

National Committee on Uniform Traffic Control Devices

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Proposed Language as approved by the NCUTCD on June 23, 2011, for new section on Pedestrian Channelizing Devices

An editorial change to Figure 6F-XX, Pedestrian Channelizing Device, was approved by the NCUTCD Council at the General Session on June 10, 2016. The text of Section 6F.XX (below, page 3, line 2, allows the option of the sheeting facing the pedestrian side of the Pedestrian Channelizing device to have a vertical orientation. The Notes for Figure 6F-XX also allow the option for the sheeting panels to have either a vertical or a 45 degree angle orientation. Figure 6F-XX was modified to show the 45 degree angle orientation instead of the vertical orientation since this configuration may provide better guidance for low-vision pedestrians using the path around or through a work zone.

Section 6F.xx Pedestrian Channelizing Devices [suggest placing after Section 6F.63 Channelizing Devices]

Support:

Pedestrian channelizing devices indicate the <u>a</u> suitable safe path of pedestrian travel around or through the work zone.

Guidance:

Pedestrian channelizing devices should be provided when work activities impact sidewalks and <u>or</u> other pedestrian facilities <u>and or</u> when the design of the temporary pedestrian facility does not otherwise include accessibility features consistent with the features in the existing pedestrian facility.

The pedestrian channelizing devices should be used both to close sidewalks and to delineate an alternate route.

Support:

An example of a Pedestrian Channelizing Device is depicted in Figure 6F.xx.

Standard:

Pedestrian channelizing devices shall be crashworthy when exposed to vehicular traffic.

Devices used to channelize pedestrians shall be detectable to users of long canes and visible to persons having low vision.

When used as a sidewalk closure, the device shall cover the entire width of the sidewalk.

Standard:

Pedestrian channelizing devices shall have continuous bottom and top surfaces. The lower edge of the bottom surface portion shall be no higher than 2 inches above the surface walkway. The top edge of the bottom surface portion shall measure at least 8 inches above the surface of the sidewalk or pathway walkway. The top of the top portion surface shall be no lower than 32 inches



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above the <u>surface walkway</u>. The top surface shall be smooth to optimize hand-trailing. Both upper and lower surfaces shall share a common vertical plane.

34 Option:

 A continuous wall may be used as a pedestrian channelizing device.

Guidance:

When used, a continuous wall should have a lower edge no more than 2 inches above the surfacewalkway, should extend a minimum of 32 inches above the surfacewalkway, should have a common vertical plane-face_and should have alternating, contrasting sheeting positioned 32 inches above the surfacewalkway.

Option

The continuous wall may extend to any height above the 32 inch minimum.

Guidance:

When pedestrian channelizing devices are combined in a series, the gap between devices should not exceed one inch.

Support:

A Hand-Trailing Edge is the upper surface of the upper rail on a pedestrian channelizing device, as shown in Figure xx. It is provided to allow pedestrians with limited vision to follow the pedestrian channelizing device with their hand. The Hand-Trailing Edge is not a weight bearing railing.

Option:

A gap not exceeding 2 inches between the bottom rail, or the bottom of the continuous wall, and the pavement or ground and the surface may be used to facilitate drainage.

Standard:

When exposed to vehicular traffic the bottom and top surfaces of the Pedestrian Channelizing Device shall have sheeting complying with Section 6F.6871 line 03.

Option Guidance

When not exposed to vehicular traffic, the Pedestrian Channelizing device should have a contrasting pattern in alternating light and dark colors to provide visual contrast on the upper surface consisting of a minimum of 6 inches of sheeting or other contrasting materials complying with Section 6F.68 line 03. Non-retroreflective materials may be used on the pedestrian side of the Pedestrian Channelizing device.

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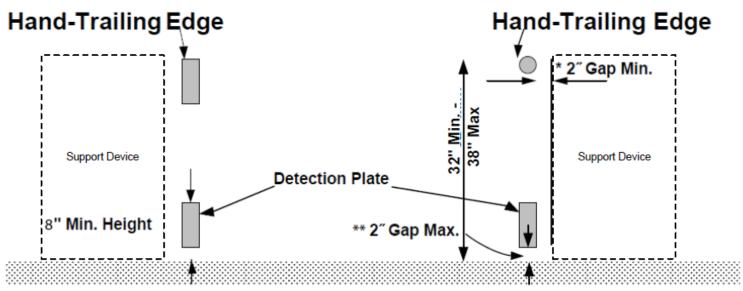
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The sheeting on the side of the device <u>facing on</u> the pedestrian <u>side of the Pedestrian</u> <u>Channelizing device</u> may have sheeting with a vertical orientation.

