




**MONTGOMERY COUNTY PLANNING DEPARTMENT**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

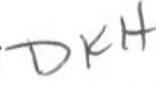
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May 8, 2008


**MEMORANDUM**

**TO:** The Montgomery County Planning Board

**VIA:** Eric S. Graye, Supervisor   
Transportation Planning

Daniel K. Hardy, Acting Chief   
Transportation Planning

Gwen Wright, Chief   
Countywide Planning Division

**FROM:** Ronald Vaughn, Planner/Coordinator (301-495-4517)   
Transportation Planning

**SUBJECT:** 2008 Highway Mobility Report (HMR) – Staff Draft

**RECOMMENDATION:** Staff recommends that the Planning Board support two actions regarding the Staff Draft of the 2008 Highway Mobility Report:

- Transmit the 2008 Highway Mobility Report (HMR) to the County Council, to provide background information for the consideration of recommended modifications to the State's Consolidated Transportation Program (CTP) priorities, and
- Adopt the FY 2009 Policy Area Mobility Review (PAMR) mitigation requirements, effective July 1, 2008.

This report must be transmitted to the Council prior to the initiation of their discussion regarding this year's State Consolidated Transportation Program (CTP) priority recommendations, which is scheduled for the end of June. Copies of this report will be distributed to the Maryland State Highway Administration (SHA) and the Montgomery County Department of Public Works and Transportation (DPW&T) prior to the Council's CTP discussion. We are tentatively planning to

schedule a Planning Board briefing on the CTP priorities for June 19, pending confirmation of County Council committee schedules.

The staff draft of the 2008 HMR is available on the Planning Board's website under the agenda page for May 15 (see Item #8 at the following link):

<http://www.montgomeryplanningboard.org/agenda/2008/agenda20080515e.html>

## **KEY FINDINGS**

- About one in seven intersections in Montgomery County has congestion levels that are worse than their current Growth Policy standards.
- About two-thirds of the County's policy areas have overall arterial and transit mobility characteristics that require new development to mitigate some or all of their vehicle trips according to current Growth Policy requirements.
- Congestion trend lines from 2004 through 2012 show that, in general, the provision of transportation facilities and services is just keeping pace with development, so that the level of congestion is remaining at undesirable levels in many areas of the County.
- Currently, congestion is generally most severe in down-county areas. Areas requiring the greatest levels of developer participation under the FY 2009 Policy Area Mobility Review (PAMR), however, are in the northern half of the I-270 corridor from Rockville to Clarksburg, due to this area's:
  - More stringent arterial mobility standards,
  - Sizeable pipeline growth (about two-thirds of the County's total pipeline jobs and housing units), and
  - Relatively low proportion of master planned transportation system improvements ready for implementation in the next four years.
- For FY 2009, staff finds that four policy areas: Germantown East, Gaithersburg City, Montgomery Village/Airpark and North Potomac, require full mitigation and eleven policy areas require partial mitigation as shown in Table 1.

Table 1: 2012 PAMR Results - Required Trip Mitigation by Policy Area

Policy Area	FY 2009 Trip Mitigation Required
Aspen Hill	20%
Bethesda/Chevy Chase	30%
Derwood	20%
Fairland/White Oak	45%
Gaithersburg City	100%
Germantown	100%
Kensington/Wheaton	15%
Montgomery Village/Airpark	100%
North Bethesda	40%
North Potomac	100%
Olney	10%
Potomac	45%
R&D Village	35%
Rockville	30%
Silver Spring/Takoma Park	10%

