



Flashing Yellow: A State Perspective

2011 VASITE Meeting – June 30, 2011

Tony Payne, P.E.

Traffic Control Device Engineer

VDOT Traffic Engineering Division

Flashing Yellow: A State Perspective

- Overview
- Timeline
- Locations
- Guidelines

Overview

Traffic Signal Arrow Indications



Red: Stop



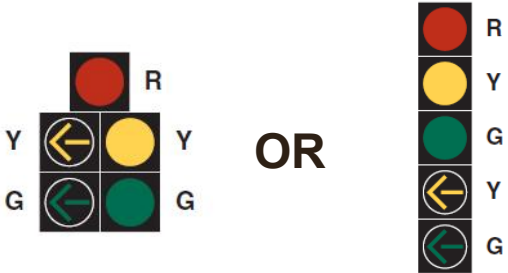

Steady Yellow: Phase ending

Flashing Yellow: Yield, then proceed safely

Green Arrow: Protected phase - Proceed

Overview

Typical Arrangements

	Protected / Permissive	Permissive Only
With Flashing Yellow Arrow		
Before Flashing Yellow Arrow		



Timeline



March 2006: FHWA releases Interim Approval for States to use Flashing Yellow Arrows (FYA)

May 2008: FHWA grants VDOT request to use FYA Interim Approval

December 2009: FHWA releases 2009 MUTCD, which contain FYA Standards and Guidance



Timeline



May 2008: VDOT requests and receives FHWA Interim Approval to use FYA

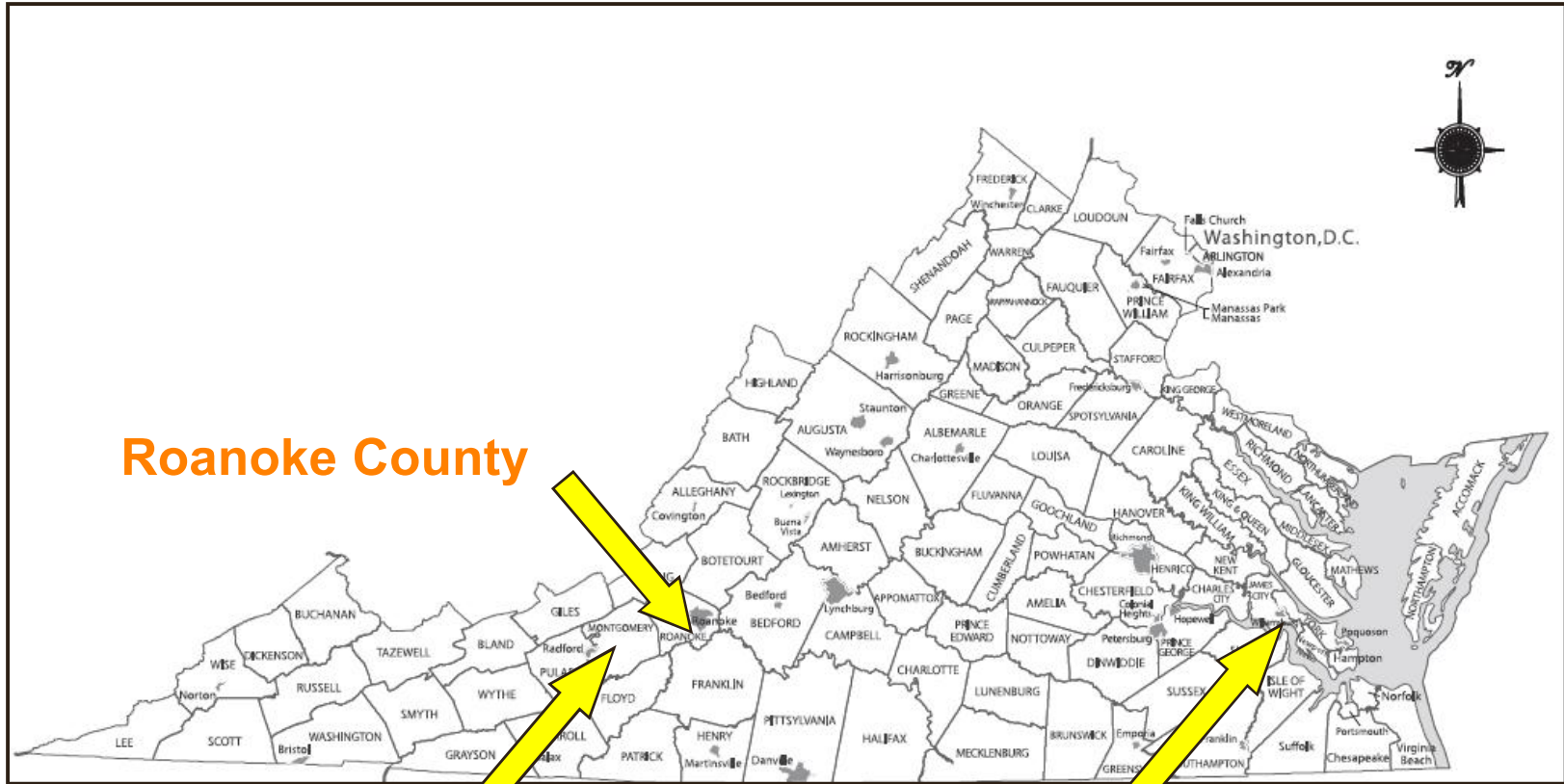
2008-2009: VDOT Regions consider pilot locations for FYA