Support:

The contrast of the light and dark stripes on the barricade sheeting assists low-vision pedestrians in following the designated detour.

Figure 6F-XX Pedestrian Channelizing Device



Cross-Section View

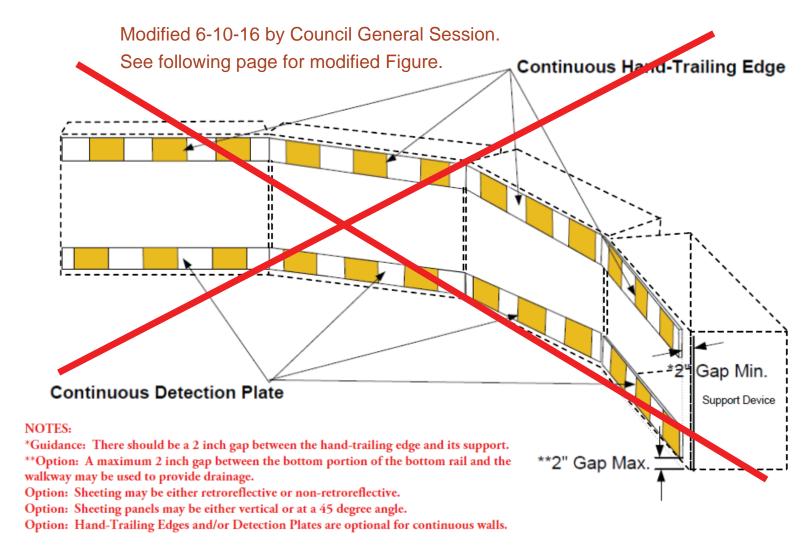
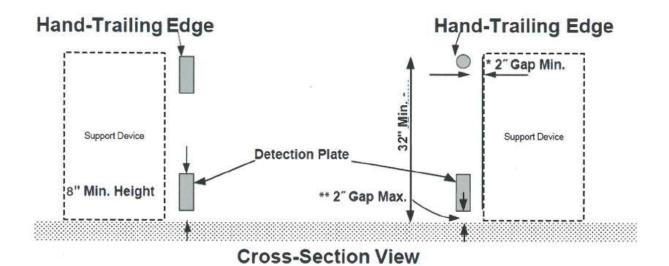


Figure 6F-XX Pedestrian Channelizing Device



Continuous Hand-Trailing Edge

Continuous Detection Plate

NOTES:

**Cuidance: There should be a 2 inch gap between the hand-trailing edge and its support.

**Option: A maximum 2 inch gap between the bottom portion of the bottom rail and the walkway may be used to provide drainage.

Option: Sheeting may be either retroreflective or non-retroreflective.

Option: Sheeting may be either vertical or at a 45 degree angle.

Option: Hand-Trailing Edges and/or Detection Plates are optional for continuous walls.

Figure 7. NCUTD Proposed Guidelines for Pedestrian Channelizing Devices



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TTC Agenda item XII January 2013

National Committee on Uniform Traffic Control Devices TTC TC

TECHNICAL COMMITTEE: NCUTCD Temporary Traffic Control Technical Committee

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Lack of an accessible, detectable barricade between the pathway and the work space

TOPIC: Figure 6H-28 – Typical Application 28 Sidewalk Detour or Diversion

TTC TC APPROVAL FOLLOWING SPONSOR COMMENTS: 6-27-13

TASK FORCE: David Church (chair), Tim Stroth, Tim Cox

TRANSMITTAL TO SPONSORS DATE: 3-11-13

AFFECTED PORTIONS OF MUTCD: Notes for Figure 6H-28, Figure 6H-28

DISCUSSION:

DATE OF ACTION: 1-10-13

RWSTC APPROVAL DATE: 1-10-13

COUNCIL APPROVAL DATE: 6-28-13

Figure 6H-28 and the accompanying notes describe 2 common situations that occur when construction closes a sidewalk: a Sidewalk Detour and a Sidewalk Diversion. The Figure depicts typical traffic control

to guide pedestrians around work that occurs on and closes the sidewalk. As with all of the TAs in

Chapter 6H, these figures are to be used as a starting point to deal with the need for alternate pathways

for pedestrians when sidewalks are closed.

