National Committee on
Uniform Traffic Control Devices

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National Committee on Uniform Traffic Control Devices (NCUTCD)
Recommended Changes to Proposed Text for 11th Edition of the MUTCD
Docket Number: FHWA-2020-0001

Federal Register Item Number: 365-372
NPA MUTCD Section Number: Sections 3H.01-3H.08
Legend: Base text shown in proposal is the NPA "clean" proposed text.

- NCUTCD recommendation for text to be added in final rule.
- ~~NCUTCD recommendation for text to be deleted in final rule~~.
- NCUTCD recommendation for text to be moved/relocated in final rule.
- NPA text that was not previously approved by NCUTCD but is now approved.
- Explanatory note: [Note that explains purpose of recommended change.]

The following pages present NCUTCD recommendations for changes to the MUTCD NPA proposed text, tables, and figures for Chapter 3H. Below is a short summary of the NCUTCD position for each section of this chapter. A more detailed summary is provided at the beginning of each section.

- NPA #365, Section 3H.01: NCUTCD agrees with NPA content (no changes recommended).
- NPA #366, Section 3H.02: Changes recommended based on Council action in spring 2021.
- NPA #367, Section 3H.03: Changes recommended based on Council action in spring 2021.
- NPA #368, Section 3H.04: NCUTCD agrees with NPA content (no changes recommended).
- NPA #369, Section 3H.05: NCUTCD agrees with NPA content (no changes recommended).
- NPA #370, Section 3H.06: Changes recommended based on Council action in spring 2021.
- NPA #371, Section 3H.07: Changes recommended based on Council action in spring 2021.
- NPA #372, Section 3H.08: NCUTCD agrees with NPA content (no changes recommended).

CHAPTER 3H COLORED PAVEMENT

Section 3H.01 Comments: NCUTCD agrees with 3H.01 as presented in the NPA.

Section 3H.01 Standardization of Application

Support:

Colored pavements consist of differently colored road paving materials, such as colored asphalt or concrete, or paint or other marking materials applied to the surface of a road or island to simulate a colored pavement.

Standard:

If colored pavement is used within the traveled way to regulate, warn, guide or otherwise communicate with traffic or if retroreflectivity is used, the colored pavement shall be considered a traffic control device and shall be limited to the colors and applications specified in this Chapter.

Except where provided in Paragraph 4 of Section 3H.07, colored pavements shall not be used as a traffic control device, unless the device is applicable at all times.

Guidance:

Colored pavements used as traffic control devices should be used only where they contrast significantly with adjoining paved areas.

Support:

The chromaticity coordinates that define the ranges of acceptable colors to be used in pavement marking applications are found in the Appendix to Subpart F of 23 CFR 655.

Standard:

Colored pavement shall be limited to uses only where it supplements other markings as provided in this Manual.

Support:

Longitudinal pavement markings, crosswalks, pavement marking symbols, and elongated route markers are not considered colored pavements.

Standard:

Colors other than those specified in this Chapter shall not be used for colored pavement.

Section 3H.02 Comments: NCUTCD generally agrees with 3H.02 as presented in the NPA, but recommends removing the Support statements because they are not necessarily correct and offer no support to the practitioner for using colored pavement.

Section 3H.02 Materials

Option:

Colored pavements may be retroreflective.

Standard:

The intentional non-use of retroreflectivity shall not exempt colored pavement from the provisions of this Manual.

Guidance:

If marking materials applied to the roadway surface are used to simulate a colored pavement, consideration should be given to selecting pavement marking materials that will minimize loss of traction for pedestrians, bicyclists, etc. (see Paragraph 2 of Section 3A.02).

~~Support:~~

~~Providing for retroreflectvity, such as incorporating glass beads, can increase the friction of pavement markings and can reduce the potential for slip and fall incidents.~~

~~Installation of colored pavement to one lane or an area or portion of a multi-lane traveled way can create differentials in skid resistance values between the colored pavement and the general-purpose lanes that might be unexpected by the oad user.~~

~~The acceleration of heavy vehicles might cause abnormal wear to colored pavement especially at bus stops. The selection of the material properties for these areas is important.~~

[remove Support statements]

Section 3H.03 Comments: NCUTCD generally agrees with 3H.03 as presented in the NPA, but recommends revisions as follows:

