

Appendix E: Wayfinding Guidance

This section includes guidance on active transportation wayfinding adapted from the City of Fort Collins. In 2015, the City of Fort Collins adopted a [Bicycle Wayfinding Network Master Plan](#), creating a wayfinding template and guiding principles for application along the City's trail and bikeway system. Although the Plan was specific to bicycles, much of the guidance is appropriate for other active modes. The City agreed to share their wayfinding documentation with the NFRMPO to distribute to member communities. This turnkey solution allows NFRMPO member agencies employ the basic elements, adapt templates to the local context, and apply their own branding. Signage related to active transportation must be compliant with the Manual on Uniform Traffic Control Devices (MUTCD) and should be designed to meet the needs of older adults and individuals with visual disabilities.

The vision for wayfinding across the Regional Active Transportation Corridor (RATC) network is signage infrastructure that provides consistent messaging to RATC users no matter where they are, but that also allows for unique local branding that complements and highlights local context and character. The following guidance offers principles to inspire confidence in users and guide them across neighborhoods and communities in a relatively seamless experience. Wayfinding elements should be included with every project on an RATC. RATC projects awarded funding through the NFRMPO Call for Projects will be required to include wayfinding elements, unless wayfinding is already implemented. Assistance from NFRMPO staff and/or the NoCo Bike & Ped Collaborative can supplement the following guidance.

Wayfinding Elements, Placement and Technical Guidance Memo

Fundamental Wayfinding Elements

The following sign typologies are recommended for the local and regional bicycle network. Unless noted otherwise, all wayfinding elements are oriented and scaled for the bicycle user.

Fundamental Navigational Elements

The fundamental family of signs which provide cyclists with navigational information consists of decision, confirmation, and turn signs. The function, content, and placement of each are described below.



Above: Fundamental on-street wayfinding tools. Credit: City of Fort Collins

Decision Sign

Function and content: Decision signs clarify route options at junctions where more than one potential route exists. Decision signs include system branding elements, space for up to three destinations, distances to destinations in miles and/or time (based on 10 mph or 6 minute per mile travel speed) and may include the route or path name.

Per the FHWA’s Standard Highway Sign Manual, the standard three-line decision sign for both on- and off-street bicycle facilities is formatted horizontally at 18 inches high by 30 inches wide.⁴⁵ Many municipalities have three-line decision signs that are formatted vertically at 24 inches wide by 30 or 36 inches tall by omitting the bicycle symbol from each separate line and including a single bike symbol at the top of the sign. Regardless of orientation, six inches of vertical space per destination line is generally provided to allow for the two-inch minimum text height.

Placement: Detailed in the following section



Above: Decision Sign example. Credit: City of Fort Collins

⁴⁵ Sign width is not standardized by the USDOT in the Manual for Uniform Traffic Control Devices (MUTCD).

Confirmation Sign

Function and Content: Confirmation signs are placed after a turn movement or intersection to reassure cyclists that they are on the correct route. Signs include a system brand mark and may include the route or path name.

For both on- and off-street bike routes, the minimum size of 24” wide by 18” high should be used.

Placement: Detailed in the following section



Above: Confirmation Sign example. Credit: City of Fort Collins

Turn Sign

Function and Content: Turn signs are used when only one route option exists to indicate a change in route direction. Signs include a system brand mark, route or pathway name and directional arrow.

Standard D1-1 series signs may be used to indicate turns. Standard turn arrow signs (M5 and M6 series) may also be used in conjunction with bike route signs to clarify turn movements. Similar to decision signs, a minimum height of 6” should be used and width may vary according to destination length.

Placement: Detailed in the following section



Above: Turn sign example. Credit: City of Chicago, IL

Supplemental Wayfinding Elements

A robust wayfinding system for active modes includes additional elements to orient, inform, and inspire confidence in the facility user. These elements can vary widely in character. They can come in the form of a standard sign, pavement marking, public art, and more. Supplemental elements can add interpretive, historical, and/or cultural value to the system, enhancing the overall experience. By including elements that celebrate and honor the historical significance of an area, indigenous peoples, and/or feature local art, communities can create more pride and ownership in the system while also making themselves more competitive for certain grant programs. With supplemental wayfinding, it is also important to consider what additional languages should be included. At a minimum, supplementary signs that include important information regarding facility rules and regulations, amenities, hazards, and warnings should be printed in Spanish and English.



Above: Supplemental Wayfinding Elements ad examples. Credit: City of Fort Collins.

Mile Markers

Function and Content: Mile markers enable pathway users to measure distances travelled and provide pathway managers and emergency response personnel with reference points to identify field issues such as maintenance needs or locations of emergency events. Mile markers include the system brand mark, distance in whole number miles or decimal miles when less than one mile and may include path name and jurisdiction.

Placement: Mile markers should be placed every ¼ to ½ mile along the pathway network. Mile markers may be installed on one side of a pathway, back-to-back. Point zero should begin at the southern and westernmost terminus points of a pathway. Mile numbering should be reset at zero as a pathway crosses a jurisdictional boundary. Distances along on-street routes should be included within mile measurements.



Above: Mile marker example. Credit: Town of Milliken

Primary Pathway Identity Sign

Function and Content: Primary pathway identification signs are oriented and scaled for vehicle drivers and serve as the initial welcome and identification of primary pathway access points. Signs include the system brand mark, pathway name, and local jurisdiction identity/logo.

Placement: Signs should be located at trailheads or regional pathway access points. Care should be taken to maintain site lines between roadways and entries at trailhead locations.



Above: Primary Pathway Identity Sign. Credit: Town of Milliken

Secondary Pathway Identity Sign

Function and Content: Secondary pathway identity signs are oriented and scaled for pedestrian and bicycle network users and serve as the initial welcome and identification of secondary pathway access points. Signs include the system brand mark, pathway name and local jurisdiction identity/logo.

Placement: Signs should be located at pathway access points visible from adjacent bicycle facilities.



Above: Secondary Pathway Identity Sign. Credit: Town of Milliken

Information Kiosk

Function and Content: Kiosks provide a clearing house of information at a more detailed level than other elements. Kiosks include orientation map graphics indicating the on- and off-street route and connections, major geographic features, destinations rules and responsibilities, emergency and pathway manager contact information and jurisdiction logo.

Placement: Kiosks should be located at major pathway system access points and set back from the edge of the path travelway to provide areas to dwell and consider the information. Per accessibility guidelines, kiosks should be placed at a distance greater than three feet from the pathway edge to provide clear circulation areas and avoid the creation of a potential physical obstacle from the bicycle travelway.



Above: Information Kiosk example. Credit: City of Loveland

System Identifiers

Function and Content: System identifiers present opportunities to add the system brand mark or logo to existing features to expand visibility at an affordable rate. Identifiers may include vinyl wraps, adhesive graphics, sign toppers, and pavement markings with system name or brand mark.

Placement: Identifiers may be placed at each jurisdiction’s discretion based on need for augmented system visibility.



Above: System Identifier example. Credit: Capital District Transportation Committee

Wayfinding Element Placement

The various elements of the wayfinding family should be located in a consistent and logical manner within and across communities. Signs may be mounted to existing or new wayfinding sign posts. Focusing efforts at the

following locations can address a majority of the navigational issues requiring clarification by bike network users:

- On-street route intersections
- Gaps in path network
- Path-path intersections
- Path-roadway intersections
- Off-street and on-street transitions
- Pathway access points

On-street Wayfinding Element Placement

On-street wayfinding element placement recommendations are provided below. However, engineering judgement and a review of the existing site conditions should also be used on a case-by-case basis to determine the specific placement of each sign.

Decision Signs

The distance of a decision sign from a turn or transition is determined by design speed, site lines and slope. Decision signs should be placed along the right-of-way in places where the cyclist can see an upcoming sign from an appropriate distance given the design speed and physical context.

