



**MANAGEMENT, OPERATIONS, AND INTELLIGENT  
TRANSPORTATION SYSTEMS (MOITS) POLICY TASK FORCE AND  
MOITS TECHNICAL SUBCOMMITTEE**

**VDOT's New 511 Traffic Information Program and Reach The Beach  
Transportation, Video & Data (TVD) Presentation**

September 11, 2012

**Scott Cowherd**

**Operations and Security Division**

## VDOT's New 511 Service

- **New 511 service launched May 18!**
- **New system offers free streaming video to the public**
- **Service disseminates traffic info through several outlets:**
  - **Web and mobile applications (iPhone and Droid)**
  - **Interactive Voice Response (IVR) phone system**
  - **Information displays at Welcome Centers**
  - **Twitter and email alerts**
  - **Travel Time road signs in Hampton Roads**
- **VDOT's new 511 traffic information program is expected to be cost neutral through the addition of sponsorships for the Commonwealth's taxpayers over the life of the 5-year base contract**

# VDOT's New 511 Service Key Features

IVR

- New voice recognition engine
- Directional recognition
- Travel times

Web/Mobile  
App

- Redesigned site
- Live streaming video (15 frames/sec)
- Mobile app with live traffic information
- Travel times

Video/  
Operations  
Data

- Free video access through web service
- Includes attribution to VDOT
- Operations data publicly available

511  
Highway  
Signs

- Sponsorship acknowledgements will be added to 511 signs

# VDOT Video Transition: Key Considerations

## Availability

- **The standard level of streaming video will be available to all media members**
  - Free via URL
  - 15 frame per sec
  - Information sharing agreement
- **Coordination with TrafficLand is on-going to ensure a smooth transition and no interruption in service**

## Flexibility

- **Users will have multiple options for receiving video**
  - Standard Video Service
  - Higher Quality Service
  - 3<sup>rd</sup> Party redistributed

## No software application required

- **Video display does not require a software application, video can be ingested into any webpage interface**

## VDOT 511 attribution banner will be included at the top of all video feeds

- **Purpose is to promote the 511 program and improve user mobility / safety**





# Virginia Traffic Information

Click here to see the different, free ways to use 511.



My 511 | Map Views | Text Views | Resources | Reach the Beach | Contact Us | Help

