



**2013
Annual Report**

**Hampton Roads
Transportation
Operations
Center**

Hampton Roads Transportation Operations Center 2013 Performance Highlights

The Hampton Roads Transportation Operations Center (HRTOC) consisted of two groups, Maintenance and Operations that were divided into seven departments: Inventory Management, Fleet Asset, Information Technology, Field & Systems Maintenance, Control Room, Safety Service Patrol (SSP), and Bridge/Tunnel Operations thru November 2013. These departments worked together to achieve decreased incident times, enhanced traveler information and timely assistance to motorists. On June 19 2013 VDOT awarded the Transportation Operations Center and Statewide Advanced Traffic Management System Services contract to Serco Inc. Serco transitioned operations at the HRTOC on midnight November 13, 2012.

2013 Recaps

- There were 81,666 events logged by the Control Room; a 4% increase over 2012, with an average of 121 disabled vehicle events logged per day.
- 54% of all events were detected by the Safety Service Patrol and 17% by Closed-Circuit Television (CCTV) cameras in the Control Room. The remaining 29% were reported from multiple sources to include the VDOT Call Center and Virginia State Police (VSP).
- The Safety Service Patrol drove 3,066,295 miles and responded to 55,903 incidents, including 5,352 accidents and 41,486 disabled vehicles.
- The Safety Service Patrol average response time to an incident was seven minutes, down from eight minutes in 2012.
- Average clearance time for incidents when the Safety Service Patrol was on scene was 24 minutes.



Training, Safety and Incident Management

Training that enhances safety standards.

Key Accomplishments in 2013:

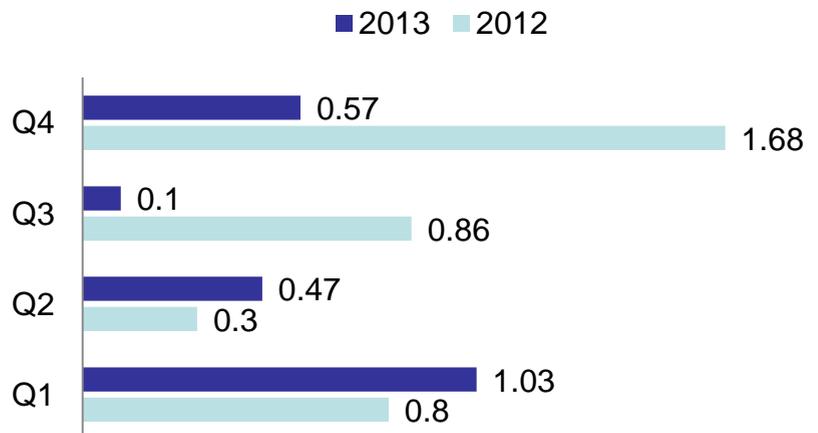
- The HRTOC trainer provided SSP training at other Virginia TOC's including the Richmond TOC and Northern TOC.
- The HRTOC Incident Management Coordinator attended many conferences, training courses and groups including 6 meetings of the Hampton Roads Drive Safe Association.



The Hampton Roads Transportation Operations Center (HRTOC) emphasizes training to ensure that all employees are equipped with the skill sets required to safely and efficiently perform their job functions. Training components, including lesson plans and materials, are specifically developed for transportation operations and for HRTOC personnel. In addition to formal training, safety meetings are held before each SSP work shift to address current issues and to reinforce the importance of a safe work ethic. The safety meeting can cover any number of issues and serve as a reminder for things such as preventing fatigued driving, assisting specialty vehicles including luxury and hybrid vehicles and communicating with motorists during assists. The HRTOC Safety Committee reviews any accident involving a HRTOC contract employee. Most accidents are investigated by the HRTOC Incident Management Coordinator (IMC).

The IMC attended several association meetings including the Regional Concept of Transportation Operations (RCTO), Hampton Roads Emergency Management Committee (HREMC), Hampton Roads Drive Safe and the Virginia Tow association. He also conducted 34 Strategic Highway Research Program (SHRP2) classes training a total of 946 responders.

