



2014 Mobility Assessment Report

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Completed: 04/10/14

Description

The purpose of the Mobility Assessment Report (MAR) is to document the Department's periodic analysis of barriers and constraints to mobility in Montgomery County. Constraints to mobility are represented here in the form of historical, current and future motor vehicle traffic congestion trends and patterns.

This information informs the Planning Board and County Council review of the State Consolidated Transportation Program (CTP) and the County's Capital Improvement Program (CIP) project priorities. The report is also useful to master planning and development review as it gives a broader context for the Area Divisions understanding of traffic flow, and use of non-auto modes of travel. The last version of this report, the 2011 Mobility Assessment Report, was released in October, 2011.

Staff recommends the Planning Board:

- Transmit the 2014 Mobility Assessment Report (MAR) to the County Council to provide background information for the consideration of recommended modifications to the State's Consolidation Transportation Program (CTP) and the County's Capital Improvement Program (CIP) priorities.
- Continue to pursue further development, expansion and integration of multi-modal measures of effectiveness into the next Mobility Assessment Report, scheduled for production in spring 2016 as an element of the next quadrennial Subdivision Staging Policy and CIP development cycle.

The staff draft of the 2014 MAR is available on the Planning Board's website under the agenda for April 17 (see Item #4 at the following link):

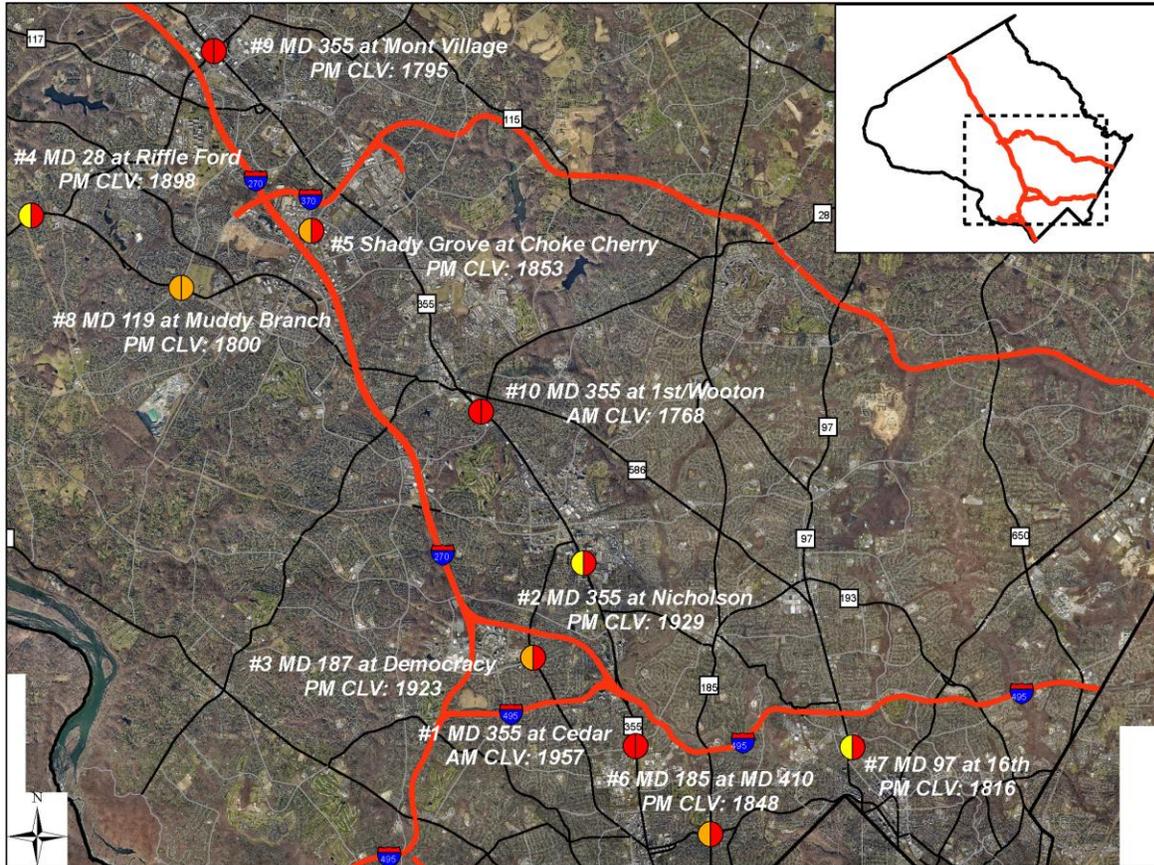
<http://www.montgomeryplanningboard.org/agenda/2014/agenda20140417i.html>

Once the Planning Board approves the document, it will be posted under the Transportation section of our web page.

