



Colorado Springs
Guide

For

Pedestrian Accessibility

**In The Public Way
During Construction**



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Colorado Springs

A Guide for Pedestrian Accessibility In The Public Way during Construction



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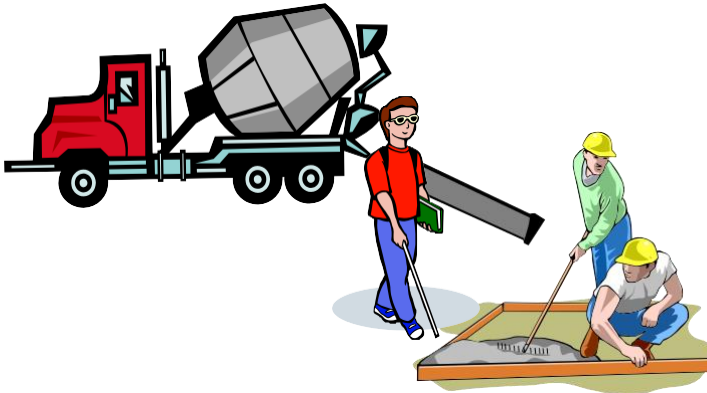
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INTRODUCTION

A permit to work in the public way is required whenever construction activities occur in the public rights-of-way of Colorado Springs. This guide is intended to give you a summary of what is required and what must be done to ensure pedestrian accessibility is maintained throughout the period of time construction is underway.

Construction in the public way can be particularly hazardous to pedestrians with either visual or mobility impairments. Therefore, it is critical that each construction site is properly and adequately protected with a barrier or barricade. Merely placing caution tape and traffic cones is not acceptable. The guidelines contained herein are based on the requirements of the 2010 ADA Standards, the MUTCD standards, chapter 6 (2009) with 2012 Supplements, Traffic Controls for Street Construction, Utility Work, and Maintenance Operations – Manual for Uniform Traffic Control Devices Supplement for Colorado Springs, and the Access Board's Proposed Guidelines for Accessible Public Rights-of-Way (2011) – the currently recognized, “best practice”...and “...state of the practice...for areas not fully addressed by the present ADAAG standards” according to the US Department of Transportation – Federal Highway Administration.

Here is a scene that can occur, but is preventable:



Appropriate planning, use of proper barricades, warnings and alternate routing can prevent injury or property damage.

Remember that pedestrian accessibility must be provided during construction for all people of all ages, including those with different types of disabilities.

PROWAG, R205 Alternative Pedestrian Access Route: When an existing pedestrian access route is blocked by construction, alteration, maintenance, or other temporary conditions, an alternative pedestrian access route complying to the maximum extent feasible with R301 [Pedestrian Access Route requirements], R302 [Alternative Circulation Path requirements], and Section 6D.01 and 6D.02 of the MUTCD...Shall Be Provided.

Consider the following when laying out construction sites:

- Advanced warning and guidance signs
- Adequate illumination and reflectors
- Use of temporary walkways
- Channeling and barricading to separate pedestrians from traffic
- Adequate barricading to prevent visually impaired pedestrians from entering work zones
- Wheelchair accessible alternate pedestrian circulation routes with appropriate signage

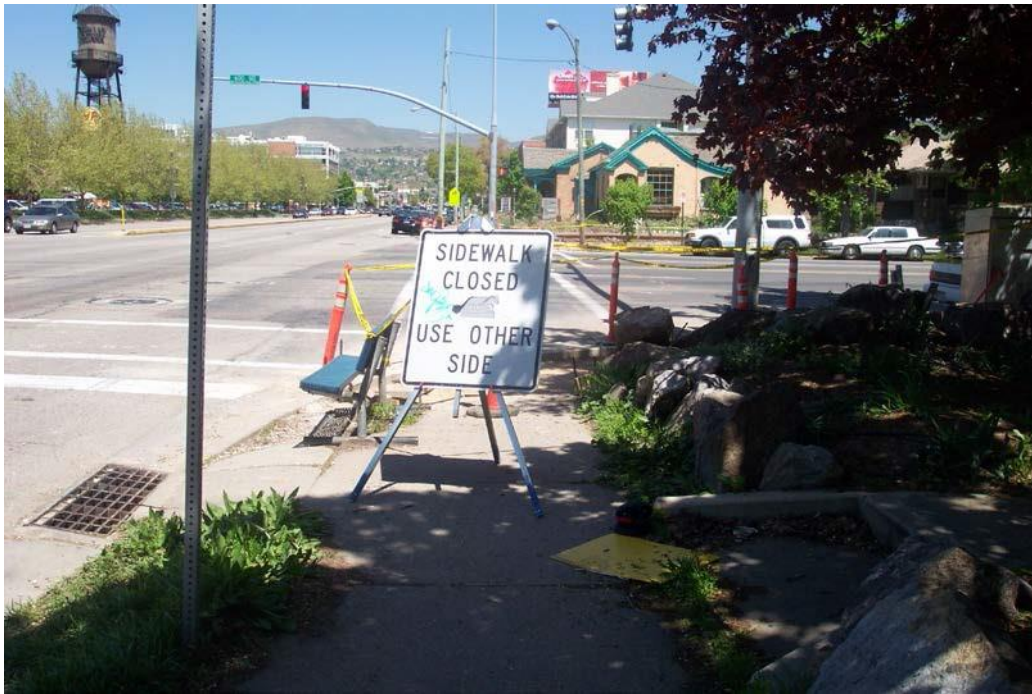
The following photographs present examples of incomplete and inappropriate barricading, advanced warning, and signage:



The removal, even for only a short time, of a pedestrian access route, curb ramp, or pedestrian street crossing may severely limit or totally preclude a person with a disability from navigating in the public way. It may also preclude access to buildings, facilities, or sites on adjacent properties.



Can you count the number of violations? This is a very busy street with no marked crosswalk. There is no alternate circulation path, no barricading, and no provisions made for pedestrians.



Where's the advanced warning and alternate circulation route? This is far from being an acceptable warning. How does someone actually get to the "other side"?



Does this look safe? How would a person with a visual disability navigate this construction site?

Temporary Traffic Control (TTC) Pedestrian Routing – the Three Approaches

- 1) Maintain existing pedestrian sidewalk, if feasible.
- 2) Develop an alternative pedestrian circulation path parallel to the sidewalk, if possible, and when sidewalk must be closed.
- 3) Identify and develop alternative route to sidewalk across the street in advance of construction area if 1 & 2 are not feasible.

Maintain existing pedestrian sidewalk when feasible.

This is preferable, when feasible. Remember the MUTCD requires accessibility features consistent with present features.

Alternate Circulation Path for Pedestrians

- A) If the current pathway must be closed, the preferred option where feasible is to create an alternative circulation path that is parallel to or easily reached from the current pathway. Often this can be accomplished by routing pedestrians into a channelized pathway on the road adjacent to the work area. Section R205 of the PROWAG and Part 6D.01 of the MUTCD reinforce this as the preferred practice as it reduces pedestrian exposure to traffic risks such as street crossings or attempting unprotected street access/usage for those that are physically unable or find it difficult to navigate longer routes across or around blocks required when parallel pathways are not allowed.
- B) It is permissible to route pedestrians in advance of the TTC across the street to a parallel sidewalk. This approach should only be used when maintaining the existing pedestrian sidewalk or same side parallel road construction zone travel is not feasible. Remember, early warning of the TTC is important as many pedestrians are not likely to backtrack.

***Please see the 2009 MUTCD with 2012 Supplements for detailed important information on Temporary Traffic Control, along with the manual on Uniform Traffic Control Devices Supplement for The City of Colorado Springs – 2005.**

Channeling Devices

- 1) Where pedestrians with visual disabilities normally use a closed sidewalk, a barrier that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk – MUTCD 6D.02
- 2) Tape, rope, or plastic chain strung between devices may not be used to control pedestrian movements because these are not detectable – MUTCD 6D.01
- 3) Pedestrian channeling devices shall have continuous bottom and top surfaces. The lower edge of the bottom portion shall be no higher than 2 inches above the walkway. The top edge of the bottom portion shall measure at least 8 inches above the walkway. The top of the top portion shall be no lower than 32 inches above the walkway. The top surface shall be smooth to optimize hand trailing. Both upper and lower surfaces shall share a common vertical plane.

***Please see the 2009 MUTCD with 2012 Supplements for detailed important information on Temporary Traffic Control, along with the manual on Uniform Traffic Control Devices Supplement for The City of Colorado Springs – 2005.**

Barricade Locations

Barricades shall be installed at the following locations:

- Between the pedestrian access route/circulation path and any adjacent construction site
- Between the alternate circulation path and the vehicular way, if the alternate circulation path is diverted into the street
- Between the alternate circulation path and any protruding objects, drop-offs, or other hazards to pedestrians
- At the down curb ramp of an intersection, if the opposite up curb ramp is temporarily and completely blocked, and no adjacent alternate circulation path is provided

Warnings and Signage

Warnings shall be located at both the near side and the far side of the intersection preceding a temporarily, completely blocked pedestrian access route. Signage shall be located at the intersection preceding the blocked way. Where directional signage or warnings are provided, they should be located to minimize backtracking, especially if there is no safe refuge at a corner under construction. This could mean locating a warning or sign at the beginning of a route, not just at the inaccessible site.