Ratio of Accidents per 100,000 Miles Driven, Quarterly

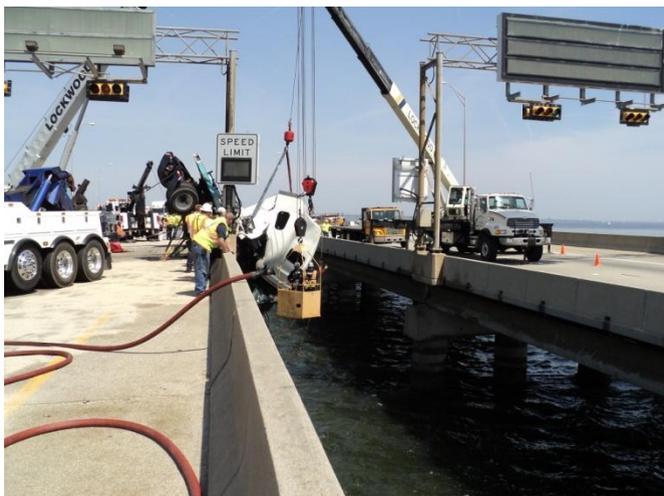


Training, Safety and Incident Management

Training that enhances safety standards.

Important functions of the IMC are incident response and escorting superloads. Superloads are cargo that require special permits to travel on state roads and may need an escort due to their size. In 2013 the HRTOC IMC was involved in escorting two superloads.

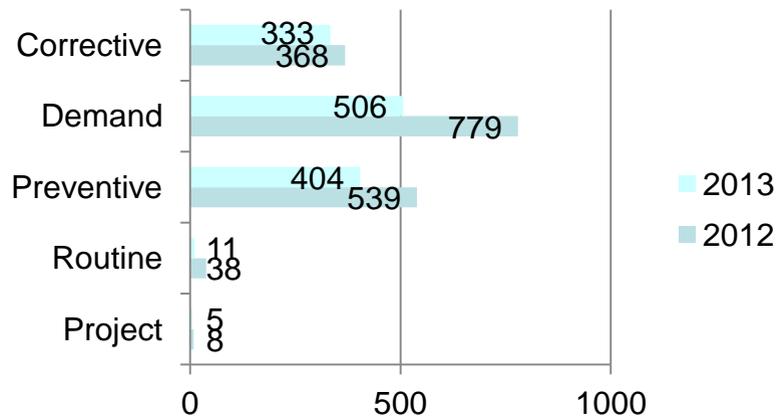
When the IMC responds to an incident he must act as a VDOT representative to ensure all VDOT responsibilities are fulfilled. The HRTOC IMC responded to 91 incidents in 2013. 35 of which were overturned tractor trailers. When the IMC is on a scene he works with multiple agencies to aid with communication and quick clearance.



IT Management

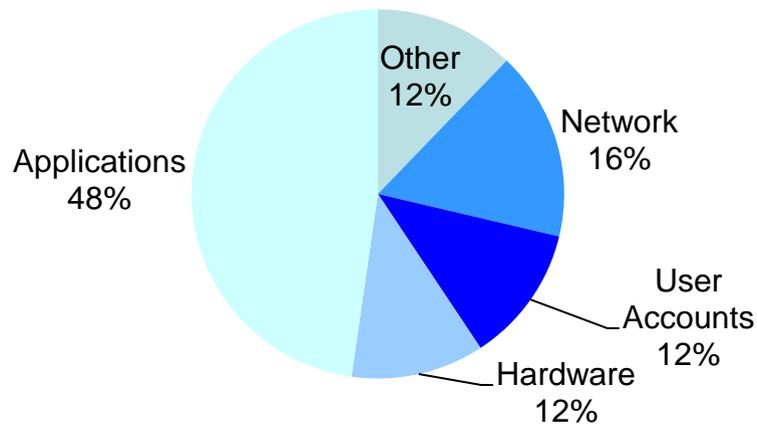
Behind the scenes keeping it up and running.

2013 IT Tasks Completed by Type



*Data is for 2013 January-November 8th 2013

2013 IT Request by Type



*Data is for 2013 January-November 8th 2013

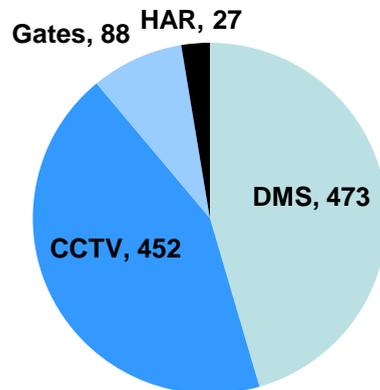
Maintenance

Keeping information sources ready to go when you are.

