

National Committee on Uniform Traffic Control Devices

13236 North 7th Street, Suite 4-259, Phoenix, Arizona 85022
Phone/Text: 231-4-NCUTCD (231-462-8823)
E-mail: secretary@ncutcd.org Website: <https://ncutcd.org>

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: 611 - 622

NPA MUTCD Section Number: Sections 9D.01 – 9D.13

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 not 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 9D. 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 #611, Section 9D.01: Changes recommended based on Council action in spring 2021
- NPA #612, Section 9D.02: Changes recommended based on Council action in spring 2021
- NPA #613, Section 9D.03: NCUTCD agrees with NPA content
- NPA #614, Section 9D.04: Changes recommended based on Council action in spring 2021
- NPA #615, Section 9D.05: NCUTCD agrees with NPA content
- NPA #616, Section 9D.06: Changes recommended based on Council action in spring 2021
- NPA #617, Section 9D.07: NCUTCD agrees with NPA content
- NPA #618, Section 9D.08: Changes recommended based on Council action in spring 2021
- NPA #619, Section 9D.09: NCUTCD agrees with NPA content
- NPA #620, Section 9D.10: NCUTCD agrees with NPA content
- NPA #NA, Section 9D.11: NCUTCD agrees with NPA content
- NPA #621, Section 9D.12: Changes recommended based on Council action in spring 2021
- NPA #622, Section 9D.13: Changes recommended based on Council action in spring 2021

Section 9D.01 Comments: NCUTCD generally agrees with 9D.01 as presented in the NPA, but recommends an editorial change in initial Support statement to convey a positive message, and recommends revising a Guidance statement to an Option to allow use of travel times on destination guide signs.

Section 9D.01 Bicycle Destination Signs (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c)

Support: **[editorial]**

The purpose of Bicycle Destination signs is to ~~deemphasize~~ emphasize their messages to ~~motor vehicle~~ bicycle traffic when the direction(s) displayed provides access to routes or pathways where the use of motor vehicles is prohibited or discouraged. Examples include:

- A. Bicycles can go in a direction counter to conventional traffic, or
- B. Access to a separated bikeway or shared-use path from a street, or
- C. Access to a bicycle route, or
- D. Bicycles are directed to a lower class of roadway that facilitates a parallel or alternative route otherwise used by motor vehicle traffic to the same destination, or
- E. Access to a sidewalk that provides connectivity between bicycle facilities.

Section 2D.36 contains information on Destination signs used for when the destinations listed would apply to both motor vehicle and bicycle traffic.

Standard:

Because of their smaller size, Bicycle Destination signs shall not be used as a substitute for vehicular destination signs when the message is also intended to be applicable to motor vehicles.

Option:

Bicycle Destination (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c,) signs may be installed to provide direction, destination, and distance information as needed for bicycle travel (see Figure 9D-1). If several destinations are to be shown at a single location, they may be placed on a single sign with an arrow (and the distance, if desired) for each name. If more than one destination lies in the same direction, a single arrow may be used for the destinations.

Destination (D1-1, D1-1a) signs (see Section 2D.36) and Street Name (D3-1) signs (see Section 2D.44) may be installed instead of or in addition to Bicycle Destination signs as needed if the Destination or Street Name sign applies to motor vehicles and bicycles.

Guidance:

Adequate separation should be made between any destination or group of destinations in one direction and those in other directions by suitable design of the arrow, spacing of lines of legend, heavy lines entirely across the sign, or separate signs.

NCUTCD generally agrees with Figure 9D-1 as presented in the NPA, but recommends adding signs D11-10a, M1-8b, and M1-8c to Sheet 2 of 2 in accordance with NCUTCD recommendation 14A-BIK-02.

Figure 9D-1. Guide Signs and Plaques for Bicycle Facilities (Sheet 1 of 2)

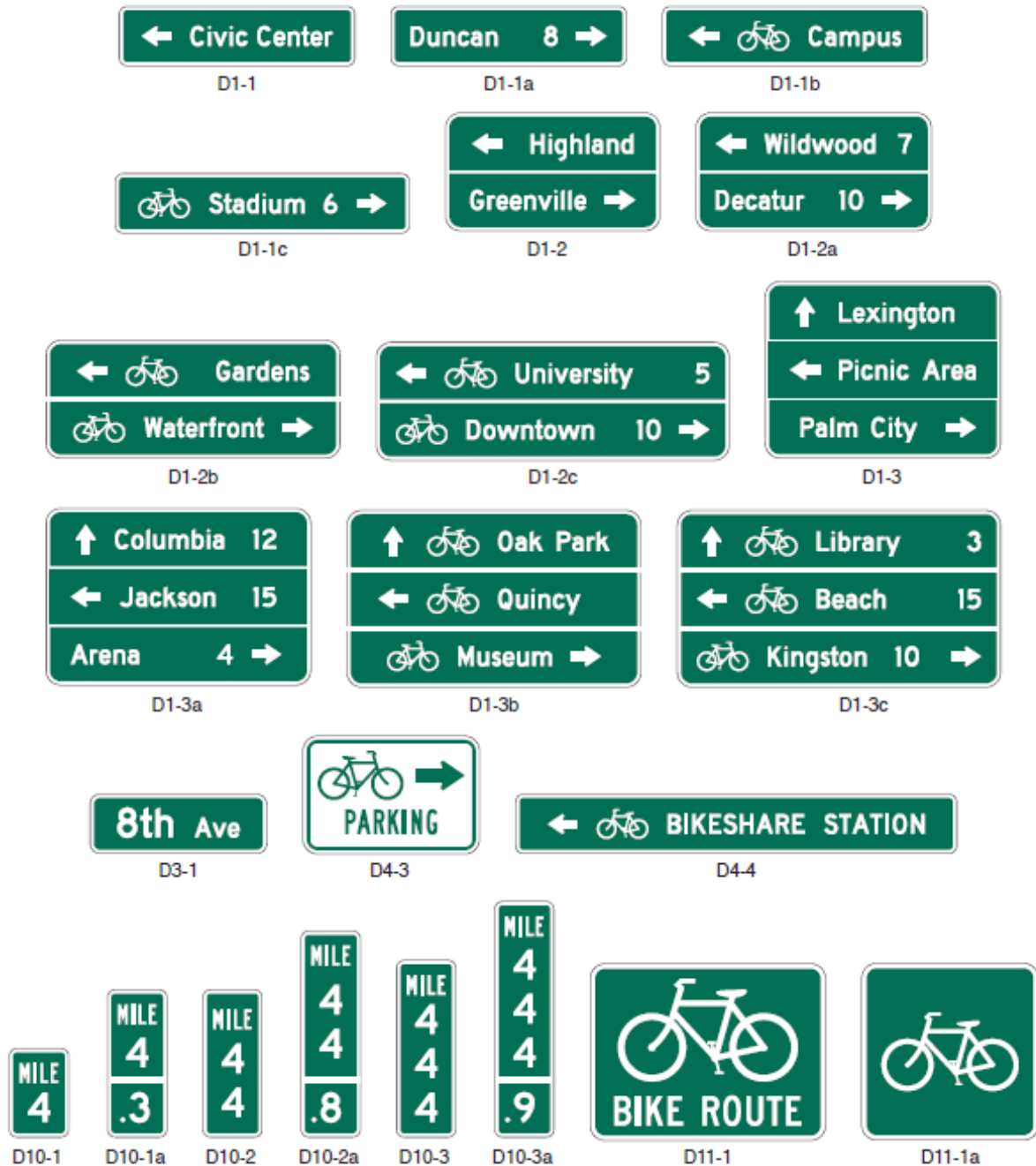
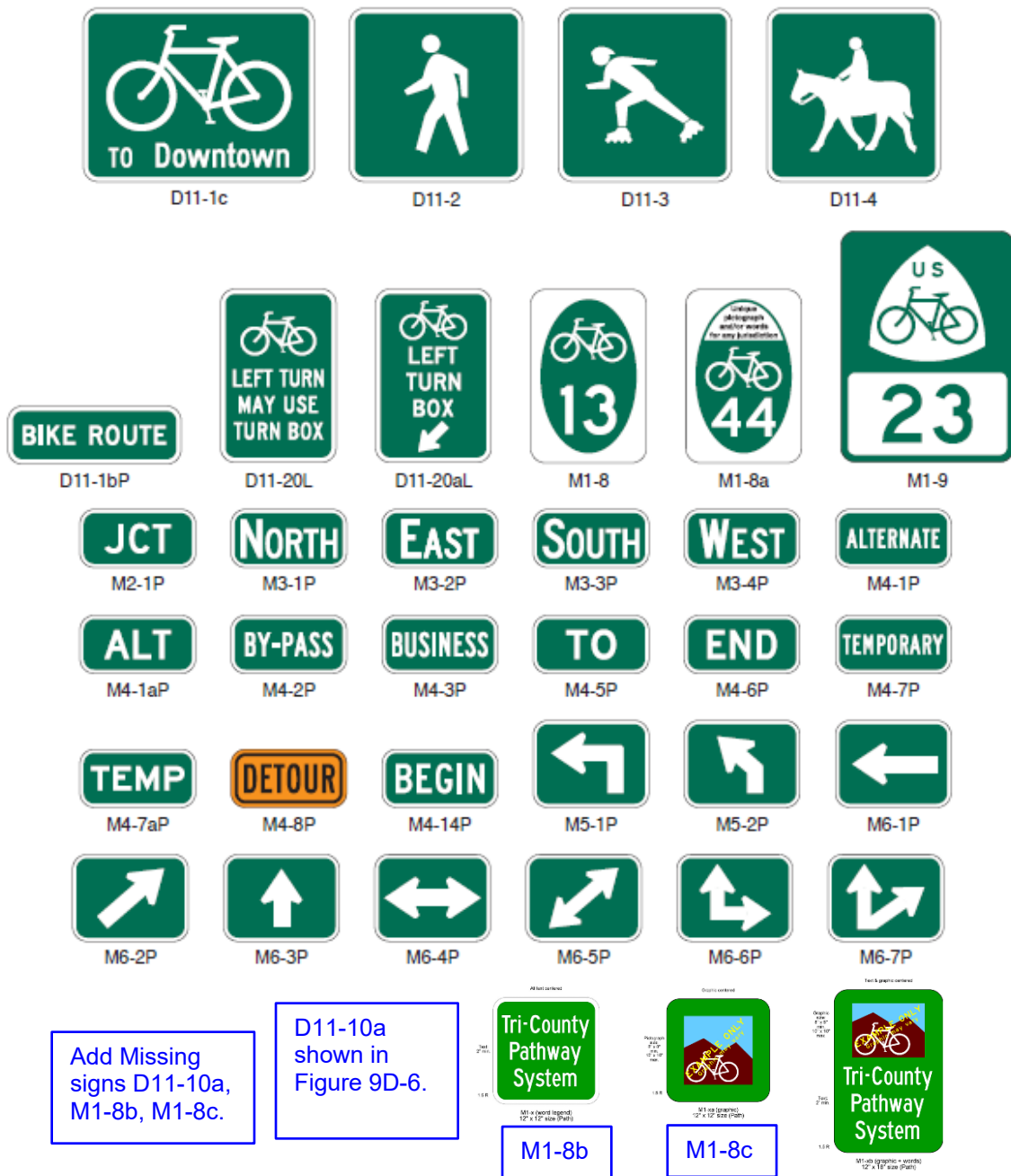