On busy streets with center turn lanes or left turn pockets, signs should be placed further from the intersection to decrease the possibility of conflicting cyclist/motorist movements while preparing for a left turn. The location of the sign should exceed the stopping distance needed by the fastest expected travel speed, but should not be placed so far in advance that the relevance of the sign is lost or forgotten.

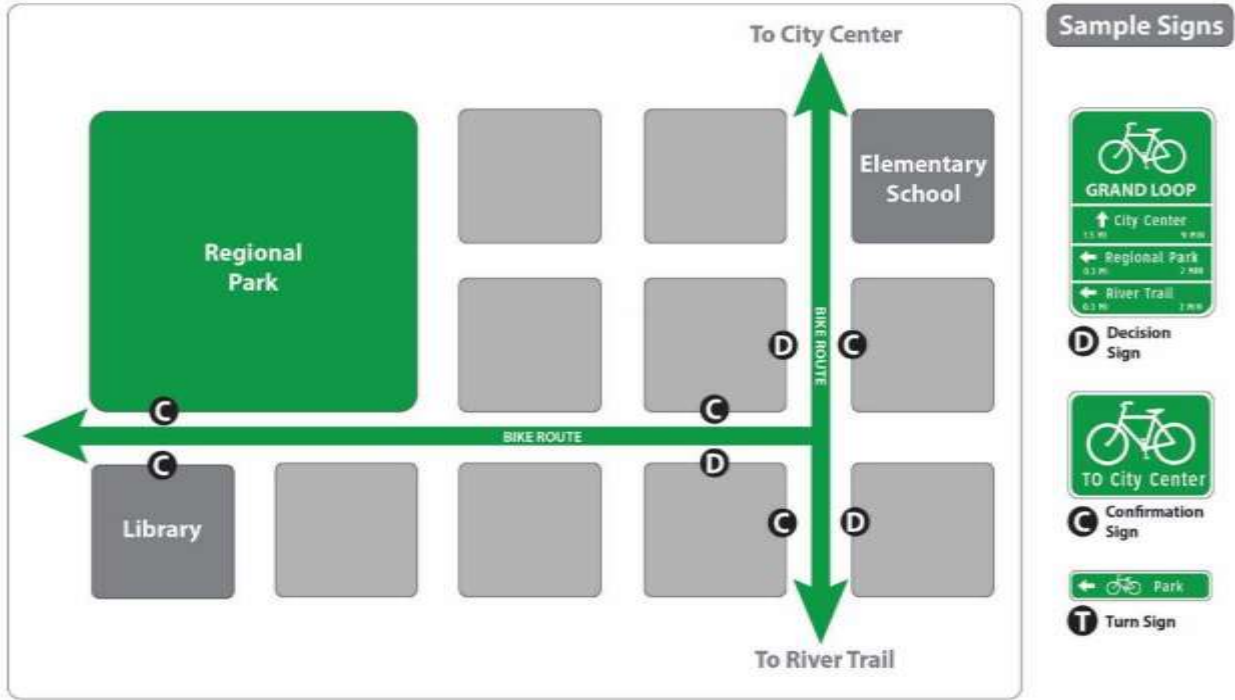
Confirmation Signs

Confirmation signs provide reassurance of direction after decision points and along long routes with no intervening destinations or decision points. At decision points, the sign should be placed 50 to 100 feet after the intersection or turn. Confirmation signs should not occur after every intersection and should be prioritized at complex intersections. Complex intersections include those having more than four approaches, non-right angle turns, roundabouts, or in-direct routing.

Along routes in developed areas with few decision points, confirmation signs should be placed every two or three blocks for reassurance. Where less reassurance is needed (for example, less developed areas, low volume streets or separated pathways) confirmation signs should be placed roughly every 0.5 miles.

Turn Signs

Turn signs should be placed at points prior to the turning action to provide cyclists advance notice of a change in direction. Signs may also be used in conjunction with a decision sign at complex intersections warranting additional information.



Above: Typical placement scenario showing a decision sign being located prior to an intersection of two bicycle facilities. A confirmation sign is provided after the turn movement as well as periodically along the route for reassurance.

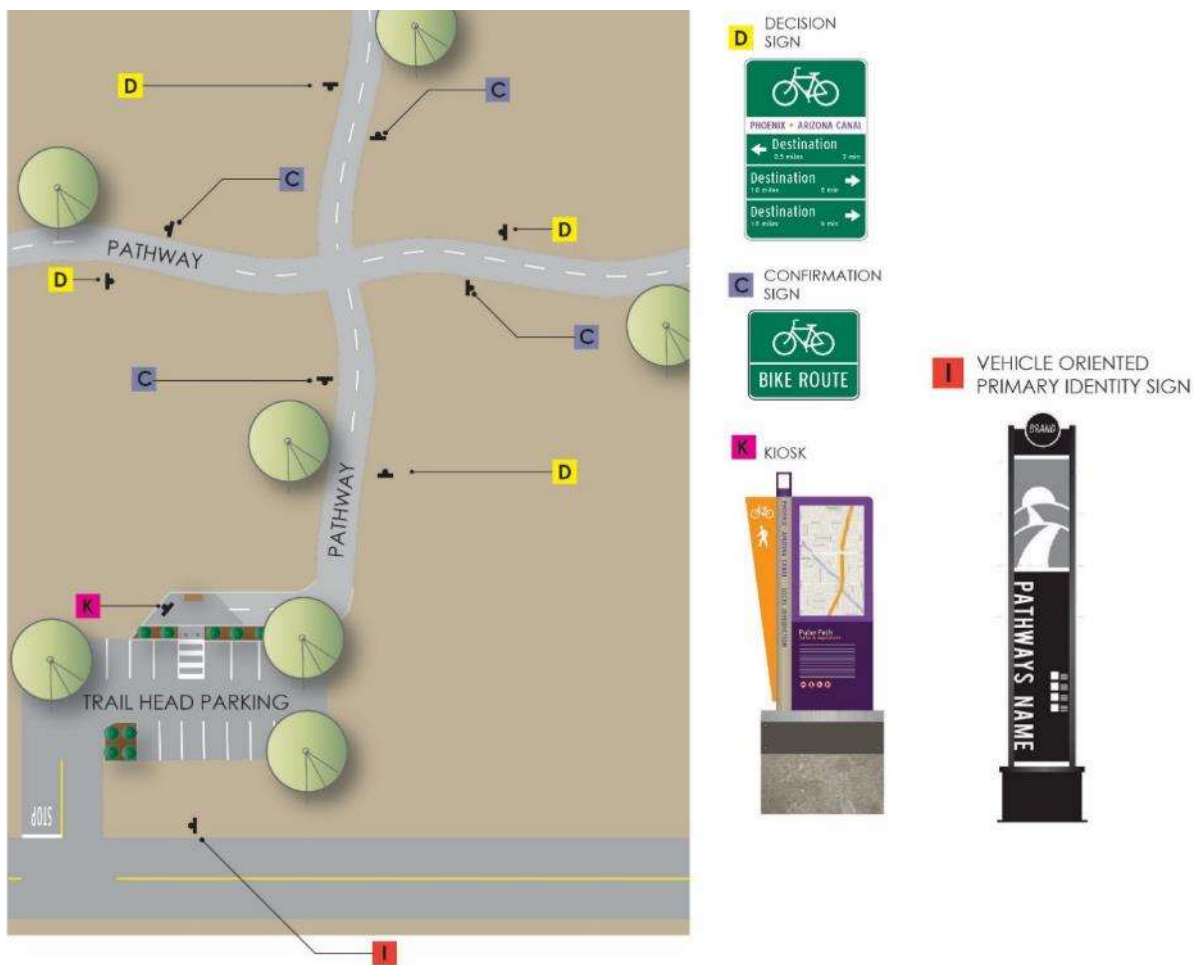
Off-street Wayfinding Element Placement

Pathway Access Points

Major pathway access points or trailheads should be identified via primary identity signs. Primary identity signs should be oriented towards approaching vehicles. Care should be taken to not obstruct site lines between the roadway and entry points or driveways. Pathway system access points not providing vehicle parking should utilize the secondary bicycle sign. As an option, kiosk signs with orientation maps may be placed at developed trailheads or access points.