June 2010: First three VDOT FYA installed in York County

3rd Quarter 2010: FYA installed in Southwest Virginia

2010-2011: VDOT prepares to adopts 2009 MUTCD & Virginia Supplement

Locations



Roanoke County

Virginia Tech Campus

York County

York County

Route 60 West, near Busch Gardens

- 3 Locations



Virginia Tech Campus

Southgate Drive (Route 314)

- 2 Locations



Roanoke County

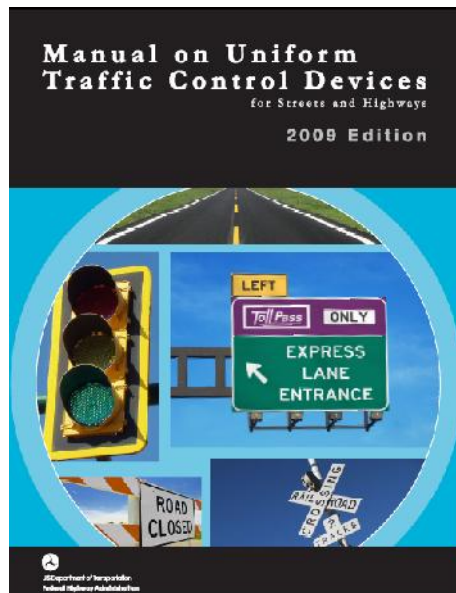
Chaparral Dr. (Rte 800) & Penn Forest Blvd. (Rte 687)



FYA Guidelines

National MUTCD

- **FYA Meaning** (Section 4D.04)
- **FYA Standards and Guidance** (Sec. 4D.17 to 4D.20)



FYA Guidelines

VDOT Guidelines Document

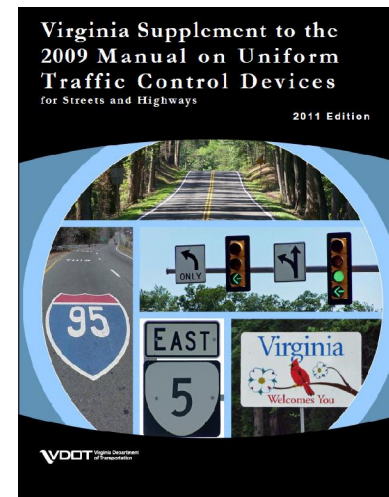
- **Currently in Final Draft form**
 - **Once final, PDF will be on VDOT's web site**
- **Content may be incorporated into future revision of Virginia Supplement to the MUTCD**

VIRGINIA DEPARTMENT OF TRANSPORTATION

TRAFFIC ENGINEERING DIVISION

Guidelines for Flashing Yellow Arrows
for Permissive Left Turns

FINAL DRAFT



FYA Guidelines

Development of VDOT Guidelines Document:

- **Input from field and Central Office staff**
 - **Traffic Engineering, Design, Operations, Maintenance**
- **Research and review of existing documents**
 - **Other states' practices & procedures**
 - **ITE *Traffic Engineering Handbook* (6th Edition)**
 - **FHWA *Traffic Signal Timing Manual* (2009)**

FYA Guidelines

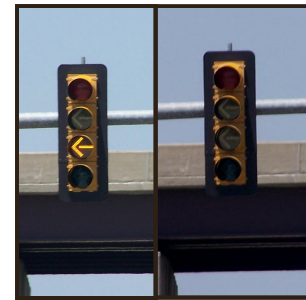
Document Highlights

- **Emphasis on proper phasing selection**
 - FYA not to be used when Protected-Only is needed
- **Emphasis on Regional Traffic Engineer judgment**
 - Field analysis
 - Site-specific conditions & crash history
- **Additional considerations**
 - Equipment compatibility
 - Public awareness
 - Optional sign

FYA Guidelines

Times to consider FYA:

- **Correctible left turn crash patterns**
- **Local traffic**
 - Motorists can be informed easily
 - Examples: school, church, subdivision
- **Time of day phasing changes**
 - Example: Protected/Permissive to Protected Only
- **Permissive or Protected/Permissive Phasing is justified**



FYA Guidelines

Times NOT to use FYA:

- **Protected-Only phasing is needed**
 - Based on volume, sight distance, or other safety factors
- **Circular green is being used nearby**
 - Avoid “mix and match” of permissive left turn indications
- **50 MPH or greater Speed Limit**
 - Exceptions for roadways with good sight distance, low-volume, and adequate gaps



FYA Guidelines

Optional Sign

- May be installed based on engineering judgment
- Recommended posted period varies based on need
 - **30 days** (local traffic)
 - **90 days** (regional traffic)
 - **At least one tourist season** (tourist traffic)



Questions?

Tony Payne, P.E.

**Traffic Control Device Engineer
Virginia Department of Transportation
Traffic Engineering Division**

Phone: 804-371-6022
Tony.Payne@VDOT.Virginia.gov