

## 1. PURPOSE

This document sets the uniform standards for signs, which communities may install by agreement on conventional state primary highways under NDDOT jurisdiction to provide directional guidance to public facilities and traffic generators within the community.

The 2009 Manual of Uniform Traffic Control Devices (MUTCD), Section 2D.50 provides guidelines and standards for community wayfinding signing (i.e. cluttered guide signs will not meet these requirements and could adversely impact safety.)

On local streets and connecting highways, local agencies have the authority to install destination signs for local attractions and traffic generators.

This document establishes the following to be applied to community wayfinding signing on state primary highways under NDDOT jurisdiction:

1. Definitions related to community wayfinding signs
2. The policy for installation on state primary highways
3. The qualifying criteria for community wayfinding signing
4. Guidance on qualifying destinations, facilities, or traffic generators
5. Clarification of sign design and installation standards
6. The review and approval process of the community wayfinding plan
7. The application and agreement process for roadways under NDDOT jurisdiction

## 2. DEFINITIONS

### 2.1. Community

In this context, community refers to Local Public Agency (LPA.)

### 2.2. Community Wayfinding Signs

These are the signs, allowed by agreement, which are owned and maintained by the community and direct traffic to:

1. Municipal area destinations such as Downtown, or Historic District
2. Individual destinations that are publicly leased or owned and operated for public use, such as City Hall, Convention Center, and local parks
3. Privately owned non-profit facilities open to the public, such as a local museum or ice center

### 2.3. Expressway

Expressways are separated roadways of opposing traffic with partial control of access and speed limits of 45 mph or greater. The separation can be a physical barrier, a raised concrete island, a painted island, or a grassy median. Access to expressways is controlled by at-grade intersections or interchanges.

#### 2.4. Freeway

Freeways are divided highways with full control of access. Access to freeways is controlled by interchanges.

#### 2.5. Pictograph

In this context, a pictograph is a pictorial representation, such as a logo, used to identify the community.

#### 2.6. Primary Destination

A primary destination is a destination that would be commonly found on standard guide signs on Interstate, US, or State highways or a destination that would be expected by drivers to have normal trailblazing signs. Primary destinations would include such places as cities, national or state parks, colleges or universities, fairgrounds, airports, hospitals, or other destinations that generate high traffic volume.

#### 2.7. State Primary Highway

In this context, a state primary highway is a roadway that is under the jurisdiction of the NDDOT. The highway will have either a federal or state route number.

#### 2.8. Trailblazing Signs

In this context, these are community destination signs that direct subsequent turns on local streets to reach the destination.

### 3. POLICY FOR INSTALLATION ON STATE PRIMARY HIGHWAYS

The NDDOT will allow the local agency, by agreement, to install and maintain community wayfinding signs on the right-of-way of state primary highways. The installation of the signs is subject to approval of the destinations, sign design, and sign location. These signs **shall not** be allowed on freeways, expressways, or ramps of interchanges.

For all community projects that include wayfinding signs, the sign design and locations **shall** be reviewed for conformity to NDDOT and MUTCD policies by NDDOT personnel. Wayfinding signs **shall** be maintained by the community.

### 4. QUALIFYING CRITERIA FOR COMMUNITY WAYFINDING SIGNING PROGRAMS

Community wayfinding signs **shall not** be allowed outside a readily apparent urban developed area, usually characterized by a reduced speed limit, nearby transition to curb and gutter, and dense residential and/or business development adjacent to the highway.

Geographical areas or districts within a community may be allowed on Community Wayfinding Signing. Two or more adjacent communities in an urbanized area may coordinate a common signing program, but the department will issue separate agreements to each individual municipality.

No countywide programs will be allowed.

The community must develop a Master Plan for Community Wayfinding Signing, which contains the following information:

1. A map of the community, including the city street/local road system, which clearly identifies:
  - a. Exact locations of destinations and attractions to be included in this signing program
  - b. State primary highway approaches to city street/local road intersections where signing is proposed
  - c. Which destination(s) and attraction(s) are to be signed on each state primary highway approach at each city street/local road intersection
  - d. City street/local road intersections where trailblazing signing is required to direct motorists to each facility
2. A concept design of a typical community wayfinding sign, which may include the city logo and up to a total of three destinations/attractions. A maximum of three destinations should be displayed on a sign (a fourth destination may be added if specific criteria are met – see SIGN DESIGN STANDARDS.)