Summary

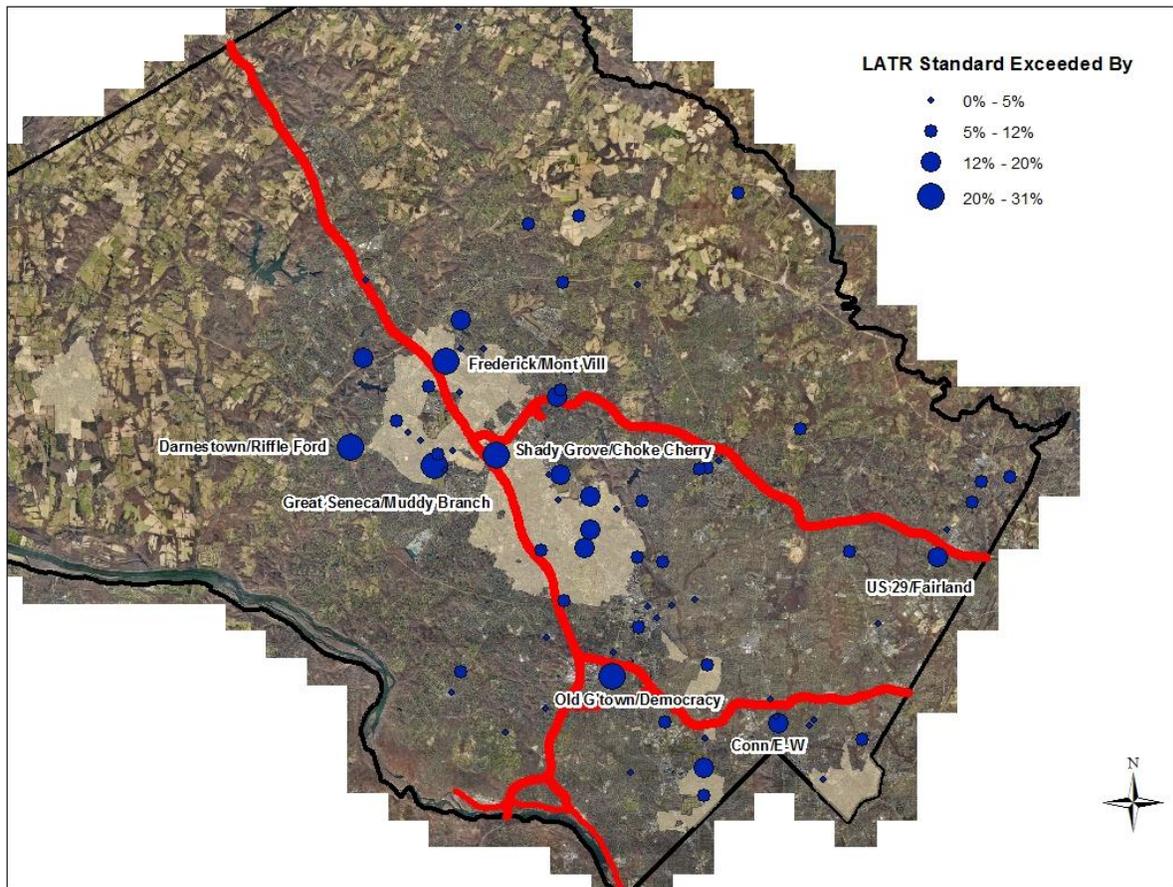
Current congestion measurements included in this report are Critical Lane Volume (CLV) for sampled intersections and arterial travel time for sampled roadway corridors in the County. Figure 1 depicts the locations of the top 10 most congested intersections in the County based on the CLV measure.

Figure 1: Top Ten Most Congested Intersections



As an alternative to using only the CLV measure to rank intersections, congestion may also be ranked using the ratio of CLV/Local Area Transportation Review (LATR) policy area congestion standard. This measure, also reported in the MAR, reports how much an intersection exceeds the congestion standard established by the County Council, potentially offering a more policy sensitive means of ranking intersection congestion. Using this metric, Figure 2 depicts the locations and the degree by which these intersections exceed the applicable LATR policy area congestion standard.