Figure 9D-1. Guide Signs and Plaques for Bicycle Facilities (Sheet 2 of 2)

**Standard:**

An arrow pointing to the right, if used, shall be at the extreme right-hand side of the sign. A narrow pointing left or up, if used, shall be at the extreme left-hand side of the sign. The distance numerals, if used, shall be placed to the right of the destination names.

Except as provided in Paragraph 9, a bicycle symbol shall be placed next to each destination or group of destinations.

Option:

An oversized bicycle symbol may be displayed as the top line of a Bicycle Destination sign instead of individual bicycle symbols for each of the destination/distance lines.

Standard:

If an arrow is at the extreme left, the bicycle symbol shall be placed to the right of the respective arrow.

Guidance:

Where the arrow is at the extreme right, the bicycle symbol should be to the left of the destination legend.

Unless a sloping arrow will convey a clearer indication of the direction to be followed, the directional arrows should be horizontal or vertical.

If several individual name signs are assembled into a group, all signs in the assembly should have the same horizontal width.

~~*Travel times should not be used on Bicycle Destination signs.*~~

Option:

Travel times may be used on Bicycle Destination signs. [revise Guidance statement to Option to provide flexibility to list travel times based on engineering judgement.]

Section 9D.02 Comments: NCUTCD generally agrees with 9D.02 as presented in the NPA, but recommends removing a duplicate Support statement and revising a Guidance statement to an Option to allow use of travel times on bike route guide signs.

Section 9D.02 BIKE ROUTE Guide Signs (D11-1, D11-1c, D11-1d, D11-1e, D11-1f, D11-1g) Support:

BIKE ROUTE Guide (D11-1, D11-1d, D11-1e, D11-1f, D11-1g) signs are used where no unique designation of routes is desired. Sections 9D.04 through 9D.07 contain information for Bicycle Route signs where the bicycle route is designated by number, name, or both.

Option:

BIKE ROUTE Guide signs may be provided along designated non-numbered, unnamed bicycle routes to inform bicyclists of bicycle route direction changes and to confirm route direction, distance, and destination.

If used, BIKE ROUTE Guide signs may be repeated at regular intervals so that bicycles entering from side streets will have an opportunity to know that they are on a bicycle route. Similar guide signing may be used for shared roadways with intermediate signs placed for bicycle guidance.

~~The BIKE ROUTE Guide (D11-1) sign may be installed where no unique designation of routes is desired.~~ [delete, repeated from above lines]

The Alternative BIKE ROUTE Guide (D11-1c) sign may be used to display a word legend that provides information on route direction, destination, and/or route name in place of the "BIKE ROUTE" word legend on the D11-1 sign (see Figure 9D-3).

Guidance:

~~Travel times should not be used on BIKE ROUTE Guide signs.~~

Option:

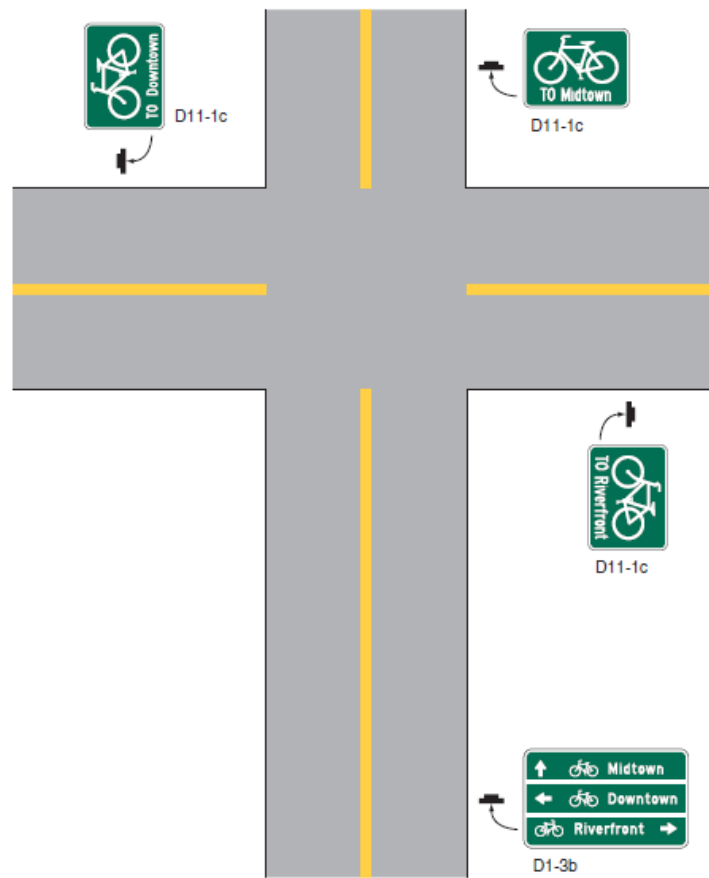
Travel times may be used on BIKE ROUTE Guide signs. [revise Guidance statement to Option to provide flexibility to list travel times based on engineering judgement]

Support:

Figure 9D-2 shows examples of guide sign applications for bicycle travel.