A practitioner recently contacted TTC to note a discrepancy between the Figure for Sidewalk Diversion and other sections in Part 6. Review of the practitioners comment showed several areas where this

figure is not compliant with other sections of Part 6. The areas that are not compliant include:

- Use of a type 3 barricade to close the sidewalk which does not provide the detectability that
 Section 6.
 - Use of the symbol for Longitudinal Channelizing Device to separate the alternate pathway from vehicular traffic without a note requiring that the LDC meet the detectability requirements of Section 6.
 - Width of the alternate pathway is noted at 36 inches while Section 6. Requires 48 inch minimum
 - Lack of notice to practitioners that a ramp is required when elevation changes by more than ½ inch.

RECOMMENDATION:

Modify Figure 6H-28 Sidewalk Diversion to include longitudinal channelizing devices on both sides of the alternate pathway that are detectable to users of long canes and that have upper and lower rails as noted in 6.; adjust the width to read 48 inches minimum and depict ramps between the curb and the alternate walking surface. Modify the Notes to TA-28 to bring them into compliance with the 2009 Edition of the MUTCD and to support the modifications to the Figure. Include in the notes clarification of the use of temporary traffic barriers.

RECOMMENDED WORDING:

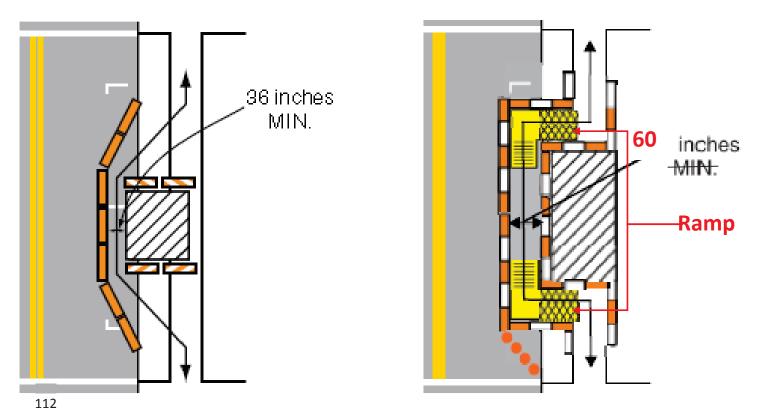
Note: Proposed changes to the MUTCD are shown in <u>underline red</u> and removed text are shown in strikethrough red.

Notes for Figure 6H-28—Typical Application 28 Sidewalk Detour or Diversion

Standard:

- 1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.
- 1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. A pedestrian channelizing device, Figure 6F.xx, 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.
- 2. When used, temporary ramps shall comply with Americans with Disabilities Act.
- 3. When used, Longitudinal Channelizing Devices used for temporary pedestrian routes shall comply with 6F.71 63.

77 70	Guidance:	
78 79	2 Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a cr	asl
80	cushion should be used to separate the temporary sidewalks from vehicular traffic.	изт
81	4. The surface of an alternate pathway should meet the requirements of Americans wit	h
82	Disabilities Act.	_
83	5. The protective requirements of a TTC situation have priority in determining the need	for
84	temporary traffic barriers and their use in this situation should be based on engineer	inq
85	<u>judgment</u> .	
86	36. Audible information devices should be considered where midblock closings and change	јеа
87	crosswalk areas cause inadequate communication to be provided to pedestrians who)
88	have visual disabilities.	
89		
90	Standard:	
91	7. Temporary traffic barriers, if used, shall comply with the provisions of	
92	Section 6F.85.	
93 94	Option:	
95	48. Street lighting may be considered.	
96	59. Only the TTC devices related to pedestrians are shown. Other devices, such as lane	
97	closure signing or ROAD NARROWS signs, may be used to control vehicular traffic	
98	610. For nighttime closures, Type A Flashing warning lights may be used on barricades the	
99	support signs and close sidewalks.	
100	711. Type C Steady-Burn or Type D 360-degree Steady-Burn warning lights may be use	
101	on channelizing devices separating the temporary sidewalks from vehicular traffic flo	w.
102	<u>812</u> .Signs, such as KEEP RIGHT (LEFT), may be placed along a temporary sidewalk to	
103	guide or direct pedestrians.	
104	13. Width of the alternate pedestrian route may be 48 inches with a passing area of	<u>50</u>
105	inches every 200 feet.	
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107	Modify the Figure in TA-28 as shown below:	
108	,	
109	Figure in MUTCD 2009 Edition Proposed Figure for TA-28	
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113 [Note – add symbols in 6H-2 for ramp and pedestrian channelizing device]

