

Commonwealth of Virginia

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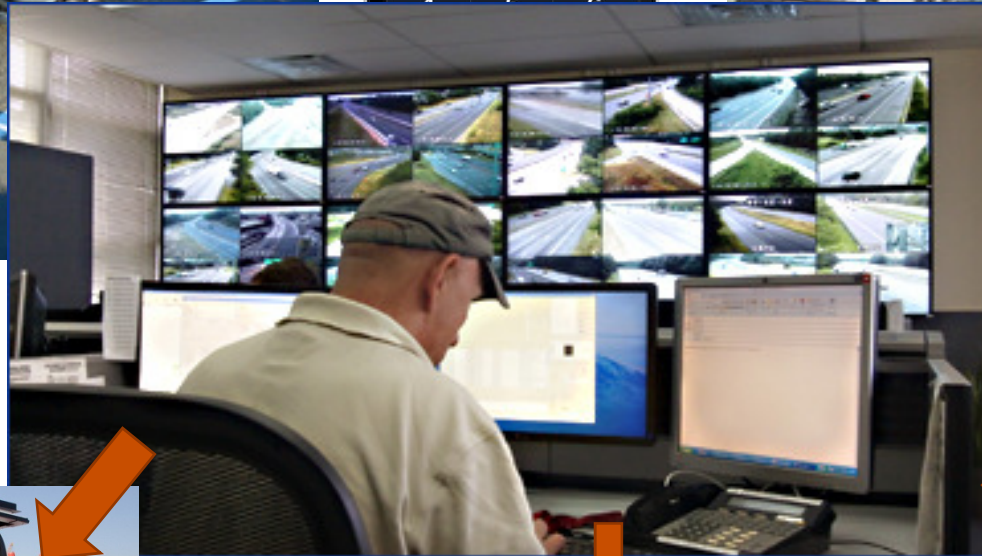
State Operations Engineer

Transportation Operations Centers and Advanced Transportation Management System Services