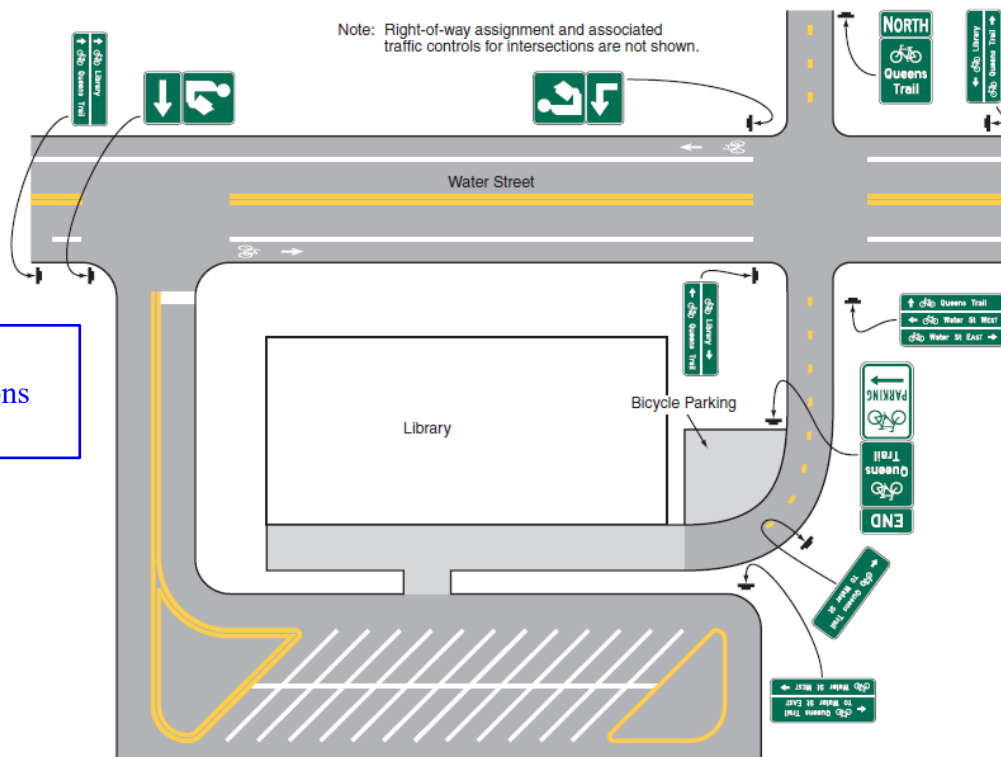
148 NCUTCD generally agrees with Figure 9D-2 as presented in the NPA, but recommends adding
149 sign designations to Sheet 2 of 2.

Figure 9D-2. Example of Bicycle Guide Signing (Sheet 1 of 2)



150

Add sign designations to figure.



Section 9D.03 BIKE ROUTE Plaque (D11-1bP)

The BIKE ROUTE (D11-1bP) plaque may be installed to supplement:

- or

- When installed above or below a Street Name sign, the D11-1bP supplemental plaque may include a bicycle symbol to the left of the BIKE ROUTE legend.

The bicycle symbol shall not be used on a Street Name sign.

A. BIKE ROUTE Guide signs (see Section 9D.02), or

- B. Alternative BIKE ROUTE Guide (D11-1c) sign (see Section 9D.02), or**
C. State or Local Bicycle Route (M1-8, M1-8a) sign (see Section 9D.05), or
D. Non-Numbered Bicycle Route (M1-8b, M1-8c) sign (see Section 9D.06), or

E. United States Bicycle Route (M1-9) sign (see Section 9D.07).

BIKE ROUTE plaques shall not incorporate replicas of the United States Bicycle Route, State or Local Bicycle Route, or Non-Numbered Bicycle Route sign to replace or supplement the bicycle symbol.

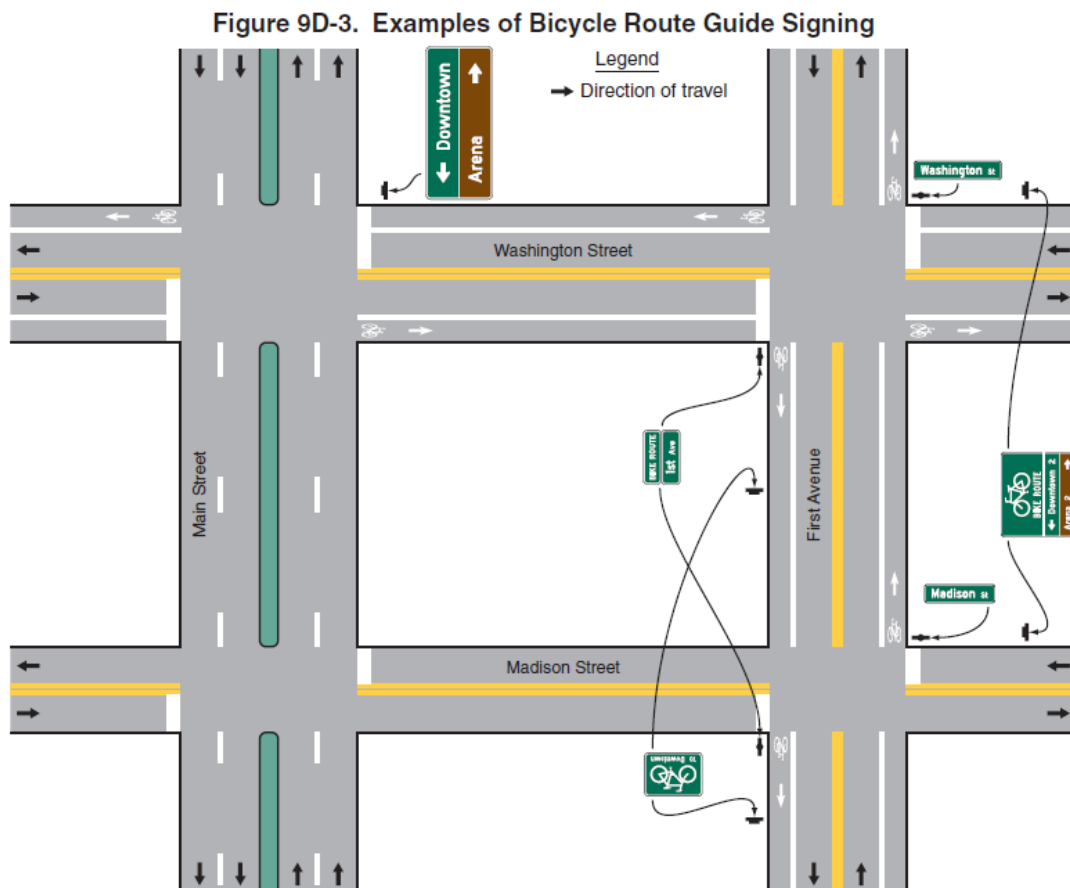
Option:

The BIKE ROUTE plaque and the Street Name sign may be different widths.

Support:

Figure 9D-3 shows an example of bicycle guide signing using the BIKE ROUTE plaque.

NCUTCD generally agrees with Figure 9D-3 in the NPA, but recommends adding sign designations.



Section 9D.04 Comments: NCUTCD generally agrees with 9D.04, but recommends adding a Support statement for flexibility for bicycle route guidance methods. NCUTCD also recommends modifying the Standard statement in accordance with NCUTCD recommendation 15B-BIK-01, as requiring signing for all numbered routes may result in agencies choosing not to designate such routes due to cost and other impacts. This could result in disconnected or incomplete signing of numbered routes. Although signing is generally the most effective method of route guidance, other methods such as maps and information guides have been successfully used for route guidance where signing cannot yet be implemented.

