



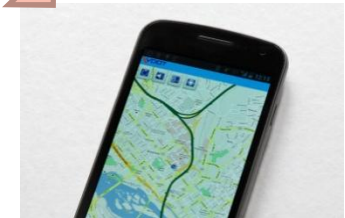
Virginia's Statewide TOC and ATMS Contract

Dean Gustafson, P.E., PTOE
State Operations Engineer
Operations Division

The Everyday Story of Operations



ACCIDENT
4 MILES AHEAD
RIGHT LN CLOSED

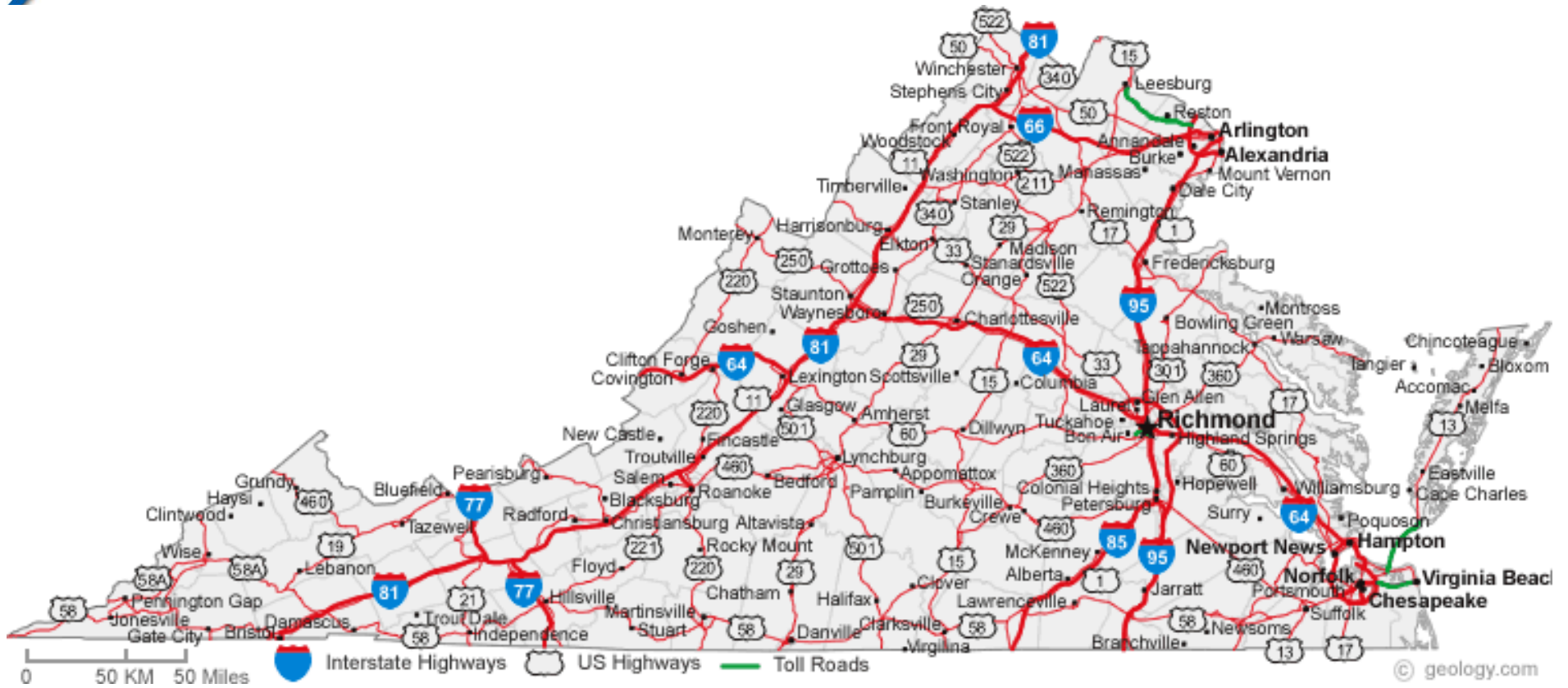


VDOT's Operations Program

- A **core** part of VDOT's mission to plan, deliver, **operate** and maintain a world-class transportation system
- The Operations Program is focused on the user/driver to maximize system reliability and maintain system access
- The Statewide Program consists of statewide policy/planning/guidance and 5 operating regions
 - Transportation Operations Centers (TOC's) in **Hampton Roads, Nova, Richmond, Salem and Staunton**
