

# General Revisions to Part 2 – Signs



# Part 2 – Signs

- Longest Part in MUTCD
- Includes requirements, guidance, & options for all types of signing
  - Design
  - Placement
  - Maintenance
  - **MIN. RETRO-REFLECTIVITY STANDARDS**

# New chapters and revisions for Part 2

- Relocation of gates and barricades to Chapter 2B
- Relocation of object markers from Part 3 to Chapter 2C
- New Chapter 2F – Toll Road Signs
- New Chapter 2G – Preferential and Managed Lanes
- New Chapter 2H – General Information Signs
- New Chapter 2I – General Service Signs
- New Chapter 2L – Changeable Message Signs



# Many new symbols



# Pictographs (Section 2A.06)

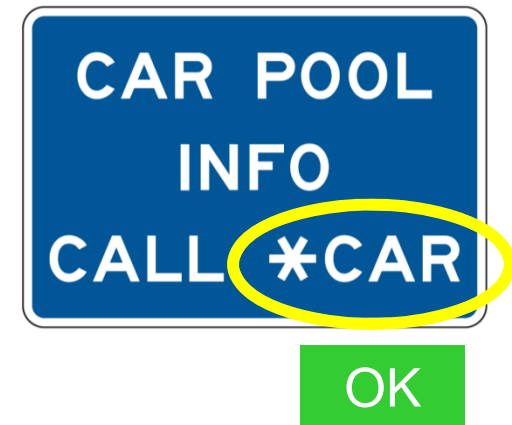
- **Definition 146: Pictograph**—a pictorial representation used to identify:
  - a governmental jurisdiction
  - an area of jurisdiction
  - a governmental agency
  - a military base or branch of service
  - a governmental-approved university or college
  - a toll payment system, or
  - a government-approved institution
- Shall be simple, dignified, and devoid of advertising
- Shall be the official designation or official seal adopted by the jurisdiction or institution
- Specific provisions indicated throughout Part 2, not a categorical permission of use

## Section 2A.06: E-mail and Internet addresses and telephone numbers

- Internet addresses, e-mail addresses, domain names, URLs: prohibited on any sign, plaque, sign panel



- Phone numbers with more than 4 characters should not be shown on any sign, plaque, sign panel (including Specific Service logo panels), or CMS



## Section 2A.07: LEDs on signs

- Optional for individual use within the border, or within the legend or symbol
- Shall not be placed within the background of a sign
- Shall not be grouped as a “de-facto” beacon
- For STOP or YIELD signs, LEDs may be placed within one border width from the border

# Section 2A.08

## Maintaining Minimum Retroreflectivity

- Not listed as a 2009 change as this rule was adopted as Revision 2 to the 2003 Edition of the MUTCD
- Separate workshop can be scheduled to examine these requirements in depth

## Section 2A.10: Sign Colors

- **Optional use of fluorescent colors including fluorescent red**
- **Added purple for panels and plaques for electronic toll collection registration requirements**
- **Removed yellow for school area signs**
- **Require fluorescent yellow-green color for school area signs**
- **Optional use of fluorescent yellow-green color for pedestrian and bicycle application signs**

