Traffic Engineering Specifications

Oversight Areas

**Division VII**

- Section 700 – General
- Section 701 – Traffic Signs
- Section 702 – Delineators
- Section 703 – Traffic Signals
- Section 704 – Pavement Markings & Markers
- Section 705 – Lighting Systems

**Other Divisions**

- Section 238 – Electrical & Signal Components
- Section 246 – Pavement Markings Materials (jointly w/ Materials Div)
- Section 247 – Reflective Materials (jointly w/ Materials Div)
- Section 512 – Maintaining Traffic
Stakeholders Engagement

• Stakeholders Partnering:
  • VDOT
    ✓ Materials, Construction, L&D, S&B, Maintenance, Operations, OPO, Safety, Districts, Regions, VCTIR, Chief Engineer, Deputy CE
  • Industry
    ✓ Contractors, Manufacturers, Consultants, Industry Associations
  • Partner Agencies
    ✓ FHWA, Localities
Outreach Efforts

- Conducted 4 Contractor & Manufacturer Industry Workshops
- On-going Reviews with Consultant & Industry representatives
- On-going Internal Reviews with VDOT Partners
- Conceptual discussions with FHWA to reduce approval time

Continuous engagement of Internal & External partners

- Safety
- Mobility
- Efficiency
- Cost Effectiveness
Traffic Engineering Technical Areas Update

- **Special Provisions - 2014 Paving Schedules:**
  - No changes planned at this time

- **Specifications - Division VII Traffic Control Devices & Section 512 Maintaining Traffic:**
  - Industry Comments have been extremely helpful
  - Sections 238, 512 & 700 through 705 being finalized with Construction

- **Standards - Revisions to Supplement Specification:**
  - DRAFT Standards to the Industry for comment by Spring 2014

- **Virginia Supplement to the MUTCD - Revision 1:**
  - Effective: projects issued for Bid on or after Jan. 1, 2014
  - On-Line: Changes are editorial, additional clarification & improved guidance
Technical Summary

- Work Zone – AFAD, Rumble Strips, TMA, Signals
  - Specification additions to improve safety for workers and motorist on two-lane roadways:
    - Automated Flagger Assistance Device (AFAD)
    - Temporary Portable Rumble Strips
  - Specification provides clearer directions on the documentation needed for Truck Mounted Attenuator (TMA)
    - Additional weight may be added to the TMA support vehicle based on Manufactures’ recommendations
    - Copy of original weight ticket shall be kept in support vehicle
    - Copy of Self-Certification
  - Establish consistent processes for traffic signal maintenance & operation responsibilities during construction
  - Strengthening plan design requirements for temporary signals
General Signs
- The 2014 Standards will offer expanded Sign Post and Foundation options for Temporary and Permanent Signing
- Specification changes to improve sign visibility for motorist on portable supports at interchanges, intersections & turn lanes

Traffic Structures
- Structural requirements updated for Signal, Overhead Signing and Roadway Lighting to comply with AASHTO 2010/2012

Signals
- Specifications cover more signal products → increase the number of products on VDOT Preapproved list → streamlined product approvals during construction
Technical Summary - Cont’

- **Markings**
  - Added installation deviation limits for pavement markings on tangent (1/4”) and curves (1/2”) as agreed in last review meeting
  - Payment for MOT during testing of suspect areas will be permitted
  - Add guidance to Standards for crossing joints and how to offset markings from joints
  - Use of Type F/G Paint for specific construction applications will be added
  - Section 704 will continue to evolve

- **Guide Rails**
  - Improving consistency in GR engineering assessment format for ease of No-Plan project development
  - Reducing unnecessary replacement of GR
  - NOVA seen 15% cost savings last year in GR budget
Continuous Improvements

- **Advance Technologies** - to improve project development and operations during construction & maintenance activities
  - Cameras/video detection technologies to minimize in-pavement loops
  - Testing adaptive traffic signal - major construction (US 17 York Co.)
  - Mobile Applications for field engineering work/inspection data

- **Signal, Communications & Lighting Utility Locating** - evaluate improvements to VDOT processes for underground signal, communications & lighting utility marking in advance of digging

- **Markings Systems** - Updating guidelines & performance specs; Evaluating research recommendations for implementation.

- **Others** - Work Zone lighting, Limitations of Work Hours, Alternative Routings, WZ Performance Measures, Safety Edge .....
Please Wake Up … Van is finally done with her presentation … Trenton has been dying to turn off the microphone!!
QUESTIONS???

TED Contacts:

➢ TED Assistant Division Administrator
  ✓ Vanloan.Nguyen@VDOT.Virginia.gov

➢ Coordination of TCD Specs & Standards
  ✓ Harry.Campbell@VDOT.Virginia.gov

➢ Temporary Traffic Control - General
  ✓ David.Rush@VDOT.Virginia.gov

➢ Temporary Traffic Control - Traffic Signals
  ✓ Don.Robbins@VDOT.Virginia.gov