**Weather** [Log in to Customize](#)

**Traffic Alerts** [+20 New](#)

**Info**

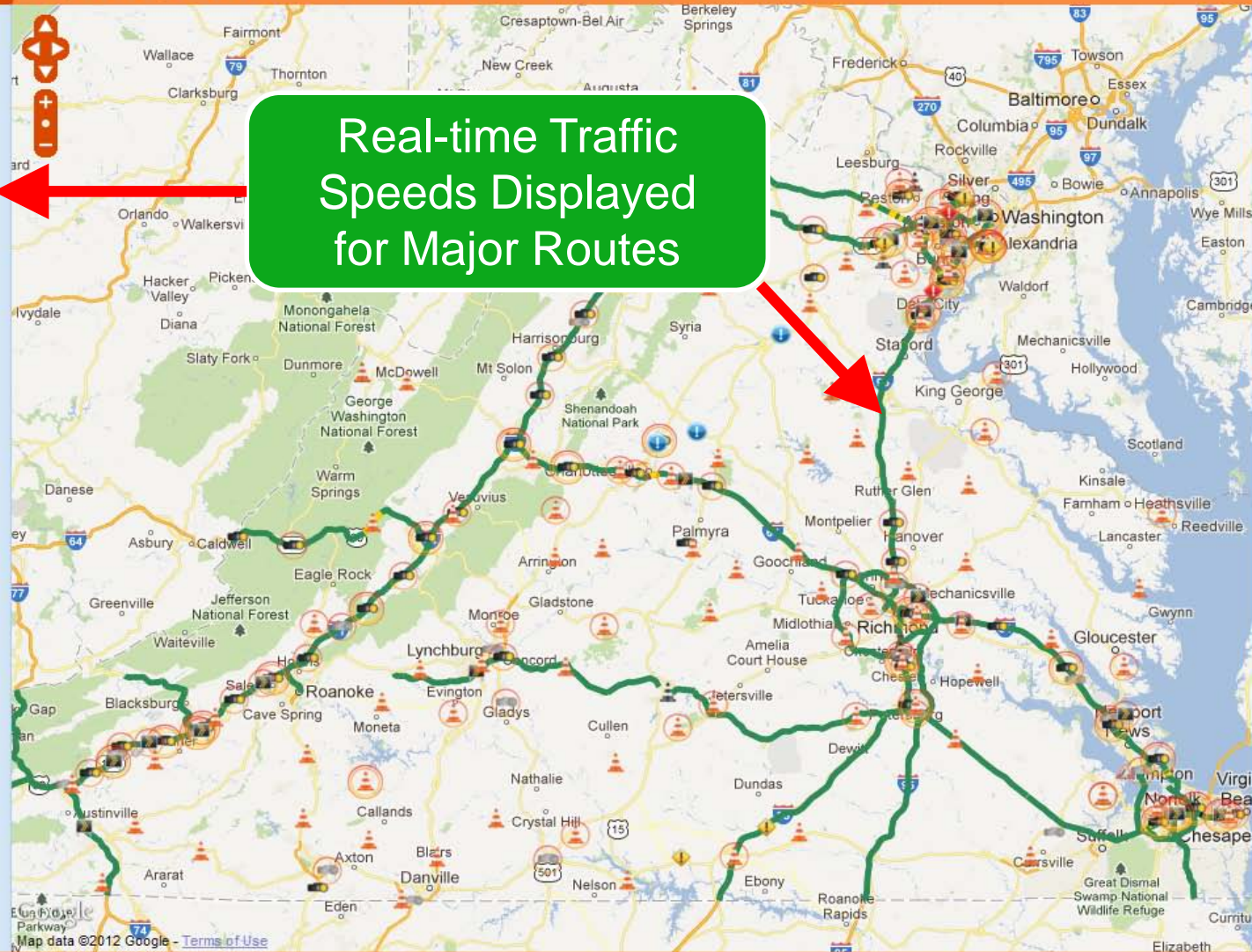
**I-95**

Northbound Lane	Southbound Lane
Speed <b>65 mph</b>	Speed <b>65 mph</b>

**I-95 from Plank Road Fredericksburg to The Capital Beltway (41.2 miles)**

Northbound Lane	Southbound Lane
Speed 60 mph	Speed 30 mph
Travel Time 40 min	Travel Time 72 min

**Legend** [more info](#)





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**Traffic Alerts** +20 New

**Info**

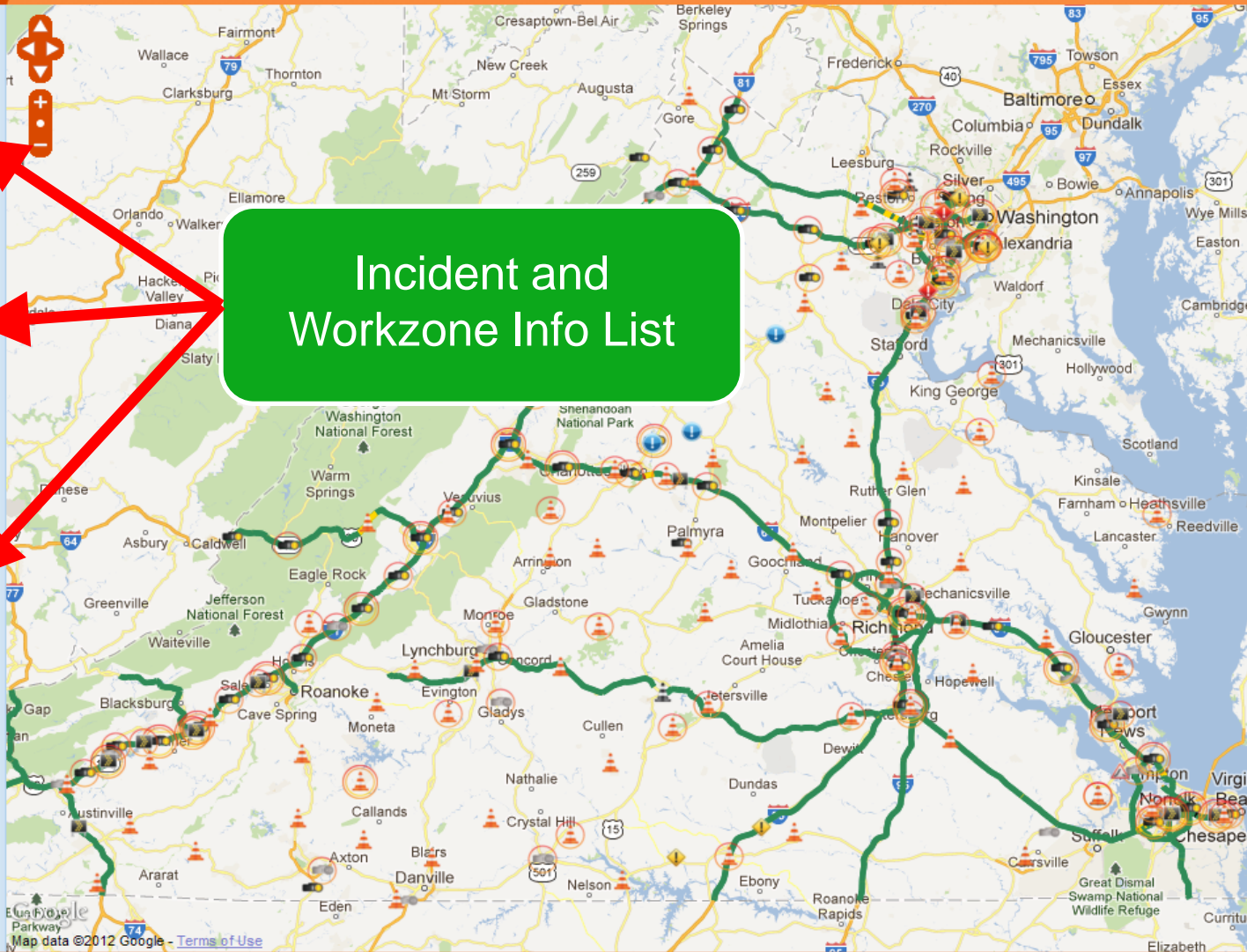
**I-95S from MM 163.0 to MM 166.0**  
 Description:  
 On I-95 in the County of Fairfax from mile marker 163 to mile marker 166, motorists can expect potential delays in this area from 05/11/12 at 8:00 AM until 05/11/12 at 7:00 PM due to construction activities. The south right shoulder is a mobile closure.  
 Last updated:  
 Fri 05/11/2012 9:22 AM EDT