Section 9D.04 Numbered Bikeway Systems

Support:

The purpose of numbering and signing bikeways and bicycle routes is to identify routes and facilitate travel.

The United States Bicycle Routes are numbered by the American Association of State Highway Transportation Officials (AASHTO) upon recommendations of State highway organizations because the respective States own these systems. County and local bikeways and bicycle routes are numbered by the appropriate authorities.

Bicycle routes are designated under the presumption that extensive pre-trip planning is done by the bicyclist. Sign systems can therefore be limited to junctions, accomplishing turns, the beginning of routes, and route termination points and still achieve the same navigational benefits and advantages. Extensive use of reassurance markers ~~is are~~ typically not needed. [editorial]

An agency or jurisdiction can use several methods for bicycle route guidance including maps, information guides, or signing. [revise per 15B-BIK-01]

Guidance:

Establishing bicycle route systems described in Paragraph 2 and any other bicycle route system should be followed with effective communication between affected jurisdictions. County and local jurisdictions that are establishing numbered routes should coordinate with the respective State Department of Transportation. Care should be taken to avoid the use of numbers or other designations that have been assigned to U.S. Bicycle Routes or other routes in the same geographical region or State. Overlapping numbered route should be kept to a minimum.

Bicycle routes, which might be a combination of various types of bikeways, should establish a continuous routing.

Standard:

~~All numbered bicycle routes shall be identified by route signs (see Sections 9D.04, Section 9D.05, and Section 9D.07) and auxiliary plaques (see Section 9D.08).~~

If an agency provides methods other than signing for bicycle route guidance, then signing shall not be required. [revise per 15B-BIK-01]

Multiple numbered bicycle route systems shall be given preference in this order: United States, State, and county or local. The preference shall be given by installing the highest priority legend on the top or the left of the sign assembly with other numbered overlapping bicycle routes.

Where applicable, multiple bicycle route systems with concurrency shall be signed in accordance with Figure 9D-4.

Guidance:

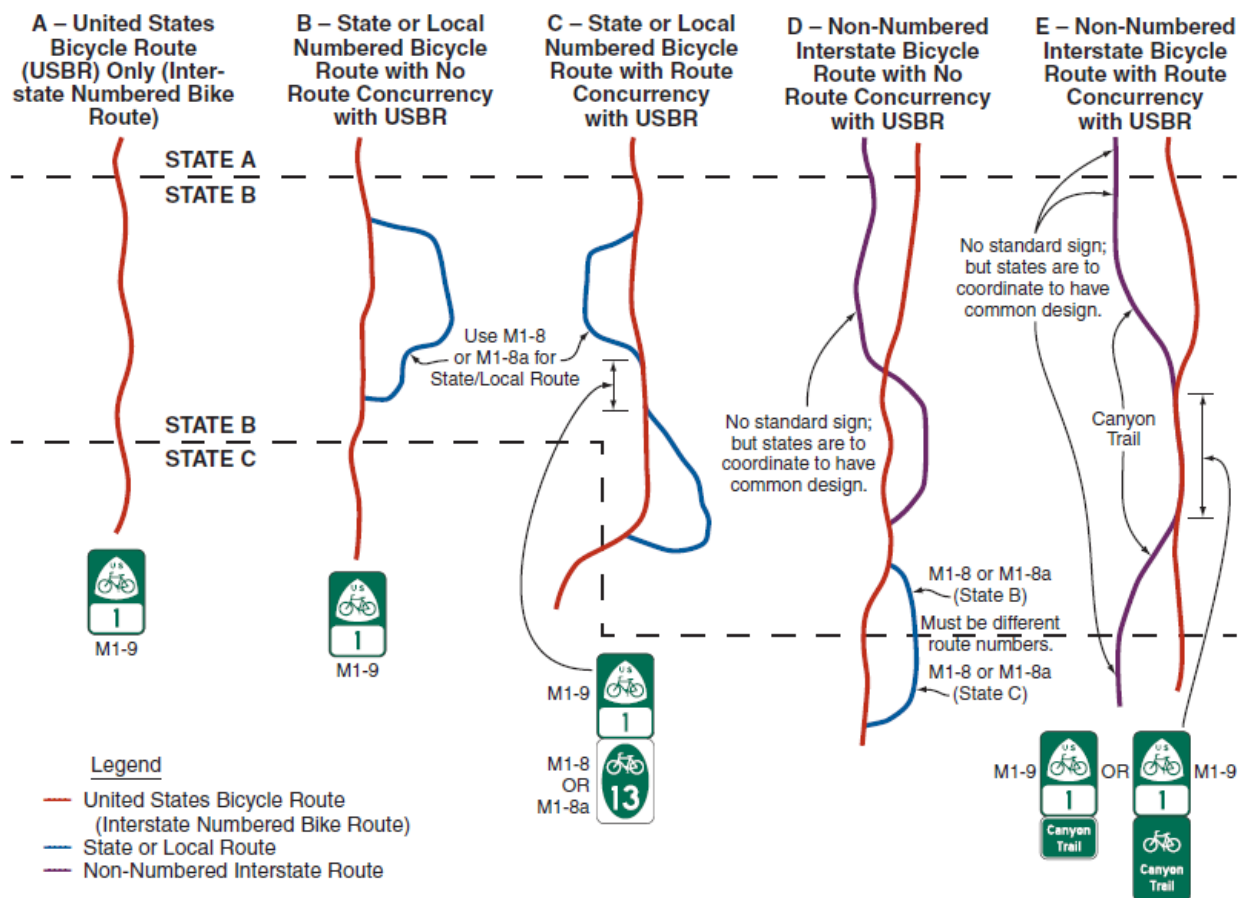
If used, Bicycle Route signs should be placed at locations to keep bicyclists informed of changes in route direction.

Option:

Bicycle Route signs may be installed on shared roadways, shared-use paths, or separated bikeways, to provide navigational guidance for bicyclists.

NCUTCD agrees with Figure 9D-4 as presented in the NPA.

Figure 9D-4. Route Signing for Numbered or Named Bicycle Routes



Section 9D.05 Comments: NCUTCD agrees with 9D.05 as presented in the NPA.

Section 9D.05 Numbered Bicycle Route Signs (M1-8, M1-8a)

Option:

To establish a unique identification (route designation) for a State or local bicycle route, the Bicycle Route (M1-8, M1-8a) sign may be used.

Standard:

The Numbered Bicycle Route (M1-8) sign shall contain a route designation and shall have a green background with a white legend and border.

The Numbered Bicycle Route (M1-8a) signs shall contain the same information as the M1-8 sign and in addition shall include a pictograph or words on the upper portion of the

sign panel that are associated with the route or with the agency that has jurisdiction over the route. [editorial]

Guidance:

The pictograph or legend on a Numbered Bicycle Route (M1-8a) sign used on a roadway should incorporate a bicycle symbol or a word message that clearly identifies the route as a bicycle route.

Standard:

If a Numbered Bicycle Route (M1-8, M1-8a) sign is used on a roadway, it shall include a bicycle symbol.

Guidance:

If a pictograph is used on the M1-8a sign the maximum dimension (height or width) of the pictograph should not exceed two times the height of the route numeral, and should be contained within a green border. The minimum width of the graphic on the M1-xa or M1-xb sign should be 66% of the panel width, and the maximum width should be 90% of the panel width.

If a bicycle symbol is used on the M1-8a sign, it should have a minimum height of 25% of the M1-8a sign panel height.

Section 9D.06 Comments: NCUTCD generally agrees with 9D.06 as presented in the NPA, but recommends an editorial change in Support for clarity.

Section 9D.06 Non-Numbered Bicycle Route Sign (M1-8b, M1-8c)

Standard:

Non-Numbered Bicycle Route (M1-8b, M1-8c) signs shall have a green background, a white border, and shall include a pictograph or words identifying the route, or both a pictograph and legend.