- Provides information and situational awareness to VDOT management and public



Virginia



Construction Districts
Systems Operations Regions

- ① SOUTHWESTERN
- ② CENTRAL
- ③ EASTERN
- ④ NORTHWESTERN
- ⑤ NORTHERN



VDOT's Statewide Operations Program TOC Components



Cameras



Message Signs



Portable Message Signs



Weather Stations



Shoulder/Lane Control



Traffic Detectors



Ramp Meters



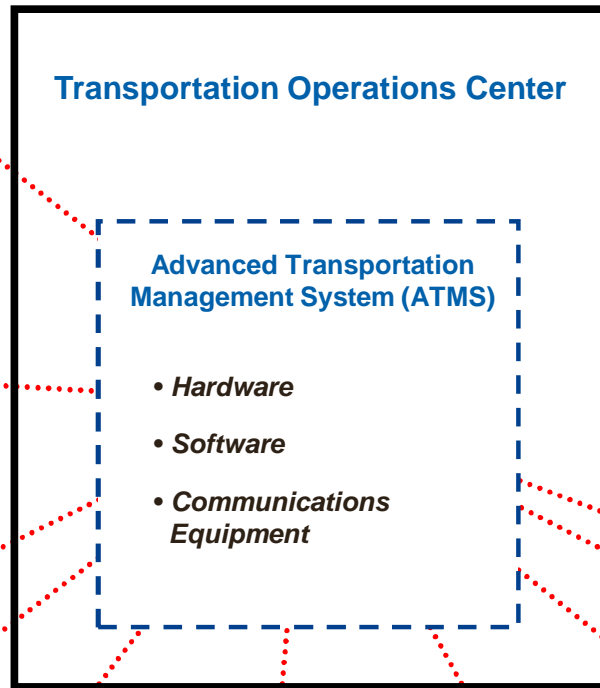
HOV Gates



Overheight Detection



Highway Advisory Radio (HAR)



Five Regions and TOCs

- Northern (Fairfax)
- Eastern (VA Beach)
- Central (Richmond)
- Northwest (Staunton)
- Southwest (Salem)