Figure 2: Intersections that Exceed Policy Area Congestion Standard

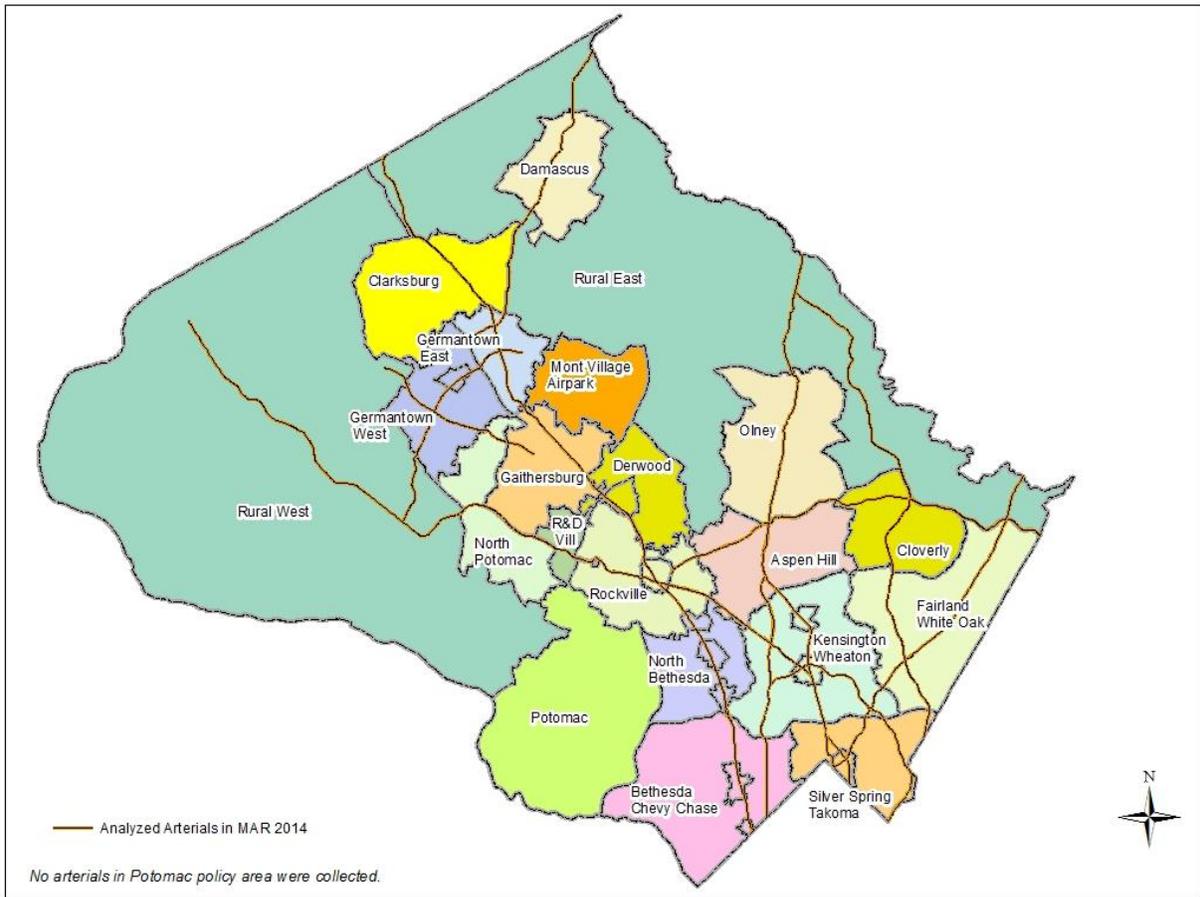


Changes relative to the 2011 Mobility Assessment Report:

Relative to the 2011 MAR, several changes are reflected in the 2014 MAR, including:

- Reporting on the performance of non-auto travel modes is expanded. This change reflects the multi-modal character of the information provided in the report -- including auto, transit, pedestrian and bicycle travel.
- An evaluation of the traffic impact of the Intercountry Connector on local roadways is performed. Data to support such an effort was not available at the time of the release on the 2011 report.
- The use of the Travel Time Index (TTI) as a roadway performance metric is greatly expanded. This is a result of the greater availability of INRIX-supplied arterial travel time data from sources such as the Metropolitan Washington Council of Governments and the I-95 Corridor Coalition. The geographical coverage of this data in the County is depicted in Figure 3.

