



NEXT GENERATION TRAFFIC OPERATIONS DATA SERVICE

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Project Need

VDOT sees a need to leverage transportation technology advancements and increases in road user data to improve corridor safety and mobility.

The future of CAV (Connected & Autonomous Vehicles) and V2X (Vehicles to Everything) technologies will depend on these elements.

While technologies continue to develop, VDOT is seeking to leverage data and technology integration to improve operations **now** and to be prepared for the future.



Project Purpose & Goals

Purpose:

- Enhance road safety through real-time monitoring and predictive analytics based on various data sources
- Make data-driven decisions through high-fidelity, low-latency data

Goals:

- Increase awareness of corridor risks
- Promote safety
- Support more efficient incident response
- Enable proactive traffic management
- Prepare corridor for future CAV
- Evaluate solution viability for other critical corridors

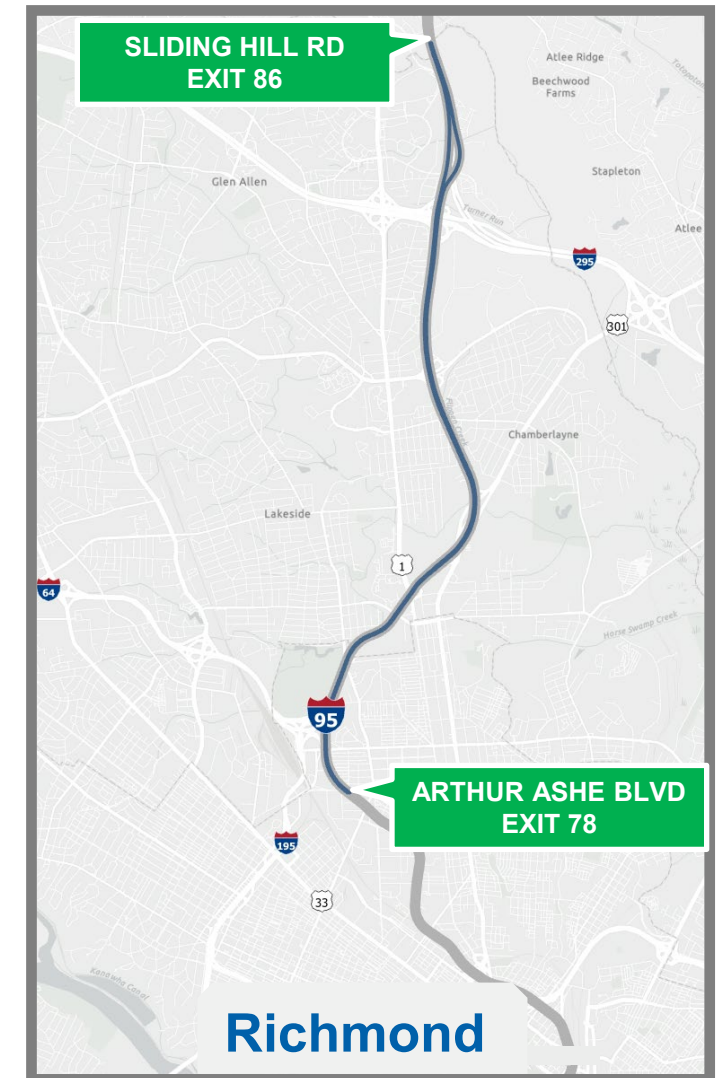


Project Corridor

Segment of the I-95 corridor from **Sliding Hill Rd (Exit 86)** to **Arthur Ashe Blvd (Exit 78)** in Richmond, Virginia.

This segment of I-95 experiences high volumes of both commuter and recreational travel with higher-than-average crash rates.

Corridor has diversity in roadway geometrics, vehicle speeds, traffic patterns and congestion, lack of existing CCTV coverage, contains multiple complex interchanges and experiences high alternate route usage during incidents.



Approach

Data as a Service Model

- Contractor will collect data via contractor-owned and maintained devices – VDOT will have exclusive rights to the data
- Leverage other data sources
- Provide real-time and predictive analytics based on data
- Provide alerts and reports to Richmond TOC for active management
- Provide incident alerts to drivers through mobile apps (partnerships with existing providers)
- Contract Term: Implementation period + 2 years of production and 2 optional 1-year renewals

VDOT will use the data for Traffic Operations incident response, planning and decision making.

Next Steps

- ✓ **Project funded by Innovation & Technology Transportation Fund (ITTF) - UPC 127235**
- ✓ **Request for Proposal in Procurement (Closes 10/6/25)**
 - Select Offeror
 - Return to CTB for approval
 - Goal to have an executed contract by January 2026