**Rt. 641E (Prince William County) at Old Bridge Rd**  
 Description:  
 On Rt. 641 (Old Bridge Rd) in the County of Prince William from Rt. 2410N (Prince William County) to Smoketown Rd; Rt. 2000E (Prince William County), motorists can expect potential delays in this area from 05/11/12 at 9:00 AM until 05/11/12 at 3:00 PM due to maintenance activities. The east left lane is closed. The west left lane is closed.  
 Last updated:  
 Fri 05/11/2012 9:03 AM EDT

**I-95N at MM 161.3**  
 Description:  
 On I-95 in the County of Fairfax at mile marker 161.3, motorists can expect potential delays in this area from 05/11/12 at 9:00 AM until 05/11/12 at 12:00 PM due to construction activities. The north left lane is closed.  
 Last updated:  
 Fri 05/11/2012 9:22 AM EDT

**US-1N at Richmond Hwy**  
 Description:  
 On US-1 (Richmond Hwy) in the County of Fairfax from Forest Pl; Rt. 3710E/W (Fairfax County) to Rt. 3191N/S (Fairfax County), motorists can expect potential delays in this area from 05/11/12 at 9:30 AM until 05/11/12 at 1:00 PM due to

**Legend** [more info](#)



Incident and Workzone Info List





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**Weather** [Log in to Customize](#)