Figure 3: Countywide Geographical Coverage of Arterial Travel Time Data



While the 2014 MAR provides an analysis of congestion conditions on many more arterial roadways relative to the 2011 MAR, the roadway travel conditions findings of the two reports are generally comparable.

The 2012 Local Area Transportation Review /Transportation Policy Area Review Guidelines now require development proposals to include bicycle and pedestrian count data in addition to vehicular counts. As a result, pedestrian and bike data collected during the past year has increased considerably. These data are used in support of this report. Key findings of the 2014 MAR are highlighted below.

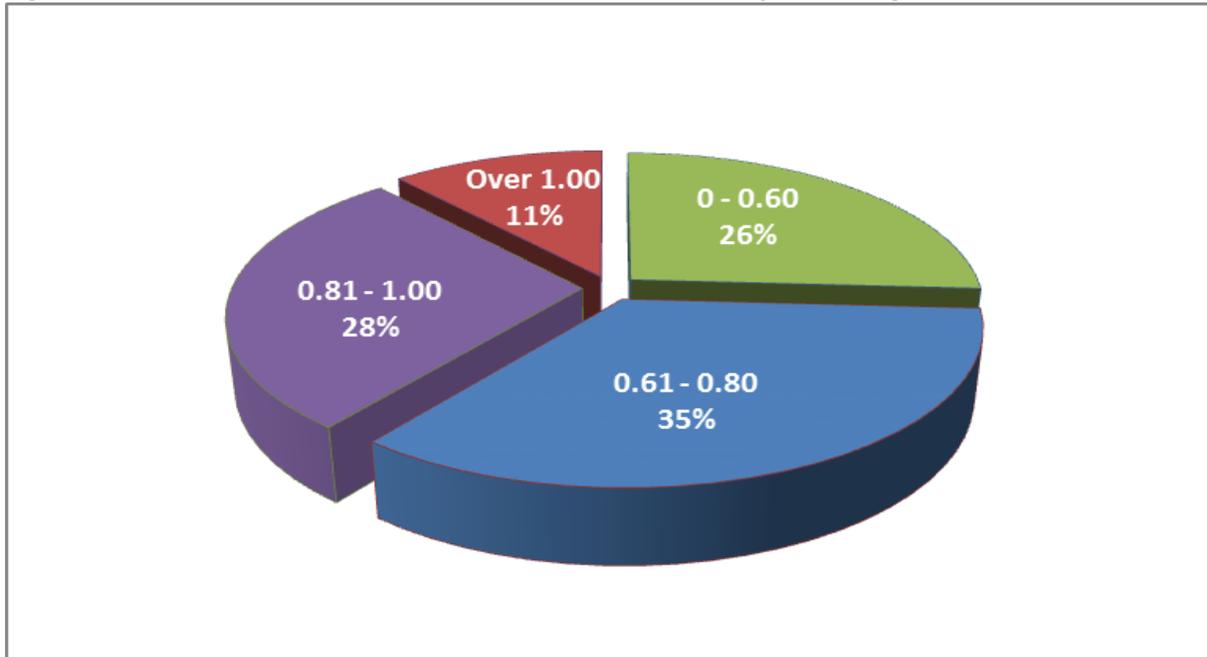
Total Vehicle Miles Traveled

- Nationwide travel has been increasing, but local travel has been stabilizing. The Federal Highway Administration’s National Vehicle Miles of Travel (VMT) Trend Data indicate an increase from 2011 to 2012 of less than one percent. The stabilization of the overall vehicle miles in the County and the State reflects a slowly recovering economy between 2011 and 2013.

Intersections

- Figure 4 depicts a breakdown of measuring intersection congestion using the metric of CLV relative to the LATR policy area congestion standard. Approximately 11% (72 of the 625 intersections sampled) of the County’s signalized intersections represented in the database exceed policy area LATR congestion standards as established in the County’s Subdivision Staging Policy. This reflects a general improvement relative to the findings of the 2011 Mobility Assessment Report which reported that 17 percent of sampled intersections exceeded the applicable LATR policy area congestion standard. Since 2005, this is the lowest percentage of intersections which exceed policy area congestion standards.

