in moratorium.

recommended changes to school adequacy thresholds

Capacity deficits of five percent are typically just below the amount that would prompt an MCPS facility adjustment, such as an addition. Several school clusters have a projected enrollment slightly over 105 percent of projected capacity yet more significant deficits are required for consideration of CIP programming.

At 110 percent, the School Facility Payment threshold more closely aligns with facility programming. For FY2010, of the nine school clusters requiring a School Facility Payment, increasing the threshold to 110 percent reduces the number of clusters where a payment is required to five. The five remaining clusters have a projected enrollment that exceeds forecasted capacity by a range of 112 percent to 120 percent.

recommendations – school capacity

The threshold for application of a school facility payment should be set at projected enrollment greater than 110 percent of projected program capacity at any school level by cluster.

transportation APF

definition and measurement of transportation adequacy The County's transportation adequacy system requires that new development be measured two ways.

- Local Area Transportation Review (LATR) evaluates the level of congestion forecasted at specific intersections near a development site
- Policy Area Mobility Review (PAMR) evaluates the average level of congestion forecasted throughout the neighborhood of a proposed development

Both LATR and PAMR share certain features.

30

- both measure roadway adequacy in terms of congestion; the County's policy is to allow higher congestion in areas with good transit service
- both consider the forecasted impact of proposed development including background traffic generated by previously approved, but as yet unbuilt pipeline development

Both LATR and PAMR require the applicant to mitigate unacceptable traffic impacts generated by the development. The Department's *Local Area Transportation Review and Policy Area Mobility Review Guidelines*, sets out mitigating actions in five categories (trip reduction, transit, non-auto facilities, intersection improvements, and roadway construction) to satisfy LATR or PAMR guidelines.

LATR/PAMR guidelines

Priority	Mitigation Approach	PAMR Mechanism	LATR Mechanism	Single mitigation action addresses	Examples of mitigation actions
1	Peak hour vehicle trip reduction	Traffic mitigation agreement (TMAg)	Traffic mitigation agreement (TMAg)	Both PAMR and LATR impacts	Vehicle trip caps, flex- time/telecommute programs, shuttle services
2	Public transit capacity	Service provision	Not applicable	PAMR impacts only	Purchase of Ride- On bus with 12 years of operation
3	Non-auto facilities	Project implementation	Project implementation	Both PAMR and LATR impacts	Offsite sidewalks and bus shelters
4	Intersection improvements	Not applicable	Project implementation	LATR impacts only	Turn lanes, change of lane use configurations
5	Roadway link improvements	Project implementation	Project implementation only if site-specific LATR impacts are addressed	PAMR impacts, LATR impacts if applicable	Roadway widening

LATR conditions are developed based on information submitted by the applicant (and checked by staff) and vary significantly based on an application's type, size, and location. Staff forecasts PAMR conditions every year to update mitigation requirements and ensure a uniform approach for each neighborhood regardless of application type, size, or location.

Across the Country, most jurisdictions require a site-specific transportation test like LATR; very few use an area wide test like PAMR.

the local test – local area transportation review LATR examines pipeline developments within a half-mile of an application. These projects will likely have the greatest impact on local intersections. However, approved projects several miles away may each also generate small amounts of traffic through the same intersections, and traffic flows may be affected by roadway improvements outside the immediate area. Tracking these minor but cumulative impacts requires a travel demand model.

The County's policy allows more congestion in Metro Station Policy Areas and these areas have robust street grids. So LATR has not generally been a limiting factor in encouraging smart growth near transit.

the area wide test - policy area mobility review

Assessing a development's traffic impacts can be thought of as looking at the ripples generated by a raindrop falling into a pond; the larger the drop, the bigger the ripple. As the ripple moves outward, it gets smaller until it is no longer noticeable. If two drops fall into the pond simultaneously, they generate overlapping ripples.

PAMR evaluates the cumulative effect of approved and anticipated development and of programmed transportation system improvements County wide. In short, it tracks the effect of an entire rainstorm.

what is policy area mobility review?

PAMR is an area wide assessment of mobility that considers how much delay motorists experience during rush hour and how competitive transit service is as compared to the automobile.