- Remove the text in the Guidance statement declaring that the right-of way is *dedicated exclusively to highway-related functions*, as this is not true in all cases
- Remove the text in the Standard statement prohibiting pictographs, symbols, and multiple color arrangements in crosswalks, as there may be situations where including these may be appropriate, such as for municipal identification
- Revise the final two Standard paragraphs to Guidance, as there may be reasons for exceptions

Section 3H.03 Aesthetic Treatments in Crosswalks

Support:

If non-retroreflective colored pavement is used as a purely aesthetic treatment within the criteria presented in this Section and is not intended to communicate a regulatory, warning, or guidance message to road users, the colored pavement is not considered to be a traffic control device, even if it is located between the lines of a crosswalk.

Guidance:

~~*Since the right-of-way is dedicated exclusively to highway-related functions, a*~~ *A policy for using aesthetic treatments in crosswalks should consider whether their use or design is appropriate for the right-of-way.* [remove portion of guidance statement]

Colored pavement located between crosswalk lines should not use colors or patterns that degrade the contrast of white crosswalk lines, or that might be mistaken by road users as a traffic control application.

Aesthetic treatments within crosswalks should only be used on roadways with a speed limit of 30 mph or less.

Support:

Examples of materials for the interior portions of a crosswalk include brick, paving bricks, paving stones, setts, cobbles, or other resources designed to simulate such paving. Examples of geometries for the interior portions of a crosswalk include honeycomb, lattice, mesh, grid, and regular polygon patterns. Examples of colors for the interior portions of a crosswalk incorporated into the material or geometry are brick red, rust, brown, burgundy, clay, tan, or similar earth tone equivalents (see Figure 3H-1).

Standard:

Patterns that constitute a purely aesthetic treatment for the interior portion of a crosswalk shall be devoid of advertising~~, pictographs, symbols, multiple color arrangements counter to Paragraph 4~~, and shall not implement elements of retroreflectivity. [remove portion of Standard]

Guidance

Patterns that constitute a purely aesthetic treatment for the interior portion of a crosswalk ~~shall~~ should not be designed to encourage other road users such as pedestrians to loiter in the crosswalk, engage in the pattern, or otherwise not encourage those users to vacate the street in an expedient manner.

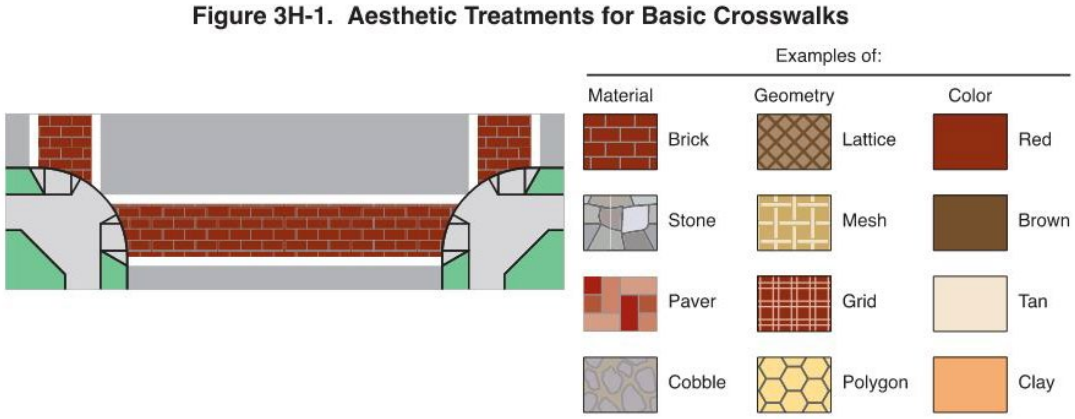
Aesthetic treatments for the interior portions of crosswalks ~~shall~~ should not be of a surface that can confuse vision-impaired pedestrians that rely on tactile treatments or cues for navigation. [revise Standard to Guidance]

Option:

To create contrast, a gap of at least one-half of the width of the white transverse line used to establish the crosswalk may be used between the white transverse crosswalk line and the aesthetic treatment, such as unmarked pavement or a black contrast line.

Figure 3H-1 Comments: NCUTCD agrees with Figure 3H-1 as presented in the NPA.

Figure 3H-1. Examples of Colors for the Interior Portions of Crosswalks



Section 3H.04 Comments: NCUTCD agrees with 3H.04 as presented in the NPA.