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NOTE: This is a recommendation to FHWA on changes to the MUTCD by the National Committee on Uniform Traffic Control Devices (NCUTCD). This recommendation is not a revision to the MUTCD and does not constitute official standards, guidance, or options. No proposed revision to the MUTCD is effective unless and until approved by FHWA through an Interim Approval or through the Federal rulemaking process.

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TTC Agenda item 7 June 2014

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National Committee on Uniform Traffic Control Devices TTC TC

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18 **TECHNICAL COMMITTEE: NCUTCD Temporary Traffic Control Technical Committee**

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- DATE OF ACTION: 6-26-14 20
- 21
- David Church (chair), Hicks, Leonard, Lohman, Flaherty, Stroth, TASK FORCE:
- Ullman, Edmonds, Putman 22
- TTC TC APPROVAL DATE: 6-26-14 23
- 24 TRANSMITTAL TO SPONSORS DATE:

25 26

TOPIC: Figure 6H-28. Sidewalk Detour or Diversion (TA-28)

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AFFECTED PORTIONS OF MUTCD: 2009 Edition – Figure 6H-28

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- 29 **DISCUSSION:**
- Revisions to TA-28 were approved by Council in June 2013. Sponsor comments indicated that 30
- several of the modifications were not clearly labeled. TTC agrees and made the noted 31
- clarifications on the drawing. These clarifications were approved by Council at the June 2014 32 meeting.

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- Because the revised figure includes the new elements of ramp and temporary walking surface, 35
- the notes are revised to address these elements. 36

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Both the clarifications on the figure and the supporting notes were approved by Council June 28, 2014.

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RECOMMENDATION:

Add the clarifications to the figure as noted below.

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RECOMMENDED WORDING:

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Note: this language is from the 2009 Edition, Section

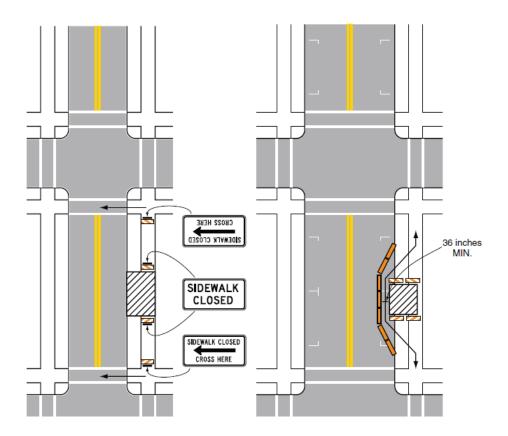
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The change in only in the figure for Sidewalk Diversions.

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This is the Figure in the 2009 Edition:

Figure 6H-28. Sidewalk Detour or Diversion (TA-28)

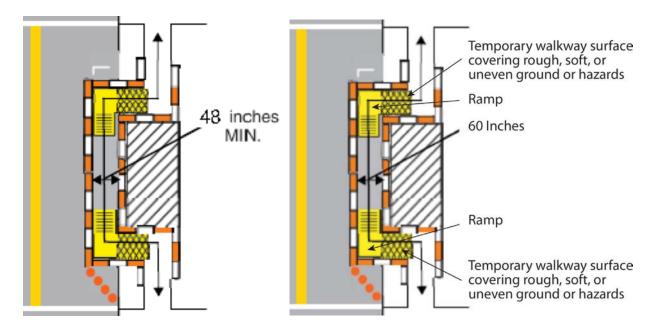


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Approved by Council in June 2013

Clarification approved by Council June 2014

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Note: this language is from the 2009 Edition, Figure 6H -28 (TA-28)

Standard:

- 1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. A pedestrian channelizing device, Figure 6F.xx, 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.
- 2. When used, temporary ramps shall <u>provide a 12:1 (8%) slope or flatter with a slip-resistant surface</u>. <u>comply with Americans with Disabilities Act.</u> Ramp landing area shall provide a 48 x 48 inch minimum area with a 2% or flatter cross-slope.
- 3. When used, Longitudinal Channelizing Devices used for temporary pedestrian routes shall comply with 6F.71.