PAMR uses Level of Service (LOS) grades like those in school: A is best and F is worst. One important difference is that while LOS A provides the best service for each customer, the most efficient use of resources to move people and goods on roadways occurs at LOS E, when roads are well used (but not gridlocked), even though all customers experience some delay. Requirements for area wide arterial LOS and transit LOS reflect County policy that transportation mobility should be multimodal. Areas with better transit service are not as reliant on auto travel; consequently more congestion can be accepted as transit LOS improves.

LOS grades are given to each of the 21 PAMR policy areas by measuring current and forecasted conditions and by considering approved development and roadway and transit improvements.

PAMR mitigation requirements for all development in a policy area are based on the area's forecasted travel conditions and the LOS standards. PAMR mitigation techniques include trip reduction agreements and construction of off-site improvements like streets, sidewalks, or transit service.

Trip reduction strategies and provision of non-auto facilities count towards both LATR and PAMR mitigation.

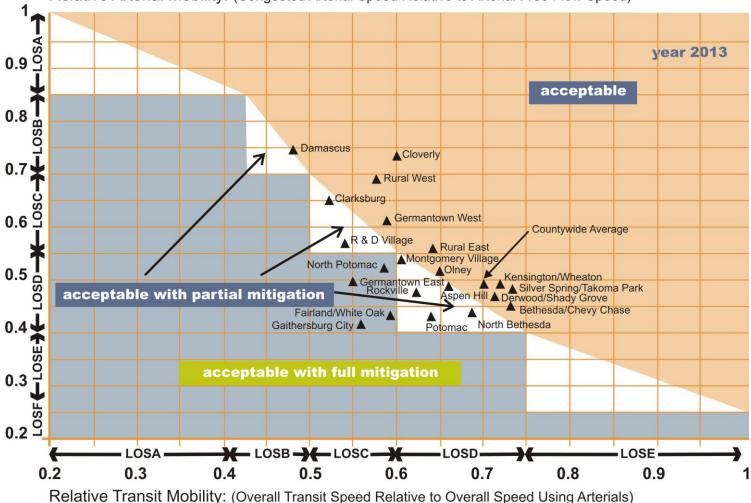
impact of PAMR on smart growth

The current definition of PAMR is criticized by many constituents as being insensitive to smart growth elements such as location and mix of uses. Development applicants are concerned that uniform PAMR criteria penalize smart growth and that mitigation proposals are unpredictable. Residents are concerned that mobility issues along roadway segments are not adequately examined in the development of average area wide conditions and that mitigation proposals are often not relevant to a development's impacts.

PAMR concerns and recommendations

Seven types of changes to PAMR are recommended, ranging from the smart growth criteria changes previously described to administrative changes. These proposals are summarized in the table below and additional information is contained in appendices K, M, and N.

Element	Concern	Proposed Changes
Location	PAMR applies to all development, even in Metro Station Policy Areas, because any development will generate traffic that impacts adjacent communities.	Smart Growth criteria provide an exemption process for development applications within ½ mile of transit or clusters of basic services .
Mixed-Use	Trip generation rates do not adequately reflect development that blends commercial and residential uses or that offers basic services within walking distance.	New trip generation rates based on household survey data available for the County's urban areas. Smart Growth criteria include a
		50% minimum residential component. Alternative review procedures available in all urban areas, not just Metro Station Policy Areas.
Travel Expectations	The level of desired mobility for car travel in most suburban and urban areas is higher than the level of mobility that is practical to provide. The most efficient use of transportation infrastructure is a system where all users experience some delays.	Revise PAMR congestion standards to require LOS A arterial service where transit is at LOS F and allow arterial conditions to degrade to LOS E if transit is LOS B.
Averaging of Conditions	PAMR averages congested conditions across many arterial roadways and may not reflect severe conditions on individual streets. PAMR does not reflect the potential of transportation systems management (traffic signals that optimize flow) to	An alternative review procedure for development in urban areas will allow PAMR mitigation through analysis of travel times on specific, affected arterial roadways in adjacent communities.
Predictability and relevance in impact mitigation	improve congestion. The current PAMR mitigation process requires a burdensome amount of interagency coordination. Some suggested mitigation facilities, such as bus shelters, are not approvable. Values of allowed mitigation yield irrelevant solutions, such as an over-reliance on curb ramps.	Revise non-auto facility mitigation criteria to define mitigating impacts based on \$11,000 per vehicle trip.