Path-Path Intersection

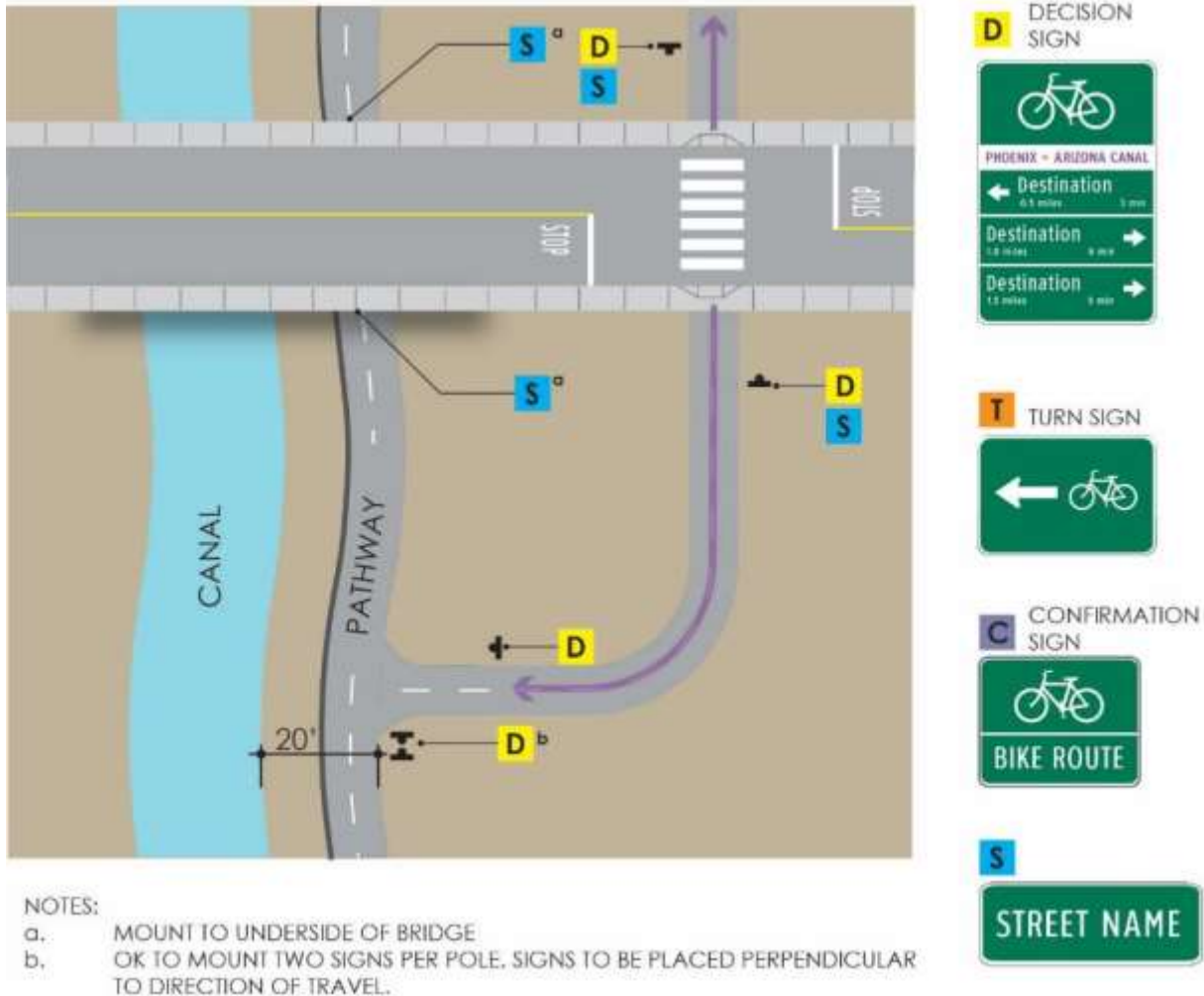
When pathways intersect each other, multiple destinations are likely. Thus, decision signs should be placed prior to the intersection. As an option, confirmation signs may be placed after intersections to reinforce that the user did indeed make the correct movement.



Pathway Access Branches

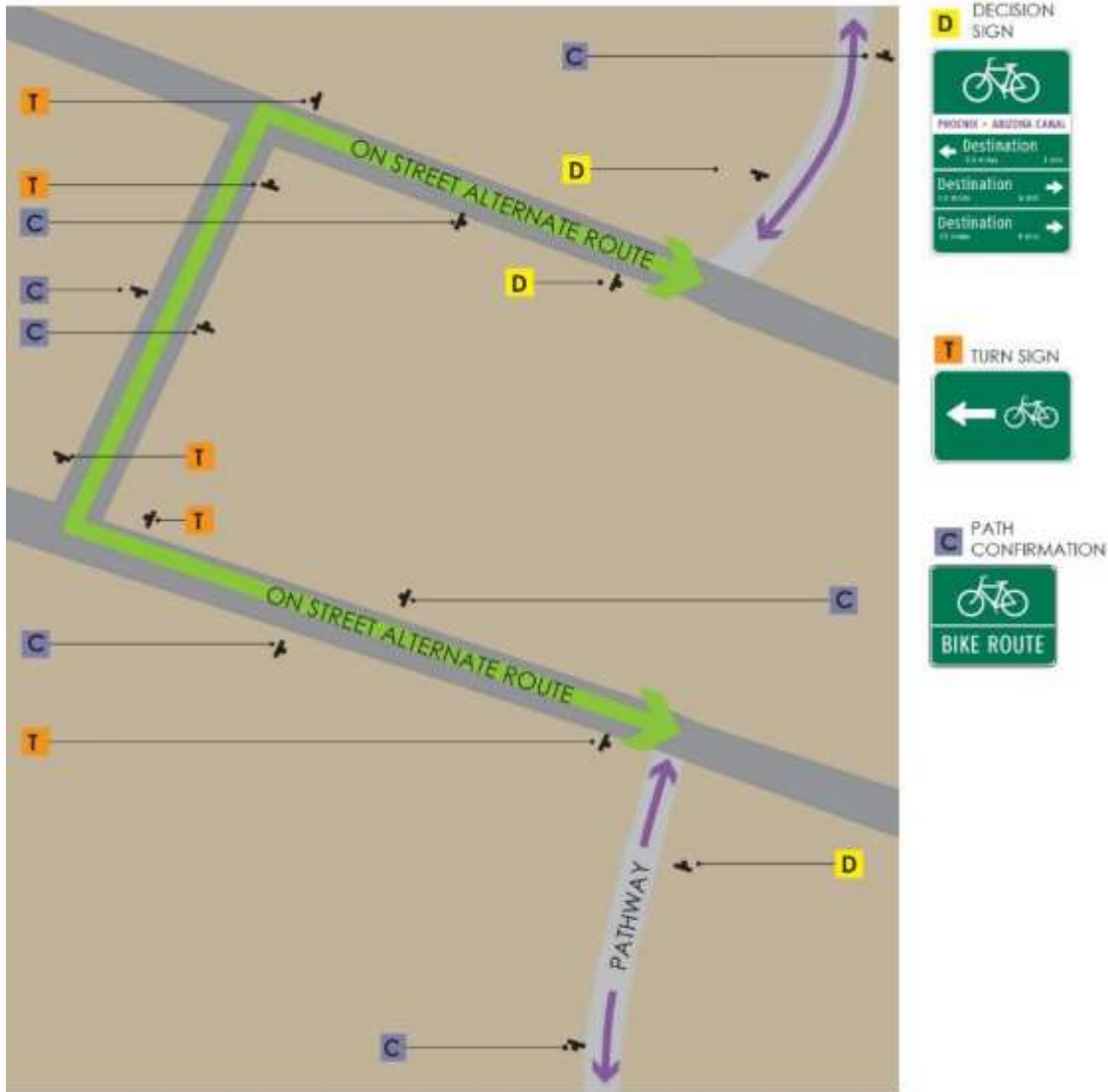
Connections and access points between the off-street and on-street network may result in path branches between the facilities. At such junctions, it is important to inform cyclists of where the alternative route option goes. This may be done via decision signs located at junctions.