Operators in the HRTOC control room as well as motorists around the region rely on hundreds of field assets for timely and accurate incident information. The HRTOC Traffic Management System covers virtually the entire interstate system on the south side of Hampton Roads and east of Lightfoot on the Peninsula, as well as some arterial roadways; a total of 140 roadway miles. This system consists of more than 500 roadside cabinets linked via 552 miles of fiber optic cable. The infrastructure provides power, control and data, to (and from) 282 cameras [CCTV], 202 Dynamic Message Signs [DMS], six Highway Advisory Radio transmitters [HAR] and five reversible roadway gate sets.

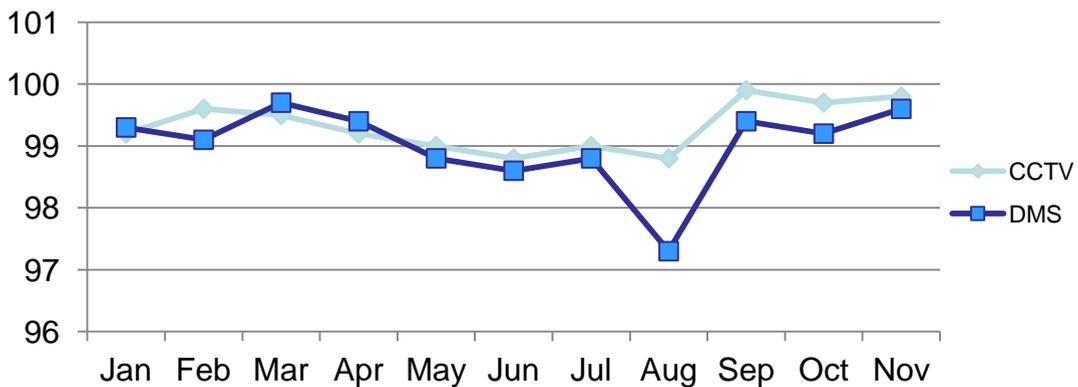
Due to the size and complexity of this infrastructure the Maintenance Group at the HRTOC was a critical component to ensure these devices are performing at the highest levels of service possible.

2013 Repairs by Device Type



*Data is for 2013 January-November 8th 2013

2013 CCTV & DMS Monthly Average Device Availability



Control Room

Providing the information motorists need to stay on the go.

Key Accomplishments in 2013:

- Actively bridged the gap between the Control Room and the Virginia State Police (VSP) Communications Center thru meetings at the HRTOC and the VSP communications center.
- Supported many Hampton Roads' projects via messages posted to overhead signs and sent to the Highway Advisory Radio(HAR).
- Obtained full staffing level on all 3 shifts and completed new systems training as well as Recumbent Training for control room staff at the transition to Serco.



Assisting motorists to reach their destination safely and quickly is the ultimate goal of the HRTOC. This is done by providing timely and accurate information about roadway conditions through the use of sophisticated traffic management and communications equipment.

The HRTOC control room operators monitor video feeds from over 280 cameras, 24-hours a day, seven days a week, for changes in roadway conditions. There were almost 14,000 events detected by control room operators via CCTV in 2013.

The control room video wall completed the transition from analog to digital and is able to display multiple video streams into the conference room/ Emergency Operations Center (EOC).

The 511 system provides motorists with real-time traffic information and live streaming roadway images to assist them with making the best travel choices.

VaTraffic, a web-based application that feeds the 511 system, is used by operators to monitor, track and assess activities affecting the Hampton Roads area roadways.

In 2013 operators created over 21,00 incident reports in VaTraffic, 4,134 of those reports were for accidents and 3,558 were for disabled vehicles. Reports are created as a result of incidents, such as vehicle crashes, planned maintenance events or weather events. As events progress, change or are cleared, updates are submitted to VaTraffic. The majority of reports created in 2013 were for congestion and can be several hours in duration. Updates are completed by the operators approximately every 30 minutes to change queue length or other important information.

The VaTraffic weather event with the longest duration in 2013 was a snow storm in February with icy road conditions lasting over 2 days. Operators played a large role in the stand up of the Emergency Operations Center (EOC) at the HRTOC during this snow event. Transportation officials from all over the region met at the HRTOC to track weather conditions and make decisions.

Control Room

Providing the information motorists need to stay on the go.

