Brief History of the MUTCD

1920s

1930s

1940s

Early 1950s

1960s

Today

1940s

Gene Hawkins
Texas Transportation Institute

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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

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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

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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

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1930 Signs

- Speed Limit 20 Miles
- Stop Traffic
- Caution School Zone
- R R
- Curves
Birth of the MUTCD

Problems of two manuals led to creation of the MUTCD

1927 Rural Manual

Joint Committee

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
1935 Signs

- Thru Traffic
- Stop Traffic
- One Way
- Lexinton 10
- Huntington 148
- Railroad Crossing

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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 ahead sign
- Stop ahead sign
- Speed limit 50 sign
- 35 M.P.H. sign
- Bryan Hearne 8 sign
- Keep right sign

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Early Stop & Yield Signs
1954 Revision

Significant sign changes

Secondary messages eliminated

Became

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
TEXAS

BUSINESS 75
SPUR

56
Metropolis Utopia

EXIT
30
M.P.H.

REST AREA
2 MILES
1961 MUTCD

Federal compliance required

New material:

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

Not Revised

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1961 Signs

- Yield sign
- Sign indicating Metropolis Utopia
- Straight route sign
- Turn only sign
- Texas Route US 81 sign
- Route 81 sign
- Evacuation route sign

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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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1971 Signs

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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 only
- Buses and 4 rider car pools only (6AM-9AM, Mon-Fri)
- Bike route
- Traffic signs

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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

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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

- Do Not Enter
- Only
- Rail Crossing
- Do Not Enter
- Stop on Red
- Slow School Zone
- East
- Drive Carefully Substandard Roadway
Additional Resources

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

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

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Questions