Section 3H.04 Yellow-Colored Pavement

Standard:

If used, yellow-colored pavement shall be limited to:

A. Flush or raised median islands separating traffic flows in opposite directions,

B. Left-hand shoulders of divided highways, and

C. Left-hand shoulders of one-way streets or ramps.

Yellow-colored pavement shall not be incorporated into elements of the roadway that function as reversible lanes or two-way left turn lanes.

Yellow-colored pavement shall not be used on channelizing islands where traffic travels in the same general direction on both sides.

Option:

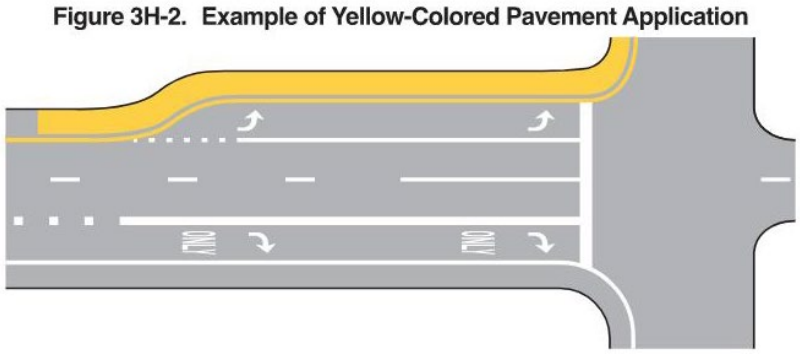
Yellow-colored pavement may be installed for the entire length of the roadway, island, or shoulder, or for only a portion or portions of the roadway, island or shoulder.

Support:

Examples of applications of yellow-colored pavement are shown in Figure 3H-2.

Figure 3H-2 Comments: NCUTCD agrees with Figure 3H-2 as presented in the NPA.

Figure 3H-2. Examples of Application of Yellow-Colored Pavement



Section 3H.05 Comments: NCUTCD agrees with 3H.05 as presented in the NPA.

Section 3H.05 White-Colored Pavement

Standard:

If used, white-colored pavement shall be limited to:

A. Flush or raised channelizing islands where traffic passes on both sides in the same general direction,

B. Right-hand shoulders,

C. Exit gore areas, and

D. Entrance gore areas.

Guidance:

When used on right-hand shoulders, white-colored pavement should be limited to areas not intended for use by motor vehicle traffic except those shoulders designated for emergency use.

Option:

White-colored pavement may be installed for the entire length of the roadway, island, or shoulder, or for only a portion or portions of the roadway, island or shoulder.

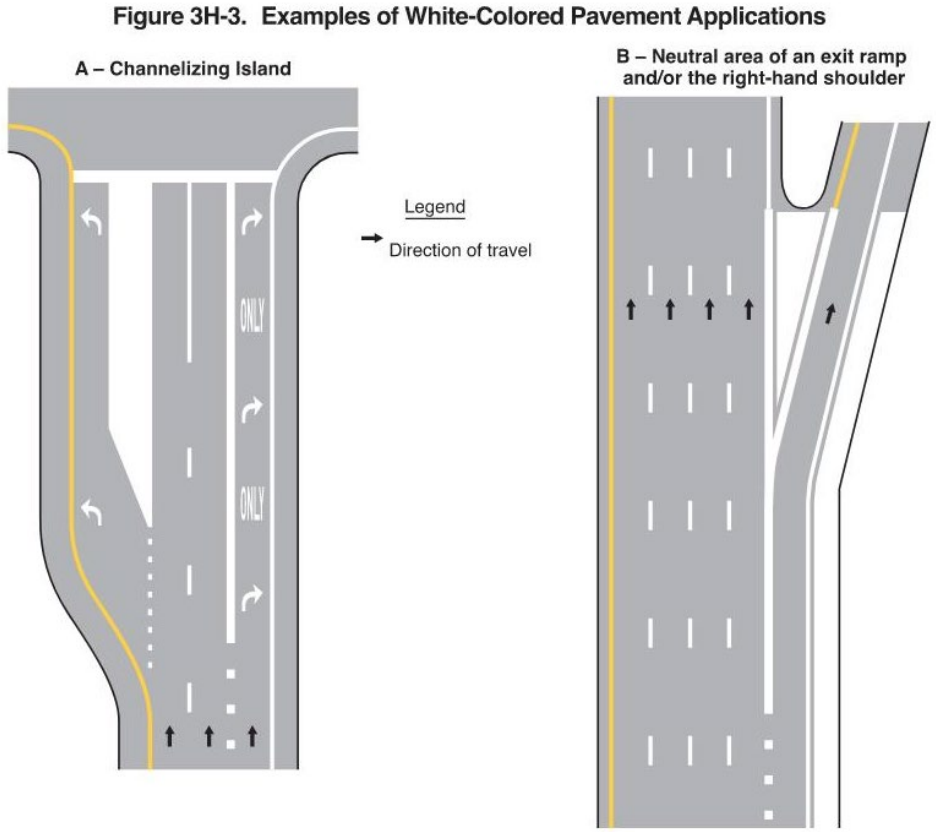
White-colored pavement may be used instead of chevron markings (see Sections 3B.13 and 3B.25) in neutral areas.