Event Type	Description	Event Total
Accident	Vehicle Collision	6,290
Debris	Ladder, mattress, furniture, ect in the roadway	4,332
Disabled	Disabled vehicle	44,342
Abandoned	Abandoned vehicle	2,290
Bridge Open	A scheduled opening, an in-progress opening, or a malfunction of the area bridges.	1,449
Choke Point	The HRTOC assists with congestion at the area bridges, tunnels, ect.	4,382
Other	Police activity, medical emergency, brush fire, ect.	645
HOV Change	Manual changes made to the HOV Reversible Roadway by the HRTOC.	2,047
Roadwork	Stationary work zone, emergency maintainance, mobile lane closure, ect.	11,546
Special Event	Event concert, cultural event, ect.	529
Off Highway*	Incident on city street or arterial roadway.	2,561
Maintenance	Repairs and/or maintenance of the HTOC field equipment.	998
Vehicle Fire	Vehicle fire that required extinguishing	169
Amber/Ozone Alert	Alerted motorists via message signs.	1

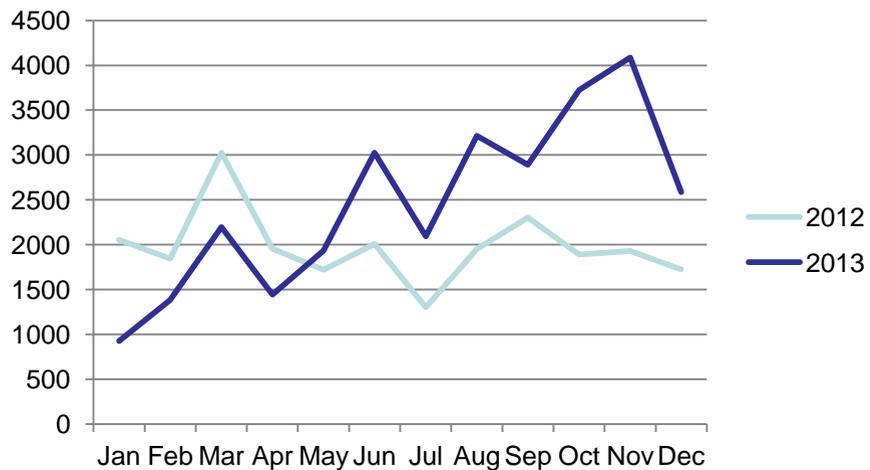
*Includes events logged on the portion of I-64 in the VDOT Richmond District that is patrolled by the HRTOC SSP.

The HRTOC continues to use the Lane Closure Advisory Management System (LCAMS) to aid with monitoring and resolving conflicts of scheduled activities.

Control room operators logged a total of 81,666 events in 2013- a 4% increase over 2012.

The two event types that had the biggest rate of increase over 2013 were Special Events and Roadwork.

Weekly Lane Closure Counts



Safety Service Patrol

Assisting motorists quickly and safely - reducing delays and improving travel in Hampton Roads.

Key Accomplishments in 2013:

- Akima, NJW and Delcan were brought on as subcontractors.
- SSP Foremen carry “Emergency Scene Ahead Signs” which are deployed on long term incidents and provide additional advanced warning to motorists.

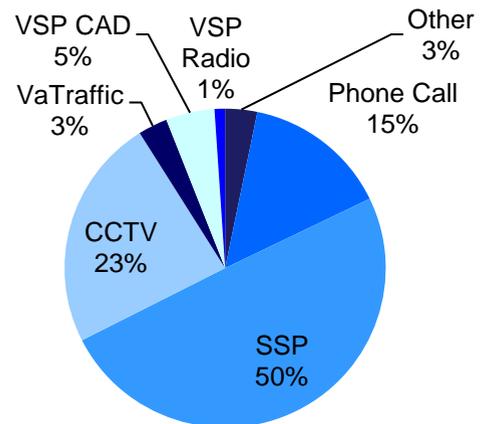


The HRTOC Safety Service Patrol program has evolved from basic motorist assistance into a full incident management and emergency response program. In addition to providing assistance to travelers, the SSP detect events, clear obstructions and debris from the roadway, and provide traffic control for emergency responders.

The majority of events recorded in the HRTOC incident database are detected by the patrollers that are out on the roadway 24 hours a day, 365 days a year. In 2013 the SSP detected over 44,000 events. The most common type of event detected by the SSP was disabled vehicles.

Since the response time for incidents detected by the SSP is usually very low those incidents are not included in the reported average SSP response time.

