



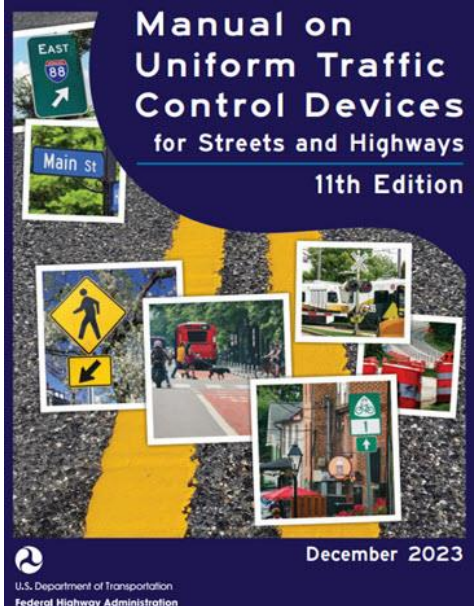
# National Committee on Uniform Traffic Control Devices

## NCUTCD MTC/TTC Orange Markings Joint Task Force



Task Force Chairs: Chris Brookes, Robert Dingess

January 5, 2024



# Orange Marking Experiments

## **Orange Marking Projects**

- North Texas Tollway Authority
- Wisconsin
- Kentucky
- Michigan
- California
- Washington State
- Indiana

## **Task Force: Web Meetings**

- Michigan, Chris Brookes
- California, Brian Hadley
- Washington State, Scott Davis, Steve Haapala
- Indiana, Joe Bruno

## Michigan DOT



## Caltrans



## Indiana DOT



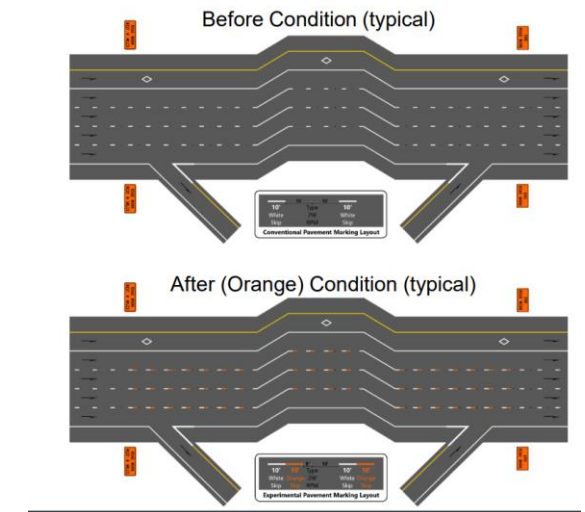
## Washington State



# Washington State

## Survey

- Nearly 90% of Surveyed Drivers want to see orange used more in work zones.
- Over 85% say it increased work zone awareness
- $\geq 60\%$  said orange markings influenced driving behavior



# Caltrans

## Survey

- 93% Recognized Orange Markings
- Nearly 80% Increased Awareness in Work Zone
- 55% Caused me to drive at more reasonable speed
- Nearly 60% orange lane line makes it easier to stay in lane
- Would you like more orange markings in work zones? 84% YES



# Caltrans

## Nighttime Survey Results

- 60% Prefer Orange Markings
- 14% Prefer White Markings



# Indiana DOT

## Survey

- 87% of surveyed drivers notice orange markings in the work zone.
- Over 80% made them more aware of the work zone.
- 81% said orange markings more visible than white markings
- 82% said orange markings more visible than yellow markings



# Indiana DOT

## Crash Modification Factor (CMF)

- 0.21 (Sellersburg)
- 0.30 (Lebanon)





# Task Force Findings

- None of the research project reports found any “negative” impacts from orange markings.
- There is a disparity in public support and recognition of orange markings among public when markings are used alone versus contrast with white and yellow markings.
- Relatively little speed reduction discernible.
- Crash reduction impact varies from none to significant.

# Task Force Recommendations

- Recommend that Joint Task Force begin working on language to provide interim approval for the use of orange markings in work zones as follows:
  - Orange permissible as a supplemental work zone marking
  - Orange markings applied as a contrast (lead/lag) and longitudinal
  - Orange color box to reference 23 CFR 655 (Pantone 152)
  - Minimum Retroreflectivity (3A.05)

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Questions