Grade separated roadway crossings would benefit from applying street name sign blades to crossing improvements such as bridge infrastructure.



Gap in Path Network

Where gaps in the off-street bicycle network exist, pathway users may be routed to on-street bicycle facilities to provide improved connectivity. The typical pattern for wayfinding signs includes a decision sign prior to the intersection of route options, followed by an optional confirmation sign. Turn signs should be placed to reinforce the route in locations where only one route option exists.



Off-street / On-street Transition

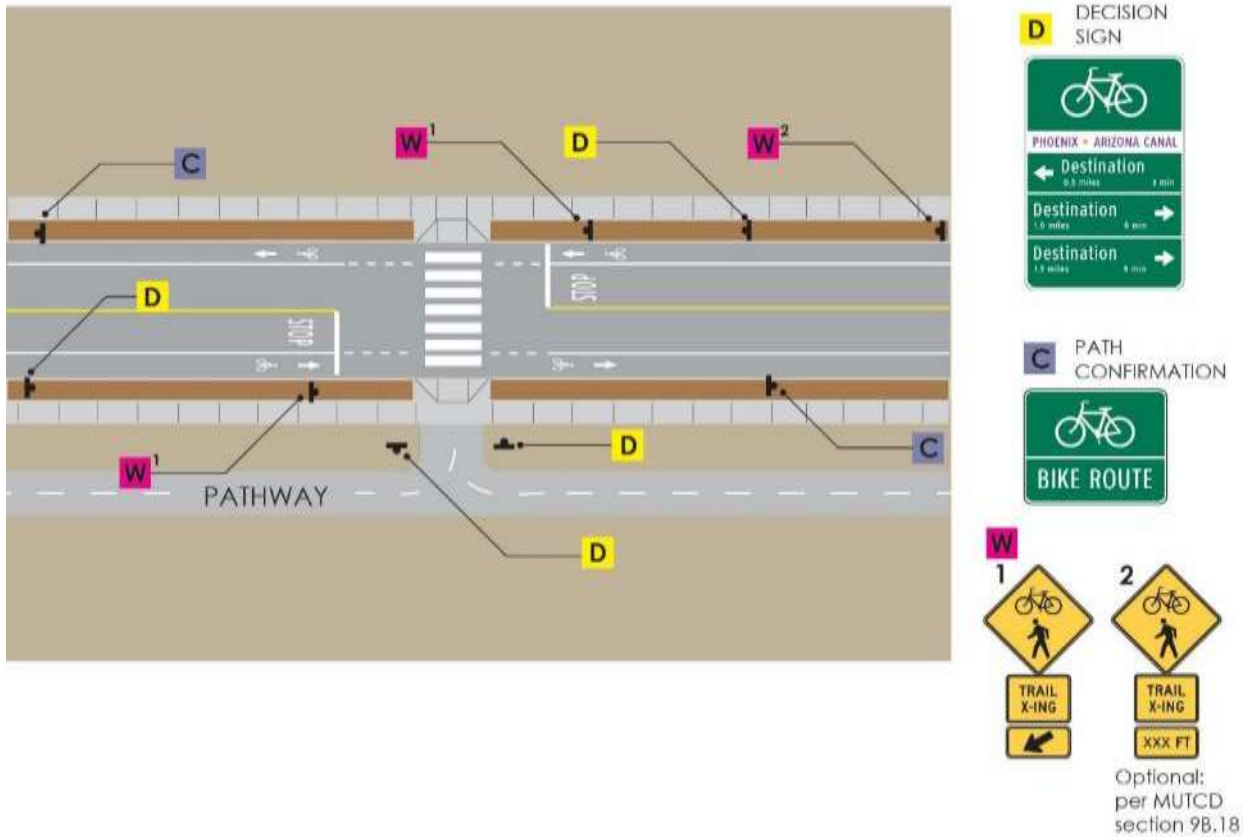
When transitioning from an off-street facility to an on-street facility, it is important to advise travelers of their route options. In this scenario, decision signs direct cyclists to their destination choices while confirmation signs reinforce that the user is on a designated facility after a turn movement is made.

Decision signs should also be placed at the entry to the off-street bicycle network. Once on the off-street bicycle network, confirmation signs are optional.

Vehicle oriented bicycle and pedestrian crossing warning signs should be placed in advance of crosswalks. In urban areas, signs should not be placed within four feet of a crosswalk in order to maintain visibility of those intending to cross the roadway.

Advance warning signs are optional per the MUTCD. If they are used, their placement should provide needed time for detection, recognition, decision, and reaction. Table 2C-4 in the MUTCD provides guidance for advance warning sign placement based on vehicle speeds.

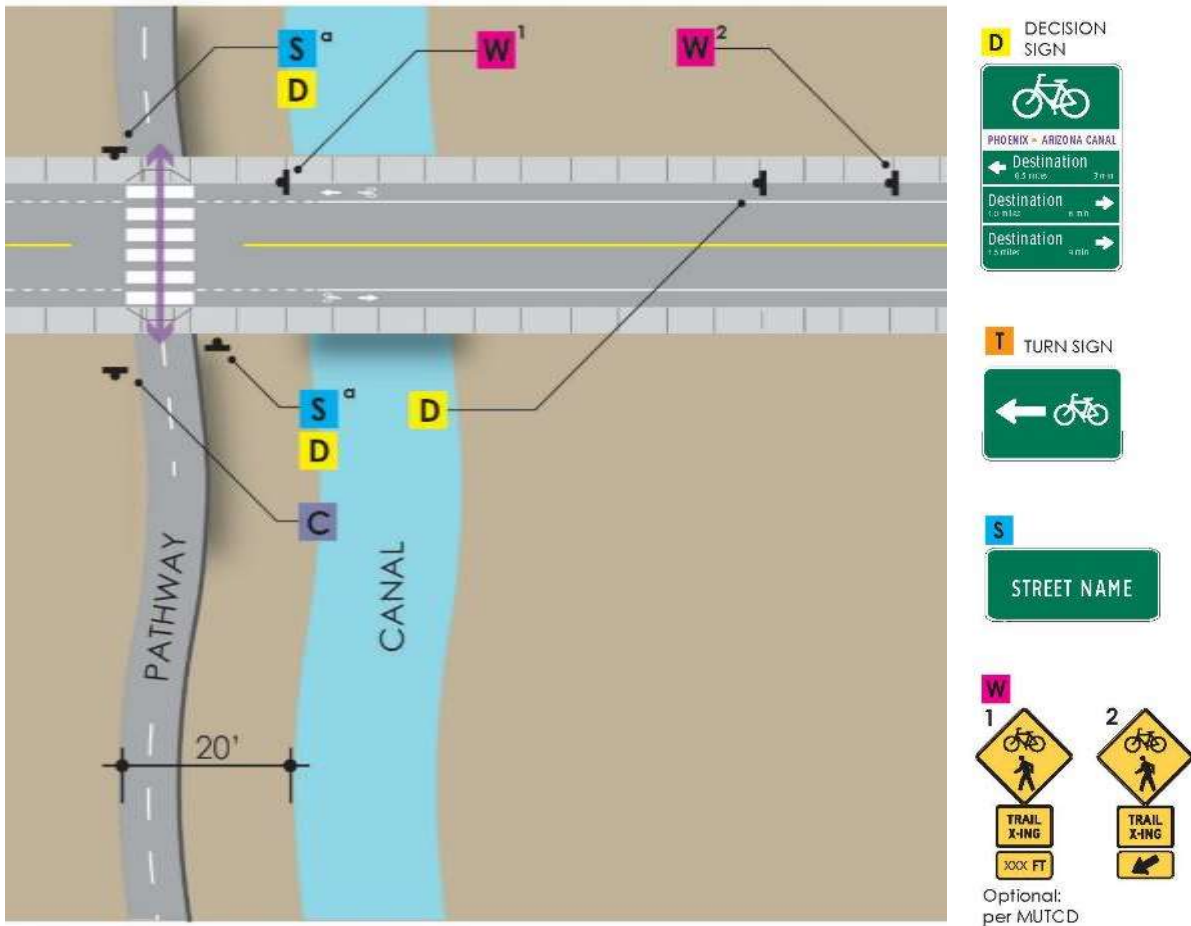
On-street directional signs leading to the pathway network should not obscure other roadway signs including warning signs. They should be spaced according to roadway travel speeds with faster roadways warranting wider spacing. Guidelines for the placement of advance warning signs based on perception-response time may be found within Table 2C-4 of the MUTCD.