Guidance:

The pictograph or legend on a Non-Numbered Bicycle Route (M1-8b, M1-8c) sign used on a roadway should incorporate a bicycle symbol or a word message that clearly identifies the route as a bicycle route.

Support:

Bicycle routes are sometimes designated specifically by name or established using a distinctive route identity, but are not numbered or are intentionally excluded from an overall numbered bicycle route system.

Section 9D.02 contains information for Bicycle Route signs where no unique designation routes is beneficial or desired.

Option:

Where a bicycle route is named or not numbered, the Non-Numbered Bicycle Route sign may be used.

Support:

Certain ~~bicycle route systems can be~~ uninterrupted, long-distance interstate ~~bicycle~~ routes that can be largely be on ~~contained to~~ shared-use paths, or other off-roadway facilities. In order to achieve continuity, these bicycle systems might have to share alignments with urban streets, rural highways, or water crossings. [editorial]

Long-distance interstate bicycle routes can be administered by non-transportation organizations subject to independent goals and interests.

309
310
311 Guidance:

312 In order to provide signing on a facility managed by a transportation department, a
313 statewide policy for encouraging independent organizations to adopt the Non-Numbered Bicycle
314 Route sign should be established.
315

316
317 **Section 9D.07 Comments:** NCUTCD agrees with 9D.07 as presented in the NPA.
318

319 **Section 9D.07 U.S. Bicycle Route Sign (M1-9)**

320 Guidance:

321 Where a designated bicycle route extends through two or more States, a coordinated
322 submittal by the affected States for an assignment of a U.S. Bicycle Route number designation
323 should be sent to the American Association of State Highway and Transportation Officials (see
324 Page i for the address).

325 Standard:

326 The U.S. Bicycle Route (M1-9) sign shall contain the route designation as assigned by
327 AASHTO.
328

329
330 **Section 9D.08 Comments:** NCUTCD generally agrees with 9D.08 as presented in the NPA, but
331 with a minor editorial change in the title, and minor editorial changes in the text to refer to
332 plaques for conformance with Chapter 2D.
333

334 **Section 9D.08 Bicycle Route Signs and Auxiliary Plaques**

335 Support:

336 Section 2D.12 contains additional provisions for the design of route sign auxiliary plaques.
337 Sections 2D.29 through 2D.34 contain additional provisions for the general application of route
338 signs.

339 Standard:

340 If a designated or numbered bicycle route is concurrent with a numbered highway, the
341 route sign and auxiliary plaques for the bikeway shall be installed as independent
342 assemblies and shall not be installed with other Route signs or confirmation assemblies for
343 the numbered or named highway.

344 Route signs for bikeways shall not be installed on guide signs or overhead.

345 Option:

346 Route assemblies for a designated or numbered bicycle route may be installed at locations or
347 distances other than those prescribed in Sections 2D.29 through 2D.34 if engineering judgment
348 indicates that the operation or speed of the bicycle justifies alternate locations or distances.

349 Auxiliary signs (See Figure 9D-1) may be used in conjunction with Bicycle Route signs as
350 needed.

351 Guidance:

352 If used, Junction (M2-1), Cardinal Direction (M3 series), and Alternative Route (M4 series)
353 auxiliary ~~plaques~~ ~~signs~~ should be mounted above the appropriate Bicycle Route signs.

If used, Advance Turn Arrow (M5 series) and Directional Arrow (M6 series) auxiliary *plaques signs* should be mounted below the appropriate Bicycle Route signs.

Except for the M4-8 plaque, all route sign auxiliary *plaques signs* should match the color combination of the route sign that they supplement.

Route sign auxiliary *plaques signs* carrying word legends that are used on bicycle routes should have a minimum size of 12 x 6 inches. Route sign auxiliary plaques carrying arrow symbols that are used on bicycle routes should have a minimum size of 12 x 9 inches. [refer to plaques per 2D.]

Standard:

If both the Junction (M2-1), Cardinal Direction (M3 series), or Alternative Route (M4 series) auxiliary plaque and the Advance Turn Arrow (M5 series) or Directional Arrow (M6 series) auxiliary plaques are used on the same sign assembly as a Bicycle Route sign, the Junction, Cardinal Direction, or Alternative Route auxiliary plaque shall be installed above the Bicycle Route sign, and the Advance Turn Arrow or Directional Arrow auxiliary plaque shall be installed below the Bicycle Route sign.

Option:

With route signs of larger sizes, auxiliary *plaques signs* may be suitably enlarged, but not such that they exceed the width of the route sign.

A route sign and any auxiliary *plaque signs* used with it may be combined on a single sign. [refer to plaques per 2D.]

Support:

An agency or jurisdiction can use several methods for bicycle route guidance, including maps, information guides, or signing.

Figure 9D-x ~~9D-3~~ shows typical placements of bicycle route signs. [Figure 9D-3 is not relevant to this section - revise reference to Figure 9D-x as per 15B-BIK-01]

Standard:

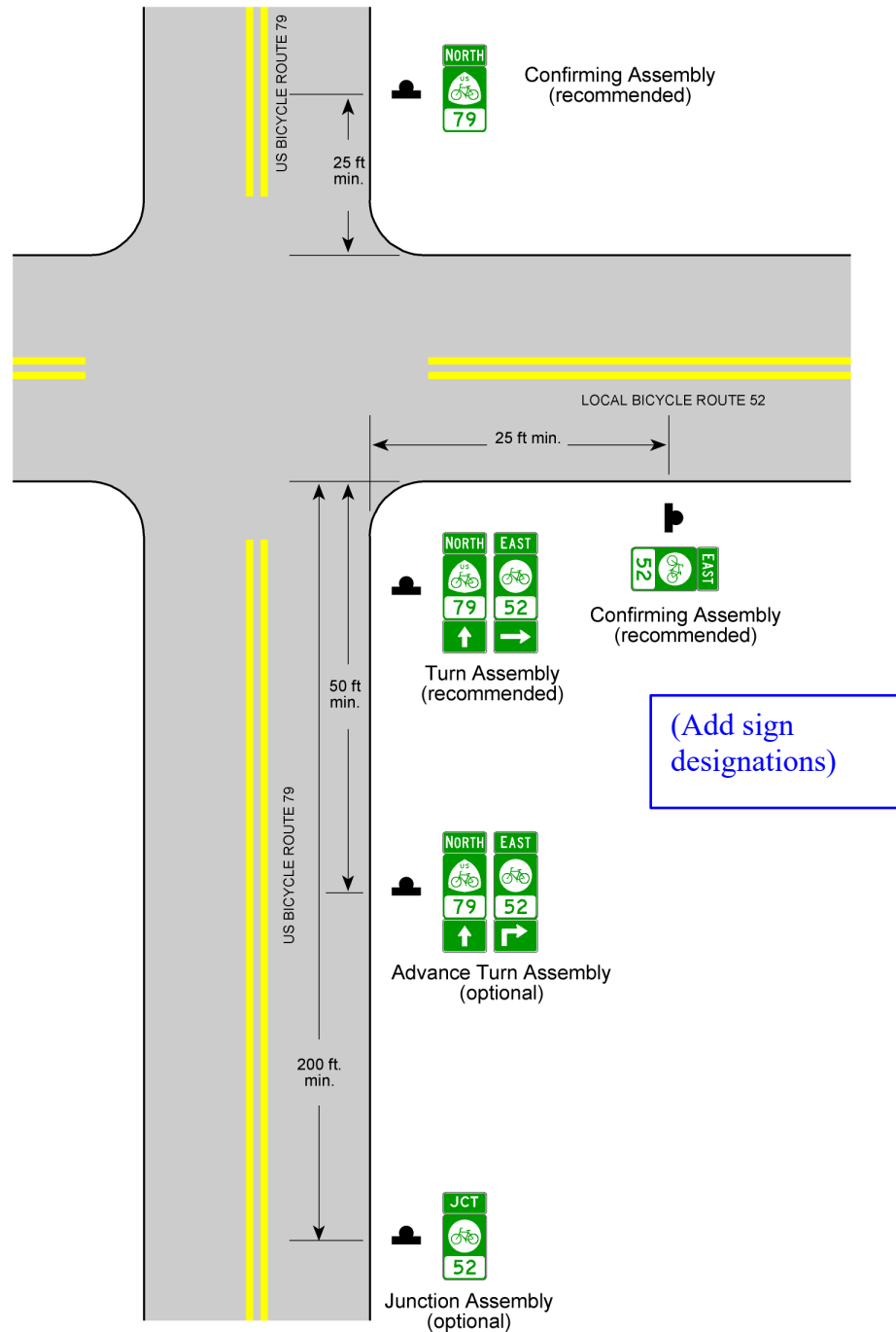
If used, a Bicycle Route Sign assembly shall consist of a route sign and auxiliary *plaques signs* that identify the route and indicate the direction. [refer to plaques per 2D]

Guidance:

If the bicycle route is signed, Bicycle Route Sign assemblies should be installed on all approaches where that route intersects with other numbered bicycle routes.