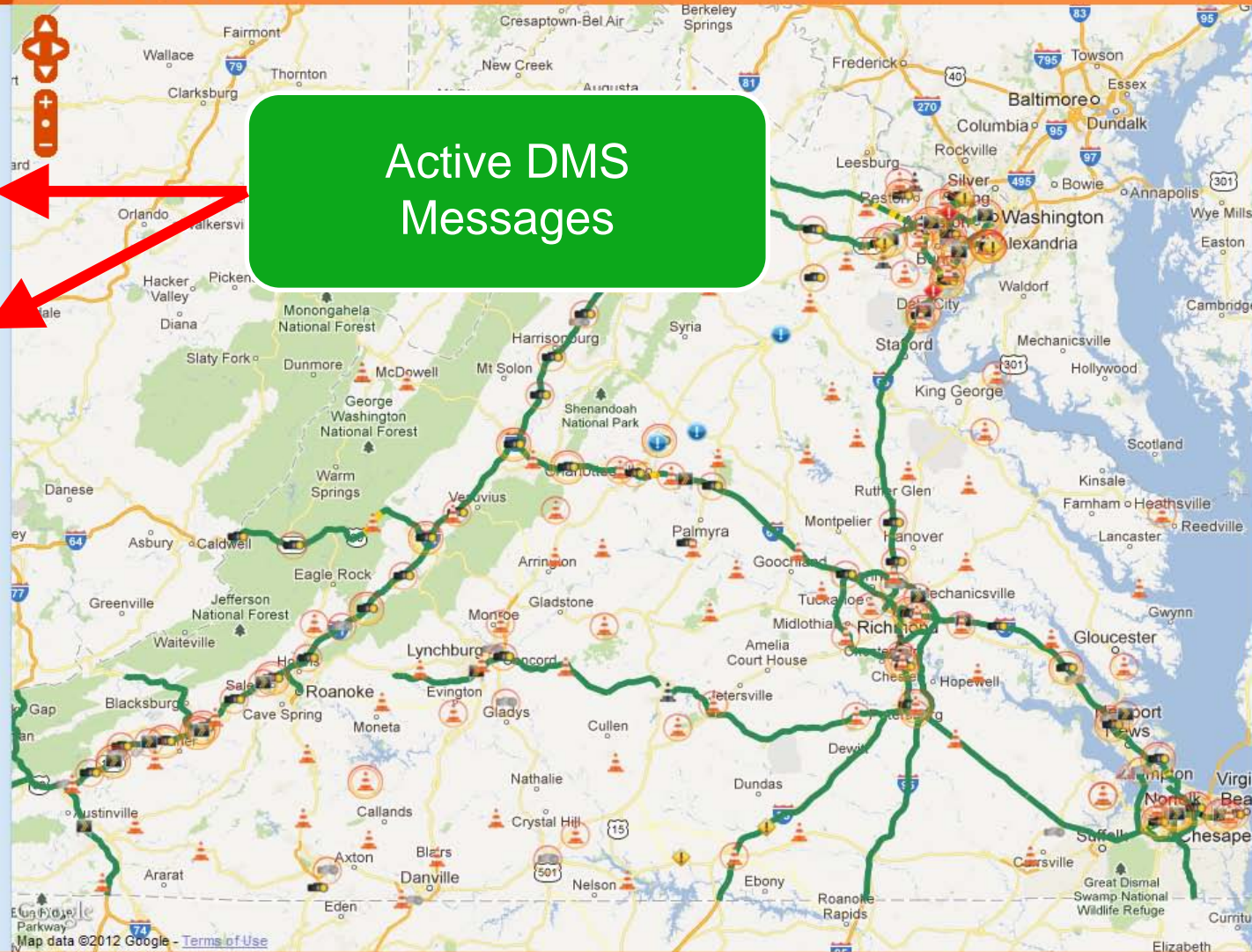
**Traffic Alerts** +20 New

**Info**

I-295 south at MM 36.1  
**BRIDGE WORK THIS WEEKEND I-64 WEST NEAR EXIT 193 EXPECT DELAYS**

I-64 west at MM 194.4  
**BRIDGE WORK THIS WEEKEND NEAR EXIT 193 EXPECT MAJOR DELAYS**

**Legend** [more info](#)





# Virginia Traffic Information

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My 511 | Map Views | Text Views | Resources | Reach the Beach | Contact Us | Help

Weather [Log in to Customize](#)

Traffic Alerts [+20 New](#)

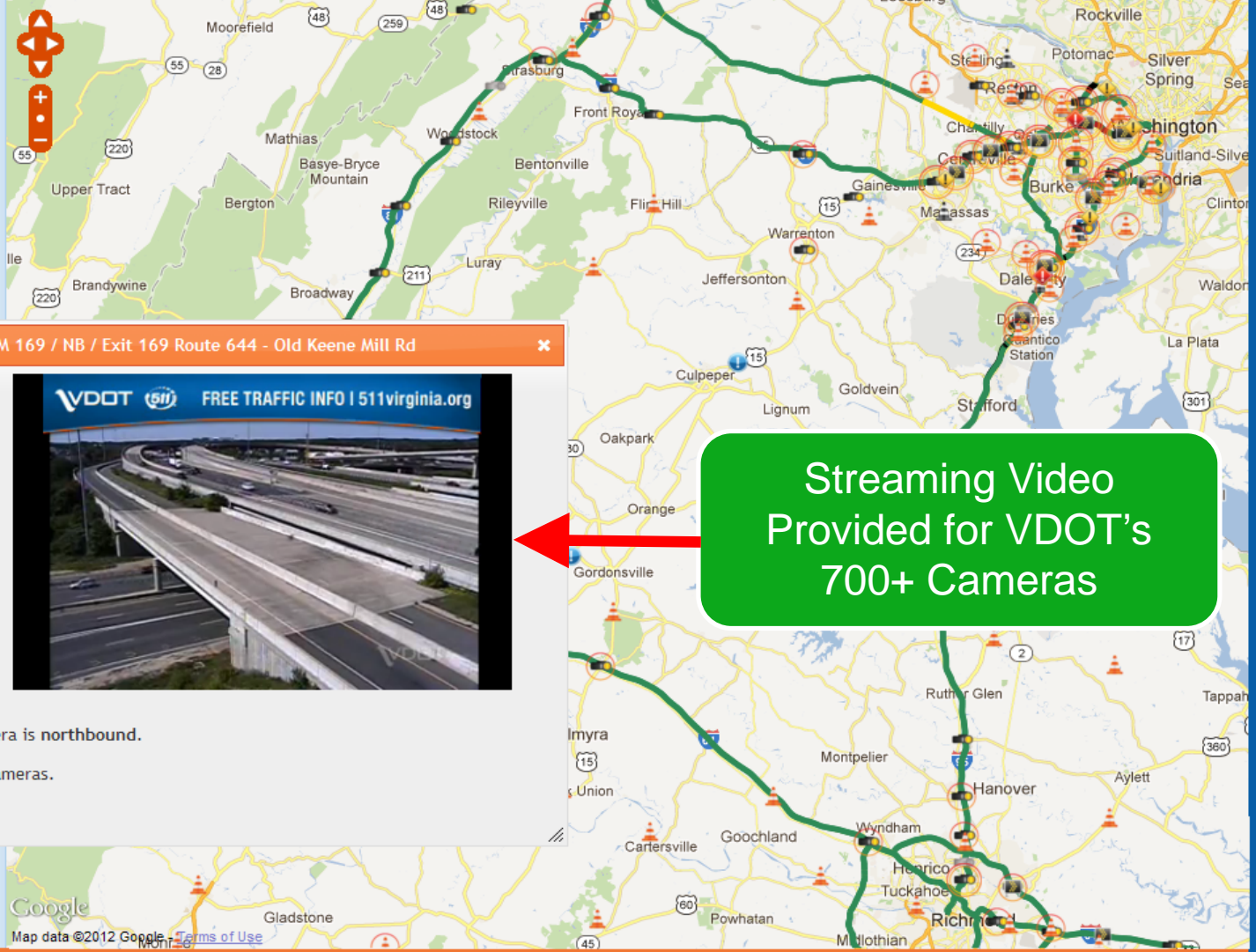
Info

**I-95**

Northbound Lane	Southbound Lane
Speed <b>65 mph</b>	Speed <b>65 mph</b>

I-95 from Plank Road Fredericksburg to The Capital Beltway (41.2 miles)

Northbound Lane	Southbound Lane
Speed 60 mph	Speed 30 mph
Travel Time 40 min	Travel Time 76 min



### Camera Viewer - I-95 / MM 169 / NB / Exit 169 Route 644 - Old Keene Mill Rd

- Springfield Pkwy
- I-95 / MM 169 / NB / Exit 169 Route 644 - Franconia Rd
- I-95 / MM 169 / NB / Exit 169 Route 644 - Old Keene Mill Rd
- I-95 / MM 163 / SB / Exit 163, Route 642 - Lorton Rd/Pohick Rd Ovp
- I-95 / MM 163 / NB / Exit 163, Route 642



Traffic closest to the camera is northbound.