Support:

Examples of applications of white-colored pavement are shown in Figure 3H-3.

Figure 3H-3 Comments: NCUTCD agrees with Figure 3H-3 as presented in the NPA.

Figure 3H-3. Examples of Application of White-Colored Pavement



Section 3H.06 Comments: NCUTCD generally agrees with 3H.06 as presented in the NPA, but recommends revising as follows:

- Add a list item H to the Standard list to add Shared Lane Markings to the treatments eligible for green pavement in accordance with NCUTCD recommendation 16B-BIK-01 and docket comments on Section 9E.03
- Remove the restriction for using green-colored pavement for shared-use paths, crosswalks, and independent alignment bicycle lanes, as green pavement can be useful on these facilities to increase conspicuity and provide color continuity, and has been used by a number of agencies on these facilities for that purpose
- Remove the Standard text requiring green-colored pavement to match the dotted line pattern in extensions, as it may be appropriate to use a continuous color pattern, and continuous patterns have been used by a number of agencies

Section 3H.06 Green-Colored Pavement for Bicycle Facilities

Support:

Green-colored pavement is used to enhance the conspicuity of locations where bicyclists are expected to operate, and areas where bicyclists and other roadway traffic might have potentially

conflicting weaving or crossing movements. Green- colored pavement is also used to enhance the conspicuity of word, symbol, and/or arrow pavement markings when these markings are used in certain bicycle facilities (see Figure 3H-4).

Standard:

If used, green-colored pavement shall be limited to:

A. Bicycle lanes (See Section 9E.01),

B. Extensions of bicycle lanes through intersections (See Section 9E.03),

C. Extensions of bicycle lanes through areas where motor vehicles enter an exclusive turn lane in which motor vehicles must weave across bicycle traffic in bicycle lanes,

D. Two-stage turn boxes (See Section 9E.11),

E. Bicycle Box (see Section 9E.12),

F. Bicycle detector symbol (See Section 9E.16), ~~and~~

G. Separated bicycle lanes within the roadway~~.~~, and

H. Shared Lane Markings [add SLMs to standard]

Green-colored pavement shall not be incorporated into ~~shared-use paths, shared-lane markings, crosswalks, separated bicycle lanes on an independent alignment, or~~ electric-vehicle parking stations or parking stalls. [remove Standard prohibition on these facility types]

Option:

Green-colored pavement may be installed for the entire length of a bicycle lane or bicycle lane extension or for only a portion (or portions) of the bicycle lane or bicycle lane extension.

Green-colored pavement may be installed for the entire length of a physically-separated bikeway within the roadway or for only a portion (or portions) of the physically-separated bikeway.

Standard:

