MCPB Item #9 July 7, 2011

MEMORANDUM

DATE:

June 30, 2011

TO:

Montgomery County Planning Board

VIA:

Mary Dolan, Acting Chief

Functional Planning & Policy Division

FROM:

Eric Graye, Supervisor (301.495.4362)

Functional Planning & Policy Division

SUBJECT:

2017 PAMR Analysis and FY 12 Trip Mitigation Requirements

RECOMMENDATION: Adopt FY 12 Policy Area Mobility Review trip mitigation requirements effective July 1, 2011.

I. 2017 Policy Area Mobility Review (PAMR) Findings

Per the adopted 2007-2009 Growth Policy (now renamed as the Subdivision Staging Policy), this analysis updates the year 2016 PAMR analysis performed in support of the FY 11 trip mitigation requirements adopted by the Planning Board in May 2010. This annual update of PAMR mitigation requirements is conducted as part of the County's Subdivision Staging Policy and is described in the Planning Board's *Local Area Transportation Review and Policy Area Mobility Review Guidelines*. The FY 12 requirements the Board adopts will be effective for subdivision applications submitted after July 1, 2011. All capital projects programmed for the next six years are included in the PAMR analysis. Therefore, the PAMR analysis assumes a six year (i.e., 2017) analysis horizon.

Using the Department's TRAVEL/3 regional transportation model, staff computed the year 2017 auto and transit travel relationship based on the following:

- The set of transportation facilities (currently funded in the six-year capital program for both, Montgomery County CIP and Maryland State CTP);
- Additional transportation capacity conditioned by approved development and;
- The existing pipeline (approved but un-built jobs and housing) in the County.

The 2017 PAMR-related results developed from this effort are summarized in Table 1. The 2017 PAMR chart derived from these data is displayed in Figure 1. As can be observed, two (2) policy areas fall into the "acceptable with full mitigation" area on the chart: (1) Germantown East, and Gaithersburg City. Concurrent with this finding, thirteen (13) policy areas fall into the "acceptable with partial mitigation" area on the chart. These policy areas, along with the FY 12 trip mitigation percentages required in these areas, are listed in Table 2. A map depicting these area-wide traffic mitigation requirements is provided as Figure 2.

Table 1: 2017 PAMR Summary

Derivation of Year 2017 PAMR Results by Policy Area

Relative Arterial Mobility

Relative Transit Mobility

Policy Area	VMT	VHT (free-flow)	VHT (congested)	Free-Flow Speeds	Congested Speeds	Relative Arterial Mobility	Average Arterial Travel Time	Average Transit Travel Time	Relative Transit Mobility
Aspen Hill	166,766	5,064	10,606	32.9	15.7	48%	37.1	53.0	70%
Bethesda/Chevy Chase	369,269	14,293	32,493	25.8	11.4	44%	28.1	36.2	78%
Clarksburg	115,975	3,741	6,169	31.0	18.8	61%	42.2	76.4	55%
Cloverly	70,412	1,813	2,560	38.8	27.5	71%	40.3	63.2	64%
Damascus	76,663	1,850	2,589	41.4	29.6	71%	47.3	95.3	50%
Derwood	121,090	4,223	8,826	28.7	13.7	48%	36.3	47.4	77%
Fairland/White Oak	352,484	9,785	23,529	36.0	15.0	42%	37.3	59.3	63%
Gaithersburg City	214,360	7,688	17,221	27.9	12.4	45%	32.1	54.6	59%
Germantown East	99,251	3,426	6,554	29.0	15.1	52%	37.1	64.6	57%
Germantown West	122,677	4,237	6,805	29.0	18.0	62%	37.6	61.5	61%
Kensington/Wheaton	421,974	13,381	27,991	31.5	15.1	48%	33.8	44.8	75%
Montgomery Village/Airpark	104,842	3,492	6,522	30.0	16.1	54%	40.0	62.7	64%
North Bethesda	223,027	9,447	21,021	23.6	10.6	45%	28.1	38.3	73%
North Potomac	57,899	2,097	3,896	27.6	14.9	54%	38.3	62.2	62%
Olney	148,904	4,136	8,240	36.0	18.1	50%	44.2	64.0	69%
Potomac	191,508	5,621	13,687	34.1	14.0	41%	35.0	52.2	67%
R & D Village	59,768	2,391	4,178	25.0	14.3	57%	29.5	52.2	57%
Rockville City	255,936	10,520	21,723	24.3	11.8	48%	29.9	44.4	67%
Silver Spring/Takoma Park	236,907	9,036	18,892	26.2	12.5	48%	30.1	38.7	78%
Rural East	490,972	12,625	23,496	38.9	20.9	54%	45.6	68.1	67%
Rural West	226,059	6,048	8,914	37.4	25.4	68%	44.7	75.1	60%
Montgomery County Total	4,126,743	134,914	275,912	30.6	15.0	49%	35.9	48.4	74%