[Log in](#) to select favorite cameras.

Streaming Video Provided for VDOT's 700+ Cameras

Legend [more info](#)

Map data ©2012 Google, [Terms of Use](#)







Virginia Traffic Information

Click here to see the different, free ways to use 511.



My 511 | Map Views | Text Views | Resources | Full Site | Contact Us | Help

**Reach the Beach**

Info

Demo

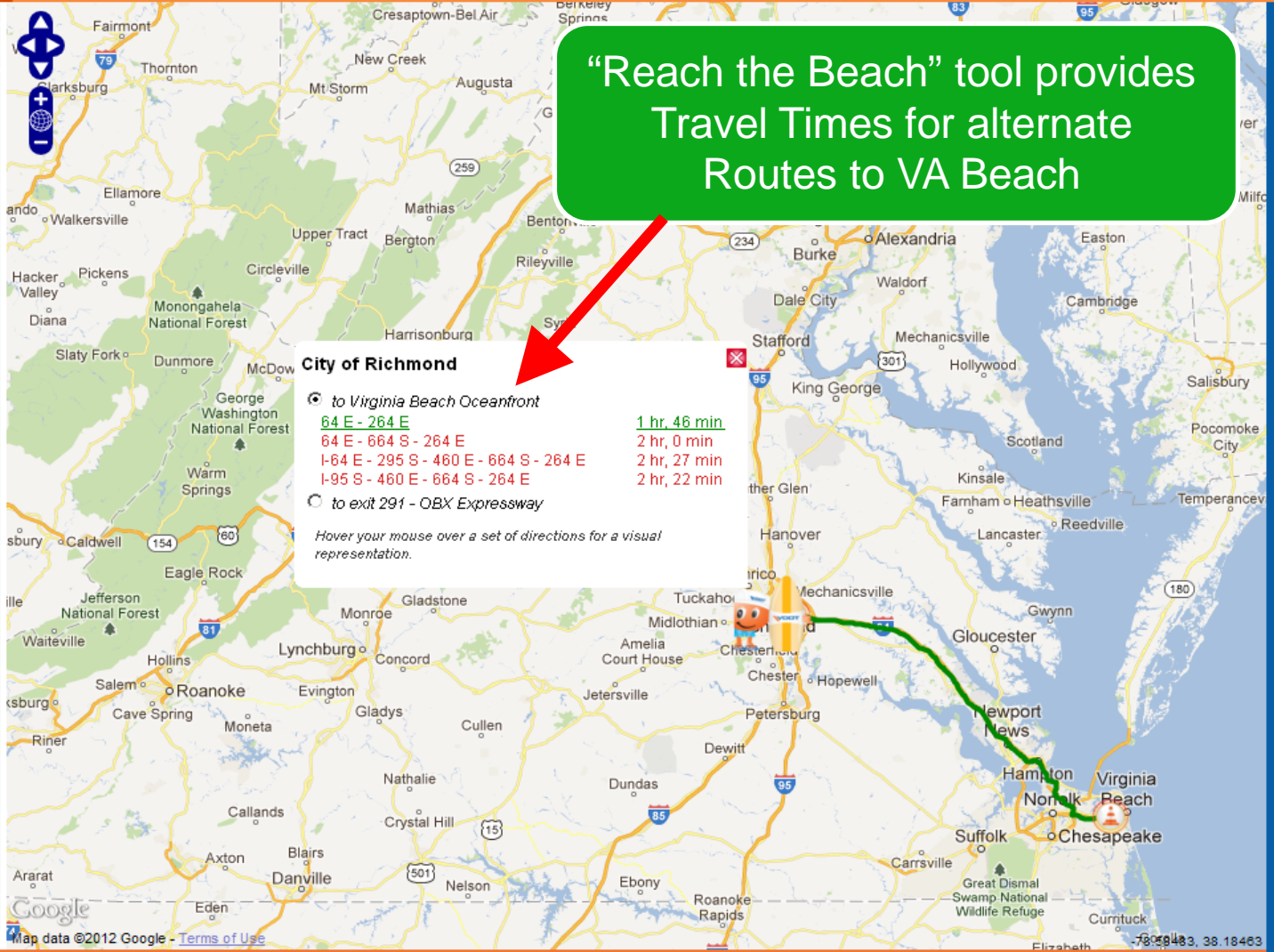
Legend

**Trip-Planning Tools**

- Origin Point
- Reach the Beach Sign
- Fastest Route
- Slower / Alt. Route

**Road & Weather Info**

- Road Work
- Inactive Road Work
- Message Sign
- High Priority Incidents
- Other Incidents
- Open Bridges
- Special Events
- Weather Closures
- Other Weather Events
- Cameras
- Inactive Cameras



