MCPB 6/16/2011 Item #5

MEMORANDUM

DATE:

June 9, 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. Hence, this year's PAMR analysis assumes a six year (i.e., 2017) analysis timeframe.

Using the Department's TRAVEL/3 regional transportation model, staff have computed the year 2017 auto and transit travel relationship based on the set of transportation facilities currently funded in the six-year capital program (i.e., Montgomery County CIP and Maryland State CTP) and additional transportation capacity conditions of approved development in combination with the geographic pattern of existing and approved 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: Germantown East and Gaithersburg City. Concurrent with this finding, fourteen (14) 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 | VHT | Free-Flow | Congested | Relative Arterial | Average Arterial | Average Transit | Relative Transit |
|----------------------------|-----------|-------------|-------------|-----------|-----------|----------------------|---------------------|--------------------|---------------------|
| · city / ii cu | | (free-flow) | (congested) | Speeds | Speeds | Mobility | Travel Time | Travel Time | Mobility |
| Aspen Hill | 167,020 | 5,070 | 10,614 | 32.9 | 15.7 | 48% | 36.4 | 52.8 | 69% |
| Bethesda/Chevy Chase | 368,043 | 14,238 | 32,201 | 25.8 | 11.4 | 44% | 27.8 | 36.0 | 77% |
| Clarksburg | 91,438 | 2,740 | 4,101 | 33.4 | 22.3 | 67% | 40.9 | 75.6 | 54% |
| Cloverly | 70,832 | 1,824 | 2,584 | 38.8 | 27.4 | 71% | 39.8 | 62.7 | 63% |
| Damascus | 74,893 | 1,803 | 2,523 | 41.5 | 29.7 | 71% | 46.2 | 94.9 | 49% |
| Derwood | 121,510 | 4,237 | 8,802 | 28.7 | 13.8 | 48% | 35.5 | 47.3 | 75% |
| Fairland/White Oak | 353,934 | 9,832 | 23,846 | 36.0 | 14.8 | 41% | 36.7 | 58.5 | 63% |
| Gaithersburg City | 221,525 | 7,846 | 18,623 | 28.2 | 11.9 | 42% | 31.2 | 53.5 | 58% |
| Germantown East | 98,236 | 3,395 | 6,592 | 28.9 | 14.9 | 52% | 35.8 | 63.6 | 56% |
| Germantown West | 126,573 | 4,360 | 7,034 | 29.0 | 18.0 | 62% | 36.4 | 60.1 | 61% |
| Kensington/Wheaton | 422,416 | 13,399 | 28,023 | 31.5 | 15.1 | 48% | 33.4 | 44.6 | 75% |
| Montgomery Village/Airpark | 107,351 | 3,581 | 6,781 | 30.0 | 15.8 | 53% | 38.5 | 61.7 | 62% |
| North Bethesda | 222,562 | 9,426 | 20,890 | 23.6 | 10.7 | 45% | 27.7 | 38.1 | 73% |
| North Potomac | 60,021 | 2,172 | 4,349 | 27.6 | 13.8 | 50% | 37.5 | 61.4 | 61% |
| Olney | 149,495 | 4,155 | 8,298 | 36.0 | 18.0 | 50% | 43.5 | 63.8 | 68% |
| Potomac | 187,875 | 5,553 | 13,280 | 33.8 | 14.1 | 42% | 34.9 | 52.4 | 67% |
| R & D Village | 57,502 | 2,291 | 3,859 | 25.1 | 14.9 | 59% | 28.9 | 51.7 | 56% |
| Rockville City | 256,106 | 10,533 | 21,686 | 24.3 | 11.8 | 49% | 29.3 | 44.2 | 66% |
| Silver Spring/Takoma Park | 236,007 | 9,050 | 18,936 | 26.1 | 12.5 | 48% | 29.5 | 38.6 | 76% |
| Rural East | 488,663 | 12,543 | 23,393 | 39.0 | 20.9 | 54% | 44.6 | 67.3 | 66% |
| Rural West | 217,045 | 5,803 | 8,496 | 37.4 | 25.5 | 68% | 44.1 | 75.1 | 59% |
| Montgomery County Total | 4,099,047 | 133,851 | 274,911 | 30.6 | 14.9 | 49% | 35.2 | 48.1 | 73% |