NCUTCD recommends adding a new Figure 9D-xx addressing bike route directional signing in accordance with NCUTCD recommendation 15B-BIK-01.

Figure 9D-X. Illustration of Bicycle Route Directional Assemblies (for One Direction of Travel Only)



Notes: 1. Other traffic control devices at the intersection are omitted for clarity.
2. Bicycle route guide signs may be combined with other route signs - if so, the distances in Chapter 2D apply.

Standard:

Within groups of assemblies, information for bicycle routes intersecting from the left shall be mounted at the left in horizontal arrangements and at the top or center of vertical arrangements. Similarly, information for bicycle routes intersecting from the right shall be at the right or bottom, and for straight-through bicycle routes at the center in horizontal arrangements or top in vertical arrangements.

Option:

The Bicycle Route Sign assemblies may be mounted on common supports with numbered highway routes for general traffic.

Standard:

A Junction assembly shall consist of a Junction auxiliary **plaque sign** and a bicycle route sign. The bicycle route sign shall carry the number of the intersected or joined bicycle route (See Figure 9D-x 9D-4) [refer to plaques per 2D]

Option:

The Junction assembly may be installed in advance of intersections where a numbered bicycle route is intersected or joined by another numbered bicycle route (See Figure 9D-x 9D-4). [change figure reference]

Standard:

An Advance Bicycle Route Turn assembly shall consist of a bicycle route sign, an Advance Turn Arrow or word message auxiliary sign, and a Cardinal Direction auxiliary **plaque sign**, if needed. If used, it shall be installed in advance of an intersection where a turn must be made to remain on the indicated route. [refer to plaques per 2D]

Option:

The Advance Bicycle Route Turn assembly may be used in advance of intersecting routes. On the approach to an intersection with a numbered bicycle route, the Advance Bicycle Route Turn assembly may be used to pre-position turning bicycles in the correct lane position from which to make their turn.

Standard:

A Directional assembly shall consist of a Cardinal Direction auxiliary **plaque sign**, if needed, a route sign and a Directional Arrow auxiliary **plaque sign**. [refer to plaques per 2D]

Guidance:

The various uses of Directional assemblies should be as provided in Items A through D:

- A: Turn movements should be marked by a Directional assembly with a route sign displaying the number of the turning route and a single-headed arrow pointing in the direction of the turn.*
- B: The beginning of a route should be marked by a Directional assembly with a route sign displaying the number of that route and a single-headed arrow pointing in the direction of the route.*
- C: An intersected route on a crossroad where the route is designated on both legs should be designated by:*
 - 1. Two Directional assemblies, each with a route sign displaying the number of the intersected route, a Cardinal Direction auxiliary **plaque sign**, and a single-headed arrow pointing in the direction of movement on that route; or*

2. *A Directional assembly with a route sign displaying the number of the intersected route and a double headed arrow, pointing at appropriate angles to the left, right, or ahead.*

D: An intersected route on a side road or on a crossroad where the route is designated only on one of the legs should be designated by a Directional assembly with a route sign displaying the number of the intersected route, a Cardinal Direction auxiliary plaque ~~sign~~, and a single-headed arrow pointing in the direction of movement on that route.

Option:

Straight-through movements may be indicated by a Directional assembly with a route sign displaying the number of the continuing route and a vertical arrow.

Guidance:

A Directional assembly should not be used for a straight-through movement in the absence of other assemblies indicating right or left turns, as the Confirming assembly sign beyond the intersection normally provides adequate guidance.

Directional assemblies should be located on the near right corner of the intersection. Where unusual conditions exist, the location of a Directional assembly should be determined by engineering judgement.

Support:

It is more important that guide signs be readable, and that the information and direction displayed thereon be readily understood, at the appropriate time and place than to be located with absolute uniformity.

Figure 9B-x shows typical placements of Directional assemblies.

Guidance:

If used, Confirming or Reassurance assemblies should consist of a Cardinal Direction auxiliary plaque ~~sign~~ and a route sign. Where the Confirming or Reassurance assembly is for an alternative route, the appropriate auxiliary sign for an alternative route should also be included in the assembly.

If used, a Confirming assembly should be installed just beyond intersections of numbered routes.

If used, Reassurance assemblies should be installed between intersections in urban areas as needed, and beyond the built-up area of any incorporated city or town.

If used, Bicycle route signs for either confirming or reassurance purposes should be spaced at such intervals as necessary to keep bicyclists informed of their routes.

[refer to plaques per 2D]

Section 9D.09 Comments: NCUTCD agrees with 9D.09 as presented in the NPA.

Section 9D.09 Bicycle Parking Signs (D4-3, D4-4)

Support:

Bicycle parking areas include bicycle racks or stands, parking stations or structures, sharing systems, or lockers. These facilities can be either regulated or unregulated.

Option:

The Bicycle Parking Area (D4-3) sign may be installed where it is desirable to show the direction to a designated bicycle parking area. The arrow may be reversed as appropriate.

The Bicycle-Sharing Station (D4-4) sign may be installed to provide directional information to a designated bicycle sharing system.

Guidance:

If used, the Bicycle-Sharing Station sign should be used in conjunction with a regulated bicycle-sharing system such as one that requires the user to pre-register or provide a deposit in order to acquire a bicycle. Where it is determined that unregulated bicycle-sharing parking facilities necessitate a bicycle parking sign, the Bicycle Parking Area sign should be used.

Standard:

In accordance with Section 1D.09, Bicycle Parking signs shall not include promotional advertising, business logos or other identification that would convey the involvement of a public-private partnership for operating the bicycle parking facility or sharing system.

Section 9D.10 Comments: NCUTCD agrees with 9D.10 as presented in the NPA.

Section 9D.10 Reference Location Signs (D10-1 through D10-3) and Intermediate Reference Location Signs (D10-1a through D10-3a)

Support:

There are two types of reference location signs:

A. Reference Location (D10-1, 2, and 3) signs show an integer distance point along a shared-use path;
and

B. Intermediate Reference Location (D10-1a, 2a, and 3a) signs also show a decimal between integer distance points along a shared-use path.

Option:

Reference Location (D10-1 to D10-3) signs may be installed along any section of a shared-use path to assist users in estimating their progress, to provide a means for identifying the location of emergency incidents and crashes, and to aid in maintenance and servicing.

To augment the reference location sign system, Intermediate Reference Location (D10-1a to D10-3a) signs which show the tenth of a mile with a decimal point, may be installed at one tenth of a mile intervals, or at some other regular spacing.

Guidance:

If Intermediate Reference Location (D10-1a to D10-3a) signs are used to augment the reference location sign system, the reference location sign at the integer mile point should display a decimal point and a zero numeral.

Reference location signs for shared-use paths should have a minimum mounting height of 2 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the shared-use path, and should not be governed by the mounting height requirements prescribed in 9B.01.

Option:

Reference location signs may be installed on one side of the shared-use path only and may be installed back-to-back.