Guidance:

- 4. The surface of an alternate pathway should meet the requirements of Americans with Disabilities Act.
- 5. The protective requirements of a TTC situation have priority in determining the need for temporary traffic barriers and their use in this situation should be based on engineering judgment.
- 6. Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.

83		Standard:
84	7.	Temporary traffic barriers, if used, shall comply with the provisions of Section
85		6F.85.
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87		Option:
88	8.	Street lighting may be considered.
89	9.	Only the TTC devices related to pedestrians are shown. Other devices, such as lane

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- closure signing or ROAD NARROWS signs, may be used to control vehicular traffic.

 10. For nighttime closures, Type A Flashing warning lights may be used on barricades that
- 10. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.
- 11. Type C Steady-Burn or Type D 360-degree Steady-Burn warning lights may be used on channelizing devices separating the temporary sidewalks from vehicular traffic flow.
- **12.** Signs, such as KEEP RIGHT (LEFT), may be placed along a temporary sidewalk to guide or direct pedestrians.
- Width of the alternate pedestrian route may be 48 inches with a passing area of 60 inches every 200 feet.

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TTC Agenda item 2 - June 2014

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National Committee on Uniform Traffic Control Devices TTC TC

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TECHNICAL COMMITTEE: NCUTCD Temporary Traffic Control Technical Committee

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- 19 **DATE OF ACTION: 6-26-14**
- 20 TASK FORCE: Jim Bryden (chair), Reiss, Sparks, Kelly, Cox, LaBarge, Aburahmah,
- 21 Putman, Groth
- 22 TTC TC APPROVAL DATE: 6-26-14
- 23 TRANSMITTAL TO SPONSORS DATE:

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- **TOPIC: Section 6D.01 Pedestrian Considerations**
- 26 **AFFECTED PORTIONS OF MUTCD**: 2009 Edition Section 6D.01

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- 28 **DISCUSSION**:
- 29 Compliance with the ADA requirements is critical when designing and operating a work zone
- that closes a sidewalk. This Chapter and others have very stringent requirements to maintain
- access for pedestrians, especially those with vision and mobility issues. Practitioners have asked
- for clarification on the length of a work period that would require sidewalk detours or diversions
- instead of less complicated methods like the use of pedestrian flag-persons. The current
- language in this section is silent on length of sidewalk closure that triggers the higher level of
- pedestrian control. The proposed language clarifies the time requirement.

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RECOMMENDATION:

TTC TC recommends inclusion of the new language to address the time component of ADA access.

RECOMMENDED WORDING:

Note: this language is from the 2009 Edition, Section 6D.01

Section 6D.01 Pedestrian Considerations

Section 47 Support:

A wide range of pedestrians might be affected by TTC zones, including the young, elderly, and people with disabilities such as hearing, visual, or mobility. These pedestrians need a clearly delineated and usable travel path. Considerations for pedestrians with disabilities are addressed in Section 6D.02.

51 Standard:

- The various TTC provisions for pedestrian and worker safety set forth in Part 6 shall be applied by knowledgeable (for example, trained and/or certified) persons after appropriate evaluation and engineering judgment.
- Advance notification of sidewalk closures shall be provided by the maintaining agency.
- If the TTC zone affects the movement of pedestrians, adequate pedestrian access and walkways shall be provided. If the TTC zone affects an accessible and detectable pedestrian facility, the accessibility and detectability shall be maintained along the alternate pedestrian route. Option:
- If establishing or maintaining an alternate pedestrian route is not feasible during the project, an alternate means of providing for pedestrians may be used, such as adding free bus service around the project or assigning someone the responsibility to assist pedestrians with disabilities through the project limits.

If an existing pedestrian route is impacted by a short-duration or short term work zone that is attended with project personnel, establishing an alternate pedestrian route may not be necessary if the work can be stopped and pedestrians can navigate the work zone. Pedestrians may be delayed for a short period of time for project personnel to move equipment and material to facilitate passage. Work zone personnel may also provide assistance to the pedestrian as necessary.

Support:

- 73 of It must be recognized that pedestrians are reluctant to retrace their steps to a prior intersection for a 74 crossing
- or to add distance or out-of-the-way travel to a destination.