

National Committee on Uniform Traffic Control Devices

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Item Number: 25B-PED-01

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AFFECTED SECTIONS OF MUTCD:

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COMMITTEE / TASK FORCE: Pedestrian Joint Task Force 25B-PED-01

Definitions of Pedestrian and Wheelchair

Pedestrian JTF Working Group

NCUTCD PROPOSAL FOR CHANGES TO THE

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

1C.02

DEVELOPMENT HISTORY:

ORIGIN OF REQUEST:

ITEM NUMBER:

Approved by NCUTCD Council:

This is a proposed change to the MUTCD that has been developed by a technical committee, joint committee, or joint task force of the NCUTCD. The NCUTCD is distributing this to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the proposal prior to NCUTCD Council consideration. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, options, or support. If approved by the NCUTCD Council, the recommended changes will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only through the federal rulemaking process.

SUMMARY:

DISCUSSION:

In the 11th Edition of the MUTCD, FHWA changed the definition of pedestrian without public review. NCUTCD approved a proposal for change (24A-PED-01) to revert the definition to the 2009 MUTCD text until further study was completed to address a wider scope of definition issues associated with pedestrians. This proposal edits the definition of pedestrian and establishes new a new definition for wheelchair.

In December 2023 FHWA released the 11th Edition of the MUTCD which included a new definition for pedestrian, different from the prior definition in MUTCDs 2000, 2003 and 2009.

New text was added which was not part of the NPA review:

Pedestrian—a person on foot, in a wheelchair, on other devices determined by local law to be equivalent, which might include skates or a skateboard.

On June 28, 2024, NCUTCD approved a proposed change (24A-PED-01) to revert the definition back to the 2009 MUTCD text. The 2024 proposal explained the need to address evolving

micromobility devices, vulnerable users and conflicts with increased speeds from mobility devices that have become motorized. Unaware if FHWA might release a Technical Correction shortly after the 11th edition release, 24A-PED-01 was approved with the intent to follow up with more robust definition development. Since that time the Pedestrian Joint Task Force has studied this definition and worked in collaboration with Edit Committee to offer this proposal.

Local Definitions of Pedestrian

The first area of investigation was to review the law and rules in every state (including DC and Puerto Rico) for pedestrian definitions (see white paper). This was done as a means to assess the additional text FHWA added to the 2023 MUTCD. What was found was a range of definitions in four categories, grouped as those defining pedestrians as:

- A person afoot (36 percent)
- A person afoot + wheelchair (34 percent)
- A person afoot + wheelchair + other mobility device (24 percent)
- A person afoot + other mobility device (6 percent)

The review of state statutes/laws/codes verified the concern that there is growing variation in the definition of pedestrian. It also emphasized the consistent elements of the pedestrian definition. Every definition (100%) included the terms a person afoot or on foot. Nearly 58 percent included wheelchairs specifically in their definitions. Only a couple included references to skates or skateboards, using text similar to the 2009 MUTCD. The states that included other mobility devices included terms such as electric personal assistive mobility device, personal delivery device, pedestrian conveyance, and conveyance designed for propulsion by human muscular power (other than bicycle). In these cases, states refined definitions to address the emergence of motorized micromobility devices.

Other Definitions of Pedestrians

A half dozen examples from TRB, United States Code, Access Board, NHTSA, Merriam-Webster and Wikipedia show a range of definition for pedestrian from technical to everyday person (see white paper for additional information). The TRB Transportation Research Thesaurus utilizes the AASHTO Glossary definition of pedestrian:

Persons traveling on foot or who use assistive devices, such as a wheelchair, for mobility.

MUTCD Use of Terms

A search of the 2023 MUTCD text for various terms produced the following counts:

- Pedestrian = 1,365 references (in every part of the MUTCD)
- Walk = 99 references (in parts 1, 2, 4, 7 & 8)
- Wheelchair = 12 references (in parts 1, 2, 3, 4, 6 & 8)
- Vulnerable User = 12 references (in parts 1, 4, 6, 8 & 9)
- Skate = 11 references (in parts 1, 2 & 9)
- Micromobility = 1 reference (in part 9)

The terms pedestrian and walk are used extensively in the MUTCD. They are used to specify traffic control device (TCD) application and operation unique to these users. Micromobility, vulnerable user, skate, skateboard and wheelchair are not defined in the MUTCD. However, by opening up the definition of pedestrian to these "small, low-speed, lightweight wheeled

conveyances" it changes key dynamics of the rules of the road and TCDs related to yielding and stopping.

Issues

Conflating pedestrians with a range of emerging mobility devices has consequences for traffic control design. Today micromobility devices operate at a variety of speed ranges. Where person who walk or use wheelchairs operate between 2.5 to 5 mph, human powered devices (such as bicycles, kick scooters, skates and skateboards) can operate between 5 to 15 mph and motorized devices (such as e-scooters, e-bike and e-unicycles) can operate between 15 to 30 mph and faster. This operating speed differential establishes a hierarchy of vulnerability for road users where in one case a group of users (micromobility) with little or no protection from crash forces with automobiles is vulnerable and the next moment they pose a threat to road users such as pedestrians and person with disabilities. Using similar definitions for wide ranges of operating speeds changes the underlying assumptions regarding traffic control device design criteria and rules of the road associated with yielding and stopping.