If a reference location sign cannot be installed in the correct location, it may be moved in either direction as much as 50 feet.

Guidance:

If a reference location sign cannot be placed within 50 feet of the correct location, it should be omitted.

Zero distance should begin at the south and west terminus points of shared-use paths.

Support:

Section 2H.10 contains additional information regarding reference location signs.

Section 9D.11 Comments: NCUTCD agrees with 9D.11 as presented in the NPA.

Section 9D.11 Mode-Specific Directional Guide Signs for Shared-Use Paths (D11-1a, D11-2, D11-3, D11-4)

Option:

Where separate pathways are provided for different types of users, Mode-Specific Directional Guide (D11-1a, D11-2, D11-3, D11-4) signs may be used to guide different types of users to the traveled way that is intended for their respective modes.

Mode-Specific Directional Guide signs may be installed at the entrance to shared-use paths where the signed mode(s) are permitted or encouraged, and periodically along these facilities as needed.

The Bicycle Directional (D11-1a) sign, when combined with the BIKE ROUTE supplemental plaque (D11-1bP), may be substituted for the D11-1 Bike Route Guide sign on shared-use paths.

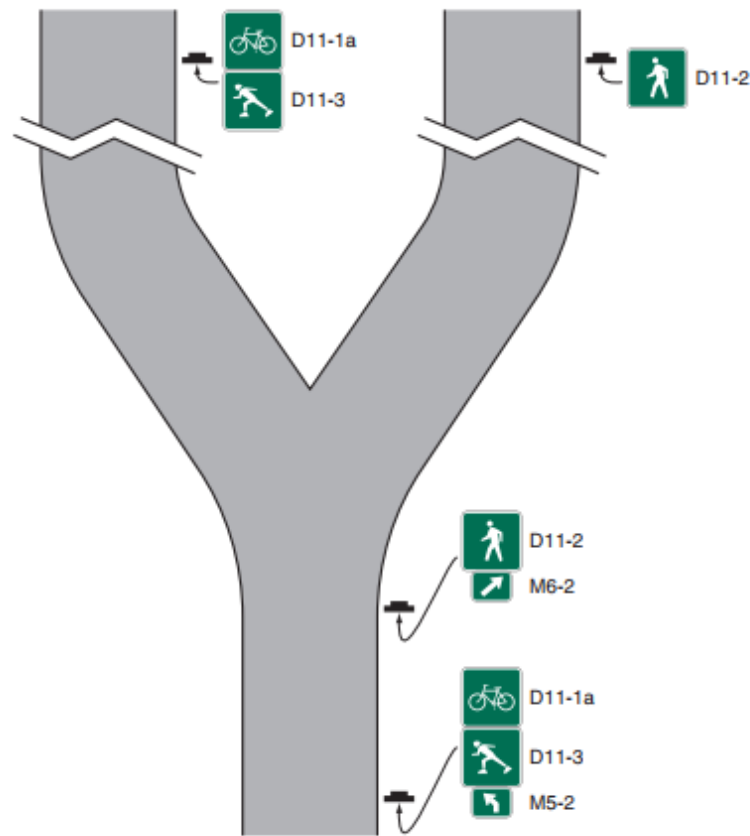
When some, but not all, non-motorized user types are encouraged or permitted on a shared-use path, Mode-Specific Directional Guide signs may be placed in combination with each other, and in combination with signs (see Section 9B.08) that prohibit travel by particular modes.

Support:

Figure 9D-5 shows an example of signing where separate pathways are provided for different non-motorized user types.

NCUTCD agrees with Figure 9D-5 as presented in the NPA.

Figure 9D-5. Example of Mode-Specific Guide Signing on a Shared-Use Path



Section 9D.12 Comments: NCUTCD generally agrees with 9D.12 as presented in the NPA, but recommends editorial changes for clarification and consistency.

Section 9D.12 Destination Guide Signs for Shared-Use Paths (D11-10a, D11-10b, D11-10c)

Support:

This Section contains information on the application of Destination Guide signs for shared-use paths where bicycle traffic is permitted. [editorial]

~~Chapter 9G contains information on applying Destination Guide signs for shared-use paths at alternative intersections.~~ [Chapter 9G content is not included in the NPA]

Standard: [editorial]

Where bicycle traffic is allowed on the shared-use path, Destination Guide signs for shared-use paths and any identification ~~enhancement~~ markers shall be retroreflective.

Guidance:

Destination Guide signs for shared-use paths should be installed on independent assemblies and should not be combined with ~~other~~ regulatory and warning signs. [editorial]

Option:

595 Destination Guide signs for shared-use paths may use symbols in addition to the bicycle
596 symbol to display other modes permitted to use the shared-use ~~on the shared-use~~ path. [editorial]

597 **Standard:**

598 **Symbols used on Destination Guide signs for shared-use paths shall be limited to**
599 **those where the symbol displayed is an allowable mode on the path or pathway alignment,**
600 **and where the symbol is supported by other regulatory signs to convey the operation.**
601 **Symbols unrelated to the allowable modes that would ~~be~~ otherwise display directional**
602 **navigation to a facility, activity, point of interest, etc. shall not be used.** [editorial]

603 **Support:**

604 Chapter 2M contains information for symbol signs used for facilities, activities, and
605 points of interest.

606 **Guidance:**

607 *Destination Guide signs for shared-use paths, exclusive of any identification marker*
608 *used, should be rectangular in shape. Simplicity and uniformity in design, position, and*
609 *application as described in Section 2A.04 are important and should be incorporated into the sign*
610 *design.*

611 *Destination Guide signs for shared-use paths should be limited to three destinations per*
612 *sign (see Section 2D.06).*

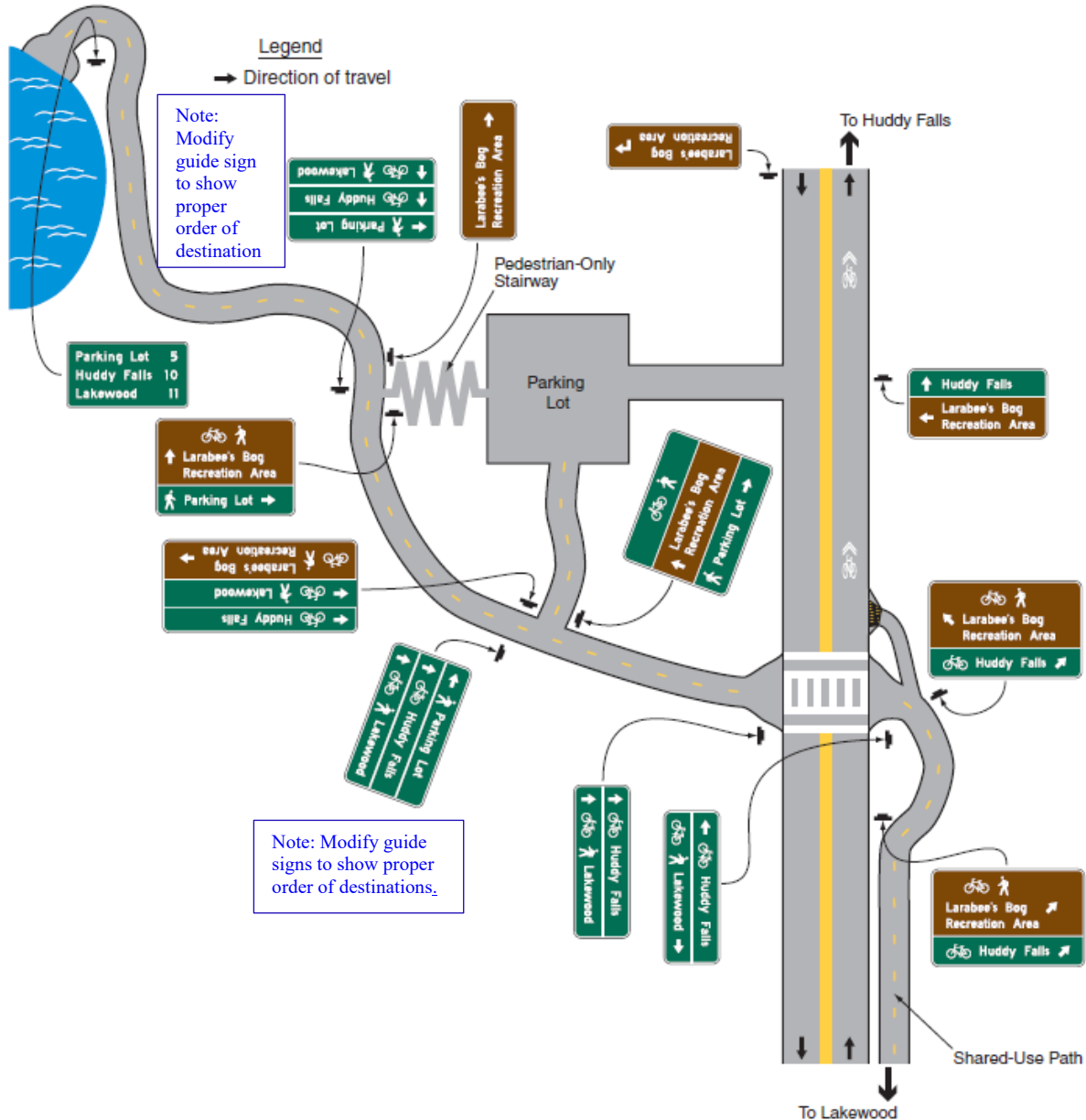
613 *Abbreviations (see Section 1D.10) should be kept to a minimum, and should include only*
614 *those that are commonly recognized and understood.*

