Brief History of the MUTCD

1920s
1930s
Early 1950s
1960s
1940s
Today

Gene Hawkins
Texas Transportation Institute
The MUTCD

There have been 9 editions of the MUTCD

#### MUTCD Comparisons

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How did we end up with such a large document on traffic control devices?
Traffic Control Devices

Early markers used in the Roman Empire
Used on pioneer trails in America
Automobile age created new demands

Roman empire | Colonial America | Early 20th Century
Early Traffic Control Devices

Need for devices increased with more automobile travel

Little coordination between agencies
Early Traffic Control Devices

The wide variety of devices created the need for uniformity

1911 - 1st centerline Michigan

1920 - 1st 3-color signal Detroit

1914 - 1st electric signal Cleveland
1923 Sign Shape Recommendations

Mississippi Valley Assoc of St Hwy Dept
Number of sides represents hazard level

- **RR Grade Crossing**
- **Stop Intersection**
- **Warning (speed reduction)**
- **Caution**
- **Directions or Regulations**

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1924 Sign Color Recommendations

National Conference on Street and Highway Safety
For signs and signals

Red - stop
Green - proceed
Yellow - caution
White - directions or distance
Purple - intersection
1925 Joint Board Report

Report of Joint Board on Interstate Highways
AASHO led
Developed U.S. Highway system
Included recommendations for standard signs
1927 AASHO Manual

Evolved from Joint Board
First national manual
Rural signs only
Title:

*Manual and Specifications for the Manufacture, Display, and Erection of U.S. Standard Road Markers and Signs*

Revised 1929 and 1931
1927 Signs

Block letter font

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1930 NCHS Manual

Prepared by American Engineering Council

Signs, markings, and signals for urban areas

Title:

Manual on Street Traffic Signs, Signal and Markings

Not Revised

Transportation Operations Group

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1930 Signs

- Speed Limit 20 Miles
- Through Traffic
- Caution School Zone
- RR
- Curves
Birth of the MUTCD

Problems of two manuals led to creation of the MUTCD

Joint Committee

1927 Rural Manual

1930 Urban Manual

1935 MUTCD
1935 MUTCD

First MUTCD (35 & 37 versions)

**Signs**
- White or yellow
- Diamond, square, circle, octagon

**Markings**
- White, yellow, or black

**Signals**
- 3-color signal as standard

Revised 1939
1942 MUTCD

Few major changes
Addressed wartime conditions

*Conservation of materials*
*Blackout traffic control*

Not Revised
Blackout Devices
1948 MUTCD

Significant rewrite

Signs
- Simplified messages
- Eliminated square signs
- Added advisory plate
- Rounded alphabet

Pavement markings
- Yellow - Double center and barrier line
- White - all other applications
- Edge lines not recommended

Simplified signal warrants

Revised 1954
1948 Signs

- T-intersection sign
- Winding road sign
- Stop ahead sign
- Speed limit 50 sign
- Directional sign (Bryan 8, Hearne 25, Keep Right)

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Early Stop & Yield Signs
1954 Revision

Significant sign changes

**THRU**  
**STOP**  
**HWY**

Became

**STOP**

Secondary messages eliminated

**YIELD**  
**RIGHT**  
**OF**  
**WAY**

New Sign

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1958 AASHO Interstate Manual

Created for the new Interstate Highway system

New features

White on green guide signs

Lower case letters

Green on white service signs

Utilized larger sign sizes

Blue service signs added in 1961 revision

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New Interstate Signs

- Interstate 10
- Interstate 75
- Business Spur
- Interstate 56
- Metropolis Utopia
- Exit 30: 2 miles
- Rest Area

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Federal compliance required

New material:

- Construction traffic control
- Civil defense signing
- Freeway guide signing

1961 MUTCD

Not Revised

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1961 Signs

YIELD

Metropolis Utopia

ONLY

Texas 81

Evacuation Route

Transportation Operations Group

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1971 MUTCD

Significant rewrite
DOT ownership
New features:
  - Content: school areas
  - Color: orange
  - Shapes: pennant, pentagon
International sign influence
  - Many new symbols
Yellow markings for opposing traffic

Revised 8 times

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1978 MUTCD

Update of 1971 edition
Loose leaf (binder) format

Individual page revisions
New content

RR-hwy grade crossings
Bicycle facilities

Yellow markings on left side

Revised 4 times

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1978 Devices

- Center Lane
- Buses and 4 Rider Car Pools Only
- Bike Route
- Road Work
- Stop Sign
- Delayed Traffic

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1988 MUTCD

Update of 1978 edition

*Included new revision (#5)*

New content

*Recreational/cultural signs*

*Logo signs*

*TODS*

Planned to be revised only for safety reasons
2000 MUTCD

Millennium edition
Complete rewrite
Ten years to develop
Significant evolution

New structure
Definitions
Metric units
New material

1 Revision
2003 MUTCD

Current edition (9th overall)
Update of 2000 MUTCD
Same size and format
Changes

Compressed pages
Editorial improvements
Signs Not in the 2003 MUTCD
Additional Resources

MUTCD web site
http://mutcd.fhwa.dot.gov
HTML & PDF versions of MUTCD
Lists of changes
mutcd.fhwa.dot.gov

MUTCD History
http://tcd.tamu.edu
⇒ MUTCD History
MUTCD history presentation
ITE Journal articles
⇒ see ITE web site
July, August, November 1992

Traffic Control Devices

Research Staff
Current Research
Previous Research
MUTCD Information
Products
TCD Links
Presentations
Minimum Sign Retroreflectivity

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Questions