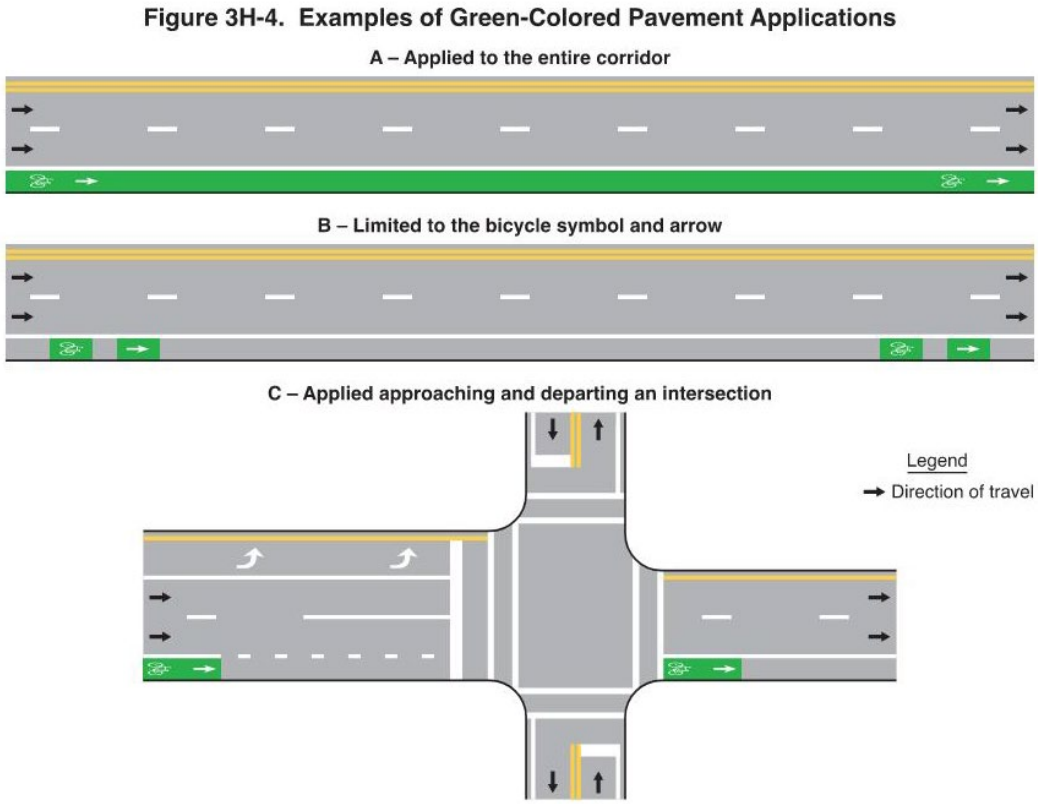
Green-colored pavement shall not be used instead of dotted lines used to extend a bicycle lane or a separated bicycle lane within a roadway across an intersection, driveway, or ramp. ~~The pattern of the green-colored pavement shall match the pattern of the dotted lines, thus filling in only the areas that are directly between a pair of dotted line segments.~~ [remove Standard requiring pattern match]

Guidance:

Appropriate regulatory (see Chapter 9B) or guide signing (see Chapter 9D) should be installed to provide related information to the presence of the colored pavement.

Figure 3H-4 Comments: NCUTCD agrees with Figure 3H-4 as presented in the NPA.

Figure 3H-4. Examples of Green-Colored Pavement



Section 3H.07 Comments: NCUTCD generally agrees with 3H.07 as presented in the NPA, but recommends changing the Standard statement restricting red-colored pavement to areas where general-purpose traffic is not expected to Guidance, as there may be reasons for exceptions.

Section 3H.07 Red-Colored Pavement for Public Transit Systems

Support:

Red-colored pavement is used to enhance the conspicuity of locations, station stops or travel lanes in the roadway exclusively reserved for vehicles of public transit systems or multi-modal facilities where public transit is the primary mode. These public transit vehicles include buses, taxis, streetcars, trolleys, light-rail trains, and rapid transit fleets.

Option:

Red-colored pavement may be used where an engineering study determines that one or more of the following conditions are expected to result from its application:

A. Increased travel speeds will be expected by the public transport vehicle after an exclusive lane or facility is provided,

B. Reduced overall service time through the corridor will be expected by the public transport vehicle,

C. Decreased rates of illegal parking or occupation of the transit or multi-mode lane or facility will be expected.

~~*Standard*~~ *Guidance:*

If used, red-colored pavement ~~*shall*~~ *should be applied only in lanes, areas, or locations where general-purpose traffic is not allowed to use, queue, wait, idle, or otherwise occupy the lane, area or location where red-colored pavement is used.* [revise Standard to Guidance]

Standard:

Red-colored pavement shall be installed for the full width of the lane.

Option:

Red-colored pavement may be used for full-time or part-time operations.

Red-colored pavement may be installed for the entire length of a restricted lane or for only a portion (or portions) of the restricted lane.

