

I-270 North of MD 124

### **Traffic Volume Trends**

Nationwide, after a period of flat or decreasing travel, traffic volumes have started to rise. For the third straight year, the number of vehicle miles travelled has increased. In 2014, the largest increase in over 10 years occurred with travel up by an estimated 1.7% or 50 billion vehicle miles nationwide. Urban areas experienced much of the increase. This holds true for the Baltimore - Washington regions especially in the surrounding suburbs.

The following facts highlight trip patterns in Maryland:

- Maryland is first in the nation in terms of longest commuting times according to the latest American Community Survey
  with an average of 32.5 minutes. The District of Columbia which includes many Maryland commuters is fourth in the
  nation with commuting times on average of 29.9 minutes each way.
- Approximately 220,000 people commute from Maryland into Washington D.C.
- There are almost 140,000 people that commute into Baltimore City each day. Almost 55% of these people travel from Baltimore County with the remaining from other jurisdictions.
- Maryland's population in 2014 was approximately 5.98 million, about 200,000 people greater than in 2010 according
  to the US Census Bureau. By 2040, population is projected to increase to over 6.9 million. In addition, job growth in
  Maryland is expected to keep pace with an estimated 800,000 additional jobs between 2010 and 2040.
- The 2015 Urban Mobility Scorecard has cited the Washington, DC region as number 1 in the nation in terms of yearly delay per auto commuter, increased fuel consumed due to travel in congested conditions and congestion cost per auto commuter in 2014.
- In measures developed as part of the 2015 Urban Mobility Scorecard, the Baltimore Metropolitan area is ranked #14 in truck congestion costs, #18 in excess fuel consumed and #18 in total congestion costs in the nation. The yearly delay experienced by Baltimore area commuters, the leading sign of congestion, ranks the area at #23 nationwide.

## 2015 MARYLAND STATE HIGHWAY MOBILITY REPORT

Roadways in Maryland are owned and operated either by local entities such as counties, cities, local municipalities, private entities or by the MDOT including Maryland SHA or Maryland Transportation Authority (MDTA). Generally, the local roadways carry the lower volumes of traffic. The higher volume roadways are mainly owned and operated by SHA and MDTA. SHA owns and maintains the numbered, non-toll routes in Maryland's 23 counties, a total of 14,800 lane-miles and 2,566 bridges that represent the backbone of Maryland's transportation system. This infrastructure forms the majority of the National Highway System (NHS) in Maryland to connect local and county roads to major commercial, office and residential centers. The transportation network not only provides roadway connections but also multi-modal connectivity to airports, railroads, mass transit, and the port. Although SHA roadways account for only 22% of the state's lane miles they carry 66% of the state's traffic. The MDTA owns and operates all toll roads in the state. This includes I-95 in Baltimore City to the Delaware State Line, I-895 including spurs to I-97 and MD 2, MD 695 from east of MD 10 to MD 151, the Hatem Bridge (US 40), the Bay Bridge (US 50/301), the Nice Bridge (US 301) and MD 200 (Intercounty Connector).

The growth in traffic volumes in the last twenty-five years in Maryland varies greatly. In more rural areas and in center city areas, traffic volumes has seen relatively no growth or even a decrease along certain roadways. Conversely, interstates highways, major arterials and roadways in suburban areas has seen a tremendous amount of growth. The following chart illustrates some of the growth that has taken place in traffic volumes over the last twenty-five years:

Location	1989 Average Daily Traffic	2014 Average Daily Traffic
MD 528 North of MD 90	29,000	46,100
US 50/301 West of US 50/301 Split	36,100	65,000
I-270 North of MD 28	100,500	226,300
I-795 North of I-695	40,000	108,900
MD 235 East of MD 4	34,600	58,500
I-70 West of US 40	41,000	65,100
MD 32 East of MD 108	12,500	45,500

A measure from year to year on the usage of Maryland's roadways besides traffic volumes is reflected in the number of Vehicle Miles Traveled (VMT) along the various roadways. VMT is a standard performance measure of travel for various roadway classifications on a local, regional, state and national level. VMT is defined as the number of vehicles times the distance they traverse along the network. VMT has been measured for decades in each state throughout the nation and thereby gives a comparison in growth from one year and one decade to the next. Many areas in Maryland have seen growth in VMT that has outpaced population growth and SHA's ability to expand the roadway network particularly in the

#### A. TRAFFIC VOLUME TRENDS

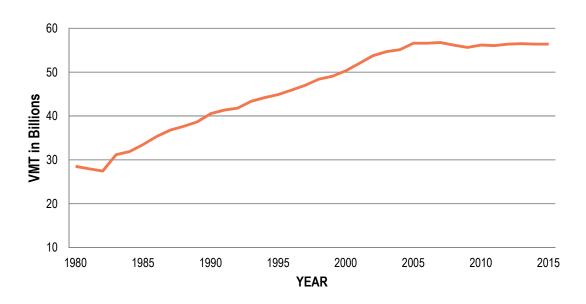


I-70 @ South Mountain

Baltimore / Washington region. This causes an increase in congestion on the roadway network. In order to keep pace with the VMT and congestion, various multi-modal and traveler incentive programs are utilized to help manage the demand for transportation services.