year 2013 PAMR chart with "symmetrical" level of service standards

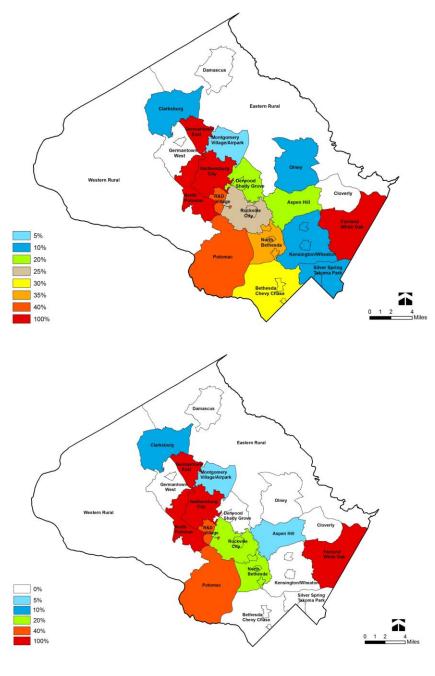
Relative Arterial Mobility: (Congested Arterial Speed Relative to Arterial Free Flow Speed)

PAMR mobility standards

Each policy area is scored according to its relative transit mobility and relative arterial mobility. The performance standards are multimodal so that areas with better transit can allow higher levels of roadway delay. PAMR requires mitigation for policy areas that do not have acceptable mobility performance for both transit and arterials. The proposed definition of adequacy would result in about half the County being considered adequate and the other half requiring PAMR mitigation.

recommendations – transportation adequacy

- 1. Allow PAMR requirements to balance arterial and transit mobility throughout spectrum.
- 2. Allow PAMR requirements to be satisfied in urban areas if specific adjacent roadways serving a site meet speed standards.
- 3. Revise acceptable facility types and define \$11,000 per vehicle trip as the common variable.
- 4. Allow transfer of apf rights into an urban area from an adjacent "parent" policy area.
- 5. In white flint, replace LATR and PAMR with a specific implementation entity as recommended in the master plan, and cap the number of long term parking spaces.



site specific arterial mobility

Rebalancing mobility standards reduces the number of policy areas requiring mitigation. Mitigation requirements remain highest in the I-270 corridor where the greatest level of growth is planned.

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Non-Automobile Transportation Facility	Trip Cr	Trip Credit vs Congestion Standard		
	1350-1500	1550-1600	1800	
100 linear feet of five-foot wide sidewalk	0.5	0.75	1.0	
100 linear feet of eight-foot wide bike path	0.5	0.75	1.0	
Curb Extension/Pedestrian Refuge Island/Curb Ramp	2.0	3.0	4.0	
Accessible or Countdown Pedestrian Signals/ Intersection	1.0	2.0	3.0	
Bus Shelter	5.0	7.5	10.0	
"Super" Bus Shelter	10.0	15.0	20.0	
Bus Bench with Pad	0.5	0.75	1.0	
Information Kiosk	1.5	3.0	4.5	
Bike Locker (set of eight)	2.0	3.0	4.0	
Real-Time Transit Information Sign	10.0	15.0	20.0	
Static Transit Information Sign	0.25	0.4	0.5	
Maximum Trip Credits	60	90	120	

non-auto facilities

The current chart of non-auto facilities shown here should be revised to allow a greater range of mitigation types, but mitigation requirements should be customized to the application and based on a cost of \$11,000 per vehicle trip.

revision to the transportation impact tax

In the past, the Planning Board has recommended structuring the transportation impact tax by land use and geographic location in the County. The intent was to levy a tax to match a development's average impact on the transportation system with lower rates in effect for uses or locations that generate fewer vehicle trips.

The proposed 2007 rates were in some cases higher than prior tax rates. The County Council chose not to implement the higher rates

but did modify the rates to reflect a proportion of impact, if not the total amount.

The transportation impact tax rate should reflect geographic location and be consistent with other policies that reflect a proximity to transit and basic services. Also, the housing schedule for the transportation impact tax should include a new category for housing in urban areas (other than Metro Station Policy Areas).