“Reach the Beach” tool provides Travel Times for alternate Routes to VA Beach

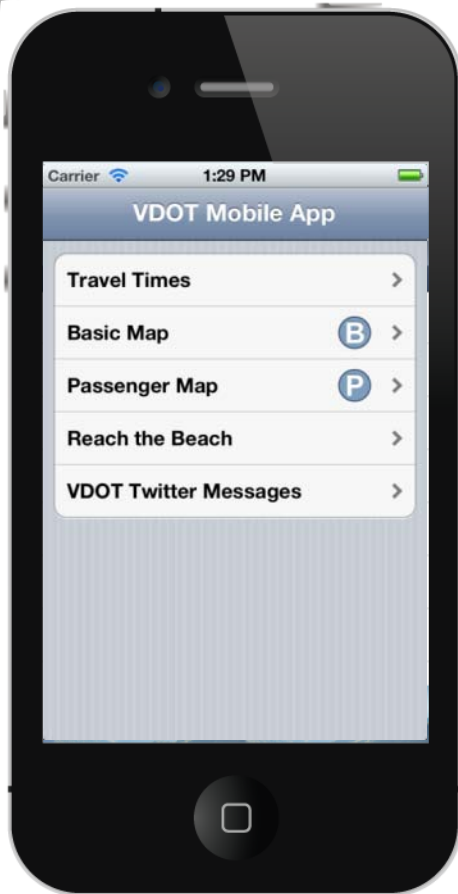


# “Reach the Beach” Campaign

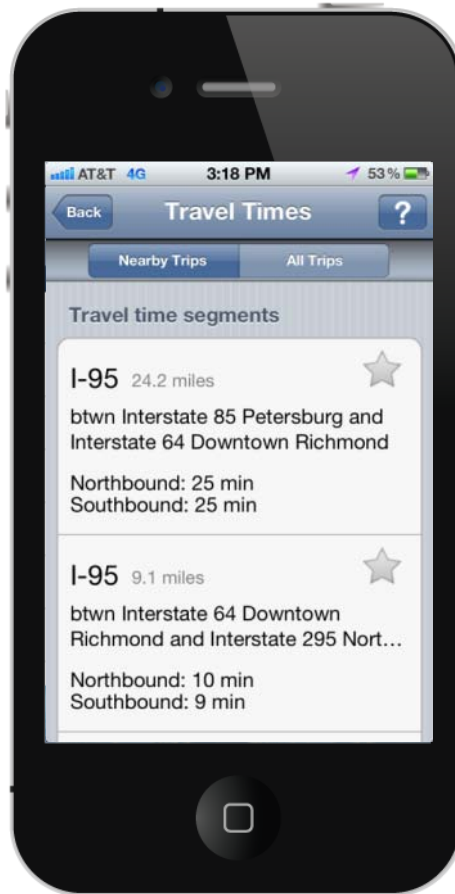
- Provide Travel Times to Beach Travelers
- Times based on INRIX and Bluetooth data
- Provide travel times through:
  - 511 phone service
  - 511 Website
  - Mobile App
  - Info Displays at Welcome Centers
  - Dynamic Message Signs (DMS)



