

# Work Zone Traffic Safety



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# Work zone traffic safety

- **External traffic control** – The primary function is to provide for the reasonably safe and efficient movement of traffic through or around work zones while protecting workers.
- **Internal traffic control** – What employers use to coordinate the flow of construction vehicles, equipment and ground crews moving in close proximity to each other within the work zone.

# OSHA standards for traffic safety

The OSHA standards that regulate work in traffic are found in 29 CFR 1926 Subpart G.

## 29 CFR 1926.200 (g) Traffic Signs

(1) Construction areas shall be posted with legible traffic signs at points of hazard.

(2) All traffic control signs or devices used for protection of construction workers shall conform to Part VI of the Manual of Uniform Traffic Control Devices (MUTCD).

## 29 CFR 1926.201 (a) Flaggers

Signaling by flaggers and the use of flaggers, including warning garments worn by flaggers, shall conform to Part VI of the MUTCD.

# OSHA standards for traffic safety

29 CFR 1926.202 (g) Barricades

Barricades for protection of employees shall conform to Part VI of the MUTCD.



# Manual on uniform traffic control devices

Defines the standards used to install and maintain traffic control devices on all streets and highways. The MUTCD is published by the Federal Highway Administration (FHWA), incorporated by the Department of Transportation (DOT) and referenced by the Occupational Safety and Health Administration (OSHA).

The MUTCD sets minimum standards, provides guidance and ensures uniformity of traffic control devices. The use of uniform traffic control devices (messages, location, size, shapes and colors) helps reduce crashes and congestion, and improves the efficiency of the transportation system.

# Traffic safety considerations

- Training
- Safety apparel
- Temporary traffic control
  - External/internal traffic control
- Work zone safety planning

# Training

- 29 CFR 1926.21(b)(2)  
Employers must instruct workers in the recognition and avoidance of unsafe conditions and the regulations applicable to the work environment to control or eliminate any hazards or other exposure to illness or injury.



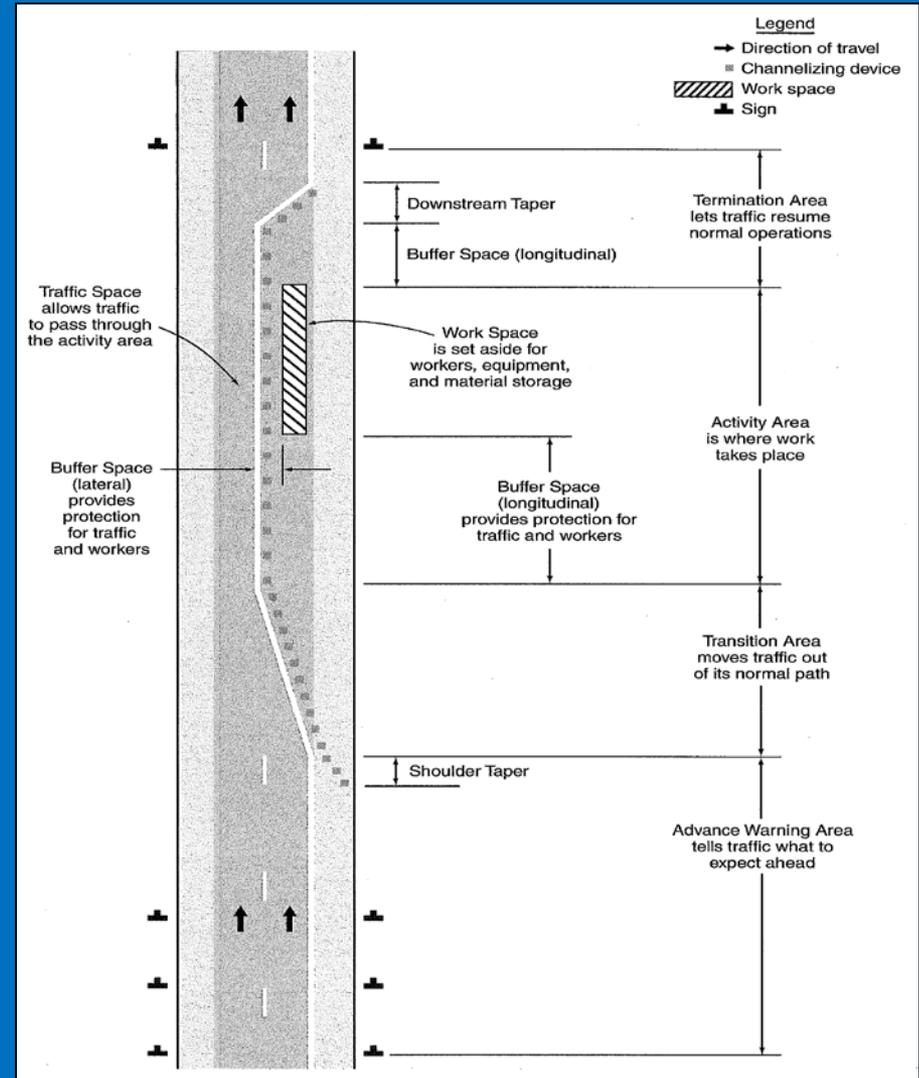
# Safety apparel

- **Minnesota Rules 5207.0100**  
Each employee exposed to or working adjacent to moving motor vehicles shall be required to wear a high visibility garment, performance class 2 or greater as specified by ANSI/ISEA Standard 107-2004.



# Temporary traffic control

- **MUST** follow the requirements of Part 6 of the MUTCD
- **Advanced warning**
- **Transition area**
- **Activity area**
  - work, traffic and buffer
- **Termination area**
  - buffer and taper



# Work zone safety planning

- Hazard control technologies
  - Vertical panel barricades
  - CB wizard alert system
  - Radar-triggered speed display
  - White lane drop arrows
  - Raised pavement markers
  - Removable orange strips
  - Flashing slow/stop paddle

# Vertical panel barricades and CB wizard alert system



# Radar speed display and lane drop arrows



# Raised pavement markers and removable orange strips



# Flashing slow/stop paddle



# References for Part 6 of Minnesota MUTCD

(2011 edition, Revision 3, January 2014)

- Temporary Traffic Control Plans 6C-1
- Temporary Traffic Control Zones 6C-2
- Components of Temporary Traffic Control Zones 6C-2
- Advance Warning Area 6C-2
- Transition Area 6C-4
- Activity Area 6C-4
- Termination Area 6C-8
- Tapers 6C-8
- Detours and Diversions 6C-10
- One-Lane, Two-Way Traffic Control 6C-10
- Flagger Method of One-Lane, Two-Way Traffic Control 6C-10
- Flag Transfer Method of One-Lane, Two-Way Traffic Control 6C-10
- Pilot Car Method of One-Lane, Two-Way Traffic Control 6C-11
- Temporary Traffic Control Signal Method of One-Lane, Two-Way Traffic Control 6C-11
- Stop or Yield Control Method of One-Lane, Two-Way Traffic Control 6C-11

# Additional work zone safety information

- Occupational Safety and Health Administration (OSHA), [www.osha.gov](http://www.osha.gov)
- National Institute for Occupational Safety and Health (NIOSH), [www.cdc.gov/niosh](http://www.cdc.gov/niosh)
- Underground Contractors Association of Illinois, [www.uca.org](http://www.uca.org)
- Chicagoland Construction Safety Council, [www.buildsafe.org](http://www.buildsafe.org)
- American Traffic Safety Services Association, [www.atssa.com](http://www.atssa.com)
- National Work Zone Safety Information Clearinghouse, [www.workzonesafety.org](http://www.workzonesafety.org)

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