





2011 Mobility Assessment Report (MAR)

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Completed: 10/19/11

Description

Key Findings:

The 2011 MAR provides information about patterns of mobility in the County. The MAR confirms many of the findings in the 2009 Highway Mobility Report, including:

- Traffic congestion is generally most severe in down-county areas;
- "Priority corridors" generally continue to exhibit the most significant levels of congestion and;
- Nearly half of the intersection in the County exhibit congestion levels that closely approach or exceed current LATR CLV policy area standards.

Figure 1 provides a chart depicting the breakdown of the CLV/LATR ratio for the more than 300 intersections observed in this year's report. Seventeen percent of these intersections exceed LATR standards. Other notable findings in the 2011 MAR are listed below.

Total Vehicle Miles Traveled

- The Federal Highway Administration's National Vehicle-Miles of Travel (VMT) Trend Data indicate a national decline in annual travel in 2009, a slight increase from 2009 to 2010 and a modest decline from 2010 to 2011.
- 2010 VMT has also declined in Montgomery County, about one percent relative to 2009. However, this decrease is not as sharp as many other jurisdictions throughout the Country.

Intersections

- Nearly half of the sampled intersections approach or exceed Policy Area LATR CLV standards as stated in the County's LATR/PAMR Guidelines.

- To date, the first phase of the Intercounty Connector does not appear to have significantly relieved congestion at major intersections in the vicinity of the highway. Future mobility reports will assess traffic congestion along arterials and major highways after the ICC is complete.

Roadways

- Of the roadways sampled during 2010, AM peak period traffic traveling southbound on US 29, from Howard County to University Boulevard (MD 193) exhibited the slowest travel time and the lowest arterial mobility. PM peak period traffic traveling eastbound on University Boulevard, between Georgia Avenue (MD 97) and New Hampshire Avenue (MD 650), exhibited the second lowest arterial mobility of the roadways sampled.
- MD 193, a major east-west route connecting Montgomery and Prince George's Counties, exhibited roughly comparable travel times in both directions during both the morning and afternoon peaks. This pattern contrasts with north-south arterials connecting Montgomery County to the District of Columbia, such as US 29 and MD 355, where travel in one direction dominates during the peak.
- Randolph Road has slower travel times and higher congestion moving east to west during the morning peak relative to traffic moving west to east during the evening peak. This pattern is generally consistent with observed traffic on the Capital Beltway.
- Most of the intersections that are performing near or above capacity are located in the area between the Intercounty Connector and the Capital Beltway, more specifically in the Gaithersburg-Rockville area and along US 29.

Pedestrians

- Much of the observed pedestrian activity on the County's arterial roads is concentrated along roadways in communities that are well-served by bus transit, such as Takoma Park, Silver Spring, White Flint, Wheaton, Rockville, and Gaithersburg.

Bicyclists

- The Planning Department is building its bicycle database and has created a Bicycle Heat map a tool that estimates potential demand for bike routes and bikeshare programs.

Ride On

- Montgomery County Ride On daily ridership in FY10 was reported at 87,990—a decline from 95,000 in FY08. Service reductions of five percent over the past two years have been identified as the main factor contributing to decreased ridership.

Metrobus

- The average daily FY10 Metrobus ridership in the County was 63,254, significantly lower than Ride On. This can be attributed to the relatively limited Metrobus route coverage in the County compared to the more extensive coverage provided by Ride On service.

Metrorail

- Generally, Metrorail ridership has remained relatively stable during the past two years. The five percent ridership decline reported during FY10 is partly attributed to the February 2010 blizzard.
- Shady Grove Metro Station, a terminal station almost exclusively serving commuters, exhibits the most uneven ridership of Red Line stations operating in the County by time of day and direction. Metrorail stations located in communities with more balanced jobs and households land uses, such as Friendship Heights, exhibit ridership patterns that are relatively even throughout the day.

Background:

The purpose of the Mobility Assessment Report (MAR) is to document the Department's periodic analysis of barriers and constraints to mobility within Montgomery County. Constraints to mobility are represented here in the form of historical, current and future motor vehicle traffic congestion trends and patterns. Current congestion measurements included in this report are Critical Lane Volume (CLV) and arterial travel time for priority intersections and corridors in the County. Figure 2 depicts the locations of the top 10 most congested intersections in the County based on the CLV measure. As an alternative to the CLV measure, intersection congestion may also be ranked by comparing the observed CLV to the CLV standard established as part of the Local Area Transportation review. This measure, also reported in the MAR, potentially offers a ranking system for intersection congestion based on adopted policy. Future congestion data is derived from volume-to-capacity ratios (V/C) as portrayed by the Department's TRAVEL/3 transportation model. These transportation measures are intended for use by the Planning Board and County Council to inform their commentary on this year's State Consolidated Transportation Program (CTP) and the County's Capital Improvement Program (CIP) project priorities.