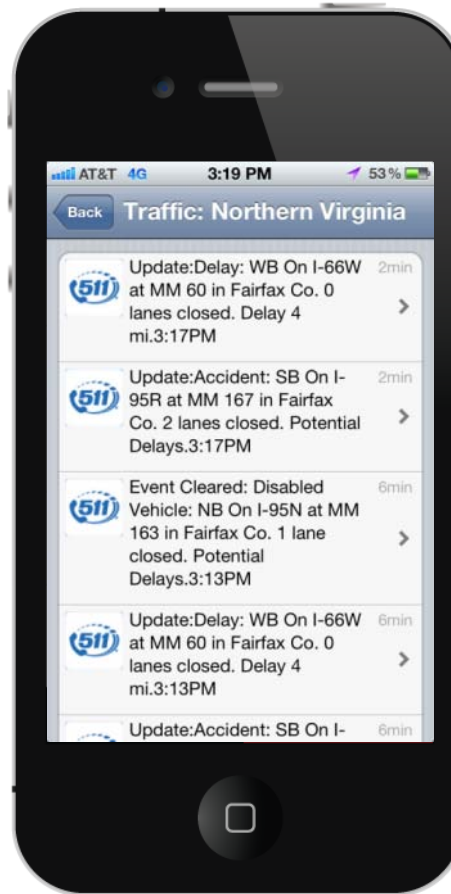
# 511 Mobile App – New Feature for VDOT



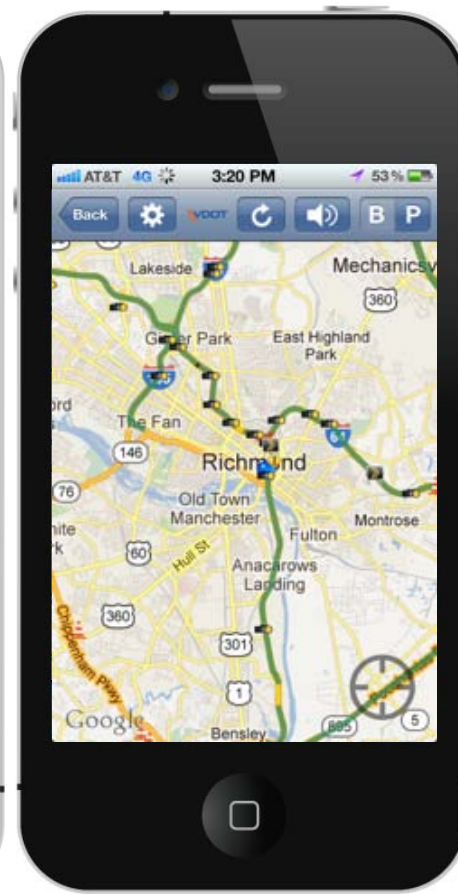
Home Screen



List of Travel Times



Twitter Feed



Map

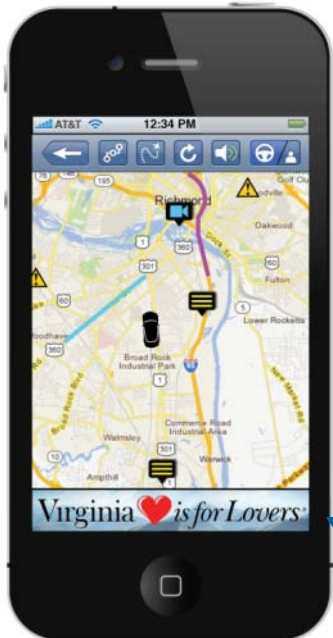
# Revenue Generation Initiative

VDOT is evaluating multiple strategies for revenue generation via sponsorships to offset costs related to operation and maintenance of:

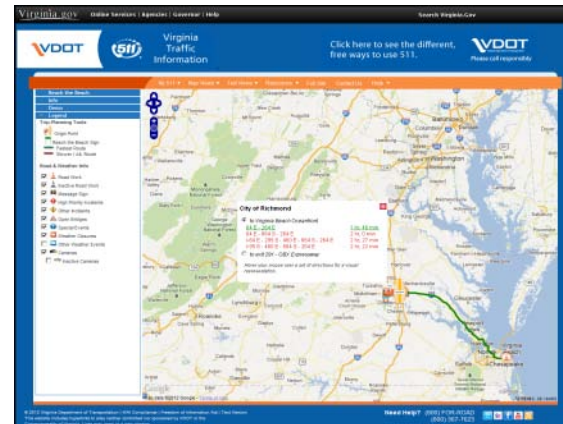
- 511 program

Acknowledgement signs

Banner ad on 511 website



“Couponing” on mobile app



# VDOT One View Portal

[http://www.virginiadot.org/newsroom/511\\_video.asp](http://www.virginiadot.org/newsroom/511_video.asp)