Supplemental documentation that will also be needed include:

1. A plan clearly showing the sign locations and messages (layouts)
2. Sign support designs (sealed by registered ND Professional Engineer)
3. A plan showing any required removal of existing signs

## 5. QUALIFYING DESTINATIONS OR FACILITIES

Destinations or attractions must be of general interest to the traveling public and **shall not** be a retail, business, or manufacturing center. The individual destinations **shall** be publicly leased or owned and operated facilities for public use or privately owned non-profit facilities open to the public.

Area destinations such as Shopping District, Downtown, and Historic District may be used.

The individual destinations **shall not** be primary destinations (see Definitions.)

A specific destination **shall** only be displayed on one sign in each direction on a state primary highway unless straight ahead signing is also approved by the NDDOT.

Community wayfinding signing **shall not** display advertising for a commercial product or service.

Interstate, US, or state highway route signage **shall not** be allowed on Community Wayfinding signs.

Street names **shall not** be allowed on Community Wayfinding signs.

## 6. SIGN DESIGN STANDARDS

All community wayfinding signs **shall** be one consistent style. If boundary signs are used to identify the beginning of geographical areas or districts, they **shall** be of a consistent style as the community wayfinding signing.

### 6.1. Shape

The shape of the signs **shall** be rectangular and may have rounded corners. A rounded or other regular geometric shape on the top will be allowed to accommodate a logo.

### 6.2. Facing

All messages, borders, legends, and backgrounds of community wayfinding guide signs and any identification enhancement markers **shall** be retroreflective (see Sections 2A.07 and 2A.08 of the 2009 MUTCD) to meet the minimum standards of high intensity sheeting.

Messages, border and legends **shall not** be allowed on the back of the sign.

Fluorescent reflective sheeting of any color **shall not** be allowed on these signs.

The sign **shall not** contain any animated or moving parts, flashing or moving lights, flashing disks, or variable message sign.

### 6.3. Color

Colors **shall** meet the standards for highway colors specified by the Federal Highway Administration (FHWA.) Color combinations **shall** have high contrast. Two-color combinations are preferred. Common combinations which may be used are white on blue, green, or brown.

A third color for the background of the logo area, if used, must provide suitable contrast (i.e., not red on blue).

The standard background colors of orange, red, yellow, purple, or the fluorescent versions thereof, fluorescent yellow-green and fluorescent pink **shall not** be allowed on Community Wayfinding Signs. One background color is preferred. A different background color for the logo area may be used, or that area may be reversed in color. Encircling color plaques or accents **shall not** be used to highlight arrows or destination names. Lettering, arrows, and border **shall** be the same color.

### 6.4. Border

Border is optional. If used, it **shall** be plain, retroreflective, not decorative, and the same color as the letters (see Section 2A.14 of the 2009 MUTCD.)

### 6.5. Lettering

Series B font as specified in the Standard Highway Signs manual is preferred. Highway Series C or D font as specified in the Standard Highway Signs manual may also be used.

The preferred letter size is 6" upper-case, 4 ½" lower-case. In areas where the speed is 25 MPH or less, a minimum letter size of 4" upper-case, 3" lower-case may be used.

#### 6.6. Arrows

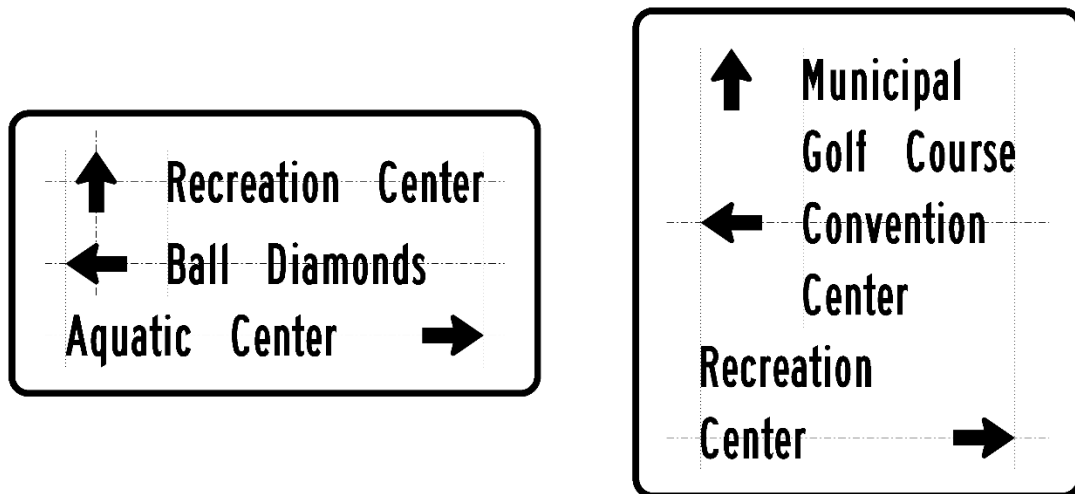
The preferred arrow style is Type D (see Section 2D.08 of the 2009 MUTCD.) Type A, B, or C arrows may be used as specified in the MUTCD.