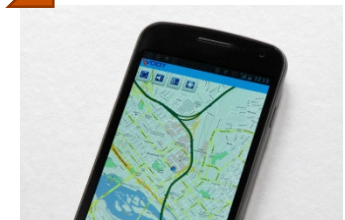
CTB Workshop
May 15, 2013



The Everyday Story of Operations



ACCIDENT
4 MILES AHEAD
RIGHT LN CLOSED



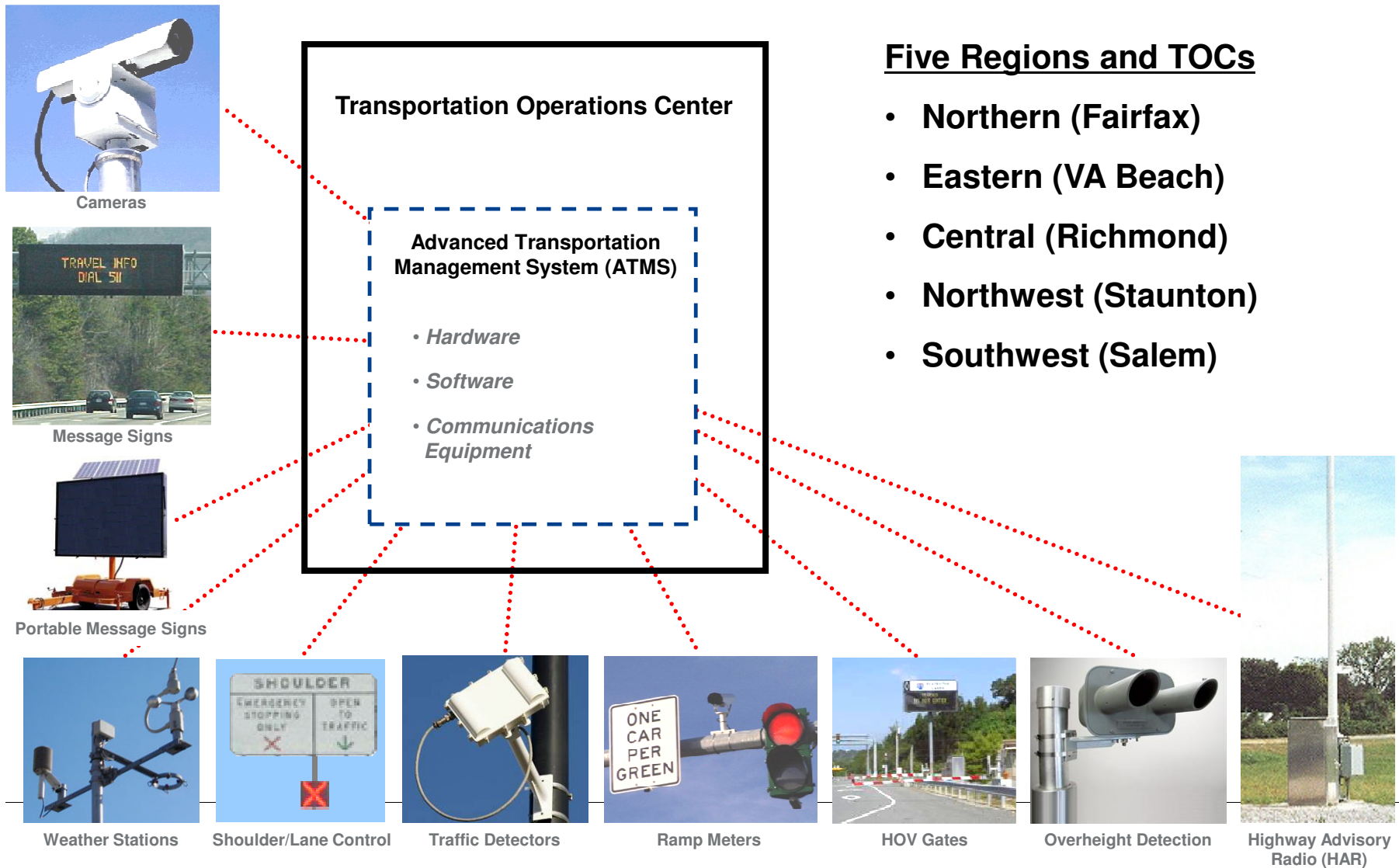
VDOT's Operations Program

- 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



VDOT's Statewide Operations Program

TOC Components



VDOT's Statewide Operations Program

Operations Statistics

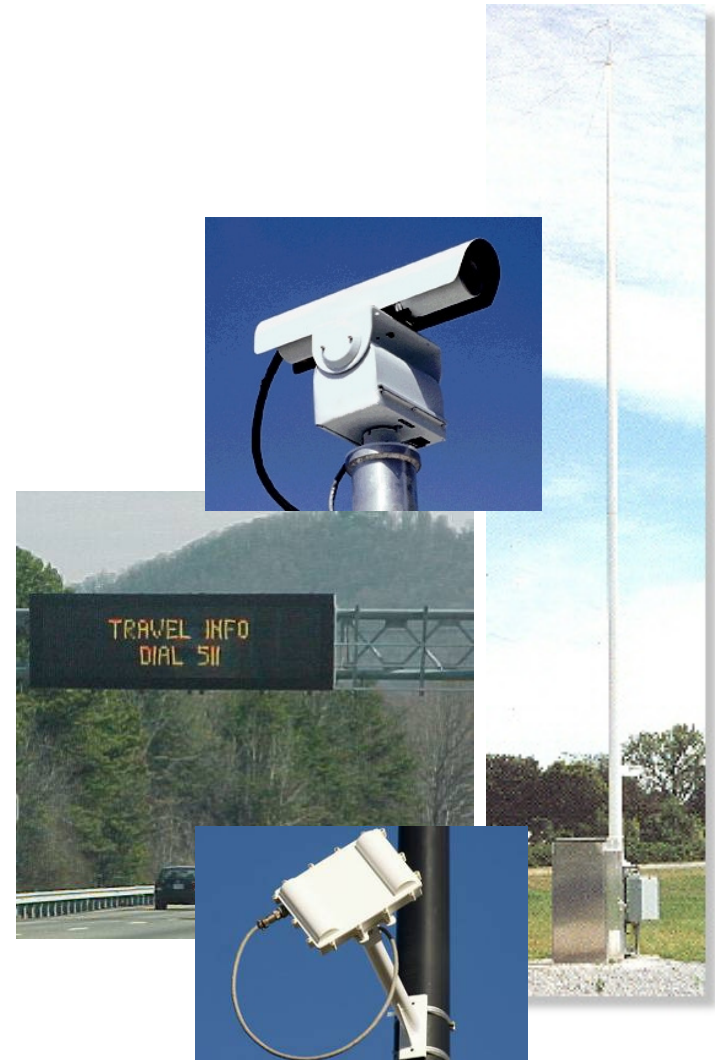
- **System Mileage**
 - Interstate – 1,120
 - Primary – 7,996
 - Secondary - 48,809
- **7 Tunnels**
- **11 Moveable Bridges**
- **3 Ferries**
- **Each TOC handles 28 to 151 events every day**
- Over 2,700 field devices
- Over 338 miles of VDOT fiber
- 50 SSP patrol routes covering 503 miles of Interstate
 - 30 routes/250 miles are 24/7
- 3rd 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

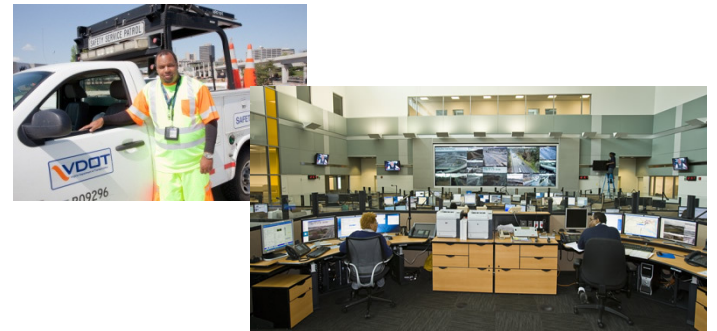
- Select best industry partners to provide statewide consistency of services
- Obtain innovative services and technology to improve efficiency and safety
- Provide contracting flexibility for new innovations, new deployment and initiatives
- Select strong, innovative, experienced, and financially stable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