- The following corridors continue to experience the most significant levels of congestion and should be targeted for congestion-relief:
  - Rockville Pike/Frederick Rd (MD 355)
    - From the Bethesda CBD to West Cedar La
    - From Chestnut Ave/Walker Ave to Montgomery Village Ave (MD 124)
    - From Middlebrook Rd to Brink Rd
  - Georgia Ave (MD 97)
    - From the Silver Spring CBD to the Capital Beltway (I-495)
    - From Veirs Mill Rd (MD 586) to Randolph Rd
    - Connecticut Ave (MD 185) to Olney-Sandy Spring Rd (MD 108)
  - Norbeck Rd/First St (MD 28)
    - From Veirs Mill Rd (MD 586) to Georgia Ave (MD 97)
  - Columbia Pike (US 29)
    - Stewart La/Milestone Dr to Fairland Rd
  - Connecticut Ave (MD 185)
    - From Western Ave (D.C. Line) to the Capital Beltway (I-495)
- Continued investment in a wide range of State and County transportation infrastructure improvements, as well as development-related improvements, is needed to help reduce congestion in nearly all areas of the County:
  - Improvements at two of the “ten most congested intersections” listed in the 2006 Highway Mobility Report have reduced congestion levels by more than 15%,

- Two of the intersections in this year's "ten most congested intersections" list are candidates for improvements as part of the National Naval Medical Center BRAC mitigation program, and
- Two of the intersections in this year's "ten most congested intersections" list located along MD 28 are forecasted to experience traffic reduction upon completion of the Intercounty Connector.

## **BACKGROUND**

The Highway Mobility Report was not assembled in 2007, as it was superseded by the Growth Policy reform work that was performed for the greater part of the year. Therefore, this report serves as a follow-up to the report that was assembled in 2006. This report contains information on historical, current, and future traffic congestion trends and patterns, which is to be used by the Planning Board and County Council to comment on this year's State Consolidated Transportation Program (CTP) project priorities. In addition, this report includes an update on the Policy Area Mobility Review (PAMR) analysis results, which were developed as part of the 2007 Growth Policy reform. This report uses the following key performance measurements to report on the status of congestion in the County: (1) Critical Lane Volumes (CLVs) at Signalized Intersections, (2) GPS Arterial Travel Times and Speeds, and (3) Year 2012 Forecasted Volume-to-Capacity (V/C) Ratios.

## **SUMMARY**

There have been a few notable changes in the observed locations of both existing and future congestion when compared to those seen in the 2006 HMR. This report contains updated Critical Lane Volume (CLV) data for a number of intersections that were identified as congested in the previous report. The updated CLV data for a number of these intersections was found to be consistent with the data presented in previous reports. These data help to further validate the long-standing issues with congestion experienced at various locations. This report also contains an expanded set of GPS-based arterial travel time and speed samples for a number of the County's major highways and arterials. The expanded coverage better enabled staff to identify a number of congested corridors, as well as the relationship between the traffic flow conditions and CLVs at various intersections along these corridors. Despite the fact that a number of the locations discussed in this report have been chronically congested over the past four years, ongoing infrastructure improvements (i.e. intersection improvements, grade-separations, and road widenings) continue to help reduce congestion levels along various corridors in the County. In addition, a number of planned infrastructure improvements are associated with some of the congested locations identified in this report. The identification of solutions for these chronically congested corridors must be multimodal, including potential Bus Rapid Transit (BRT) treatments.

## **ADDRESSING DATA RELIABILITY ISSUES**

The acquisition of additional fiscal resources would allow the Department to expand its annual data collection activities for both travel monitoring and regulatory purposes. In order to advance this initiative, staff had requested \$150K to be approved under the FY09 budget and we understand this proposal remains under consideration by the County Council. This level of funding would enable the Department to increase its collection of intersection turning movement count and GPS travel time and speed data throughout the County. Collection of these types of data on an annual basis helps to minimize the possibility that the observed change over time is simply normal variability of traffic conditions, or the “noise” that is expected in an area as dynamic as Montgomery County.

The question of data variability and reliability in transportation performance measurement continues to surround the activities associated with the Department’s travel monitoring and congestion management efforts. Staff is working to address this issue through coordination with State and County agencies in an attempt to increase the scope of data sampling for reports of this nature. SHA recently reinitiated coordination with the Department and the DPWT on the authorization of a Memorandum of Understanding (MOU) in which all three agencies would enter into an agreement to use the SHA traffic count guidelines which require the collection of 13-hour turning movement counts. This coordination effort has a history that dates back to November 2004. However, the process has been delayed as a result of the internal review process on the part of each participating agency.