Red-colored pavement may be installed in a broken pattern where entrance into the transit lane is permitted by general traffic, for example where general traffic is allowed in a transit lane in advance of a turn.

Standard:

Regulatory signs (see Sections 2B.02 and 2G.03) shall be used to establish the allowable use of the lane, area, or location. Regulatory signs shall also be used when it is determined that other vehicles will be allowed to enter the lane to turn or bypass queues.

Guidance:

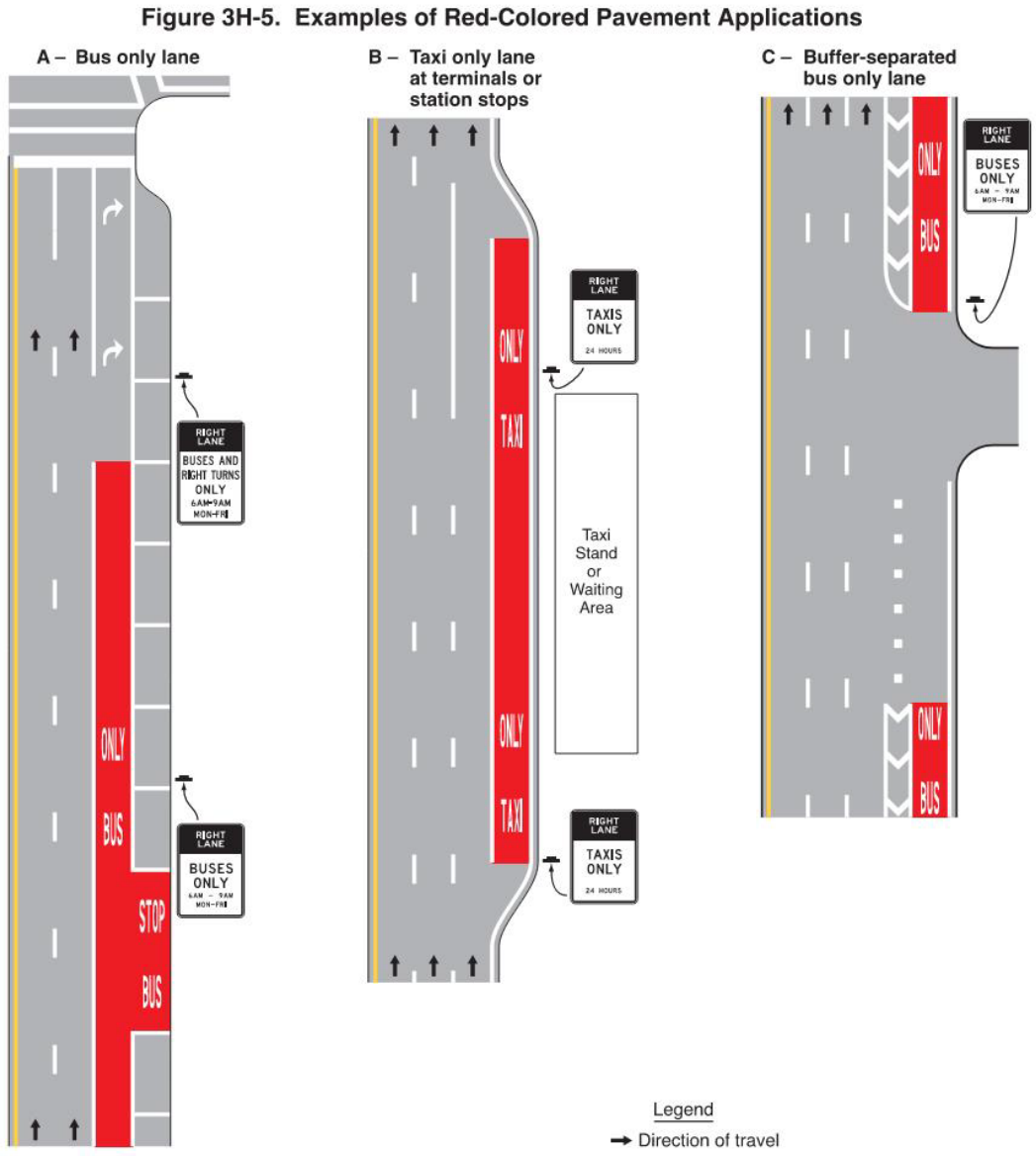
If red-colored pavement is used on public transit facilities separated from the roadway or on facilities on an independent alignment, it should be used only at the entrances to those facilities from roadways open to public travel.

