Data and Technology Driven Traffic Asset Management in Virginia

November 13, 2016
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2016 AASHTO Transportation Vanguard Award Presentation
Traffic Assets in Virginia

Critical to the Safety and Operation of Our Highway System
Data Driven Decision Making
Intersection Sufficiency Rating (ISR) and Application

Signal Recovery Prioritization for Hurricane Relief

Evacuation Rt
Accessibility
Crash History
Traffic Volume
Speed Limit
Congestion etc.
Identify Guardrails with Highest Potential Safety Benefit

Richmond District Guardrail Upgrade Priority on Interstate

Guardrail in High Priority Site

Traffic Engineering Division
Traffic Asset Application Program
9/16/2016
Break the Silos - Integrate safety and pavement information into GR Upgrade Decision

Scheduled Paving Project

GR with High Safety Benefit Potential

Pavement in Excellent Condition

GR Terminal with Functional Condition C

GR with Highest Safety Benefit Potential

Guardrail 6469

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VA Roads - Scheduled To Be Paved

Pavement Conditions (Interstate & Primaries)

- EXCELLENT
- GOOD
- FAIR
- POOR
- VERY POOR
- NOT RATED

GR Terminal Functional Condition

- A
- B
- C
- D
ADA Curb Ramps Mobile Application
Highway Maintenance and Management System (HMMS)
Recognition to VDOT Traffic Asset Program Team

Team Profile
Staff: 5
Average Age: 37
Average Years of Experience: 11

Degrees Held by our Five Team Members:
• Six Bachelor Degrees
• Five Master Degrees
• Two Ph.D. Degrees

In Diverse Areas of:
• Civil Engineering
• Transportation Engineering
• Economics
• Statistics
• Management & Science