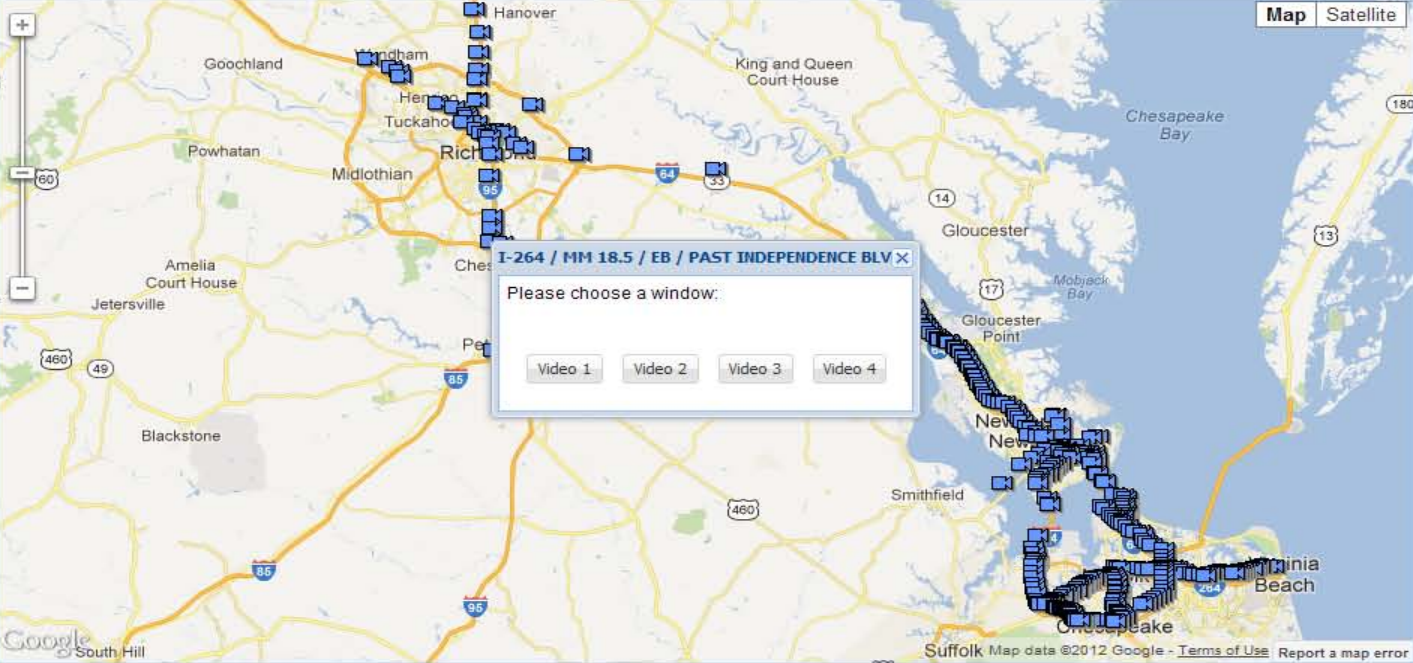
## Demo

# VDOT OneView Portal



ITS Dashboard Video Wall

Focus Area Map Layers



- ### Live Traffic Incidents
- 511** 511statewide Cleared: Bridge/Tunnel Stoppage: EB on I-64 at Hampton Roads Bridge Tunnel East in Hampton.2:34AM  
5 hours ago · reply · retweet · favorite
  - 511** 511statewide Update: Accident: WB on US-33 at MM13 in Rockingham Co. 3 lanes closed. Potential Delays.2:52AM  
5 hours ago · reply · retweet · favorite
  - 511** 511statewide Bridge/Tunnel Stoppage: WB on US-58 at Midtown Tunnel West in Norfolk. 2 lanes closed. Potential Delays.3:12AM  
5 hours ago · reply · retweet · favorite
  - 511** 511statewide Cleared: Bridge/Tunnel Stoppage: WB on US-58 at Midtown Tunnel West in Norfolk.3:16AM  
5 hours ago · reply · retweet · favorite
  - 511** 511statewide Update: Accident: WB on US-33 at MM13 in Rockingham Co. 3 lanes closed. Potential Delays.4:54AM  
3 hours ago · reply · retweet · favorite
  - 511** 511statewide Update: Accident: WB on US-33 at MM13 in Rockingham Co. 3 lanes closed. Potential Delays.7:10AM  
about 1 hour ago · reply · retweet · favorite
  - 511** 511statewide Update: Accident: WB on I-64 at MM289 in Chesapeake. 3 lanes closed. Delay 1 mi.8:00AM  
31 minutes ago · reply · retweet · favorite
  - 511** 511statewide Accident: WB on I-264 at Berkley Bridge in Norfolk. 1 lane closed. Minor Delays.8:04AM

Last Updated: Mon Sep 10 08:29:08 2012

I-95 / MM 73.4 / NB / Maury

I-264 / MM 22 / EB / AT LYNNHAVEN PARKWAY

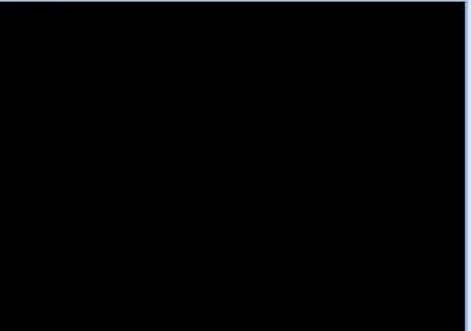
I-64 / MM 243.65 / WB / AT Exit 243A

Video 4

VDOT 511 FREE TRAFFIC INFO | 511virginia.org

VDOT 511 FREE TRAFFIC INFO | 511virginia.org

VDOT 511 FREE TRAFFIC INFO | 511virginia.org



# VDOT OneView Portal



ITS Dashboard | Video Wall

Configuration <<

Traffic Cameras

- I-264 / MM 0.05 / WB / AT I-64 AN
- I-264 / MM 0.12 / EB / AT I-64 AN
- I-264 / MM 0.26 / WB / AT I-64 AN
- I-264 / MM 0.27 / EB / AT I-64 AN
- I-264 / MM 0.29 / EB / AT I-64 AN
- I-264 / MM 0.45 / EB / AT I-64 AN
- I-264 / MM 0.51 / WB / AT I-64 AN
- I-264 / MM 0.86 / WB / PAST GREE
- I-264 / MM 1.47 / EB / AT GREENV
- I-264 / MM 1.86 / WB / BEFORE GF
- I-264 / MM 11 / EB / AT BRAMBLET
- I-264 / MM 11.5 / WB / BEFORE B
- I-264 / MM 12 / EB / AT BALLANTIN
- I-264 / MM 12.5 / EB / BEFORE BR
- I-264 / MM 13 / EB / AT MILITARY
- I-264 / MM 13 / WB / AT BROAD C
- I-264 / MM 13.5 / EB / BEFORE MIL
- I-264 / MM 13.5 / WB / PAST MILI
- I-264 / MM 14 / EB / AT I-64 INTE
- I-264 / MM 14 / WB / AT I-64 INTE

Videowall Layout



I-395 / MM 2 / NB / Exit 2, Route 648 - Ed...



I-495 / MM 54 / NB / Exit 54, Braddock Rd



I-66 / MM 60 / EB / Exit 60, Route 123, Chain Bridge Rd, Blake Ln (WB)



I-264 / MM 13.5 / WB / PAST MILITARY...



I-66 / MM 42.2 / MEDIAN / I-66 W/W Me...



I-66 / MM 53 / EB / Exit 55, Route 7100 - ...



I-66 / MM 62 / EB / Exit 62, Route 243 - N...



I-95 / MM 163 / NB / Exit 163, Route 642...



I-66 / MM 70.6 / WB / 70.6 Mile Marker C...





**Thank you for your time**

**Scott Cowherd**  
**Operations and Security Division**