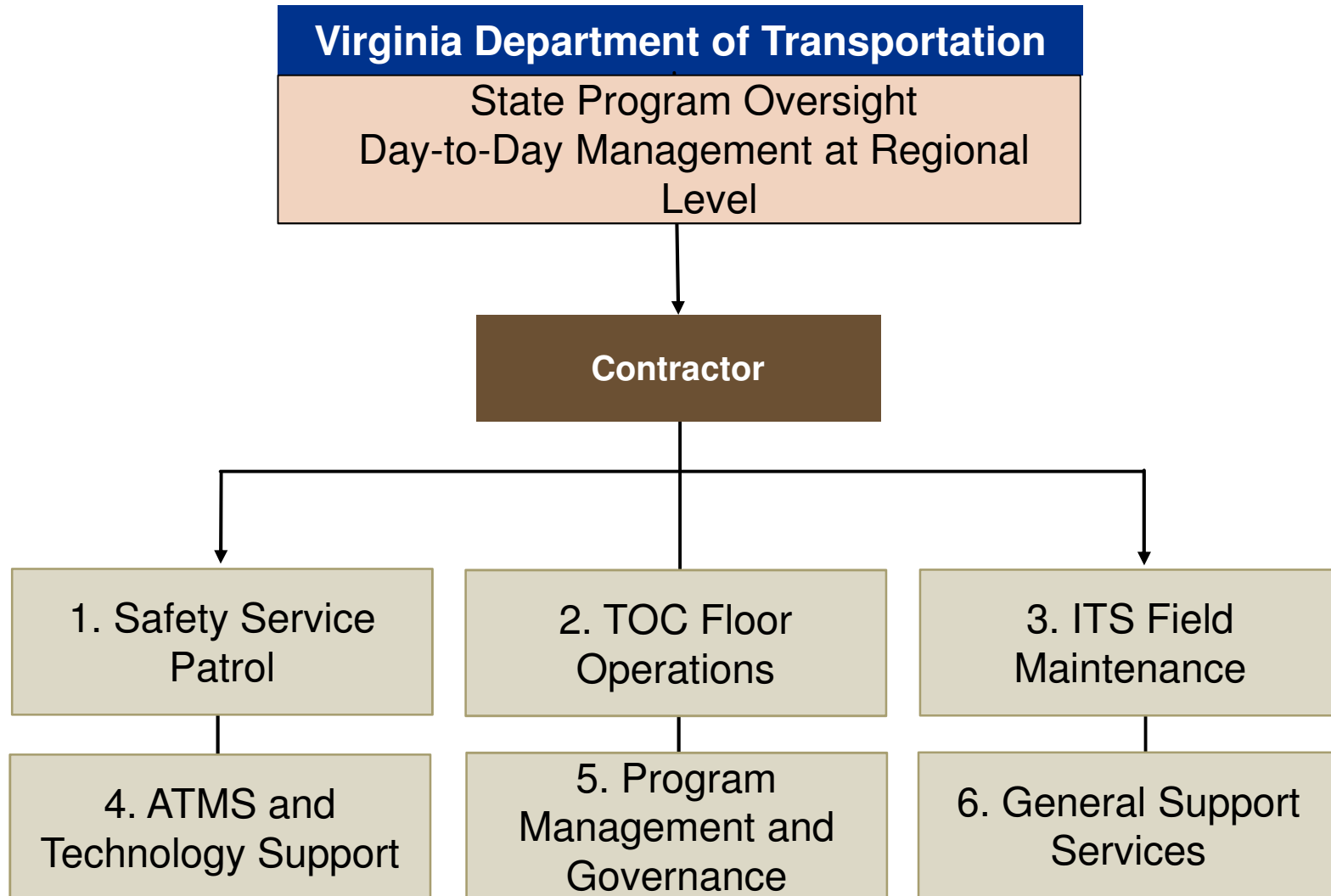
- VDOT issued RFI to industry in January 2012
- VDOT Advertised RFP on July 10, 2012
- Received proposals from 4 Offerors on Nov 14, 2012
- Evaluation Committee completed an extensive process to select **Serco** based on criteria in RFP
 - Included: Oral Presentations, Site Visits, Negotiations, Demonstrations, 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

Project Governance Structure



Contract Cost and Major Terms

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

Contract Timeline

Contract Milestone	Date
Contract Effective Date	July 1, 2013
Transition Services at TOC's	July-December 2013
New Software and Technology	June 2014 to July 2015
Fully Interoperability	Fall 2015