# New option for the use of fluorescent colors (2A.10)



**Fluorescent yellow**

**Standard yellow**

Revisions Incorporated into the 2009 MUTCD

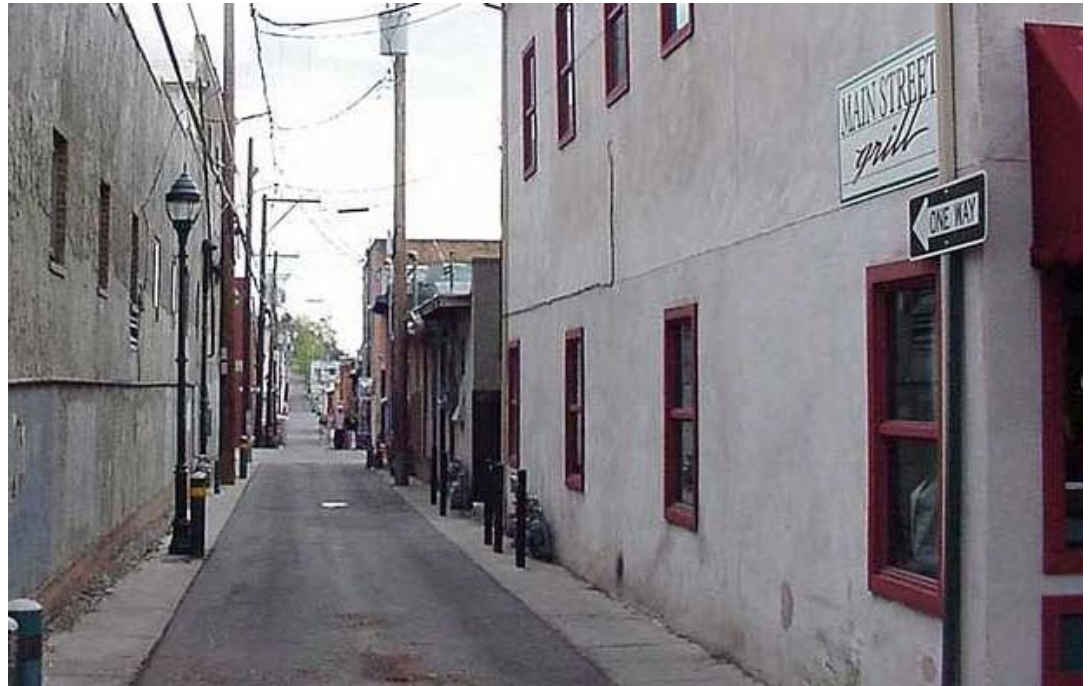


2009 MUTCD (Final Rule)

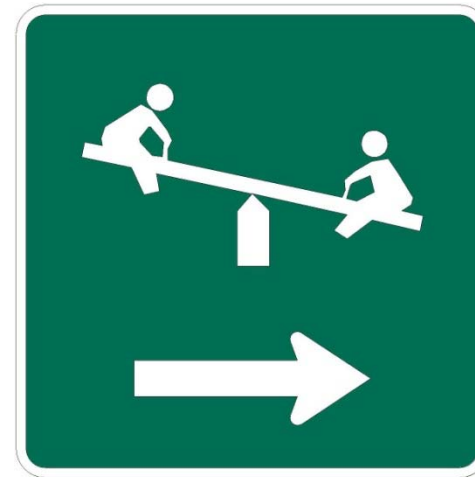
# New and revised sign size tables (Parts 2B and 2C)

- Updated/expanded table for regulatory sign sizes
- New detailed sign size tables:
  - Warning signs
  - Conventional road guide signs
  - Freeway/expressway guide signs
  - General service signs
  - General information signs

# Section 2A.11: Minimum sign size may be decreased by 6 inches in alleys that have restrictive physical conditions



# Section 2A.12: Symbols from one type of sign shall not be used on a different type of sign



**Not acceptable!**

The playground symbol that is used on warning signs cannot be used on guide signs

**Section 2A.13: Size of sign lettering should be based on 1 inch of letter height per 30 feet of legibility**

- Based on 20/40 vision
- 1988 and earlier MUTCDs were 1 inch per 50 feet of legibility based on 20/20 vision
- 2003 MUTCD recommended 1 inch per 40 feet based on 20/33 vision

# Section 2A.13: Lettering for place names and destinations

- Mixed-case lettering required for names of places, streets, and highways for guide signs
- Mixed-case lettering consists of an initial upper-case letter followed by lower-case letters
- Letter height is specified as the height of the initial upper-case letter



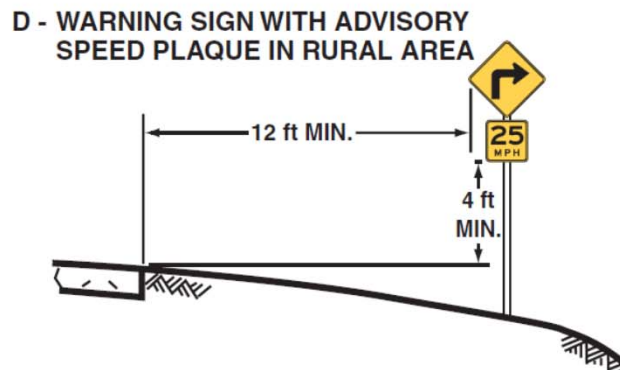
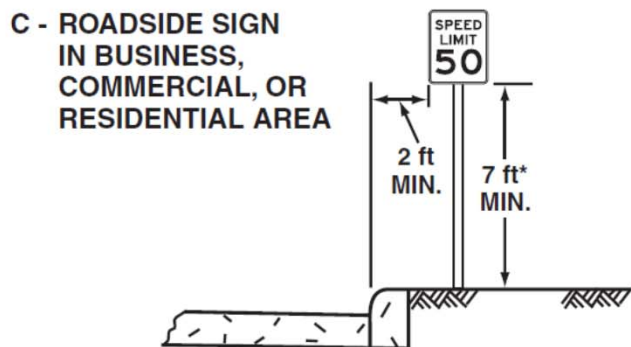
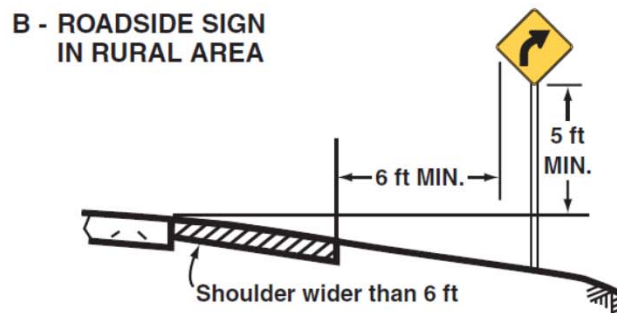
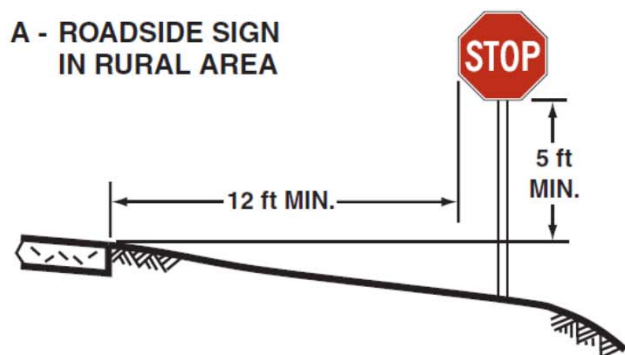