615 **Support:**

616 Figure 9D-6 shows a signing system of Destination Guide signs used on shared-use paths.
617
618

NCUTCD agrees with Figure 9D-6 as presented in the NPA, but recommends reorientation of some sign arrows and text to comply with provisions in other Sections.

Figure 9D-6. Examples of Destination Guide Signs for Shared-Use Paths



Standard:

The arrow location and priority order of destinations shall follow the provisions described in Sections 2D.08 and 2D.36. Arrows shall be of the designs provided in Section 2D.08.

The lettering for destinations on Destination Guide signs for shared-use paths shall be a combination of lower-case letters with initial upper-case letters (see Section 2D.04). All

other word messages on Destination Guide signs for shared-use paths shall be in all upper-case letters.

Except as provided in Paragraph 15, the lettering style used for destination and directional legends on Destination Guide signs for shared-use paths shall comply with the provisions of Section 2D.04.

Option:

The distance to the place named may be displayed on the Destination Guide sign. If ~~several~~ multiple destinations are ~~to be~~ displayed on a sign at a single point, the ~~several~~ destination names may be placed on a single sign with an arrow (and the distance, if desired) for each name. If more than one destination lies in the same direction, a single arrow may be used for such a group of destinations. [editorial]

A lettering style other than the Standard Alphabets provided in the "Standard Highway Signs and Markings" publication book may be used on Destination Guide signs for shared-use paths if an engineering study determines that the legibility and recognition values for the chosen lettering style at minimum letter heights meet or exceed the values for the Standard Alphabets for the same legend height and stroke width. [editorial]

Standard:

Where a shared-use path is within the ~~roadway~~ highway right-of-way or crosses a street or highway, an alternative lettering style shall not be used. [editorial]

Option:

Pictographs (see definition in Section 1C.02) may be used on Destination Guide signs for shared-use paths.

Standard:

If a pictograph is used, its height shall not exceed two times the height of the upper-case letters of the principal legend on the sign.

Business logos, commercial graphics, or other forms of advertising (see Section 1D.09) shall not be used on Destination Guide signs for shared-use paths or sign assemblies.

Option:

An identification marker may be used in an assembly for Destination Guide signs applied to shared-use paths, or may be incorporated into the overall design of Destination Guide sign, as a means of visually identifying the sign as part of an overall system of signs.

Standard:

The size and shape of an identification marker shall be smaller than the Destination Guide sign. [editorial]

Identification markers shall not be designed to have an appearance that could be mistaken by road users as being a traffic control device.

Guidance:

The area of the identification marker should not exceed 1/5 of the area of the Destination Guide sign with which it is mounted in the same sign assembly.

Standard:

Except as provided in Paragraph 27, Destination Guide signs for shared-use paths shall have a white legend and border on a green or brown background and shall be consistent with the basic design principles for guide signs.

Color coding or pictographs shall not be used to distinguish between different types of destinations. If used, color coding shall be accomplished by the use of different colored square or rectangular panels on the face of the sign, each positioned to the left of the named

geographic area to which the color⁴ coding panel applies. The height of the colored square or rectangular panels shall not exceed two times the height of the upper-case letters of the principal legend on the sign.

Option:

The different colored square or rectangular panels may include either a black or a white (whichever provides the better contrast with the color of the panel) letter, numeral, or other appropriate designation to identify the destination.

Except where a shared-use path is within the ~~roadway~~ highway right-of-way or crosses a street or highway, [editorial]

Destination Guide signs for shared-use paths may use background colors other than green or brown in order to provide a color identification for systematic destinations within the overall guide signing system.

Standard:

The standard colors of red, orange, yellow, purple, or the fluorescent versions thereof, fluorescent yellow-green, and fluorescent pink shall not be used as background colors for Destination Guide signs for shared-use paths, in order to minimize possible confusion with critical, higher-priority regulatory and warning sign color meanings readily understood by path users.

Option:

Destination Guide signs for shared-use paths may display phone numbers and Internet and e-mail addresses, including domain names and uniform resource locators (URL).

Standard:

If used, the use of phone numbers and Internet and e-mail addresses shall be limited to direct contact information of the jurisdiction with authority of the shared-use path, or contact information for emergency service response, or both. Contact information for advertising purposes shall not be used.

Section 9D.13 Comments: NCUTCD agrees with 9D.13 as presented in the NPA, but recommends revising a Standard statement to Option to provide flexibility for use of Turn Box Guide signs and consistency with Figure 9D-7 and other NPA content.

Section 9D.13 Two-Stage Bicycle Turn Box Guide Signing (D11-20 series)

Support:

Two-stage bicycle turn boxes provide a way for a ~~bicyclist~~ bicyele to make a turn wherein a merge across general purpose lanes is not required. [editorial]

Section 9B.18 ~~provides situations when~~ includes provisions for signing and marking when use of a two-stage bicycle turn box by bicyclists is required and also contains information about the Two-Stage Bicycle Turn Box Regulatory sign (R9-23 series). [editorial]

Section 9E.11 contains information regarding pavement markings for two-stage bicycle turn boxes.

Standard: [revise Standard to Option]

~~Where a two-stage bicycle turn box is provided, the Two-Stage Bicycle Turn Box Guide sign series (see Figure 9D-7) shall be used.~~

Option:

Where a two-stage bicycle turn box is provided, the Two-Stage Bicycle Turn Box Guide sign series (see Figure 9D-7) may be used. [Change Standard to Option to be consistent with Figure 9D-7 and NPA text]

Standard:

~~Where used, the~~ **When a Two-Stage Bicycle Turn Box Advance guide sign is used, it shall be mounted in advance of the intersection where the turn box is located.**

~~Where used, the~~ **When a Two-Stage Bicycle Turn Box guide sign is used, it shall be mounted on the far side of the intersection.** [editorial]

Option:

Where the Two-Stage Bicycle Turn Box Advance guide sign is used, an additional Two-Stage Bicycle Turn Box Advance guide sign may be mounted on the near side of the intersection where the turn box is located.

If used, an appropriately sized Street Name (see Section 2D.44) sign (D3-1) may be installed below the Two-Stage Bicycle Turn Box Advance guide sign to identify the cross street where the turn box will be available.

NCUTCD generally agrees with Figure 9D-7 as presented in the NPA, but recommends the addition of a note to reference Section 9B.18 regarding use of the NO TURN ON RED R10-11 sign and revision of the sign designations to match Figure 9D-1.

