

Creating Safer Work Zones: Improving Operations on Both Sides of the Barrel



Pedestrians in work zones present special safety and mobility concerns. Providing safe, convenient passage to all pedestrians must be addressed in the planning, design, and operation of work zones. This brochure provides some helpful guidelines that can be used to accommodate pedestrians in work zones.



Facts about Pedestrian Work Zone Crashes

- Over the last decade more than 1200 pedestrians and bicyclists died in work zones.
- Over 10,000 pedestrians and bicyclists were injured in work zone crashes during that same period.
- Non-motorist fatalities (workers, pedestrians, bicyclists) in work zone crashes increased more than 60 percent in the last 5 years.

Considerations for Design of Pedestrian Accommodations:

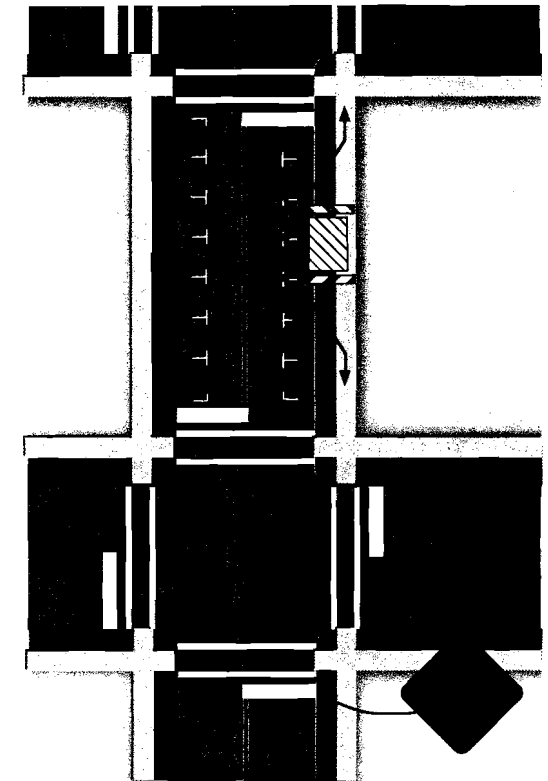
The need to accommodate pedestrians in work zones can be identified by observing existing pedestrian usage and accommodations prior to the start of work. The presence of pedestrians in the area, existing sidewalks and other pedestrian paths, and pedestrian generators such as schools, residences, and parks, all indicate that pedestrians are likely to be present in the work zone. If existing sidewalks must be closed, relocated, or otherwise affected by the planned work activity, temporary facilities should be provided. The following considerations should be addressed when a need for pedestrian accommodations in the work zone is identified:

- Direct conflicts between pedestrians and vehicular traffic, work vehicles, and other work activities should be avoided.
- Temporary pedestrian facilities should provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.
- Covered walkways should be provided where pedestrians are exposed to potential injury from falling objects.

- Adverse economic consequences to business establishments in the work zone should be avoided by maintaining pedestrian access.

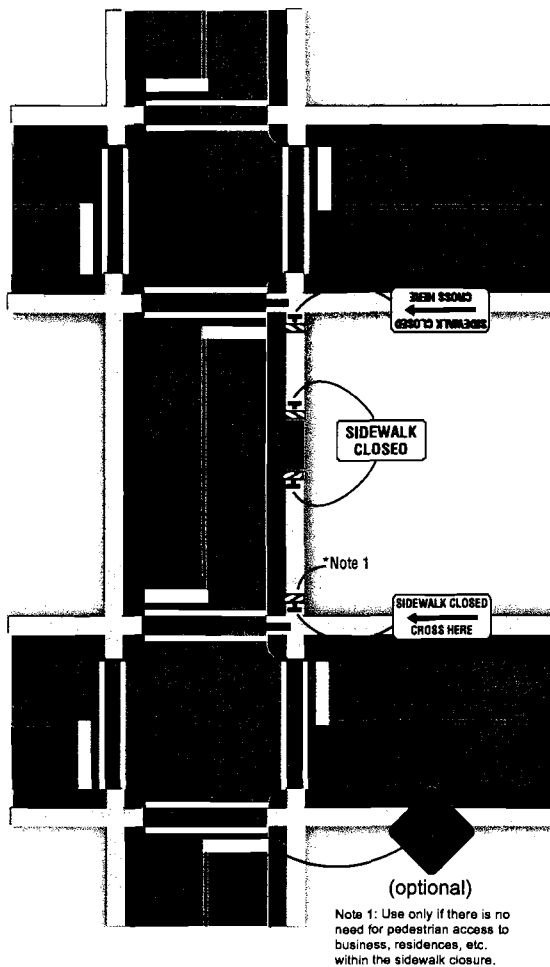
Pedestrian information needs:

- Advance information placed at appropriate distances before the work zone allows pedestrians to make timely decisions about routes through or around the work zone. This is especially important when existing pedestrian routes are closed or detoured.
- Transition information—allows pedestrians to find a safe path through and around work zones. Important when the pathway is restricted, diverted, or detoured.
- Work area information—aids the passage of pedestrians through the work zone. This information is needed on all pedestrian routes except detours.
- Exit information directs pedestrians back to the original route. Important when the pedestrian route is diverted or detoured.