The width across the arrow heads **shall** be the same as the height of the upper-case letter of the principal legend on the sign, and the same color as the lettering. The shaft length of the arrows **shall** be the same for all similar style arrows (i.e. Type D up arrows shall be the same as the Type D left / right arrows, just rotated.) Refer to Arrow Details shown on NDDOT Standard Drawing D-754-9.

The arrows **shall not** have encircling accents or contrasting mini backgrounds.

Left arrows **shall** be left justified and left of the text for destinations to the left (see examples below.) Right arrows **shall** be right of the text for destinations to the right and right justified (see examples below.)

Up arrows **shall** be vertically centered to the left of the text for destinations ahead. Up arrows **shall** be horizontally centered with left arrow(s) (see examples below.) If there are no left arrows present, the up arrow **shall** be left justified.



**Examples of Arrow and Text Placement**

Straight ahead destinations are not normally used, except when the State route turns, and the driver leaves the route by continuing straight ahead. An exception is made for the first wayfinding sign on a route entering the city. A maximum of two straight ahead destinations may be shown on the sign. These destinations **shall** be located directly off the straight-ahead route. The straight ahead

destinations cannot be located on another State primary highway without NDDOT approval (i.e. straight ahead destinations cannot be located on a state primary highway if the driver needs to turn onto another state primary highway to get to the destination.)

All arrows **shall** be a minimum of one upper-case letter height (of the principal legend of the sign) space from the destination text.

If the destination name contains more than one line of text, the up and left arrows **shall** be to the left of the top line and the right arrow **shall** be to the right of the bottom line of the text (see example above.)

### 6.7. Destinations

Destinations/attractions on a community destination sign **shall** be displayed (from top to bottom of sign) in the following sequence:

1. Ahead destination (if used)
2. Left-oriented destinations/attractions (closest to furthest)
3. Right-oriented destinations/attractions (closest to furthest)

Community Wayfinding Signs should be limited to three destinations per sign. A fourth destination may be used but a heavy line entirely across the sign **shall** be used to separate destinations by direction.

Destinations **shall** only be listed once per direction (may be used in conjunction with another sign with an up arrow) and should be at the intersection with the local street access most commonly used to access the destination.

Text for destinations straight ahead and text for destinations to the left **shall** be left aligned with each other. Text for destinations to the right **shall** be left justified. All destination text **shall** be a minimum of one upper-case letter height (of the principal legend of the sign) space from the arrows. See examples shown above with the arrow section.

Vertical spacing between lines of legend **shall** be a minimum of  $\frac{3}{4}$  of the height of the upper-case letter for the principal legend of the sign.

If the destination name contains more than one line of text, all lines of text for that destination **shall** be left aligned with each other. See examples shown above with the arrow section.

General language (i.e. Recreation Center) should be used over specific destination names.

Abbreviations (see Section 1A.15 of the 2009 MUTCD) should be kept to a minimum and should include only those that are commonly recognized and understood (see Table 1A-1 of the 2009 MUTCD.)

Whole destination names are preferred, but an acronym may be used when the destination is well known by the acronym (such as "U S" for a United States.) If used, the initials should be separated by a space of between  $\frac{1}{2}$  and  $\frac{3}{4}$  of the letter height of the initials.

“Historic” **shall** only be used if the destination is listed on the National or State historic register.