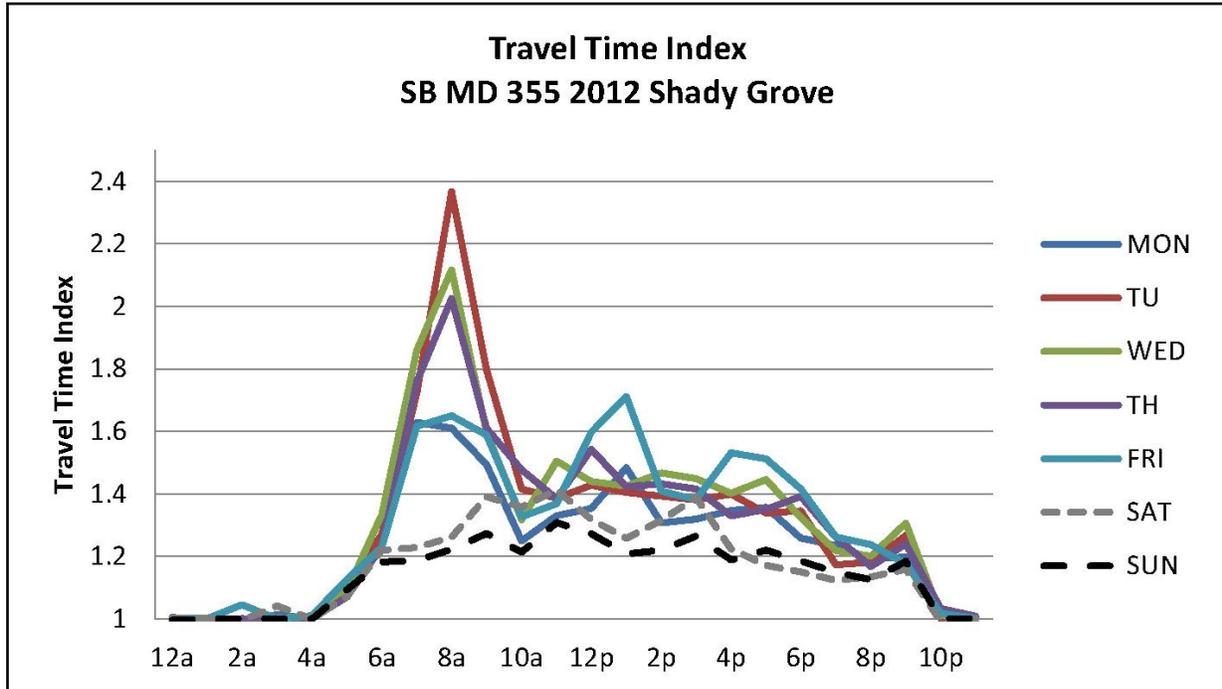
Figure 4: Breakdown of Intersections Which Exceed LATR Policy Area Congestion Standards



Roadways

- Intercounty Connector (MD 200) vehicle traffic volumes continues to grow at a steady rate of 3% per month.
- MD 200 has provided a travel time savings of 25% relative to travelling along parallel local arterials.
- Of the 120 arterial roadway segments analyzed, seven operate under “severe” congestion levels reflecting a Travel Time Index (TTI) ranging from 87 to 119 percent of congested travel speed relative to free flow travel speed. An example is MD 355 southbound in the Shady Grove Metro Station policy area which exhibited the worst level of travel time congestion, with a TTI ranging between 95 to 119 percent during morning and evening peaks as well as during the midday. This result is depicted in Figure 5.

Figure 5: Travel Time Index – MD 355 Southbound, Shady Grove Metro Station Policy Area



Pedestrians and Bicyclists

- Capital Bikeshare is newly established in the County with docks installed or planned near Metrorail stations in CBD locations: Friendship Heights, Bethesda, and Silver Spring, as well as locations in Takoma Park, and the Shady Grove/Life Sciences Center.
- The Planning Department will contract out multi-modal traffic counts at selected locations in the County to build a solid bicycle and pedestrian database. There has been an increase in the collection of observed pedestrian data and bicycle data based as a result of new traffic impact study data collection requirements. However, the sparse coverage of this data limits the ability to perform an analysis of local trends at this time.

Ride On

- In FY13, average weekday ridership on Ride On routes reached 88,370, a slight increase from the 87,990 riders in FY12. Ridership has decreased from the 95,000 average weekday boardings in FY08 due to service reductions of about five percent during the past two years.

Metrobus

- WMATA's average daily bus ridership in the County in FY13 was 57,631, a decrease from 63,254 in FY12.

Metrorail

- Average weekday ridership in the County is highest at the Silver Spring, Shady Grove, Bethesda, and Friendship Heights stations. These Metrorail stations consistently have the highest ridership in the County.

Attachment

1. 2014 Mobility Assessment Report

EG/MD/JD/am