## Section 2A.15: New options for sign conspicuity enhancement



# Heights and Lateral Locations of Signs (Figures 2A-2 & 2A-3 revised)

Figure 2A-2. Examples of Heights and Lateral Locations of Sign Installations



\*Where parking or pedestrian movements are likely to occur

# Section 2A.19

- **Crashworthiness of Sign Supports on Roads with Speeds of 50 mph or More**
- **January 17, 2013 (2000 MUTCD)**
- **No Change in Compliance Date**

# Heights and Lateral Locations of Signs (Figure 2A-2 revised)

Figure 2A-2. Examples of Heights and Lateral Locations of Sign Installations

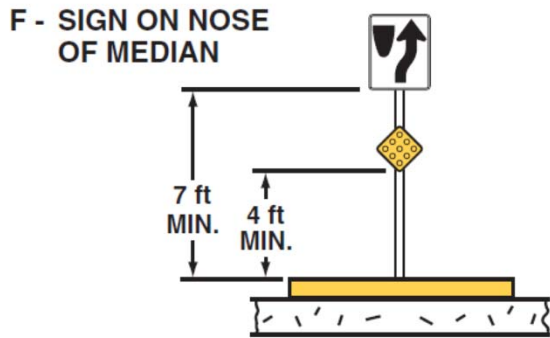
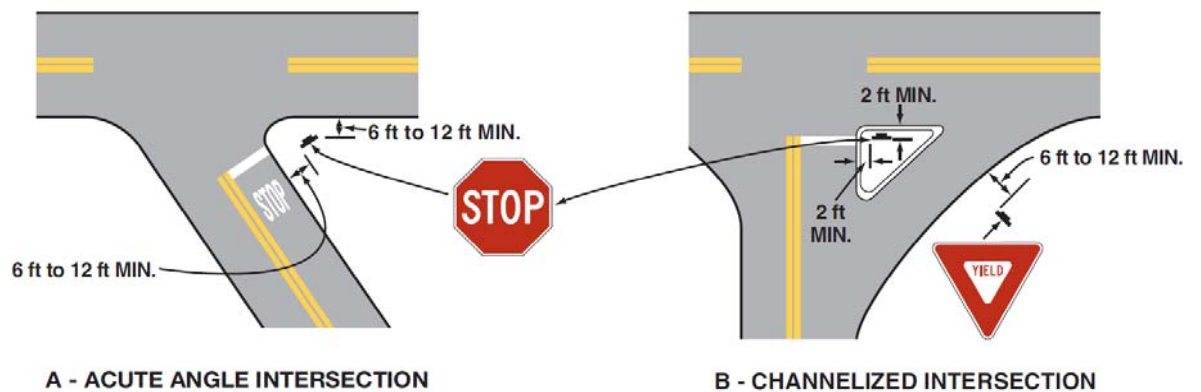
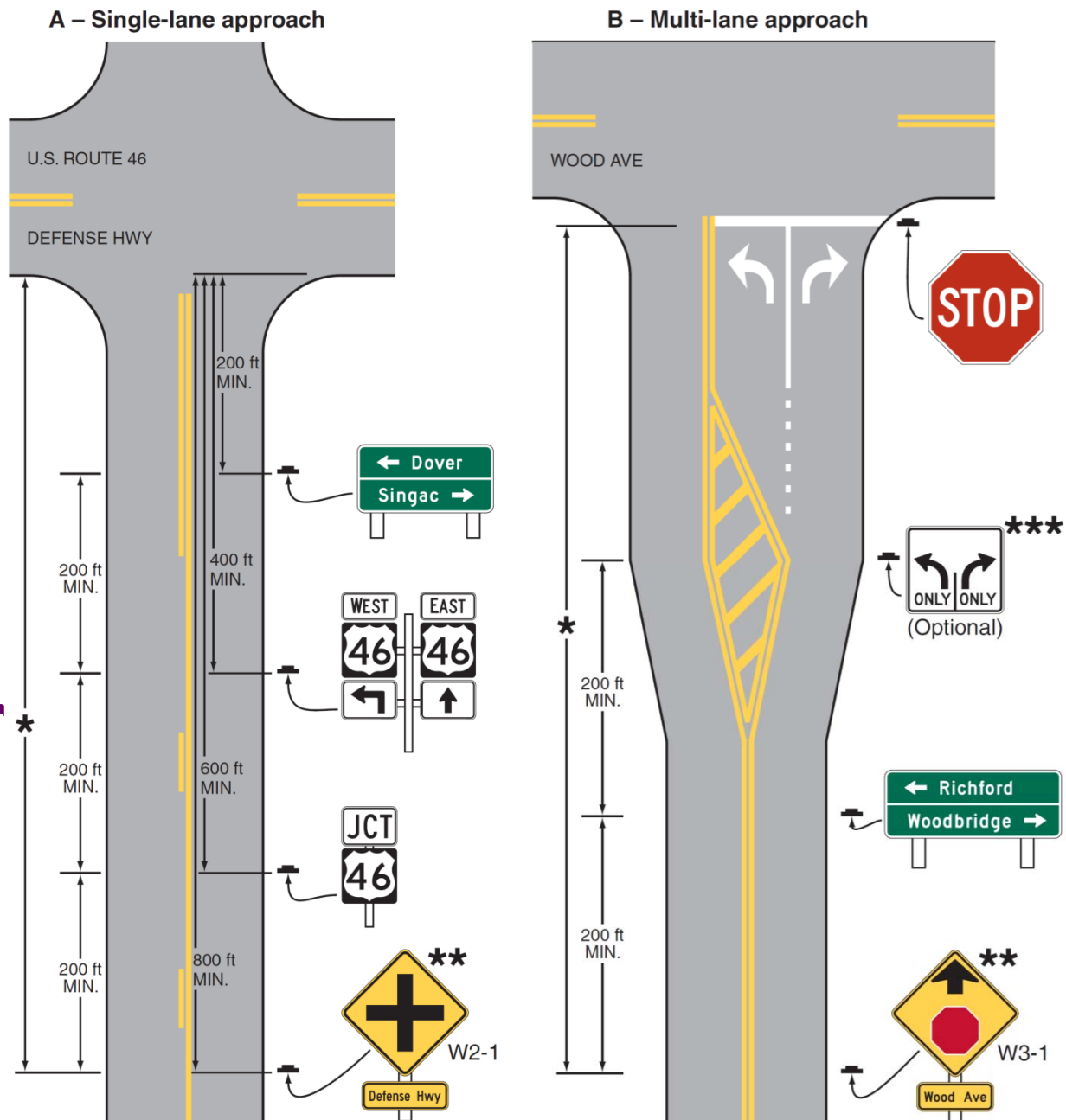


Figure 2A-3. Examples of Locations for Some Typical Signs at Intersections



# Relative locations of regulatory, warning, and guide signs for intersections (new fig. 2A-4)



# Final Rule



Federal Register

- **Published on Dec 21, 2007**  
– Vol 72, No. 245
- **Revision #2 of the 2003 Edition of the MUTCD**
- **Effective Jan 22, 2008**

# MUTCD Changes

- Portions of the 2003 MUTCD were revised:
- Introduction
  - Compliance dates
- Part 1
  - 1A.11 - relation to other publications
- Chapter 2A
  - **2A.09 - minimum sign retroreflectivity**
  - 2A.22 - sign maintenance
- Minor editorial changes to cross-references
  - 2A, 2B, and 6F

- **Section 2A.08**

- **“Standard:**

**Public agencies or officials having jurisdiction shall use an assessment or management method that is designed to maintain sign retroreflectivity at or above the minimum levels in Table 2A-3”**

- **Support:**

**“Compliance... is achieved by having a method in place and using the method to maintain the minimum levels established in Table 2A-3. Provided that... a method is being used, an agency would be in compliance... even if there are some individual signs that do not meet the... levels at a particular point in time.**

# Methods

## Assessment

- **Visual Nighttime Inspection**
  - **Calibration Signs**
  - **Comparison Panels**
  - **Consistent Parameters**
- **Measured Sign Retro**

## Management

- **Expected Sign Life**
- **Blanket Replacement**
- **Control Signs**
- **Future Method Based On Engr. Study**
- **Combination Of Any**

# *QUESTIONS ??*