#### 6.8. Pictograph and Enhancement Marker

Only one community pictograph may be incorporated in the top of the sign subject to NDDOT approval. If used, it **shall** be simple and easily recognizable. The height of the pictograph **shall not** exceed two times the height of the upper-case letters of the principal legend on the sign. For coordinated programs, a unique pictograph for each municipality may be used.

If a community name is to be displayed at the top of the sign panel, instead of or in addition to a pictograph, the lettering **shall** be of a size, font style (Highway Series Font) and suitable contrast for motorists to read at the posted speed.

All signs in a Community Wayfinding Signing program **shall** have the same format. If a community pictograph, and/or name, is to be used on any sign, it **shall** be used on all signs in the community program.

Pictographs for destinations and attractions **shall not** be allowed.

An identification enhancement marker may be used in a community wayfinding sign assembly or may be incorporated into the overall design as a means of visually identifying the sign as part of an overall system.

The sizes and shapes of identification enhancement markers **shall** be smaller than the community wayfinding guide signs themselves. Identification enhancement markers **shall not** be designed to have an appearance that could be mistaken by road users as being a traffic control device.

The area of the identification enhancement marker **shall not** exceed 1/5 of the area of the community wayfinding guide sign with which it is mounted in the same sign assembly.

#### 6.9. Symbols

Except for pictographs, symbols that are not approved in the MUTCD for use on guide signs **shall not** be used on community wayfinding signs.

Business logos, commercial graphics, or other forms of advertising (see Section 1A.01 of the 2009 MUTCD) **shall not** be used on community wayfinding signs or sign assemblies.

The larger dimension of the height and width of the symbol **shall** be a minimum of two times the height of the upper-case letters of the principal legend on the sign.

### 7. SIGN INSTALLATION STANDARDS

Signs **shall** be installed by the community on separate supports furnished by the community. Signs **shall not** be combined with other signing by the community or the Department.

If signing is approved on the state primary highway directing to a facility, any necessary trailblazing signing **shall** be installed on the city streets/local roads by the community before (or during the same construction phase as) signing is installed on the state primary highway.

The community **shall** affix a date label to the back of each sign in accordance with Section 754.04.B.5 of the NDDOT Standard Specifications for Road and Bridge Construction.

Sign supports installed in the clear zone **shall** meet the crash testing requirements found in the American Association of State Highway and Transportation Officials (AASHTO) Manual for Assessing Safety Hardware (MASH). If MASH supports are unavailable, sign supports **shall** meet the testing requirements found in the National Cooperative Highway Research Program 350 (NCHRP 350). An acceptance letter from the Federal Highway Administration (FHWA) showing device compliance must be submitted.

Sign installation and placement **shall** be in accordance with Section 2A.16 of the 2009 MUTCD.

Signs **shall** have a minimum vertical clearance of 5'-0" from grade of road (7'-0" from grade of sidewalk where pedestrians and/or parking is allowed) to the bottom of the sign panel.

Signs **shall not** block sight distance or prohibit the installation of regulatory, warning, and other guide signs, which have priority over community wayfinding signs.

Signs **shall** be installed within the Public Right-of-Way.

Signs **shall** be placed in advance of the intersection where a turn would be required. Only one sign **shall** be allowed in each direction approaching an intersection and it **shall** be located on the right side of the roadway.

In areas where the speed is 45 MPH or greater, the desirable sign spacing is 400 feet from any other highway sign (minimum spacing **shall** be 200 feet.) Where the speed is less than 45 MPH, the desirable sign spacing is 200 feet from any other highway sign (minimum spacing **shall** be 100 feet.)

Signs **shall not** be located on a state primary highway if you need to turn from that state primary highway onto another state primary highway to get to the destination without NDDOT approval.

Signs erected on the state highway system **shall** have their locations approved by the NDDOT. Signs at all locations **shall** be installed with due care to be visible, and to not obscure other traffic control devices. Further guidance on location is contained in Section 2A.16 of the 2009 MUTCD.

When signs are required to be installed in a sidewalk or shared use path because another area is not available, minimum clearance standards found in the Public Right-of-Way Accessibility Guidelines (PROWAG) **shall** be followed.

## 8. REVIEW AND APPROVAL PROCESS

To expedite the process, the community must select a primary point of contact (POC) through which all Department correspondence and contact will be made. The POC will be responsible for setting up a meeting with the District Engineer, and other NDDOT representatives recommended by the District



Engineer, to ensure there is proper understanding of what is expected. If the community chooses to hire a consulting firm, this meeting may take place after the consulting firm is under contract but prior to beginning the process of determining the signing destinations or locations displayed on the Community Wayfinding Signs.