Quick response times help lanes be reopened faster and minimizes congestion delays. The average response time decreased by a full minute from 2012 to 2013.



2013 Events by Detection Source

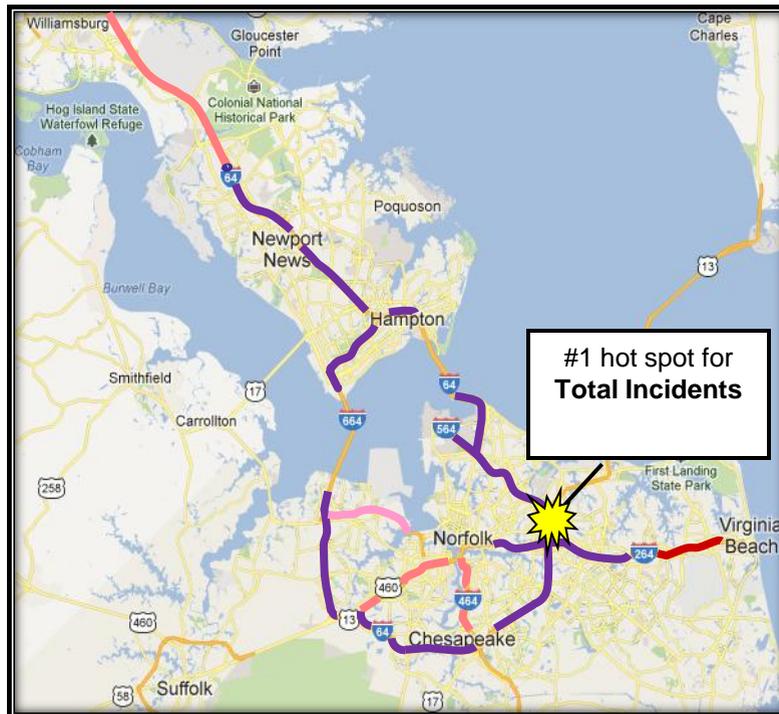
Average Incident Duration*, in minutes



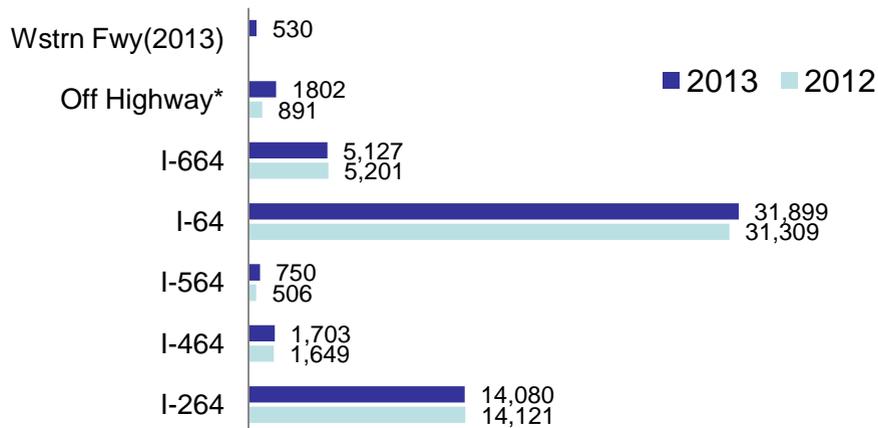
*Only includes incidents where an SSP responded, but was not the detection source

Safety Service Patrol

Assisting motorists quickly and safely - reducing delays and improving travel in Hampton Roads.



SSP Response by Roadway

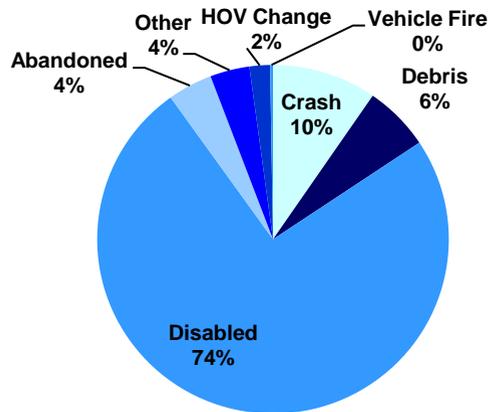


*Off Highway counts for 2012 include responses on the Western Freeway and between exits 220 & 227 on I-64 (VDOT Richmond District)