Changes from the 2009 Highway Mobility Report (HMR):

Relative to the 2009 HMR, several changes are reflected in the 2011 MAR, including:

- The name of the report is changed to the **Mobility Assessment Report**. This change reflects the multi-modal character of the information provided in the report -- including auto, transit, pedestrian and bicycle travel.
- As an alternative to the traditional CLV measure, the CLV/LATR ratio is offered as a metric which is used to rank intersection congestion.
- A new metric, the Travel Time Index (TTI), is introduced. Figure 3 illustrates the TTI for southbound AM peak period travel time along US 29 from MD 198 to the D.C. line. This was the slowest travel time observation derived from 2010 sampling along the Priority Corridors. This measure is derived from travel time data provided by the vendor INRIX. INRIX-supplied travel time data offer a stable source of travel time information with the potential for expanded geographical coverage in the future.
- A "bicycle heat map" (see Figure 4) that shows areas of bicycle demand in the County has incorporated in this report. This tool can be used to assist with the prioritization of bike routes and support facilities.

Summary

STAFF RECOMMENDATION:

Staff recommends the Planning Board support the following actions regarding the 2011 Mobility Assessment Report:

- Transmit the 2011 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) priorities.
- Incorporate the Mobility Assessment Report congested intersection ranking system based on the ratio of observed intersection critical lane volume (CLV) to the appropriate Local Area Transportation Review (LATR) CLV standard as an evaluation tool in support of future Capital Improvement Program (CIP) prioritization efforts.
- 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 part of the next quadrennial Subdivision Staging Policy and CIP development cycle.

The staff draft of the 2011 MAR is available on the Planning Board's website under the agenda for October 27 (see Item #9 at the following link):

<http://www.montgomeryplanningboard.org/agenda/2011/agenda20111027e..html>

Figure 1: Intersection CLV/LATR Ratio Categorization

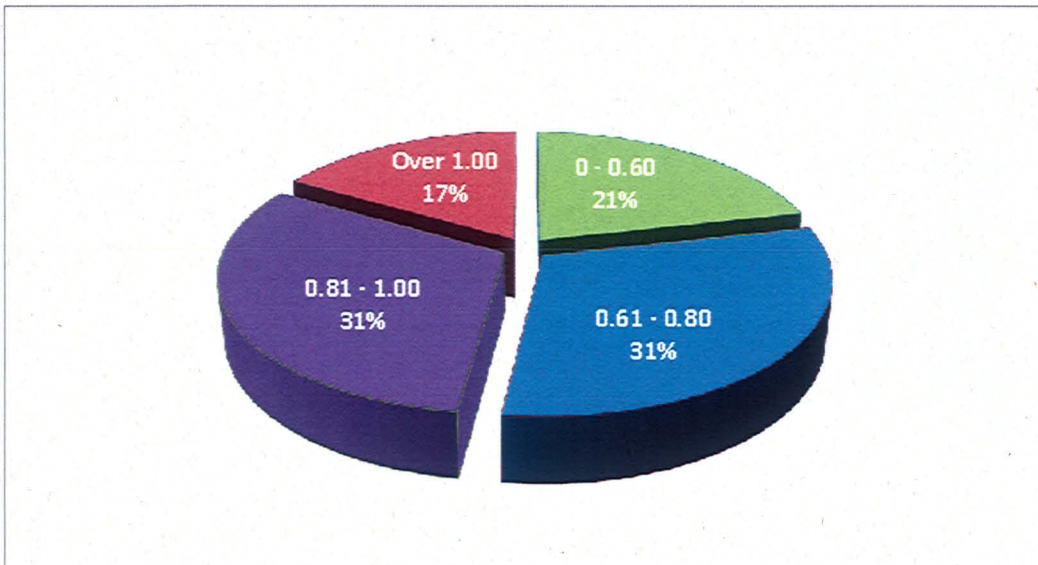


Figure 2: Map of the 10 Most Congested Intersections (Based on CLV)