Support:

Examples of applications of red-colored pavement are shown in Figure 3H-5.

Figure 3H-5 Comments: NCUTCD agrees with Figure 3H-5 as presented in the NPA.

Figure 3H-5. Examples of Application of Red-Colored Pavement



Section 3H.08 Comments: NCUTCD agrees with 3H.08 as presented in the NPA.

Section 3H.08 Purple-Colored Pavement for Electronic Toll Collection (ETC) Account Only Preferential Lanes

Standard:

Purple-colored pavement shall be limited to:

A. Lanes on the approach to a toll plaza where the lane is restricted to use only with a registered ETC account, and

B. Lanes or approaches to an open-road tolling (ORT) collection facility that bypasses the physical toll plaza, where the ORT facility is restricted for use only by vehicles with registered ETC accounts.

Purple-colored pavement shall not be used in an approach lane that also facilitates additional payment methods downstream.

If used approaching a physical toll plaza, purple-colored pavement shall be flanked by white solid longitudinal lines that establish the toll lane.

If used on an ORT collection facility that bypasses the physical toll plaza, purple-colored pavement shall be flanked by appropriate edge lines, and if applicable in multi-lane bypasses, appropriate longitudinal solid or broken white lane lines.

Option:

Purple-colored pavement may be installed for the entire length of a toll lane or ORT collection facility or for only a portion (or portions) of the toll lane or ORT collection facility.

Support:

Figure 3H-6 illustrates an example of purple-colored pavement for use at toll plazas.

Figure 3H-6 Comments: NCUTCD agrees with Figure 3H-6 as presented in the NPA.

Figure 3H-6. Examples of Application of Purple-Colored Pavement

Figure 3H-6. Examples of Purple-Colored Pavement Applications (Sheet 1 of 2)