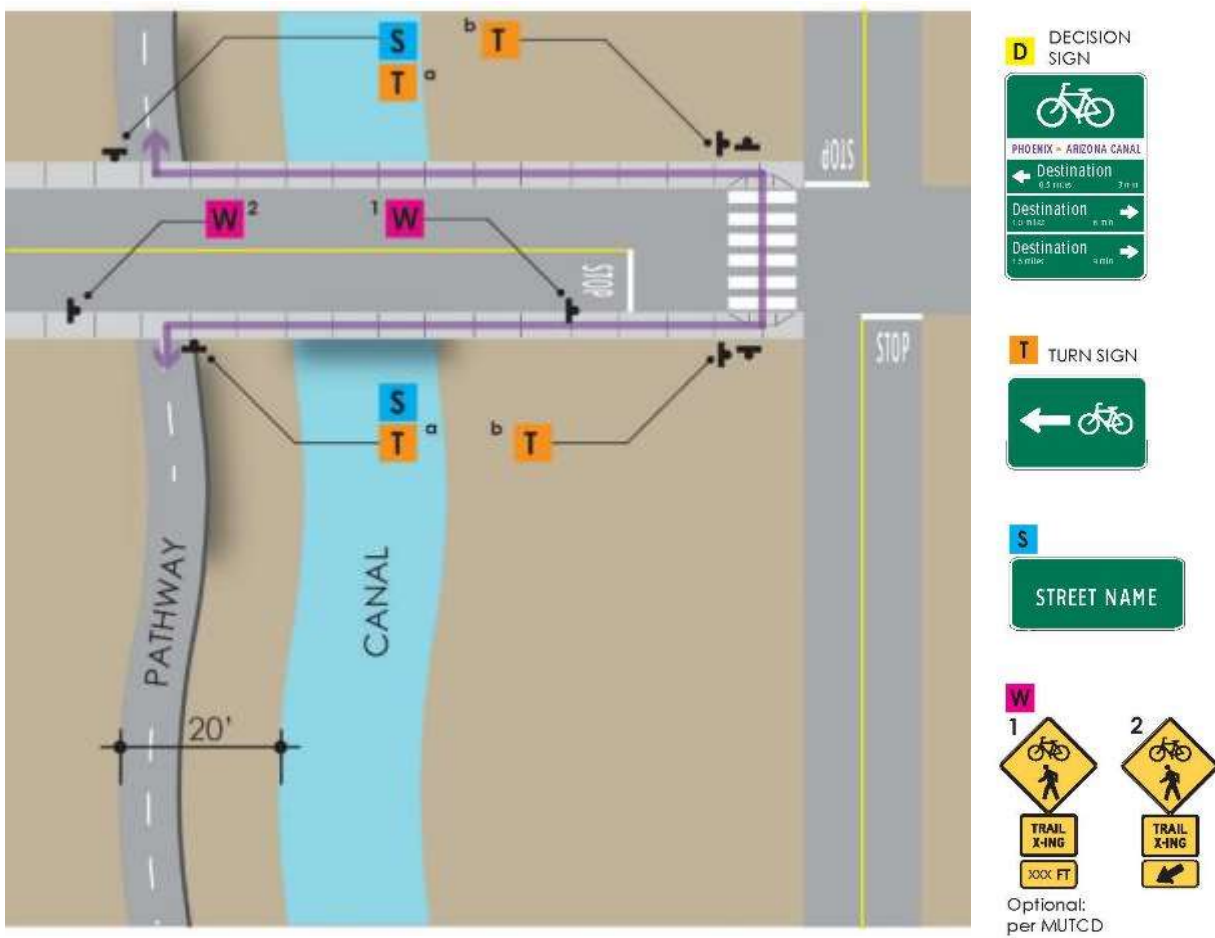
Path-Roadway Intersection

Pathway users should be directed to cross roadways only where improvements such as curb ramps, crosswalk striping, and warning signs exist. If the cross street has bicycle facilities such as bike lanes, a bicycle boulevard, or cycle track, a decision sign should be placed prior to the intersection to inform cyclists of their route options. If a cyclist-oriented stop sign is present, it should not be obscured by the wayfinding sign. Decision signs may be topped with street name sign blades to enhance one’s awareness of their location. As an

option, confirmation signs may be placed at pathway entries to assure cyclists that they are on a bicycle facility.



Oftentimes, direct travel via midblock roadway crossings is not provided for. Instead pathway users are expected to divert to the nearest improved or signalized intersection. In this scenario, turn signs should be used to direct cyclists to the intersection with safety improvements. Again street name blades may be mounted above decision signs to reinforce location.



Destination Selection and Prioritization

The process of selecting and prioritizing the destinations to include on wayfinding should include input from a stakeholder committee representing system users, stewardship groups/agencies, advocates, schools/school districts, business community/chamber of commerce in each community.

A consistent approach to selecting destinations to be included on wayfinding elements is necessary given the multitude of potential destinations. Signs should follow the same approach throughout the region so that the system is clear and predictable. Destinations and their names should be referred to consistently until they are reached.

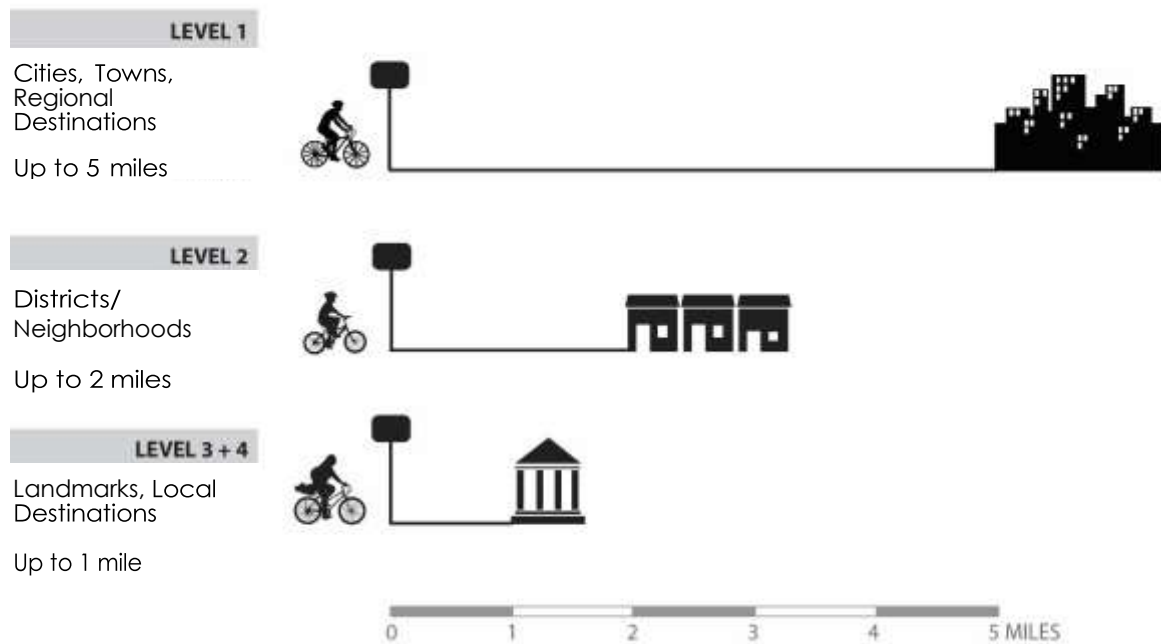
Potential destinations for inclusion on signs should be categorized into four levels. These levels are explained in detail in **Table AE-1** and **Figure AE-1**. For on-street and off-street regional pathways, Level 1 destinations should receive first priority, followed by Level 2 and then 3. Level 4 destinations should only be included when other destinations are not present to fill available slots on a sign. local routes typically serve shorter trips within their immediate community. Signs on such facilities may prioritize Level 2-4 destinations recognizing that longer, regional trips are more likely to occur via the regional pathway network.