VDOT's Statewide Operations Program Operations Statistics

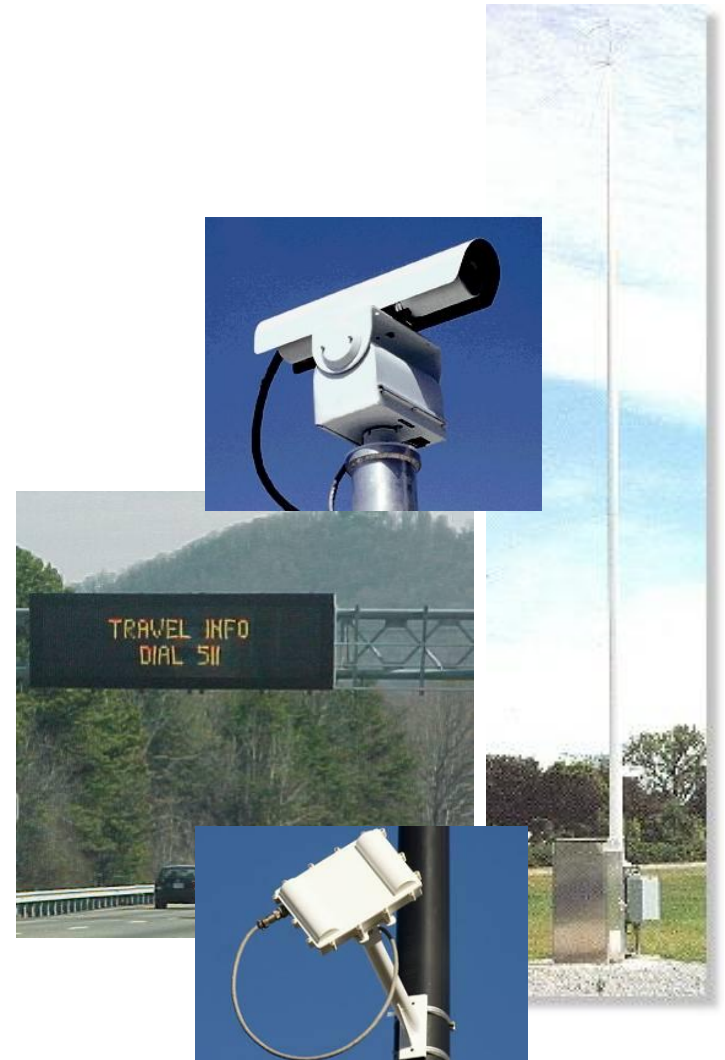
- System Mileage
 - Interstate – 1,120
 - Primary – 7,996
 - Secondary - 48,809
- 7 Tunnels
- 11 Moveable Bridges
- 3 Ferries
- Each TOC handles 28 to 151 events every day
- Over 2,700 field devices
- Over 338 miles of VDOT fiber
- 50 SSP patrol routes covering 503 miles of Interstate
 - 30 routes/250 miles are 24/7
- 4th Generation Statewide 511 Program
 - Phone, Web, Mobile App
 - Sponsorship/Revenue Generation

Current State Overview

- VDOT owns and maintains 2 Advanced Traffic Management Systems, including a separate statewide system for handling incidents/weather events (Open Roads, Transdyn, and VaTraffic)
- VDOT currently has 11 contracts to obtain SSP, TOC Control Room Floor, ITS Maintenance and ATMS services
 - **Each contract has different requirements and performance measures**
 - **Only Staunton and Salem shared contracts together**
- Only 2 TOC's are interoperable, Staunton and Salem
- No statewide contract to implement new technology/innovations
- Tools and technology work well, but not cohesive
- Mix of state employees and contractors providing services, but not uniformly

Major Project Objectives

- Select best industry partners to provide statewide consistency of services
- Obtain innovative services and technology to improve efficiency and safety
- Provide contracting flexibility for new innovations, new deployment and initiatives
- Select strong, innovative, experienced, and financially stable industry partners
- Foster SWAM/DBE involvement



Project Scope and Approach

- **6 Major Service Categories:**

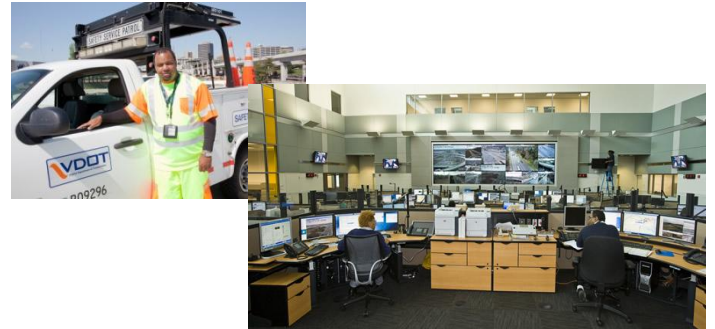
1. **Safety Service Patrol**
2. **TOC Floor Operations**
3. **ITS Field Maintenance**
4. **Statewide ATMS Solution and Technology Support**
5. **Program Management and Governance**
6. **General Support Services**

- Procured using Competitive Negotiation and significant collaboration/leadership from Office of Transportation Public/Private Partnerships