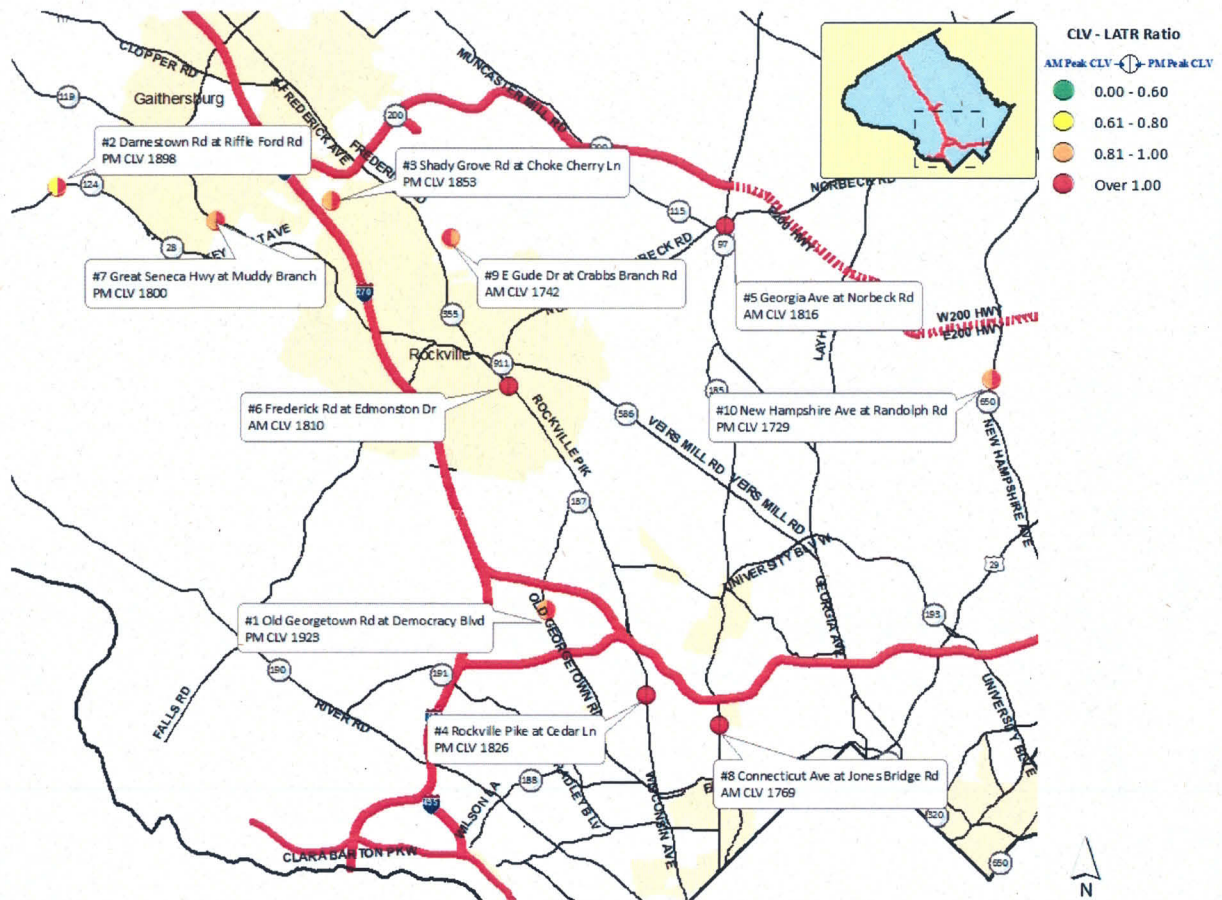


Figure 3: Travel Time Index – Southbound US 29, MD 198 to D.C. Line

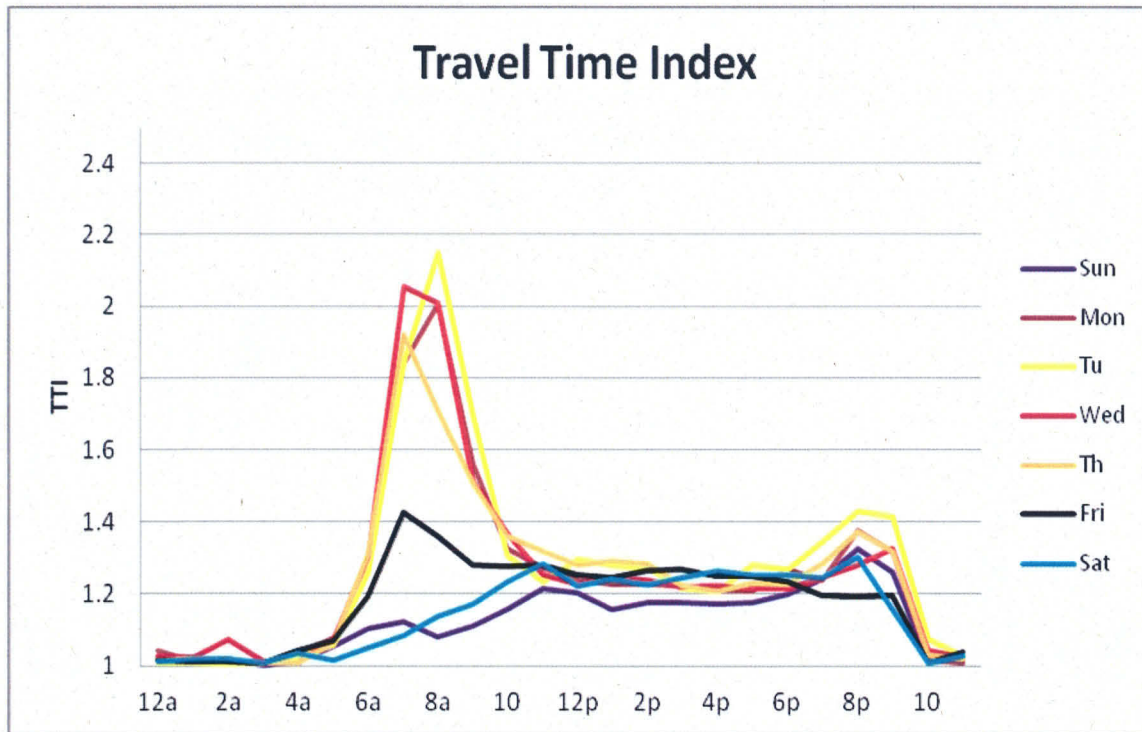


Figure 4: Montgomery County Bicycle Heat Map

