



Fundamental Principles of Traffic Control in Work Zones

Design Manual
Chapter 9
Traffic Control in Work
Zones
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The guidelines in this chapter are directed to the safe and expeditious movement of traffic through construction and maintenance zones and to the safety of the work force performing these operations. Because of the variety of conditions encountered, no standard sequence of signs or other control devices can be set up as an inflexible arrangement for all situations. Designers must keep in mind the needs and control of all road users, including motorists, bicyclists, and pedestrians. Attention must be given to ensuring the needs of individuals with disabilities are addressed according to ADA requirements.

These guidelines are based on the following fundamental principles of traffic control.

- A. Traffic safety in construction and maintenance zones should be an integral and high-priority element of every project from planning through design and construction.
 - The basic principles used in the design of permanent roadways should also govern the design of traffic control in work zones.
 - Appropriate traffic control, based on the complexity of the job, should be prepared by knowledgeable persons. Pertinent information should be gathered, analyzed, and used to prepare the traffic control plan.
- B. Traffic movement should be inhibited as little as possible.
 - Assume motorists will reduce their speed only if they perceive a need to do so. Avoid reduced-speed zoning as much as possible.
 - Avoid frequent and abrupt changes in geometrics (lane narrowing, dropped lanes, lane shifting). Proper distances between maneuvers must be maintained.
 - Give consideration to the safe operation of work vehicles, especially on high-volume, high-speed roadways.
 - Minimize construction time to reduce driver exposure to potential risks.
- C. Motorists, bicyclists, and pedestrians should be given clear and positive guidance when approaching and traversing construction areas. Refer to Section [12A-4](#) for information on pedestrian traffic control requirements.

Chronology of Changes to Design Manual Section:

009A-001 Fundamental Principles of Traffic Control

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Change reference from 11A-4 to 12A-4.

4/29/2011 Revised
General updates.