A – Electronic toll collection only toll plaza lane

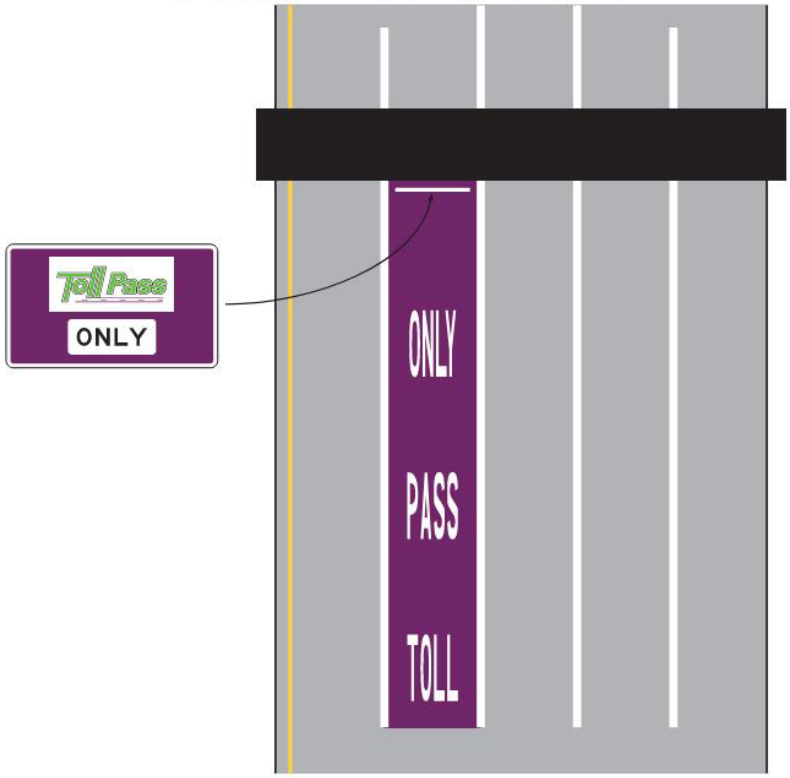
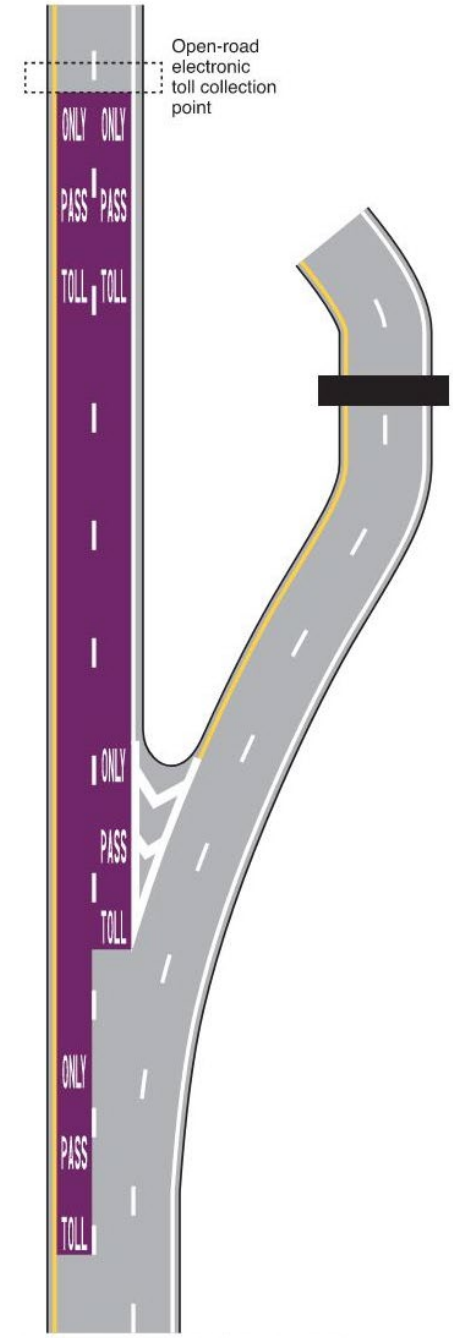
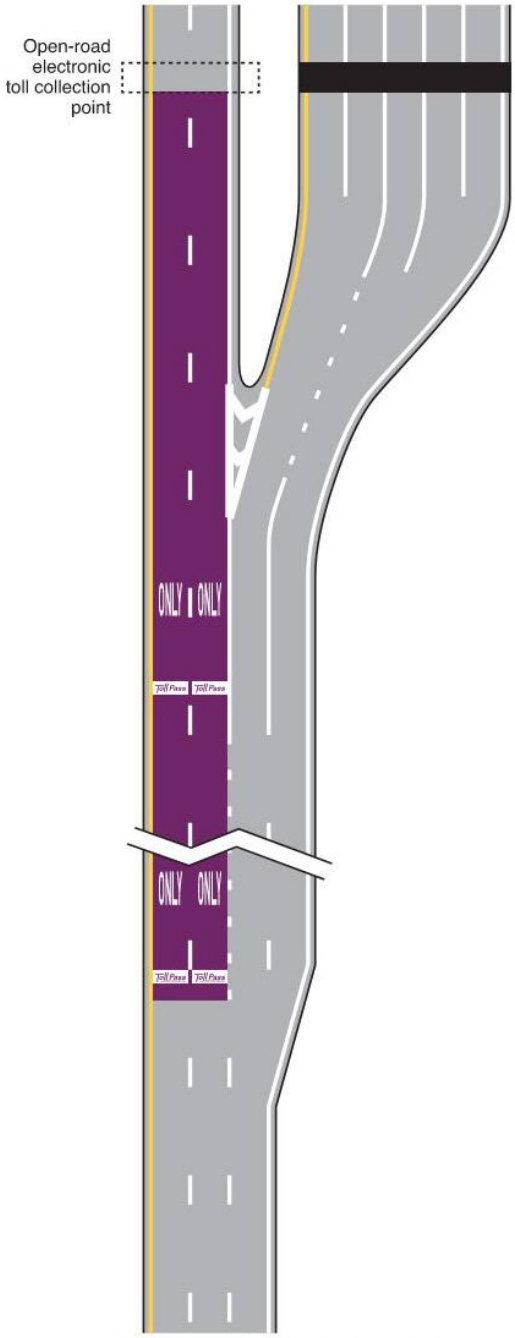


Figure 3H-6. Examples of Purple-Colored Pavement Applications (Sheet 2 of 2)



B – Open-road electronic toll collection bypass with upstream option lane



C – Open-road electronic toll collection bypass with dedicated approach lanes