In Maryland, vehicular traffic nearly doubled between the early 1980s' and the mid 2000s'. This increase was based on various economic and social conditions such as the increase of women in the work force and people moving further from their location of employment. The economic downturn of the late 2000s had the opposite impact causing a reduction in VMT. VMT has been mostly flat over the past several years. The following graph depicts the VMT trend over the past 35 years.

#### MARYLAND ANNUAL VEHICLE MILES OF TRAVEL



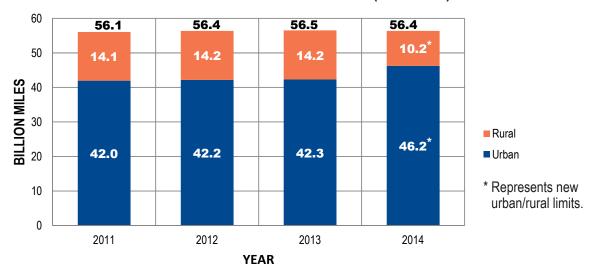
## 2015 MARYLAND STATE HIGHWAY MOBILITY REPORT

In calendar year 2014, the statewide VMT is estimated to be 56.4 billion vehicle miles. This is less than a 0.2% decrease over 2013 and represents a 0.4 billion vehicle miles off the all-time high of 56.8 billion vehicle miles in 2007. The highest volume SHA freeway, SHA arterial and MDTA toll facilities segments are depicted in the following table.

Highest Average Daily Traffic Volumes						
Freeway Section	2014 ADT	Arterial Section	2014 ADT			
I-270 N of I-270 Split	252,000	US 301/MD 5 N of Chadds Ford Road	86,000			
I-270 N of MD 189	251,000	MD 5 S of MD 223	81,000			
I-495 E of MD 650	247,000	MD 124 E of I-270	75,000			
I-495 S of I-270 West Leg	244,000	MD 210 S of I-95	70,000			
I-495 W of MD 97	232,000	MD 4 E of MD 337	70,000			
MDTA Toll Facility Crossings		2014 ADT				
I-95 Ft. McHenry Tunnel		114,000				
I-95 Tydings Bridge		80,000				
I-895 Harbor Tunnel		71,000				
US 50/301 Bay Bridge		70,000				

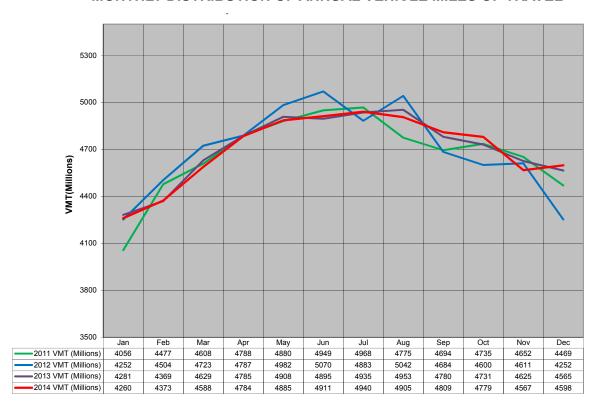
The 2014 VMT on all state and toll maintained roadways was 40.5 billion, which is an increase of approximately 163 million miles over 2013. The 2014 VMT along all other roadways decreased to 15.9 billion from 16.1 billion in 2013. Urban and rural limits were modified in 2014 to reflect changes in the 2010 Census. This modification substantially increased the VMT on urban roadways in Maryland and decreased the VMT on rural roadways. The following chart shows the VMT trends with for the last few years.

#### MARYLAND VEHICLE MILES OF TRAVEL (BILLIONS)



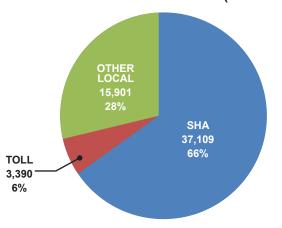
The charts below show the monthly distribution and the disaggregation of VMT by ownership and roadway type.