Table AE-1: Wayfinding Destination Categorization
Level 1 – Cities, Towns, and Other Regional Destinations
Level 1 destinations include regional destinations accessed via the system, either within the community or in neighboring communities. Highlighting nearby cities/towns provides large scale geographic orientation for users, especially those making regional trips. Level 1 destinations provide “pull through” destinations for users who are travelling significant distances as well as a full range of attractions and services. Appropriate facilities should exist to the destination if it is included on a sign. Level 1 destinations should be included on directional signs and orientation maps. Level 1 destinations should be included on signs up to 5 miles away.
Level 2 – Districts and Neighborhoods

<p>Level 2 destinations provide a finer grain of navigational information than Level 1 destinations by directing users to comprehensible districts and neighborhoods. These may be city centers, historic, commercial, cultural, or educational districts, or neighborhoods with a distinct name and character. Emphasis should be placed on districts providing a mix of services. Neighborhoods not offering services or attractions, need not be included. Level 2 destinations should be included on signs up to 2 miles away.</p>
<p>Level 3 – Landmarks</p>
<p>Level 3 destinations are specific landmarks or major attractions which generate easily or commonly accessed by an active mode. Landmarks could include transit stations, major tourist venues, regional parks, open spaces and post-secondary educational institutions. Level 3 destinations should be signed up to 1 mile away.</p>
<p>Level 4 – Local Destinations</p>
<p>Level 4 destinations are local destinations such as civic buildings, parks, high schools, shopping centers, and healthcare facilities. They are typically present on signs in low density areas where few other destinations are present or along pathways not connecting higher priority (Level 1-3) destinations. Level 4 destinations may be signed up to 1 mile away.</p>

Figure AE-1: Maximum Suggested Signing Distances Based on Destination Level



Distances may be measured either to a destination boundary or center, as long as the approach is consistent throughout the region. Cities (level 1 destinations) typically have a well-defined edge and thus should be measured to boundary lines. Districts (level 2 destinations) are less defined in terms of their boundaries and thus should be measured to their centers. Level 3 and 4 destinations are typically specific addresses and thus distances should be measured to the main entrance of their specific location. If a level 3 or 4 destination is large or has several access points, distance should be measured to the point at which the user will arrive at the destination.

Destination Selection Criteria

Level 1 – Cities, Towns, and Other Regional Destinations

Level 1 destinations should include nearby towns, cities, and other large regional destinations such as state or county parks/open spaces if the system extends past a city or town.

Level 2 – Districts and Neighborhoods

Districts and neighborhoods may be included on signs if the area has been formally established by resolution or ordinance of the appropriate local agency or if the district has developed and implemented its own internal wayfinding sign plan. Examples of districts include: city centers, university districts and arts districts. Neighborhoods having historic character or otherwise significantly contributing to the culture and vibrancy of a city may also be signed.

Level 3 - Landmarks

Landmarks included within the inventory have been sorted between levels 3 and 4. Level 3 landmarks have regional importance and can reasonably be expected to be in operation for years to come. Level 3 destinations include:

Businesses and Services

- Medical Facility - Hospitals, veterans' services providers, and clinics may be considered if the facilities meet all of the following criteria:
 - Service is provided 24 hours a day, 7 days a week.
 - Emergency department facilities and services are provided.
 - The facility is licensed or approved for definitive medical care by an appropriate State authority.
- Shopping Center - A group of shops, retail stores, and/or restaurants that is regionally significant in size with respect to the size of the community or area of the region.
- Visitor Center - A facility having the primary purpose of providing information and tourist support services. Must be approved by the State Department of Community and Economic Development.

Education

- College/University - An educational institution that is nationally accredited and grants degrees.
- Public 2 Year College - An educational institution that is nationally accredited and grants degrees.

Entertainment and Culture

- Historic Site - A structure or place of historical, archaeological, or architectural significance listed on the National Register of Historic Places.
- Museum - A facility of national or regional significance exhibiting works of artistic, historic, or scientific value.
- Performing Arts Venue - A facility focused on the enjoyment of the performing arts and providing a minimum capacity of two hundred seats.
- Botanical Garden or Zoo - Accredited institution, where plants and/or animals are kept and cared, while also offering public education.

Public Facility

- Recreation or Community Center - Publicly owned buildings offering places to recreate, learn, and/or gather.
- Library - A repository for literary and multi-media materials, such as books, periodicals, newspapers, recordings, films, and electronic media, kept and systemically arranged for use and reference.
- Park/Open Space - Publicly owned National, State, and Regional parks.
- Pathway - Named regional facilities built for transportation and recreation purposes and used by both cyclists and pedestrians.
- Transit Center - Passenger terminals facilitating access to multiple bus lines.

Sports Facility

- Golf Course - A facility open to the public and offering at least eighteen holes of play. Miniature golf courses and driving ranges are not considered a level 3 landmark.
- Stadium or Arena - A permanent facility used for the primary purpose of presenting organized sporting events. Includes county and state fairgrounds.
- Sports Complex - A facility open to the public that commonly holds sporting events on multiple fields, such as baseball or softball tournaments.

Level 4 - Local Destinations

Extending the wayfinding system to include local destinations may be useful in lower density areas or on more rural routes where Level 1-3 destinations are not present. Each community is unique but, generally, larger civic institutions such as libraries, museums, or community centers will take precedent over specific local services and visitor accommodations.

Businesses and Services

- Medical Facility - Licensed facilities that provide emergency or urgent care services. Need not be open 24 hours per day, seven days per week.
- Shopping Center - A group of shops, retail stores, and/or restaurants that is significant mainly on a local level, with respect to the size of the community or area of the region.

Community Facilities

- Cemetery - A large public park or ground laid out expressly for the interment of the dead.

Education

- Primary School – Public schools providing elementary school level education to students generally aged six through eleven. Private schools may be considered on a case-by-case basis
- Secondary School – Public schools providing high school level education to students generally aged eleven through eighteen. Private schools may be considered on a case-by-case basis

Entertainment and Culture

- Museum – A facility of local recognition exhibiting works of artistic, historic, or scientific value to the general public.
- Performing Arts Venue - A facility focused on the public’s enjoyment of the performing arts and having a capacity of less than two hundred seats.

Public Facility

- Civic Building - City hall, courthouse, fire or police station.
- Local Park - Publicly owned local parks.
- Post Office – Official federal postal service center.

