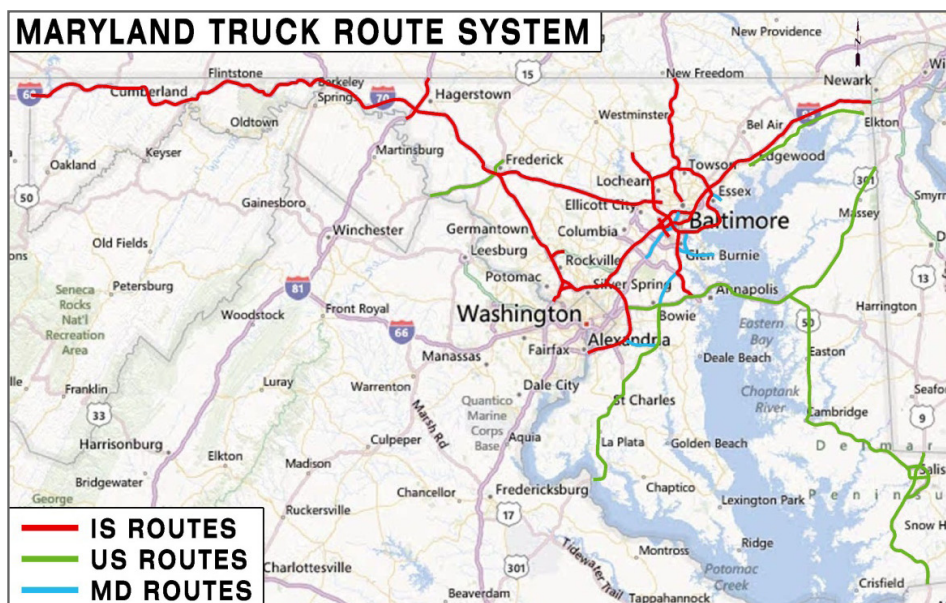


# 2014 Maryland State Highway Mobility Report



## 3. Freight

To facilitate optimal freight movement in Maryland certain federal and state highways have been designated as the Maryland Truck Route System. The Maryland Truck Route System consists of approximately 900 miles of roadways throughout the State. This includes all interstate routes (481 miles), seven segments of U.S. Routes (320 miles) including US 13, US 40, US 50, US 301, US 340, US 13 Business and US 50 Business and seven segments of Maryland state routes (99 miles). The state routes include sections of Maryland 3, Maryland 4, Maryland 10, Maryland 100, Maryland 201, Maryland 295 and Maryland 702.



Freight is integrated into highway project planning as a result of the 2011 SHA/MDTA Freight Implementation Plan. This document provides direction for future transportation investments to enhance the safe and efficient movement of commercial vehicle freight.



### Truck Trends

Maryland's economy is enhanced by a safe, efficient, and reliable freight network. The highways, port infrastructure, airport, and rails must be in good working condition and relatively congestion free. Unpredictable congestion and delay reduces the reliability of delivery times, which leads to costlier freight movement. The trend toward leaner supply chains and changes in online retail require efficient roadway networks, warehouses, and intermodal facilities to ensure timely and cost-effective delivery. Planners and policymakers are paying special attention to population growth and related freight demand, increases in warehouse and distribution facilities in heavily trafficked corridors, and growth in intermodal traffic, which is expected to increase with the completion of the Panama Canal expansion project in 2015. Distribution giant Amazon.com announced in 2013 that it is building a one million square foot distribution center in Southeast Baltimore.

Freight movement in Maryland is estimated to be over \$365 billion accounting for over 510 million tons of goods. Approximately 60% of the freight tonnage moves by highway. In order to support the economic viability SHA processes over 139,000 oversize/overweight truck load permits. In addition to the movement of goods in or around Maryland, our position as a "through" state especially related to the key corridors of I-95 and I-81 will continue to require that freight congestion be minimized. For example, on sections of I-95 there are over 25,000 trucks per day utilizing the roadway. The movement of freight is impacted by the same reliability and congestion that motorists on the network face.

The American Transportation Research Institute (ATRI) evaluated congestion costs for trucking on the interstate system which showed Maryland was rated 7th highest among all states in congestion costs. The Washington DC metropolitan area experienced the 5th highest congestion costs for highway freight movement.

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The Federal Highway Administration (FHWA) Office of Management and Operations and ATRI monitor interstate highways as part of the Freight Performance Initiative. A major monitoring area is the identification of bottlenecks on the nation's interstate system. The 2013 Freight Performance Measures Analysis of Freight Significant Highway Locations report identifies a congestion index based on the peak and off peak speeds below the free flow speeds over 24 hour periods and the freight demand at the junction of two interstate roadways nationwide. Four of the top 100 locations were in Maryland including in order:

- I-95 @ I-495
- I-495 @ I-270
- I-95 @ I-395
- I-95 @ I-695 (South)

This congestion has an influence on the cost of the products we buy, impacts to the environment and safety. Cost ranging from delays of freight arriving on time to additional fuel costs are more significant to truckers than to motorists. Truckers experience a greater level of congestion at certain locations throughout the State. Based on the analysis of bottleneck locations the following sections represent the most congested areas of freight traffic:

- I-495 Inner Loop @ I-270
- I-695 Inner Loop @ MD 147
- I-95 Northbound @ MD 100
- I-695 Outer Loop @ Edmondson
- US 29 Northbound @ MD 175
- I-270 Southbound Spur @ I-270
- I-95 Outer Loop @ Greenbelt Metro
- I-270 Northbound @ MD 80
- I-270 Northbound @ North of MD 124

These bottlenecks result in driver delay costs, cargo delay costs, diesel costs and increased emissions. This amounts to an estimated \$62.1 million in 2013. The following graph illustrated the costs.

## 2013 FREIGHT CONGESTION COSTS ON MARYLAND'S FREEWAYS/EXPRESSWAYS