- Contract - 6 year term with three, 2 year renewals

- **July 1, 2013 to June 30, 2019**

- Performance Based Contract



Procurement Process

■ Major Milestones

- VDOT issued RFI to industry in January 2012
- VDOT Advertised RFP on July 10, 2012
- Received proposals from 4 Offerors on Nov 14, 2012
- Evaluation Committee completed an extensive process to select **Serco** based on criteria in RFP
 - **Included: Oral Presentations, Site Visits, Negotiations, Demonstrations, Reference Checks and Financial capacity reviews**
- Developed a custom contract to clarify contract terms, manage risk, and facilitate contract administration
- Transition services over 180 days

Proposed Innovations

Innovations

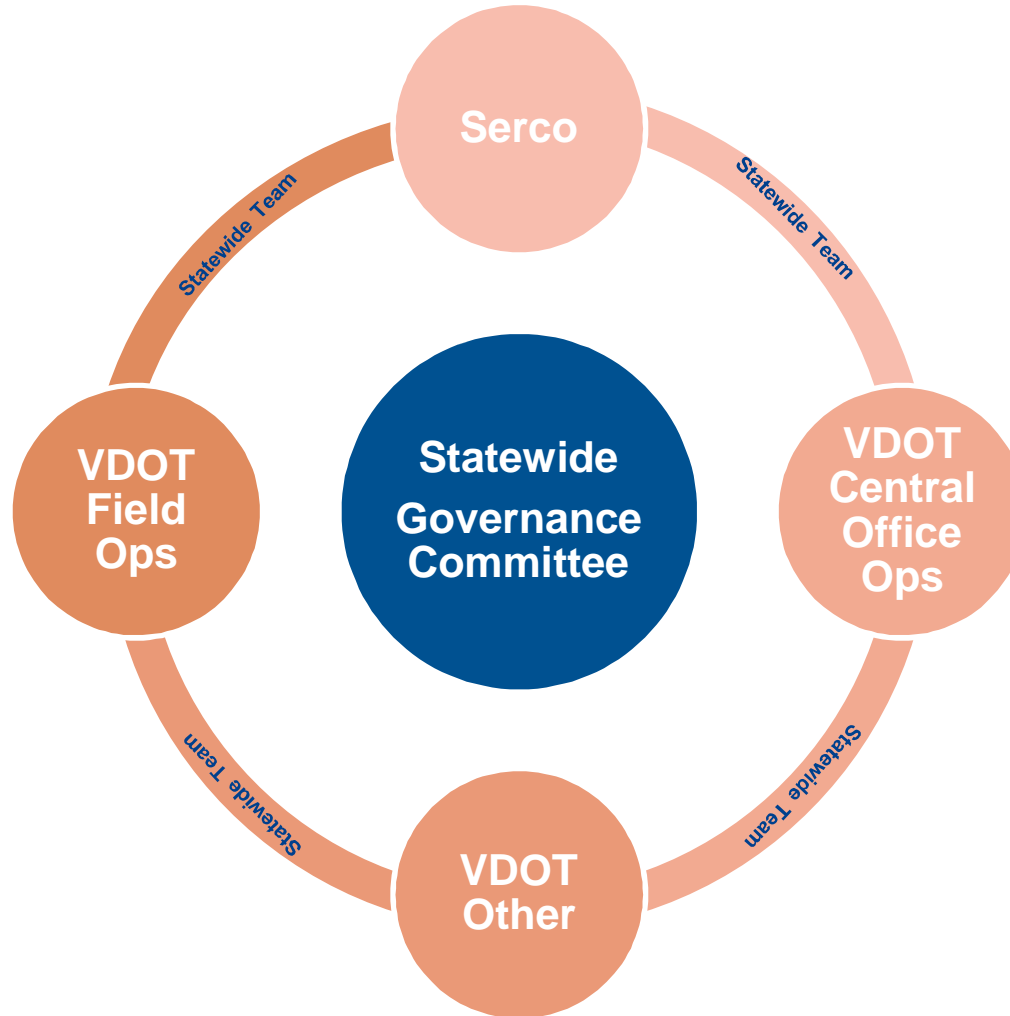
- Interoperability between centers
- Modernize technology on road and software
 - Establish statewide process to review and implement new technologies/innovations.
 - Enhanced SSP and Severe Incident Response Vehicles for quick clearance
 - Network Operations Center to improve device availability
- Improve monitoring and communications to traveling public
 - Statewide Training Academy for TOC staff
 - Monitor and operate traffic signals in real-time to improve arterial operations