Additional Barricading Guidelines

The contractor shall require that no construction materials be stored or placed on the path of travel. The contractor shall maintain the construction barriers in a sound, neat and clean condition. The contractor shall keep public walkways adjoining the construction site of accumulated trash and debris.

The contractor shall remove barriers and enclosures upon completion of the work in accordance with applicable regulatory requirements and to the satisfaction of Colorado Springs Public Works Department.

***Please see the 2009 MUTCD with 2012 Supplements for detailed important information on Temporary Traffic Control, along with the manual on Uniform Traffic Control Devices Supplement for The City of Colorado Springs – 2005.**

Temporary Traffic Control Plans

The Colorado Springs [Traffic Controls for Street Construction, Utility Work, and Maintenance Operations](#), page 12 requires...”work involving a sidewalk or pedestrian walkway, the traffic control plan must contain appropriate protection for pedestrians (fencing, barriers, or covered walkways) and must be approved by Traffic Engineering.”.

Chapter 6 of the MUTCD addresses Temporary Traffic Control (TTC) plans. The following excerpt from this chapter emphasizes the importance of preparing a traffic control plan:

The TTC will include provisions for effective continuity of accessible circulation paths for pedestrians.

Where existing pedestrian routes are blocked or detoured, information should be provided about alternate routes that are useable by pedestrians with disabilities, particularly those who have visual disabilities. This must include access to temporary bus stops, reasonably safe travel across intersections, and other routing issues. Barriers and channelizing devices that are detectable by people with visual disabilities must be provided.

Include provisions for effective continuity of transit service. Provide for features such as accessible temporary bus stops, pull-outs, and satisfactory waiting area for transit patrons, including people with disabilities.

Considerations for Temporary Traffic Control Design Elements in Work Zones:

- Permanent and temporary surfaces must be firm, stable, and slip resistant.
- Walkway widths must be a minimum of 36 inches.
- Cross slope must be 2% or less.
- Running slopes not to exceed 5%, except ramps can be up to 8.33%
- The MUTCD requires a continuous detectable edge on sidewalk diversions with a bottom edge no higher than 2.5” and a top edge no lower than 6” above the sidewalk.
- Covered walkways must meet MUTCD standards of 84” to 96” tall for canopies and a width of 5’.
- Signs or barricades must not protrude into the walkway as to reduce the width less than 36”.
- Channelizing devices must be crashworthy where exposed to vehicular traffic.
- Access to businesses and transit stops should be maintained.

Concluding Statement

The City of Colorado Springs requires that a safe and accessible path of travel shall be provided for all pedestrians, including those with disabilities, around and/or through construction sites.

It is recognized that there are various types of construction activities, including both short-term and long-term projects. Some barricading systems are more appropriate for certain types of construction than others.

When erecting barricades and planning routes, the contractor shall be conscious of the needs of pedestrians with disabilities – particularly those with mobility and vision disabilities. Contractors shall provide protection for pedestrians consistent with all local, state, and federal codes, including the Americans with Disabilities Act, the MUTCD/including the Colorado Springs Supplement and PROWAG in absence of direction from other recognized standards.

REFERENCE DOCUMENTS

- **ADA – 2010 Standards**
- **MUTCD (2009 Edition with 2012 Supplements)**
- **Public Rights-of-Way Accessibility Guidelines (Access Board's 2011 Draft)**
- **Traffic Controls for Street Construction, Utility Work, and Maintenance Operations (2005)**

COLORADO SPRINGS CONTACTS

<p>Public Works – Traffic: Traffic Engineering (719) 385-5908 Traffic Management Center (719) 385-5966 Traffic Signals (719) 385-6721 Traffic Signs & Markings (719) 385-6720</p>	<p>Public Works – Streets Department David Scalfri Streets Operations Manager Public Works Department, Streets Division Office Phone (719) 385-6831 dscalfri@springsgov.com</p>
<p>Public Works – Traffic Engineering Mark Nordstrom Engineering Technician II Public Works/Traffic Engineering – Work Zones Office Phone(719)385-5446 Cell Phone(719)491-5642 mnordstrom@springsgov.com</p>	<p>Projects that Potentially Impact Transit/Bus Locations Christoph Zurcher PLA Project Manager / Design Specialist Public Works - Mountain Metropolitan Transit Office Phone (719) 385-6524 czurcher@springsgov.com</p>