What Can We Do?

Decision-Makers

We cannot build our way out of congestion. Transportation investments must go toward maintaining the existing system and improving operations to reduce congestion and the effects of incidents. When possible, find dedicated, additional funding for transportation.

Planners, Engineers and Other Partners

- Consider operations strategies, such as emergency traffic patrol, incident management task forces, traffic signal coordination and intersection improvements.
- Incorporate Transportation Demand Management (TDM) by making it more desirable to live near jobs and more convenient to walk, bicycle and take transit; we need to address demand as well as supply of transportation.
- In addition to reducing congestion, review other ways to help freight move reliably.

All of Us

- Check conditions before departing to consider transportation mode, route and least-congested time to travel if you have flexibility.
- Drive safely to reduce the likelihood of a crash.
- Learn about and participate in transportation planning and funding decisions.

Agencies at Work

Baltimore Regional Transportation Board (BRTB) builds consensus among transportation agencies in the Baltimore metropolitan region.

Maryland Department of Transportation (MDOT) mission is to enhance the quality of life for Maryland's citizens by providing a balanced and sustainable multi-modal transportation system for safe, efficient passenger and freight movement.

State Highway Administration (SHA) is responsible for planning, designing, building and maintaining the State's highways and bridges.

Maryland Transportation Authority (MDTA) is responsible for planning, designing, building and maintaining the State's tolled highways and bridges

Maryland Transit Administration (MTA) operates local and commuter buses, light rail, metro subway, commuter rail, and paratransit system.

Everyday Resources

MD 511 - www.md511.org

StreetSmart – *http://www.bmorestreetsmart.com/*

CHART - http://www.chart.state.md.us/

MTA Trip Planner - http://mta.maryland.gov/

Abstract: *Congestion is getting harder to manage, but tools to analyze it and cost-effective measures are getting better. This is the first in a series of brochures using archived operations data to understand the causes of congestion and what can be done about it. The focus corridor for this edition is MD 295 in the vicinity of MD 175, however the emphasis on operations, multimodal approaches, and partnerships as realistic approaches to congestion are widely applicable.*

The Baltimore Regional Transportation Board is the Metropolitan Planning Organization for the Baltimore region. The BRTB is an 11 member board representing the cites of Annapolis and Baltimore; Anne Arundel, Baltimore, Carroll, Harford and Howard counties; the Maryland Departments of Transportation, Environment,, and Planning; and the Maryland Transit Administration. The Baltimore Metropolitan Council provides technical and staff support to the BRTB.

Photo Credits: Ed Stylc; Baltimore Metropolitan Council; US Park Service Web Page

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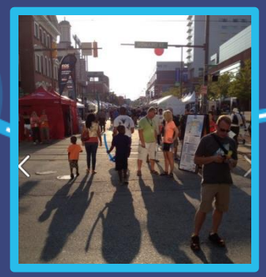
BRTB Baltimore Regional Transportation Board

Baltimore Metropolitan Council

Sitting in traffic *again*?

We all have better things to do…

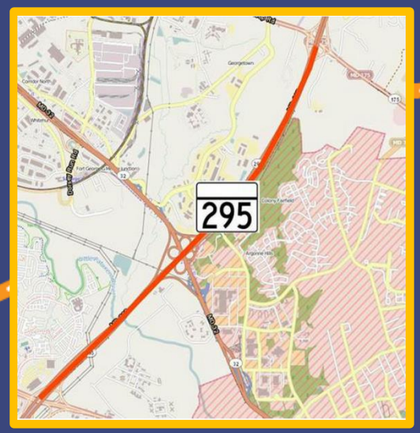


Inside:

New tools and what you can do to reduce congestion

This Edition:

MD 295 in the vicinity of MD 175



Congestion costs each traveler in this 4-mile section $2,400 per year!

BRTB Baltimore Regional Transportation Board

March 2014

Managing congestion is hard in the 21st century – insufficient funding and ever-increasing traffic pose a challenge to providing an efficient transportation system for all. Fortunately, we have a new generation of analytic tools, enhanced strategies and better cooperation among organizations.

The Story of One Corridor: MD 295 in the vicinity of MD 175

MD 295 carries over 100,000 vehicles a day. Congestion is especially a problem northbound on an average afternoon. Investments to improve reliability would help in this situation.

Recurring Congestion

The average northbound travel speed on the 4-mile section of MD 295 between MD 175 and MD 198 drops from 65 mph to 34 mph during the afternoon peak hour on weekdays in 2013.

Reliability

On an incident-free afternoon, it takes about 4 minutes to drive through this segment. However, travel frequently slows down due to factors such as crashes, construction and weather. You would need to budget almost 15 minutes – nearly quadruple the time – to be on time.

Non-Recurring Congestion

Crashes, construction and weather are among the reasons for frustrating non-recurring congestion. For example, on Wednesday, October 9, 2013, a crash in a southbound lane at 4:54 a.m. closed MD 295 in both directions, causing a 5-hour traffic jam. Implementing measures to reduce the number of crashes and the time to clear them will increase the safety of our transportation system while reducing non-recurring congestion.

This section has a high crash rate (69.2 accidents / hundred million vehicle miles traveled)*. In 2012, 126 incidents directly affected commuters over this 4-mile segment, which carried an Annual Average Daily Traffic (AADT) of 95,000 vehicles. Specifically:

- *22* people were injured
- 30 crashes were reported to police (96 total crashes).

**Calculated using crash rate for a Roadway Segment (R_{SEG})*
Source: ITE Traffic Engineering Handbook: 6th Edition

Effective, Low-Cost Strategies
Current and Potential Use on MD 295

Recurring Congestion

Traffic Signal Optimization on parallel roads, such as US 1, could reduce traffic on MD 295 by making it more attractive for shorter trips to be made on local roads. In 2012, the Maryland State Highway Administration (SHA) reviewed the signal timing at 256 signals in the Baltimore region. Changes were made to 113 signals resulting in an annual delay reduction of 468,000 hours.
Source: SHA

Non-Recurring Congestion

Current Strategies:

The state's Coordinated Highways Action Response Team (CHART) helps reduce congestion on MD 295, as well as throughout the state, by providing traffic and incident management, emergency management and response, and safety patrols and assistance to motorists. In 2012, the CHART program provided the following benefits to the users of our highway system:

- User cost savings of about $1 billion, from reductions in travel delay, fuel consumption and emissions.
- Over 63,000 incident responses and assists to stranded motorists.
- A 24 percent reduction in incident duration due to CHART operations.
- Benefit to cost ratio of 30 to 1.

Source: *2012 CHART Performance Evaluation and Benefits Analysis*, University of Maryland, July 2013

Potential Strategies:

- Around the clock safety patrols on MD 295.
- Increased availability and use of real-time traffic data on MD 295 and parallel roadways to speed incident notification to travelers and operators and enable routing of traffic to alternate routes

The source of most of the data and analysis in this brochure is the **I-95 Corridor Coalition Vehicle Probe Project (VPP) Suite.** For information, see www.i95coalition.org.