For these reasons, pedestrians need to be uniquely defined to advance safe design of traffic control devices for a growing range of road users. When traffic control devices are meant for other users, they can be specified as such. MUTCD sections related to pedestrian crossings/crosswalks, bicycle crossings and the use of bicycle facilities depends upon clear understanding for the proper application of TCDs.

To this end, the definition of vehicle in the MUTCD (see below) is interpreted to include "devices upon which a person or property can be transported upon a highway" which would include micromobility – human powered or motorized.

284. Vehicle—every device in, upon, or by which any person or property can be transported or drawn upon a highway, except trains and light rail transit operating in exclusive or semi exclusive alignments. Light rail transit equipment operating in a mixed-use alignment, to which other traffic is not required to yield the right-of-way by law, is a vehicle.

Some of those devices operate at lower speeds (micromobility). However, low-speed does not conflate with being a pedestrian. Common definitions for "low-speed" from FHWA (49 CFR 571.3 and 49 CFR 571.500) and referred to in many state statutes or laws is a maximum operating speed of 20-25 mph. The number of stated with definitions for pedestrian that include low-speed devices has grown in recent years. While the majority (70%) of states define pedestrians as a person afoot or in a wheelchair, the variation that has emerged is contrary to the objective of the MUTCD for consistency and uniformity (Section 1A.01).

The term wheelchair has not been defined in the MUTCD. Wheelchairs are a central part of the pedestrian definition and the term is utilized in six different parts of the MUTCD. Because they may be motorized, being clear about their inclusion as a pedestrian (as different from micromobility) is important. This avoids conflation between devices that may be similar in nature to a wheelchair but are not operated comparably to a pedestrian (stated in 49 CFR 37). An additional clarification is needed as the definition of vehicle is so broad that it could be interpreted to be inclusive of wheelchairs as a highway includes the "public way traveled by vulnerable road users." This highway definition is the same as is being considered by 25A-EDT-01 which proposes to have highway refer to road and road continues to include the entire area with the right-of-way. By excluding wheelchairs from vehicles, wheelchairs are uniquely defined as transporting a person as a pedestrian. The white paper provides additional background.

The inclusion of skates and skateboards in the pedestrian definition adds devices that may or may not be motorized and are not defined. The potential for operating speeds that are substantially different than that of a person afoot or in a wheelchair. This inconsistency is apparent in that almost no state includes them in their statute/law/code definitions of pedestrian. These are part of micromobility, which may need to be considered in the future for definition should design of TCDs be affected by their use.

This Proposal

This proposal addresses the definitions for pedestrian and wheelchair in the MUTCD. The pedestrian definition is brought in line with AASHTO, TRB, the United States Code and vast majority of states. The core contents of the Access Board definition for wheelchair is adapted for MUTCD application. It includes two important variations. The proposal focuses on "mobility device for persons with impaired mobility" and "for use in pedestrian travel." These two qualifying statements are needed to avoid possible misinterpretations with micromobility devices. A minor edit to the definition of vehicle is added to exclude wheelchairs as they are to be used for pedestrian travel.

An additional objective of this proposal would be, in collaboration with the Rules of the Road Task Force, to seek national consistency in these definitions to avoid further misconceptions associated with criteria for design and operation that would present road users with inconsistent, non-uniform application of TCDs. By including the specific statute/law/code sections in the white-paper, each state may choose to address consistency in their own manner.

RECOMMENDED MUTCD CHANGES:

The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in red strikethrough. Changes previously approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double underline for additions and green double strikethrough for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by [bracketed white text in shaded green]. Deletions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in highlighted-red-strikethrough-and-sans-serif-text. Additions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in underline-blue-and-sans-serif-text.

PART 1

GENERAL

CHAPTER 1C. DEFINITIONS, ACRONYMS, AND ABBREVIATIONS USED IN THIS MANUAL

03

Section 1C.02 Definitions of Words and Phrases Used in this Manual

[Only the following three definitions are shown for brevity]

185 Standard:

The following words and phrases, when used in this Manual, shall have the following meanings:

- 164. Pedestrian—a person on foot, in or who uses a mobility device, such as a wheelchair, on other devices determined by local law to be equivalent, which might include skates, or on a skateboard. [Changes in green from 24A-PED-01]
- 284. Vehicle every device in, upon, or by which any person or property can be transported or drawn upon a highway, except a mobility device, such as a wheelchair, and except trains and light rail transit operating in exclusives or semi-exclusive alignments. Light rail transit equipment operating in a mixed-use alignment, to which other traffic is not required to yield the right-of-way by law, is a vehicle.
- <u>291a.</u> Wheelchair a wheel mobility device designed for use by an individual with impaired mobility, manually-operated or power-driven, for the purpose of pedestrian travel.