The community will ensure the consulting firm is aware of and knows how to apply the Manual on Uniform Traffic Control Devices (MUTCD) to Wayfinding Community Signs.

The community should prepare the Master Plan in compliance with the guidelines in this policy. Any necessary revisions may cause a return of the plan to the community POC, resulting in a delay.

Sign destinations, designs, and locations **shall** be approved by the NDDOT. Installation of these signs **shall** be through this agreement request process.

The Master Plan and all supporting documents **shall** be submitted to the NDDOT District Engineer for review. This submittal **shall** be initiated and coordinated by the community POC.

The community must submit the following items during the Wayfinding Signing approval process:

1. The Master Plan for Community Wayfinding Signing
2. A plan clearly showing the sign locations and messages (layouts)
3. An overall map showing all the signs and messages (this would only be needed for the review process and does not need to be part of the formal document)
4. Sign support designs (sealed by registered ND Professional Engineer)
5. A plan showing any required removal of existing signs

Once the above items have been received, the submittal will be reviewed for the following:

1. Appropriate qualifying destinations
2. Direct and effective routing to the destinations, including trailblazing on local roadways
3. Appropriate sign locations
4. Installation standards
5. Individual sign designs
6. Engineering drawings sealed by a registered ND Professional Engineer

Some common issues that may cause a delay or return of the plans are:

1. Community wayfinding signs **shall not** be used to provide guidance to primary destinations or highway routes or streets.
2. The background colors of orange, red, yellow, purple, or the fluorescent versions thereof, fluorescent yellow-green and fluorescent pink **shall not** be used as background colors for community wayfinding signs.
3. All messages, borders, legends, and backgrounds of community wayfinding guide signs and any identification enhancement markers **shall** be retroreflective.
4. Community wayfinding signs should be limited to three destinations per sign (four may be used when a heavy line is provided entirely across the sign to separate destinations by direction.)
5. The lettering for destinations on community wayfinding signs **shall** be a combination of lower-case letters with initial upper-case letters.

6. All Sign Design Standards, such as arrow placement, text alignment, spacing, etc. **shall** be followed.
7. Except for signs that are intended to be viewed only by pedestrians, bicyclists stopped out of the flow of traffic: QR Codes, Internet and e-mail addresses, including domain names and uniform resource locators (URL), **shall not** be displayed on any community wayfinding sign or sign assembly.
8. Wayfinding signs designed for and intended to provide direction to pedestrians, bicyclists, or other users of a sidewalk or other roadside area should be located to minimize their conspicuity to vehicular traffic. These signs **shall not** be retroreflective.
9. 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.
10. Except for pictographs, symbols that are not approved in the MUTCD for use on guide signs **shall not** be used on community wayfinding signs.
11. Business logos, commercial graphics, or other forms of advertising (see Section 1A.01 of the 2009 MUTCD) **shall not** be used on community wayfinding signs or sign assemblies.

Comments made by NDDOT and FHWA during the review process will need to have a written response to show how the comments were addressed before final approval will be given.

## 9. COMMUNITY WAYFINDING SIGNING AGREEMENT

Once the Master Plan and associated documents have been approved, the community **shall** complete a Community Wayfinding Signing Agreement. This agreement gives the community authorization to install the community wayfinding signs and assigns responsibility for all future maintenance of the signs.

All sign panel designs should be reviewed and approved by the NDDOT before fabrication.

The community **shall** be responsible for the construction, installation and maintenance of the community wayfinding signs at its own expense.

The signs **shall** be maintained to meet minimum retroreflectivity requirements as described in the 2009 MUTCD.

New requests for directional signing (standard guide signs) for destinations displayed on the community wayfinding signs will not be approved on ND or US Highways.

If community wayfinding signs are not properly maintained, the community **shall**, upon request by NDDOT, replace or remove the signs at its own expense. If not replaced or removed within 30 days of notification, NDDOT will remove the community wayfinding signs at the expense of the community.

Roadway reconstruction and/or installation of new regulatory, warning or guide signs may necessitate relocation or removal of community wayfinding signs by the community at its own expense.