Sidewalk Diversion

- Advance warning may be necessary.
- Only traffic control devices relating to pedestrian flow are shown. Other devices may be needed to control traffic on the streets.
- Transition signing may be necessary to guide or direct pedestrians.



Sidewalk Detour

- Additional advance warning may be necessary
- Only traffic control devices relating to pedestrian flow are shown. Other devices may be needed to control traffic on the streets.
- It may be necessary to allow pedestrians to travel to the closure points to allow access to businesses, residences, etc.

Pedestrian Accommodation Work Zone CHECKLIST

Did you consider: (If NO, check box)

- Impact on pedestrian generators (Schools, Senior Centers, transit stops, etc.)
- Impact on existing pedestrian flow
- Pedestrian information needs—advance, transition, work area, and exit information
- Pedestrian Facilities—walkway width, surface, boundaries, transitions, and channelization.
- Intersections—crosswalk placement, additional signing/markings, traffic signals modification (timing, pedestrian signals, push button, etc.)
- Adequate and safe detour or diversion due to sidewalk closure or blockage
- Adequate pedestrian protection—physical separation from work space and vehicular traffic, overhead protection, etc.
- Construction staging to maintain pedestrian access throughout all construction phases
- Temporary nighttime lighting
- Requirements of the Americans with Disabilities Act (ADA) of 1990
- Location/access to business, residences, etc.
- Future considerations**—frequent checks of the pedestrian accommodations during construction to ensure that the temporary traffic control plan (TCP) is followed, traffic control devices are maintained in good condition, and a safe, accessible pedestrian route is available at all times.

NOTE: If you checked any box, you need to go back and review your traffic control plan and make the necessary changes.

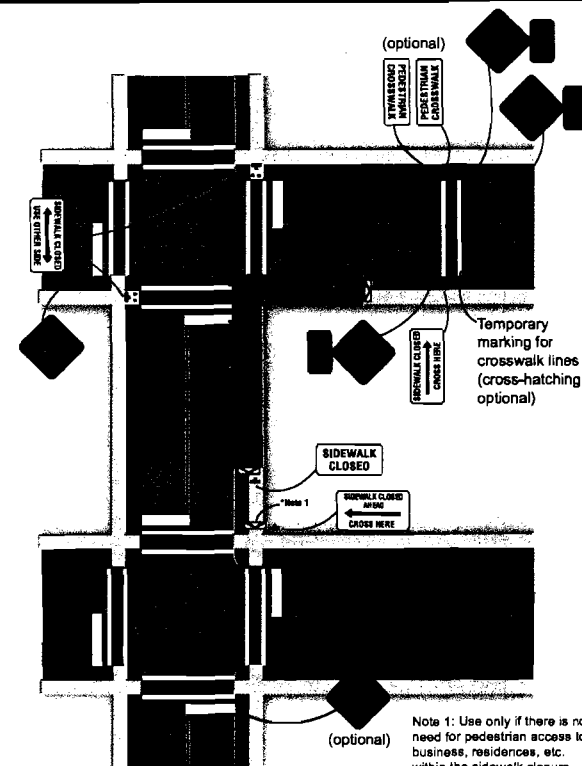
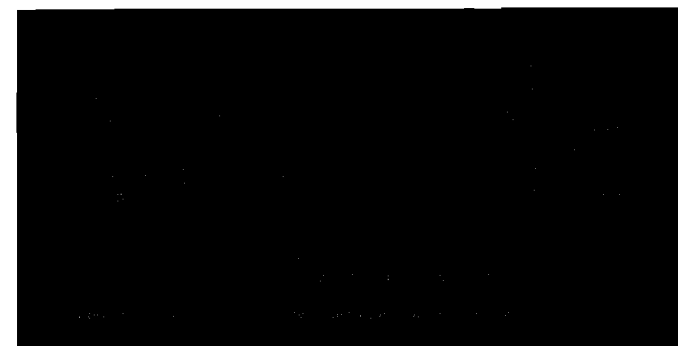
Ref.: MUTCD, Part 6, Millennium Edition



<http://safety.fhwa.dot.gov/programs/wsz.htm>

U.S. Department
of Transportation
**Federal Highway
Administration**

FHWA-SA-03-011



Crosswalk Closure

- Advance warning may be necessary.
- Only traffic control devices relating to pedestrian flow are shown. Other devices may be needed to control traffic on the streets.
- Pedestrian signals should be deactivated for closed crosswalks.
- Nighttime lighting should be considered.