Safety Service Patrol

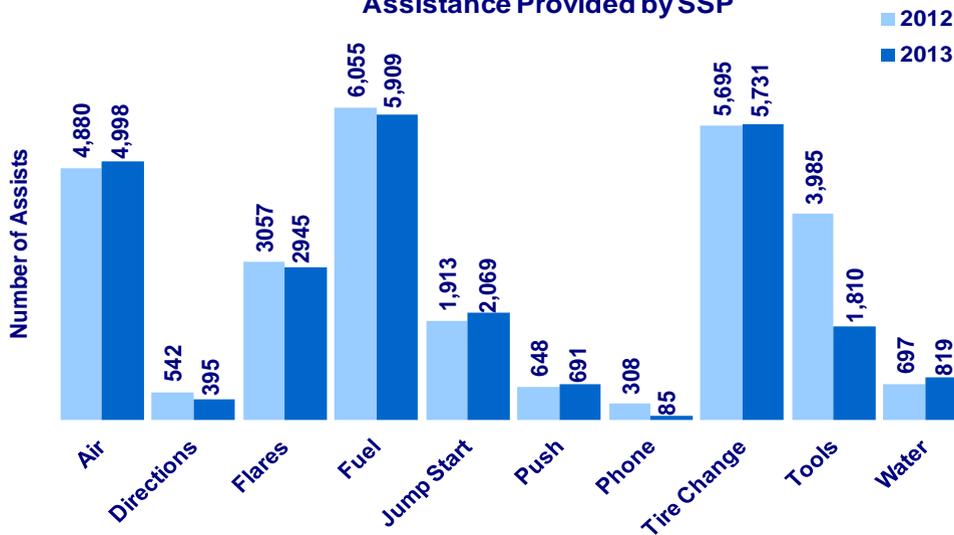
Assisting motorists quickly and safely - reducing delays and improving travel in Hampton Roads.

2013 SSP Response by Event Type



*Includes responses to Off Highway events

Assistance Provided by SSP



Thank you!

Motorist quotes about HRTOC Safety Service Patrollers

“Thank you so much! I was out with my 3 kids and it was very scary to be sitting roadside on I-64 at night with traffic whipping by. Your service is invaluable.”

“The SSP driver was amazing. He was very nice and helpful. He was very fast and friendly. Thank You So Much!!”

“The gentleman who help me could not have been nicer or explained things better.”

Know before you go

Motorist information that is easy to access and readily available.

Before you hit the road, check traffic conditions to avoid congestion and delays. Use these Know Before You Go information resources to check roadway conditions in Hampton Roads and beyond.

511 Virginia

By phone:

Dial 511 from any phone, cell or landline, or download the 511 app on your smart phone and tell the 511 system what road you are traveling on or what route you are interested in, and you will get personalized statewide traffic information tailored specifically for you.

Via the Internet:

Visit www.VA511.org to view traffic cameras, set up email and text alerts, learn about road construction, bridge lifts and more, all at one convenient web location.

Reach The Beach

The "Reach the Beach" initiative is used to aid travelers and tourists coming from other parts of the state toward the Virginia Beach Oceanfront or the Outer Banks in North Carolina. Virginia's coastal region is a prime destination for vacationers especially during warm months of the year. Reach the Beach utilizes electronic signage (below), Welcome Center Monitors and 511 to provide real-time traffic information.



Highway Advisory Radio & TrafficLine

Tune into the Hampton Roads HAR, on channel 1680 on the AM dial, for roadway conditions and updates.

If you are outside of the broadcast area, call the Hampton Roads TrafficLine at 757-361-3016, to receive the same report over the phone.

Lane Closure Advisory Management System (LCAMS)

Visit <http://vdot.openlcams.com> to view current and future scheduled lane closures statewide.

Find us on Twitter



VDOT Hampton Roads @VaDOTHR

The Virginia Department of Transportation's Hampton Roads District. For real-time traffic updates, follow [@511hamptonroads](https://twitter.com/511hamptonroads). For statewide info, follow [@VaDOT](https://twitter.com/VaDOT).

Travel-Time

The HRTOC is excited about the implementation of Travel-Time in Hampton Roads. It is currently on six Dynamic Message Signs (DMS) throughout the region. Travel-Time uses proven INRIX Traffic technology and is incorporated in the Regional traffic management software (DYNAC).

Hours of operation are from 5am-9pm Monday thru Friday and 8am-8pm Saturday and Sunday.