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

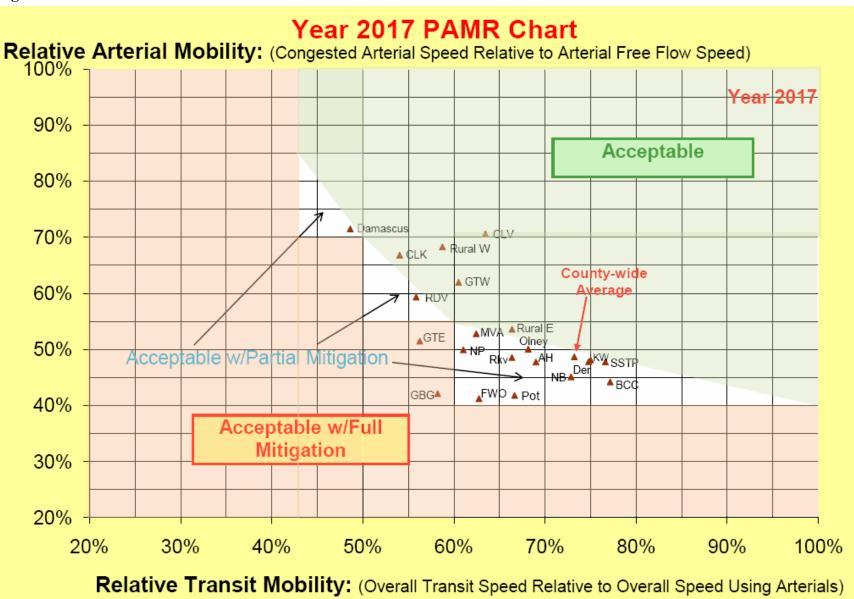


Table 2: 2017 PAMR Results – FY12 Trip Mitigation Requirements by Policy Areas

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

Note: Policy area trip mitigation percentages that differ from FY11 trip mitigation percentages are highlighted in **bold**.

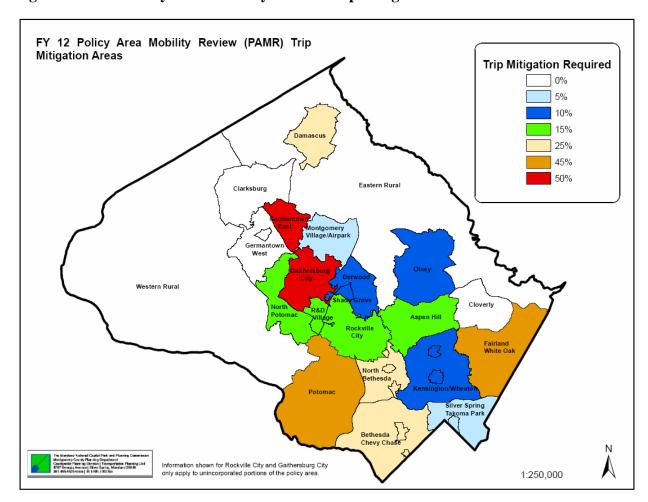


Figure 2: FY 12 Policy Area Mobility Review Trip Mitigation Areas

II. 2017 PAMR Analysis Discussion

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 estimated development pipeline occurred between FY11 and FY12. However, some policy areas exhibited changes in estimated pipeline development during this period primarily as a result of the Department's thorough review of the data sources used to estimate 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 horizon.

The combination of updated County pipeline estimates and the addition of the single minor transportation project described above resulted in generally modest shifts in trip mitigation requirements in some areas with only two areas experiencing more than a 5% difference between FY 11 and FY 12 as described below.

The Damascus policy area required 0% mitigation in FY 11. This policy area moves to "partial mitigation" in FY 12 with a 25% requirement. This result can be largely attributed to the pipeline demographic assumptions pertaining to the 2017 PAMR analysis relative last year's 2016 PAMR test. These changes result in 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. While the change in system performance is fairly minor, the change in mitigation requirement is substantial because the policy area data point crosses the line between no mitigation and partial mitigation.

The R & D Village policy area required 35% in FY 11. The mitigation requirement in this policy area reduces to 15% in FY 12 largely due to a reduction in the employment pipeline in the area from 30,449 as assumed in last year's 2016 PAMR analysis to 25,809 in this year's 2017 PAMR test.

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