#### MONTHLY DISTRIBUTION OF ANNUAL VEHICLE MILES OF TRAVEL

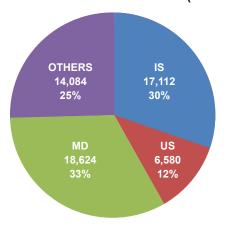


NOTE: This chart displays estimated monthly Vehicle Miles of Travel compared with the previous year based on data collected at approximately 67 continuous count stations throughout the State.

#### 2014 VMT BY OWNERSHIP (MILLION)

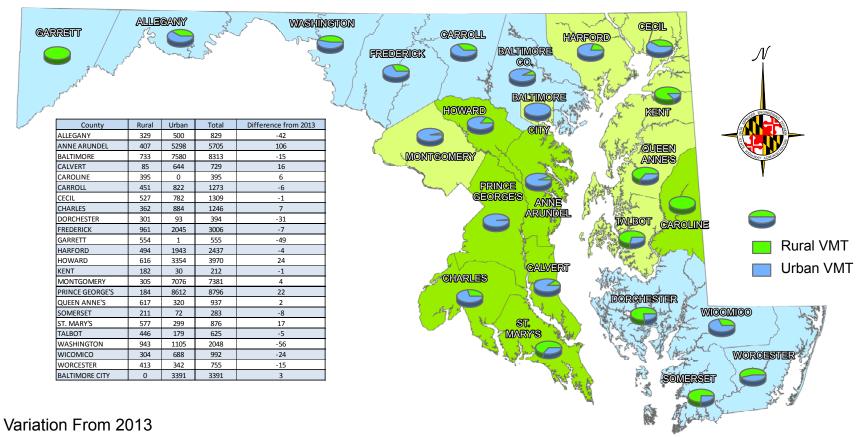


#### 2014 VMT BY ROADWAY TYPE (MILLION)



On a countywide basis, the change in VMT from county to county varies with some counties increasing, some decreasing and other remaining virtually the same. The largest increase in VMT experienced was in Anne Arundel County while Washington County had the greatest decrease in total volume. This is shown in the following figure.

#### **VEHICLE MILES OF TRAVEL - 2014 DATA**



- Increased More Than 5 Million Miles
- Remained Within 5 Million Miles
- Decreased More Than 5 Million Miles

The state was divided into five regions for purposes of analysis throughout this report. The regions and the Counties within those regions are as follows:

#### **BALTIMORE METROPOLITAN REGION**

- Anne Arundel County
- Baltimore City
- Baltimore County
- Carroll County
- Harford County
- Howard County

# WASHINGTON METROPOLITAN REGION (MARYLAND COUNTIES)

- Frederick County
- Montgomery County
- Prince George's County

#### **SOUTHERN MARYLAND**

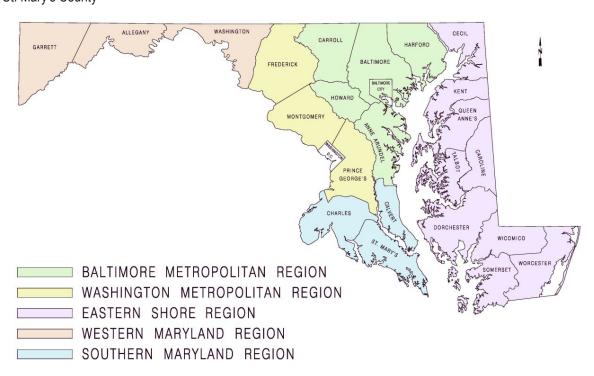
- Calvert County
- Charles County
- St. Mary's County

#### **EASTERN SHORE**

- Caroline County
- Cecil County
- Dorchester County
- Kent County
- Queen Anne's County
- Somerset County
- Talbot County
- Wicomico County
- Worcester County

#### **WESTERN MARYLAND**

- Allegany County
- Garrett County
- Washington County



## 2015 MARYLAND STATE HIGHWAY MOBILITY REPORT

The VMT was measured for the five regions. As shown by the following chart almost all areas were flat last year except for a decrease in VMT in Western Maryland.

VMT	2011	2012	2013	2014
Baltimore Region	25.0	25.2	25.2	25.2
Washington Region	19.1	19.1	19.2	19.2
Southern Region	2.8	2.8	2.9	2.9
Eastern Shore Region	5.8	5.9	5.8	5.8
Western Region	3.4	3.4	3.4	3.3
Total	56.1	56.4	56.5	56.4