Relative Arterial Mobility measures total PM Peak Period vehicular travel on arterial roadways within each policy area Relative Transit Mobility measures AM Peak Period travel times for journey-to-work trips originating within each policy area VMT = Vehicle Miles of Travel

VHT = Vehicle Hours of Travel

Figure 1: 2017 PAMR Chart

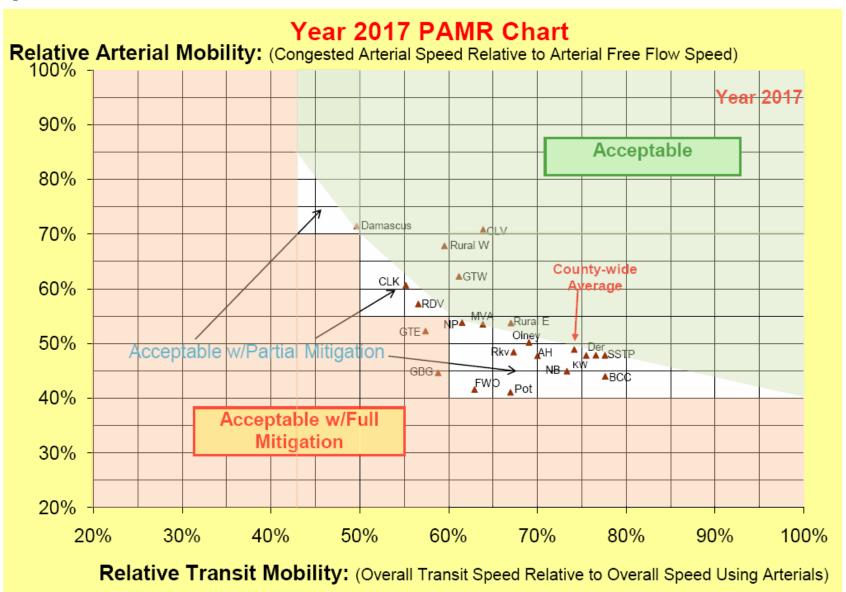


Table 2: 2017 PAMR Results – FY11 and FY12 Trip Mitigation Requirements by Policy Areas

Policy Area	FY 11 Trip Mitigation Required	FY 12 Trip Mitigation Require	Change from FY 11	
Aspen Hill	15%	15%		
Bethesda/Chevy Chase	30%	25%	-5%	
Clarksburg	0%	10%	+10%	
Cloverly	0%	0%	0%	
Damascus	0%	0%	0%	
Derwood/Shady Grove	15%	5%	-10%	
Fairland/White Oak	45%	45%	0%	
Gaithersburg City ²	50%	50%	0%	
Germantown East	50%	50%	0%	
Germantown West	0%	0%	0%	
Kensington/Wheaton	10%	10%	0%	
Montgomery Village/Airpark	5%	0%	-5%	
North Bethesda	30%	25%	-5%	
North Potomac	10%	5%	-5%	
Olney	10%	5%	-5%	
Potomac	45%	45%	0%	
R & D Village	35%	30%	-5%	
Rockville ³	20%	15%	-5%	
Silver Spring/Takoma Park	10%	5%	-5%	

¹ FY 12 trip mitigation percentages that differ from FY 11 trip mitigation percentages are highlighted in **bold**.

² Mitigation is applied to the **non-municipal** areas of Gaithersburg.

³ Mitigation is applied to the **non-municipal** areas of Rockville.