Sports Facility

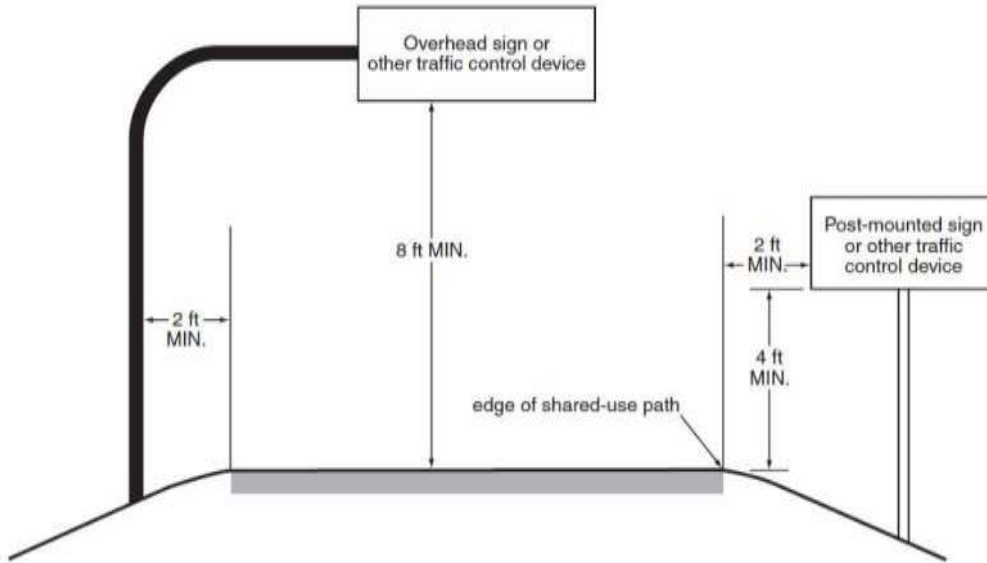
- Golf Course - A facility open to the public and offering fewer than eighteen holes of play. Miniature golf courses and driving ranges may be considered.
- Sports Field – A permanent facility used for the primary purpose of presenting and practicing local organized sports.
- Public Pool, Swimming Area, or Waterpark – A facility open to the public for water recreation. The facility may already be referenced if it is part of a recreation or community center.

In situations where two destinations of equal significance and distance may be properly designated and the two destinations cannot appear on the same sign, the two names may be alternated on successive signs. If a facility ends abruptly, signs should signify “End of Trail” or “End of Route” as the lowest priority after all other possible destinations, up to 1 mile before the facility ends.

Additional Technical Guidance

A variety of standards and guidelines influence both sign design and placement of wayfinding elements in Fort Collins. The following provides information related to national standards for wayfinding signage.

In general, regulatory and warning signs are a higher priority than wayfinding signs. Care should be taken to not obscure priority information. This includes providing a typical spacing of no less than 75 feet between signs along off-street pathways. This distance is based on travel speeds and thus is generally greater for on-street systems.



Minimum Sign Clearances on Shared-Use Paths

Accessibility Standards

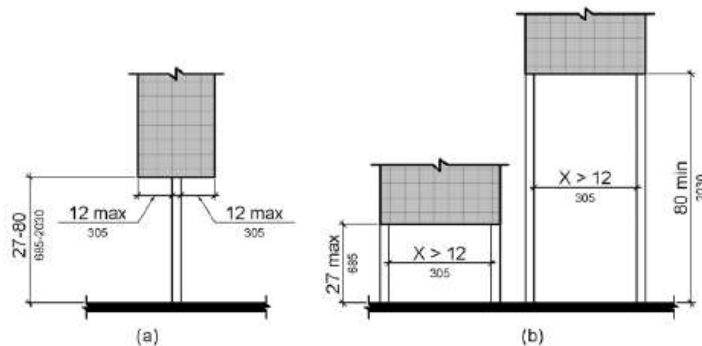
As wayfinding systems often relate to accessible routes or pedestrian circulation, it is important to consider technical guidance from the ADA so that signs and other elements do not impede travel or create unsafe situations for pedestrians and/or those with disabilities. The Architectural and Transportation Barriers Compliance Board provides guidance for accessible design for the built environment. Standards which should be considered when designing and placing wayfinding signs includes the following:

Vertical Clearance

Vertical clearance should be a minimum of 80 inches high or maximum of 27 inches when signs protrude more than 12 inches from the sign post or support structure.

Post-Mounted Objects

Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches, the lowest edge of such sign or obstruction should be 27 inches maximum or 80 inches minimum above the finish floor or ground.

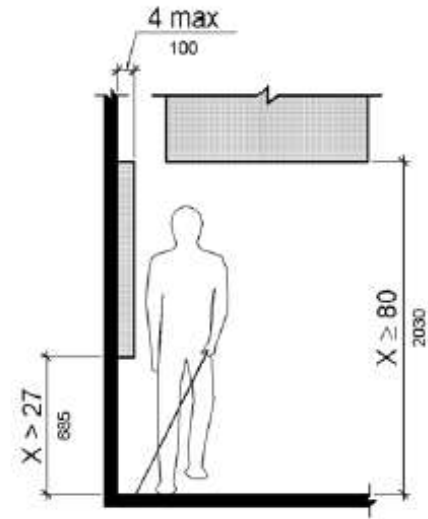


Protruding Objects

Objects with leading edges more than 27 inches and not more than 80 inches above the finish floor or ground should protrude 4 inches maximum horizontally into the circulation path.

Required Clear Width

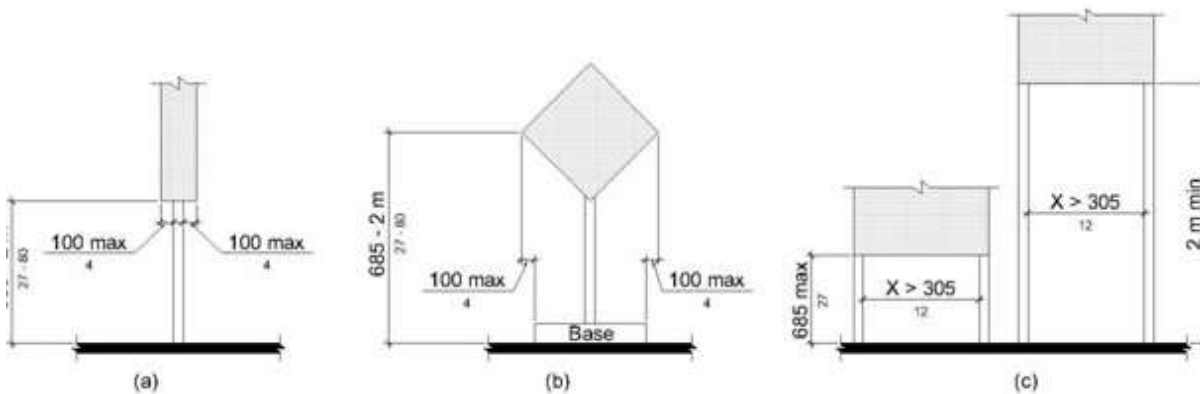
Protruding objects shall not reduce the clear width required for accessible routes. Generally this requirement is met by maintaining four feet minimum clear width for maneuvering. This requirement applies to both sidewalks and pedestrian circulation paths.



Limits of Protruding Objects

Shared Use Paths

Accessibility standards for shared use paths are currently being developed. Proposed standards address post mounted objects. Where objects are mounted on free-standing posts or pylons and the objects are 27 inches minimum and 80 inches maximum above the finish surface, the objects should overhang pedestrian circulation paths 4 inches maximum measured horizontally from the post or pylon base. The base dimension should be a minimum of 2.5 inches thick. Where objects are mounted between posts or pylons and the clear distance between the posts or pylons is greater than one foot, the lowest edge of the



object should be 27 inches maximum or 80 inches minimum above the finish surface.

Current proposed standards for post mounted objects along shared use paths.