Staffing

■ Program Management and Governance

- Program Oversight at Statewide Level
- Day to day management and execution at Regional Level
- VDOT and Contractor will have a single point of contact at the Statewide Level and in each Region.
 - **Statewide Level**
 - VDOT Statewide TOC and ATMS Program Manager (Hanshaw)
 - SERCO Statewide Program Manager (McLain)
 - **Regional Level**
 - VDOT Regional Traffic Operations Manager (RTOM)
 - SERCO Regional Project Manager

A Governance Cmte with diverse perspectives will provide strategic thought leadership



Contract Cost and Major Terms

- Contract Cost (total initial 6 years) - \$355.8 M
 - VDOT Overhead - \$19.8 M over 6 yrs
- Payment and Performance Bond
- Exit Escrow
- Technology Escrow
- Federally eligible and full oversight by FHWA
- Performance measures with tiered disincentives to maintain optimal performance



Procurement Lessons Learned

- Executive Level Support needed
- Hire full-time Project Manager with staff
 - Relieve Procurement Team from day-to-day assignments
- Involve legal counsel early
- Obtain procurement consultant support
- Exit planning is critical
- Provide ample time for negotiations
- Off-site negotiations facility with sufficient working space
- Improve communications with those not directly involved with procurement
- Do we need all these deliverables?
- Document management and control

Status

Contract Standup

- Contract began effective July 1, 2013
- Held key leadership retreat June 3/4
- Established statewide transition team
- Serco delivered July 15, Aug 3, Aug 15 and Sept 3 deliverables
 - 43 of 45 deliverables submitted on-time
 - VDOT approved 30 of 45 deliverables (15 under review)
- Serco established key PMO and Regional leadership
- Serco established a strong partnership with VDOT leadership
- VDOT and Serco jointly developed business processes



Status, cont.

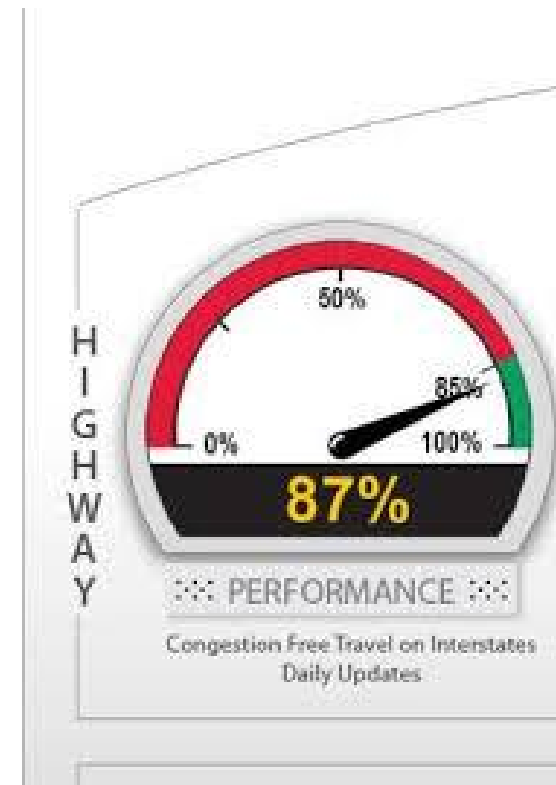
Contract Standup

- Significant staffing changes for VDOT, Incumbents and Serco
- Substantial document development and management
- VDOT continues to evolve statewide approach
- Serco began Operations in Staunton TOC on Sept 29th on-time.
- Contract scope/scale allows Serco to standup dedicated PMO office, near VDOT Offices