The MWCOG Travel Survey conducted in 2007 and 2008 found that housing close to regional activity centers generated both fewer tripsper-household and fewer vmt's, reflecting higher non-automobile use and the proximity of jobs and services found in mixed-use clusters. Data from the survey shows a vmt rate of approximately two-thirds that of a residence located outside of an activity cluster. Therefore, rates proposed are calculated as two-thirds that of the 2007-2009 adopted rate for general residential. These rates are shown in Appendix M.

These Urban Areas should be taxed to reflect the lower vmt's, reducing the per capita tax for new units, similar to the lower rates available in Metro Station Policy Areas.

household travel survey

Households in MWCOG activity centers generated 19.6 vmt per day, compared to 29.3 VMT per day generated by households outside of the activity centers.

recommendations – transportation impact tax

To adopt rates for residential development based on MWCOG household travel survey findings so that the rates in Urban Areas are set at two-thirds the 2007-2009 general residential rate.

future studies

The recommendations of the 2009-2011 Growth Policy begin a discussion that has already started around the country. Communities are assessing development in terms other than traffic congestion. Some jurisdictions let the congestion happen, realizing it leads to smarter growth as development patterns shift to infill and generate economies of scale for existing infrastructure and better transit options. Places using this approach find that traffic congestion naturally adjusts over time as many people seek to improve their quality of life by finding different travel patterns such as walking to work.

1. Planning staff will develop incentives for compact subdivision development through growth policy, master plans, and zoning.

compact subdivision

An example of a compact Silver Spring subdivision, focusing on the human environment rather than the automobile.

2. Planning staff will study emerging changes to the LEED for Neighborhoods classification system to determine those which



can further encourage smart growth and may form recommendations in the next growth policy.

3. Planning staff should look into the potential of carbon offsets for mitigating automobile trips. For example, a green roof reduces a building's carbon emissions by a specific factor that on an annual basis could be compared to vehicle emissions. In this way, green building features could be provided as a direct offset

for the vehicle emissions generated by a development, rather than a mitigation solution of an intersection.

4. County Executive agencies should report on the potential to create area specific funds, where the PAMR mitigation fees are paid to help finance transit improvements within that district to meet the needs created by redevelopment.

5. Planning staff should work with the County Executive to determine whether impacts vary for specific land uses by their location. For example, does a fast food restaurant in a Metro Station Policy Area generate fewer vmts than the same use in a suburban location? How should that impact be weighted in the growth policy?

6. Planning staff should consider the impact of chain retailers vs. local retail on vmt and parking demand to determine how it impacts vehicle generation rates. In combination with emerging zoning policy, considering lower impact fees and mitigation for local retailers can encourage small business growth.

7. The County Executive should complete the study under recommendation F9 of the 2007 Growth Policy. Emerging mixed-use zoning for pending master plans has raised the issue of linkage fees applied to non-residential uses for affordable housing. The County Executive should engage an economic consultant to determine the impact of such a linkage fee on the County office and retail market, to determine if the 2011 growth policy should advance this concept.

conclusion

The County has reached an important juncture in determining future growth. The reality of past growth dictates where growth must occur. There is little new land left to develop and future growth must be in existing urban areas. The question is how growth in our urban areas should be assessed. Strategic, efficient growth is necessary to preserve the qualities that have made the County an attractive place to live and invest.

Many jurisdictions across the country are placing high values on creating better places on less land. Montgomery County can do the same, but it means bringing other factors into the growth equation. Those factors include quality public spaces where people can move about in shorter distances combined with greener buildings that can improve all aspects of daily life.

Growing smarter will enhance the suburban qualities many residents enjoy. It will also prepare the County for the new residents yet to move here, offering a more sustainable approach to growth. The next 20 years of growth can be absorbed on a fraction of the 40,000 acres the County consumed over the past 20 years.

This growth, if carefully managed, will have considerably less impact on the environmental quality of the County than the past 20 years. It does require a shift in thinking, of how growth should be assessed.

reducing our footprint

more community sustainable walking nature transit time





Montgomery County 2009-2011 Growth Policy Montgomery County Planning Department Planning Board Draft MontgomeryPlanning.org



6.15.09 Draft