AASHTO Guide for the Development of Bicycle Facilities

The Guide for the Development of Bicycle Facilities by the American Association of State Highway Transportation Officials, or AASHTO, provides information on the physical infrastructure needed to support bicycling facilities. The AASHTO guide largely defers to Part 9 of the Manual on Uniform Traffic Control Devices (MUTCD) for basic guidelines related to the design of wayfinding systems for bicycles (see page 16). Additional information provided by AASHTO regarding wayfinding is as follows:

- Many communities find that a bicycle wayfinding system enhances other encouragement efforts by providing a visible invitation to new bicyclists and encouraging current bicyclists to explore new destinations.
- Bicycle wayfinding signs alone do not improve safety or rider comfort and should supplement other infrastructure improvements so that conditions are favorable for bicycling.
- Guide signs may be used to designate continuous routes that are composed of a variety of facility types and settings.
- Wayfinding guidance may be used to provide connectivity between two or more major bicycle facilities, such as a street with bike lanes and a shared use path.
- Wayfinding may be used to provide guidance and continuity in a gap between existing sections of a bikeway, such as a bike lane or shared use path.
- Road/path name signs should be placed at all path-roadway crossings to help users track their locations.
- Reference location signs (mile markers) assist path users in estimating their progress, provide a means for identifying the location of emergency incidents, and are beneficial during maintenance activities.
- On a shared use path, obstacles, including signs, should be placed no closer than 24 inches from the near edge of the travel way and no more than 6 feet away. For pole mounted signs, the lowest edge of the sign shall be 4 – 5 feet above the existing ground plane.

Manual on Uniform Traffic Control Devices (MUTCD)

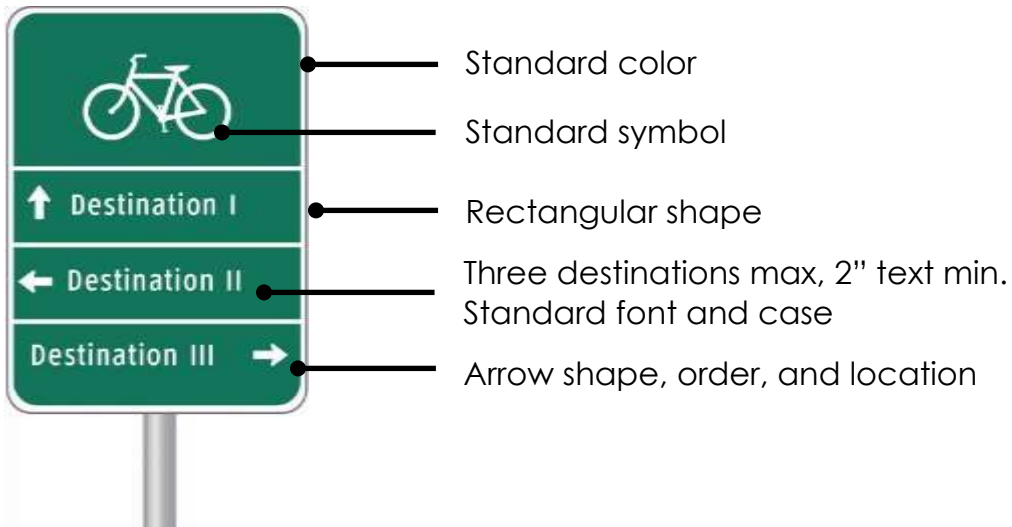
Bicycle Sign Standards

The Manual on Uniform Traffic Control Devices, or MUTCD, is a document issued by the Federal Highway Administration of United States Department of Transportation. The MUTCD specifies the standard for all traffic control devices installed on any street, highway, bikeway, or private road open to public travel. The MUTCD was established in order to achieve uniformity and consistency in traffic control devices (wayfinding signage is considered a traffic control device) so that information would be readily recognized and understood by travelers. Both on-street and off-street bicycle facilities are required to follow the standards within the MUTCD.



Per the MUTCD, devices should be designed so that:

- Size, shape, color, composition, lighting or retro-reflection, and contrast are combined to draw attention to the devices; simplicity of message combined to produce a clear meaning.
- Legibility and size combine with placement to permit adequate time for response.
- Uniformity, size, legibility, and reasonableness of the message combine to command respect.



Standard MUTCD compliant directional or decision sign

Sign Arrangement

The MUTCD also recommends the arrangement and amount of text, or legend, on each section of each sign:

- Guide signs should be limited to no more than three lines of destinations, which include place names, route numbers, street names, and cardinal directions.

- A straight ahead location should always be placed in the top slot followed by the destination to the left and then the right. If two destinations occur in the same direction, the closer destination should be listed first followed by the farther destination.
- Arrows shall be depicted as shown above for glance recognition, meaning straight and left arrows are to be located to the left of the destination name, while an arrow indicating a destination to the right shall be placed to the right of the destination name. The approved arrow style must be used.
- 19 characters (including spaces) in titlecase should be considered a maximum length for a single destination title. 10-14 characters (including spaces) in titlecase should be considered an ideal maximum length for a single destination title.
- In situations where two destinations of equal significance and distance may be properly designated and the two destinations cannot appear on the same sign, the two names may be alternated on successive signs.
- Approved fonts include the Federal Series (series B, C, or D), also known as Highway Gothic. Clearview is also currently approved for use, however the FHWA is considering rescinding the use of Clearview.
- A contrast level of 70% needs to be achieved between foreground (text and graphics) and background.

Case Studies

Local agencies in Northern Colorado have conducted planning and implemented their own local wayfinding systems to varying degrees. The following examples illustrate the elements of those efforts and cost estimates where possible.

Fort Collins On-Street Bicycle Wayfinding Network: Master Plan and Initial Implementation

Master Plan Development - \$39,000⁴⁶ (2015)

- Tasks included consultant selection, stakeholder engagement, site assessment, landmark identification, general approach, sign location, destination, phased implementation plan, signage plan and cost estimates.

Implementation: Phase I (2016-2017) - \$6,000 - \$9,000⁴⁷ per route

- Five routes, \$6,000 - \$9,000 per route (decision, confirmation, and turn signs; pavement markings)
 - Remington Street (71 signs, 8 miles), Swallow Road (56 signs, 5 miles), Centre Avenue (78 signs, 8 miles), City Park Ave (94 signs, 7 miles)

Moving Forward

- Goal is to sign two routes per year as infrastructure is implemented.

⁴⁶ 2015 Dollars

⁴⁷ 2016-2017 Dollars

Milliken Wayfinding to the Town Park SystemInitial Design (2020) – no cost

- Sign concepts were created in 2020 by Brandon Smith, volunteer member of the Great Outdoors Milliken (GO Mill) Committee

Final Design, Production, and Installation (2021) - under \$5,000

- Design was finalized to as 24”x18” sign with a brown background and white lettering incorporating the Town of Milliken logo, following current MUTCD standards and Town Design Codes.
- 57 signs were produced at \$42 per unit. Additional costs associated with signposts and installation hardware have kept the project under \$5,000 (budget was based on a CDPHE grant awarded in early 2021)
- In-house installation

Loveland Recreation Trail (paved) Wayfinding Signage ProgramInitial Design (2016)- \$20,000 – Completed with in-house staff

- Tasks included assessment of sign needs, sign types, design, sign location, update of Bikeway & Recreation map/brochure, phased implementation plan, signage plan and cost estimates.

Implementation: (2017-2018) - \$120,000

- 15 new or restored trail kiosks for 21-mile trail system- \$80,000
- Seven trail segments with sign identification- 400 new sign installations @\$100 per sign installed. Where feasible, 2 signs combined back-to-back and viewable both directions. Signs were located for route identification, safety, regulatory/etiquette, local feature identification, distances and turn signs. \$40,000
- Mileage Markers- removal of old concrete mileage marker system and installation of new ¼ mile markers for emergency management trail location identification and trail user convenience. Cost of \$100 per mile marker installed (including demo and removal of old concrete markers)- \$8400

Continuation of wayfinding program

- New trail segments will be named and signed when developed for public access using the same design and sign criteria as the existing system.