Operations Performance Measures

Measures

- Travel Time Reliability Index
- Annual Hours of Delay
- Incident Duration
- HOV Performance



Hampton Roads District Action Plan (Operations)

Bimonthly Report for Operations Program

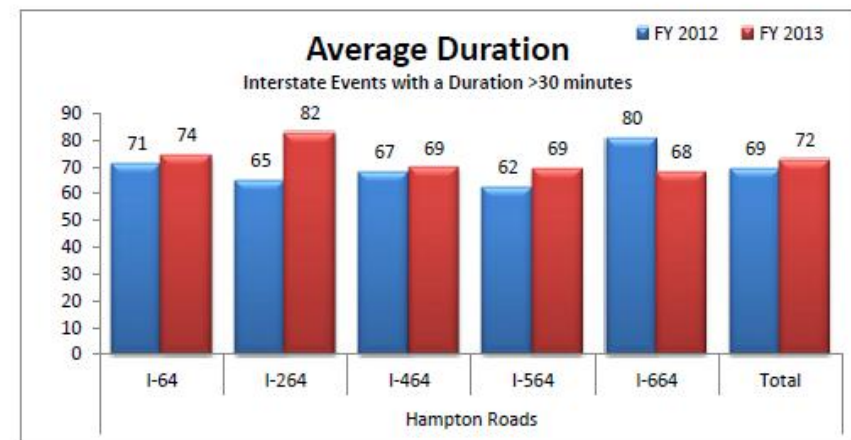
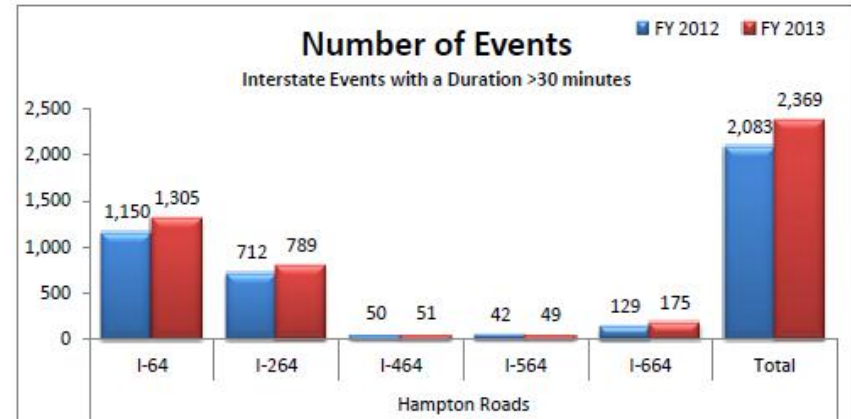
Hampton Roads Time Period = July 1, 2012 to June 30, 2013

MEASURE	Target	Actual	FY13	FY12
Travel Time Reliability Index	TBD	N/A	UNK	1.2
Annual Hours of Delay	53	N/A	UNK	43
Incident Duration	TBD			
HOV Performance	45 mph	N/A	N/A	N/A

Hampton Roads

Strategies and Plans

- Implemented Contracted Wrecker Services at HRBT/MMMBT with performance based response requirements
- Implemented Weekly Water Crossing Coordination meetings with CONST/MAINT/OPS to coordinate planned closures/work efforts
- Revised major holiday response posture at TOC, Tunnels and Movable Bridges to include increased operations & maintenance staffing, SSP, wreckers, traffic control and roadway repair capability
- Conducted six (6) SHRP2- Traffic Incident Management (TIM) Responder training courses





Virginia Department of Transportation