In early 2006, the Department began coordinating with the University of Maryland-Center for Advanced Transportation Technology Laboratory (UMD-CATT Lab) on the transfer of the Department’s former DASH (Data Acquisition Software and Hardware) system traffic data for archiving and analysis purposes. The University’s archiving efforts eventually evolved to become to the Regional Integrated Transportation Information System (RITIS) program. The RITIS program aims to improve transportation efficiency, safety, and security through the integration of existing transit and transportation system management data for the Washington D.C. metropolitan area. As a stakeholder in the project consortium, the Department will have access to various types of transportation data to be used for planning purposes as the data becomes available. Staff will continue to coordinate with UMD as the program develops for future data acquisition purposes.

## **ACTIVE OR PLANNED TRANSPORTATION INFRASTRUCTURE**

There are a number of active or planned transportation infrastructure projects that should help to alleviate congestion along some of the corridors that were identified at the outset of this memo. In addition, there are a number of recently completed improvements, which have helped to reduce levels of congestion at some locations. Staff has identified various projects that are either active or under study by location for reference purposes. Most of these projects are located along State highways, which include most of the County's major highways and arterials.

**Rockville Pike (MD 355) from the Bethesda CBD to W Cedar La** – A number of the intersections located along this corridor are currently being analyzed under the Base Realignment and Closure (BRAC) Federal installation project. The master-planned grade-separated interchange for the intersection of Rockville Pike and Cedar Ln / W Cedar Ln was recommended by the County Executive and County Council, for addition to the State's Development & Evaluation (D&E) program in the fall of 2005.

**Frederick Road (MD 355) from Chestnut Ave / Walker Ave to Montgomery Village Ave (MD 124), and from Middlebrook Rd to Brink Rd** – A grade-separated interchange for the Ridge Rd (MD 27)/Father Hurley Blvd intersection has been recommended in the area master plan. In addition, this corridor may be a candidate for Bus Rapid Transit (BRT) treatments.

**Frederick Road (MD 355) in Clarksburg** – This area should continue to be monitored with a high level of scrutiny, as there is a significant amount of new development that has been approved for this area that has yet to be built. There is also a significant amount of planned transportation infrastructure for this area, both developer-funded (such as the extension of Snowden Farm Parkway to Ridge Road) and through public funding sources (such as the extension of Observation Drive). However, travel conditions will most likely worsen until those facilities are actually constructed.

**Georgia Avenue (MD 97) from Veirs Mill Rd to Randolph Rd and from Connecticut Ave (MD 185) to Olney Town Center** – The grade-separated interchange at Randolph Rd is currently funded for construction. In addition, capacity improvements have been recommended in the master plan for the Bel Pre Rd and Emory La intersections. Also, the County Executive and County Council have indicated that the Georgia Avenue Busway is a priority for future study in the state's CTP.

**Norbeck Road/First St (MD 28) from Veirs Mill Rd (MD 586) to Georgia Ave (MD 97)** – Upon completion, the following projects should help to alleviate congestion along this corridor:

- Intersection capacity improvement at Veirs Mill Rd (MD 586) (currently in design phase)
- Intersection capacity improvement at Georgia Avenue (MD 97) (currently in project planning)

**Colesville Road / Columbia Pike (US 29) from Stewart La/Milestone Dr to Fairland Rd** - Four additional grade-separated interchanges (Blackburn Rd, Fairland Rd / Musgrove Rd, Greencastle Rd, Stewart La, Tech Rd) are either master-planned or in project planning.

However, in accordance with the Council Master Plan guidance, SHA is conducting a monitoring program in the vicinity of and downstream from the new interchanges before additional interchanges are funded for construction. The development of planned interchanges along US 29 has reserved the opportunity for future Bus Rapid Transit (BRT) priority treatments.

**Connecticut Avenue (MD 185) from Western Av to the Capital Beltway** – Improvements to the Jones Bridge Road intersection are included in the BRAC FEIS recommendations.