Advanced Traffic Management System (ATMS) Briefing

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VDOT Innovation and Technology Implementation Plan

1. Improve safety to the goal of ZERO Annual fatalities.

2. Improve Operations, providing increased mobility and reduced congestion; connecting people and moving goods in a more timely and efficient manner.

3. Concurrently reduce infrastructure costs and improve State of Good Repair in order to repurpose spending from obsolete assets to core needs and innovative approaches.

4. Drive the implementation toward significantly reduced overall public sector transportation infrastructure investment.

VDOT needs a new ATMS to implement the Innovation & Technology Plan

- **We need interoperability between our 5 traffic operations centers (TOC) to better coordinate agency operations, emergency response & handle peak events.**

- **We need to consolidate various systems with future connected and automated vehicle initiatives to <u>improve operations, improve safety, and reduce congestion.</u>**

- **A statewide ATMS will facilitate data sharing for connected and automated vehicle consumption and drive innovation.**

The ATMS automates managing traffic

VDOT has selected the most viable vendor

- **VDOT needs to consolidate each Regional ATMS into one statewide ATMS.**

- **VDOT leverages existing investment to control 3,100 field devices and upgrade legacy applications.**
  - VA Traffic – used to manage incidents, weather events and work zones
  - Lane Closure System (LCAMS) – use to coordinate work zones/lane closures
  - Data Gateway – data exchange broker between Virginia State Police, 911 center, cities and VDOT
  - Email Generator Service – automates real-time notification of incidents, major weather events, and major work zones.

- **Previous competitive procurement resulted in only 3 potentially viable vendors.**
  - One vendor could not control VDOT field devices.
  - Second vendor only in 1 TOC, their market focus is tunnel control systems and Tolling, and would require new hardware/network infrastructure.
  - Open Roads (dba Q-Free) is operating in 4 of 5 TOC's, developed legacy applications, and integrated with over 2,200 field devices.
  - No substantial change in marketplace over last several years.

Implement ATMS using a phased approach

- **Release 1 – Staunton, Salem, and Richmond TOC's**
  - April 2017
  - All currently used business modules, except VA Traffic and LCAMS
- **Release 2 – Hampton Roads TOC**
  - September 2017
  - All currently used business modules, except VA Traffic and LCAMS
- **Release 3 – NOVA Public Safety TOC and Active Traffic Management (ATM)**
  - March 2018
  - Updates to other regions
- **Release 4 – Integrate VA Traffic and Lane Closure System**
  - October 2018

- **Schedule driven by development time, operational risk and relationship to other major projects (Transform I-66)**
- **Each Release replaces Regional ATMS at each TOC**

The contract will ensure successful ATMS Delivery

- **Sole source procurement to implement only viable solution**
- **Deliverable based, performance driven contract**
- **Contract will be 4 years with 2, two year renewal options**
- **Base contract value is $25.8 M**
  - **Development Costs (one-time) $13.9 M**
  - **Operations and Maintenance Support Costs $11.9 M over 4 years**
- **Contract structured to accommodate innovative solutions and changes over its life.**
- **A robust project governance structure has been established.**
- **The contract is compliant with Commonwealth of Virginia (COV) Security Requirements.**
- **The sole source justification and contract have received legal review and concurrence from the OAG and are both being reviewed by VITA.**

Any questions?