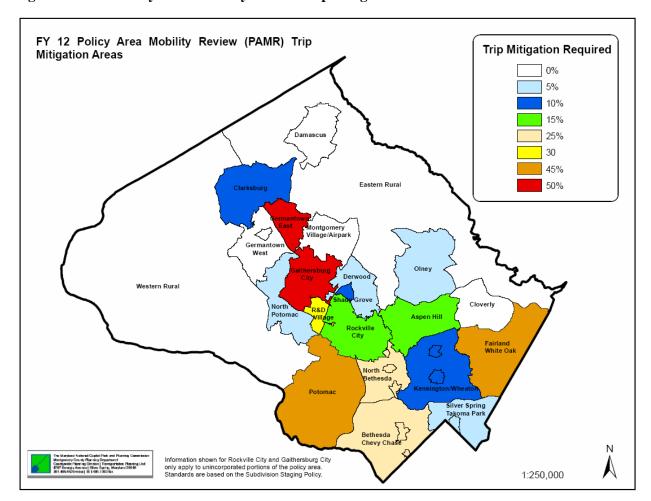


Figure 2: FY 12 Policy Area Mobility Review Trip Mitigation Areas

II. Development Pipeline Review

The Planning Department has improved the accuracy of monitoring pipeline projects by taking advantage of computer programs that pull building permit and other land development information from multiple County agencies. This effort resulted in an overall reduction of 25,000 jobs and 2,600 units in the development pipeline for end of year 2011 as compared to end of year 2010. The current county pipeline of "approved" but "un-built" projects consist of 29.7 million square feet of non-residential projects and 25 thousand residential units.

Three types of pipeline changes were made that potentially influence PAMR results:

- Projects were removed because the APF had expired.
- Project gross square footage and unit counts were corrected (either increased or decreased) based on
 more current information. In some cases square footage formerly assigned to the office category was
 re-assigned to the retail category and vice versa. Because the multipliers used to translate square
 footage into jobs vary with development types, job estimates changed accordingly.
- Projects were added that were approved after end of year 2010.

III. PAMR Analysis Changes

Relative to last year's 2016 PAMR analysis, only one Montgomery County developer-sponsored transportation project was added to the network in order to reflect year 2017 PAMR conditions:

• Snouffers School Road widening to 4 lanes, Centerway Road to Ridge Heights Drive (approximately 0.5 miles).

From a County-wide perspective, relatively minor changes in the development pipeline occurred between FY11 and FY12 as a result of new project approvals. However, some policy areas exhibited changes in pipeline development as a result of the Department's thorough review of the pipeline.

From a regional perspective, the assumption of a year 2017 planning horizon had virtually no effect on travel demand modeling, as the regional growth totals assumed outside Montgomery County for jobs and households for year 2017 were roughly equivalent to those tested last year for the 2016 PAMR analysis.

IV. 2017 PAMR Analysis Discussion

The analytical changes described above were reflected in the transportation modeling used to perform the PAMR analysis from which the FY 12 trip mitigation requirements were derived. The combination of updated County pipeline and the addition of the single minor transportation project did result in shifts in trip mitigation requirements. While in most cases the shifts are modest, two areas experienced more than a 5% difference between FY 11 and FY 12. These changes (as shown in Table 2) are described below.

- Six (6) policy areas exhibited no change in trip mitigation relative to FY 11 conditions.
- Eight (8) policy areas exhibited a 5% reduction in trip mitigation relative to FY 11 conditions. This includes Montgomery Village/Airpark which moved from 5% mitigation in FY 11 to 0% mitigation in FY 12.

These modest shifts can largely be attributed a more accurate accounting of development pipeline throughout the County.

The 5% trip mitigation reduction in R & D Village can largely be attributed to a reduction in the development pipeline plus the existing base development for the adjacent Gaithersburg City policy area from 68,518 in last year's 2016 PAMR analysis to 58,921 in this year's 2017 PAMR test. Most of the reduction is accounted for by a reduction in the pipeline as reported by the City of Gaithersburg.

The 5% trip mitigation in North Bethesda is also a result of more accurate pipeline information. Staff notes that ketch plans proposed by developers in White Flint are not included in the pipeline, because these proposed development are in the beginning stages of the development process and haven't proceeded to APF review and therefore cannot be included in the pipeline.

- Two (2) policy areas exhibited a 10% change in trip mitigation relative to FY 11 conditions.
 - The Clarksburg policy area required 0% mitigation in FY 11. This year's analysis shows more traffic diverting from I-270 onto MD 355 because of the reduced local traffic demands along that facility resulting from the reduction in the development pipeline in Clarksburg relative to last year's analysis. This causes a shift of the 2017 PAMR data point for the policy area slightly down and to the left on the PAMR chart relative to 2016 conditions. The resultant change in transportation system performance is accompanied with a change in

mitigation requirement because the policy area data point crosses the line between no mitigation and partial mitigation. Therefore, this policy area moves to "partial mitigation" in FY 12 with a 10% mitigation requirement.

o The Derwood/Shady Grove policy area required 15% in FY 11. The mitigation requirement reduction to 5% in FY 12 can be attributed to a reduction in the pipeline employment in the adjacent Gaithersburg City policy area described above.

EG:tc