

2008 Pedestrian, Bicycle and Accessible Design Update

Spring 2008



Accessible Design/Universal Design

Meeting new standards may be easier than you think...

The Basic Requirements

- New construction and altered facilities must be “accessible to and usable by” people with disabilities.
- Transportation providers must evaluate existing facilities, policies and programs for discrimination and develop a modification or transition plan that includes:
 - Methods and schedule for correction/retrofit
 - Curb ramp installation schedule(Per Title II (28 CFR Part 35.149 and 35.150))
- Individual pedestrians must be reasonably accommodated, where necessary (most common request is Audible Pedestrian Signal).

Legal Framework for Accessibility

The Law: Establishes Broad Intent

- Rehabilitation Act of 1973 –
<http://www.ed.gov/policy/speced/leg/rehabact.doc>
- ADA (1990 and updates) –
<http://www.ada.gov/pubs/ada.htm>

The Regulations: Details the Law and Specific Requirements

- Rehabilitation Act Section 504 (49 CFR Part 27) -
<http://www.section508.gov/index.cfm?FuseAction=Content&ID=15>
- ADA Title II (28 CFR Part 35) -
<http://www.ada.gov/reg2.html>

The Standards: Measure Compliance

- Special Report: Accessible Public Rights-of-Way Planning and Design for Alterations, August 2007*, (FHWA expectations for public rights of way, summarizes PROWAG) - <http://www.access-board.gov/prowac/alterations/guide.htm>
- Public Rights-of-Way Accessibility Guidelines (PROWAG)* <http://www.access-board.gov/prowac/draft.htm#r3>
- ADA Standards for Accessible Design (ADAAG)* (primary resource for architecture) -
<http://www.ada.gov/adastd94.pdf>
- Accessibility for Outdoor Developed Areas Final Report* (primary resource for parks) –
<http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm>
- WSDOT Design Manual, Chapter 1025*
<http://www.wsdot.wa.gov/EESC/Design/DesignManual/desEnglish/1025-E.pdf>
- WSDOT Standard Plans F30.10-00 – F80.10-00*
- Accessible Sidewalks and Street Crossings – an informational guide*, FHWA (FHWA-SA-03-019).

Accessible Design Quick Reference Guide

Features	Curb Ramps	Sidewalks	Driveways	Crosswalk	Landing	Refuge Island	Accessible Route (pedestrian only)	Ramps for Buildings
Width	4 feet	5 feet	5 feet	10 feet	4 ft x 4 ft	5 ft x 6 ft	5 feet	4 feet
Cross Slope	2% maximum (require less than 2% to get desired results)	2% maximum (require less than 2% to get desired results)	2% maximum (require less than 2% to get desired results)	2% maximum (require less than 2% to get desired results)	2% maximum (require less than 2% to get desired results)	2% maximum (require less than 2% to get desired results)	2% maximum (require less than 2% to get desired results)	1.5%
Running Slope	5-8.3% maximum (require less than 5% to get desired results)	5% maximum (require less than 5% to get desired results)	5% maximum (require less than 5% to get desired results)	5% maximum (require less than 5% to get desired results)	5% maximum (require less than 5% to get desired results)	5% maximum (require less than 5% to get desired results)	5% maximum (require less than 5% to get desired results)	5% maximum (require less than 5% to get desired results)
Maximum Vertical Lip	¼ inch	¼ inch	¼ inch	n/a	¼ inch	¼ inch	¼ inch	¼ inch
Curb Flare Slope	10% measured parallel to gutter	n/a	10% measured parallel to gutter	n/a	n/a	n/a	n/a	10% measured parallel to gutter
Horizontal Clear Area	4 inches	4 inches	4 inches	4 inches	4 inches	4 inches	4 inches	4 inches
Vertical Clear Area	80 inches	80 inches	80 inches	80 inches	80 inches	80 inches	80 inches	80 inches
Counter Slope	5%	5%	n/a	5%	n/a	n/a	n/a	5% at Bottom of Ramp
Landing	4 feet	n/a	4 feet	n/a	n/a	n/a	Landing Required Every 2.5 ft Vertical Rise	4 feet

Source: PROWAG, AADAG



Update- Bicycle and Pedestrian Treatments

Some new treatments described here are being considered for the 2009 update of the *Manual for Uniform Traffic Control Devices (MUTCD)*. View these and other proposed changes to the MUTCD on the website...

<http://mutcd.fhwa.dot.gov/res-notice.htm>

What Are Bike Boxes?

A bike box is striping/markings applied in the shape of a box (e.g., 11x14 feet) encouraging cyclists to move in front of motor vehicles when waiting for a green light at an intersection. Bike boxes eliminate the potential dangers of cyclists being hit by right turning motor vehicles (right hook) by prohibiting their right turn on red. Bike boxes are particularly important in cities at locations with collision history involving bicycles and right turning motor vehicles.

What Are HAWK Signals?

Hawk signals, or pedestrian hybrid signals, are also being considered as part of the 2009 MUTCD update. 'Hawk' is a short name for high intensity, pedestrian activated crosswalk signal. These signals (pictured above) provide the benefit of improved pedestrian safety with less cost than a full traffic signal. Other benefits of the HAWK signal over a full traffic signal include reduced vehicle delay and lower pedestrian volumes required to meet warrants.

What Are Green Bike Lanes?

Colored bike lanes have been applied in several cities across the US to warn motorists and cyclists of high conflict areas. Because blue has been reserved for indicating ADA information, several cities including Portland and Seattle are applying green to bicycle lanes. Colored bike lanes have been shown to improve compliance by both bicyclists and motor vehicles, which in turn improves safety for all road users.

New Bicycle-Focused Guide Signs and Markings

Several bicycle signs and markings are being considered within the 2009 MUTCD update. One is the 'shared lane' or sharrow marking. This symbol is placed in the roadway and is intended to show correct cyclist location where bike lanes should not or can not be installed. This marking can be used on streets or roads with and without on-street parking, and with operating speeds of 35 mph or less. Additionally, the "Bikes May Use Full Lane" sign is being considered for optional use in locations with narrow lanes, and bicyclist focused guide signs with destination and distance are being considered.

Accessible Pedestrian Signal Push Buttons

New requirements are being considered for the location of pedestrian push buttons and for accessible pedestrian signal push buttons. Also, legends on signs associated with the pushbuttons will clearly indicate which crosswalk signal is activated by which pushbutton. New installation requirements will help ensure access, and, whenever a 'No Pedestrian Crossing' sign is installed, will be supplemented with a warning for blind pedestrians.

Other Changes Being Considered...

- Audible devices will be required at pedestrian crossings of light rail.
- Florescent yellow-green signs will be required for school warnings.
- Signing will not be required along bike lanes.
- New sign will be available for other path users (skaters, equestrians).
- New sign will be available for warning both bicyclists and pedestrians, and
- Florescent yellow-green will be recommended for bicycle warnings.

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