# Greater Kansas City Regional Trails & Bikeways Map

Cartographical Standards | June 2025

# Introduction

Mid-America Regional Council (MARC) maintains a GIS-based inventory of trails and bikeways in the 9-county Kansas City region. This is known as the Greater Kansas City Regional Trails & Bikeways Map (RTBM). Data from this map is shown to the public in two forms: an online map displayed through a web application, and a print map that is typically produced once every two years (but may be produced more frequently). The print map uses the data generated for the online map. The print map is a popular resource with businesses and residents in the region. The data used by these maps may also be useful as a tool in planning active transportation infrastructure. Data is generated through calls for data to local public agencies and through the observations of the built environment by MARC staff.

MARC staff desire to produce a high-quality, high-accuracy map that reliably informs residents of trails and bikeways and inspires them to walk and bike for transportation and recreation. The map currently classifies trails and bikeways by the form of the facility that is present. To present a map to the public that is accurate, consistent, and legible across the region, MARC reserves the right to independently confirm the presence of facilities and to make editorial decisions about facility portrayal on the map.

Several of the facility types that MARC maps have "subtypes," which serve as second-order classifications of facilities. The combination of facility types and subtypes will help MARC be specific in the form of facility present, and flexible if changes need to be made in how the facilities are portrayed in the RTBM.

This document will make use of the AASHTO Guide for the Development of Bicycle Facilities, 5<sup>th</sup> Edition (herein, AASHTO) to help establish standards for the RTBM.

# Facility Types and Subtypes

## Shared Use Paths

A shared use path, sometimes known as a multi-use path, or simply referred to as a trail or greenway, is a paved or unpaved path intended exclusively for non-automobile users, including pedestrians and cyclists. This is largest category on the RTBM in terms of linear mileage. Shared use paths are distinguished from Walking Trails and common sidewalks by their width, which enables shared use paths to serve users such as cyclists. Shared use paths may have a range of widths. The following standards apply to the RTBM:

The standard width for shared use paths is 10 feet. While 10 feet is the general minimum standard, AASHTO encourages path widths of 11 feet in section 6.4.3:

In general, a two-directional shared use path should be at least 10 ft in width. This allows for a person traveling single file to pass another person approaching from the opposite direction in single file

comfortably... However, this width does not allow for socializing without increasing conflicts... The FHWA SUP LOS research found 11 ft to be the minimum width required for a path to function with 3 operational lanes.

MARC will not portray shared use paths narrower than 8 feet wide, except in rare circumstances (see below). MARC will rely on local public agency confirmation that a path narrower than 10 feet wide that is at least 8 feet wide is a shared use path. AASHTO says the following in section 6.4.3:

"In rare circumstances, a path of 8 ft may be used for the entire or substantial portion of the path where most of the following conditions prevail:

- Bicycle traffic is expected to be less than 50 bicyclists per hour, even on peak days or during peak hours.
- Pedestrian use of the facility is not expected to be more than occasional or to exceed 30 percent of total volume."

Exceptions to the 8 foot rule may be determined on a case-by-case basis. A path may become narrower than 8 feet for a very short stretch, or it could feature an unusual configuration, such as the Southern Platte Pass trail between MO Hwy 45 and Cosby Ave., which features 6-foot-wide paths on both sides of MO Hwy 45, and is signed in a way implying cyclist use.

#### **Subtypes of Shared Use Paths**

- **Trail** a trail is a shared use path constructed along an independent right-of-way, meaning, not along a street or roadway.
- Sidepath a sidepath is a shared use path constructed along a street or road.

# Separated Bike Lanes

A separated bike lane is a bike lane that is separated from automobile lanes by parked cars, curbs, bollards, or a combination of delineators. It may also be called a "mobility lane" due to its use by those who are not cyclists, such as scooters, joggers, and powerchairs. Most separated bike lanes in the region use street surface "between" the curbs, but there may be more separated bike lanes "behind" the curb in the future. The RTBM refers to these lanes as "separated bike lanes" instead of "protected bike lanes" due to the various levels of separation from car traffic found throughout the region. AASHTO uses this terminology as well.

#### **Subtypes of Separated Bike Lanes**

- One-way separated lanes intended for one-way travel on each side of a street, or on one side of a
  one-way street. AASHTO lists the "practical minimum" for one-way separated bike lanes as 4.5 feet
  for lanes between vertical curbs without gutter, and 4 feet for lanes adjacent to one vertical curb.
  One-way separated bike lanes will not be mapped if they do not meet these requirements.
- One-way parking protected lanes intended for one-way travel on each side of a street, or on one side of a one-way street. Distinguished from one-way separated bike lanes by parked cars providing the primary means of separation from moving automobile traffic.
- **Two-way separated** lanes intended for two-way travel that are adjacent to each other on one side of a street. AASHTO lists the "practical minimum" for two-way separated bike lanes as 8.5 feet for lanes between vertical curbs without gutter, and 8 feet for lanes adjacent to one vertical curb. Two-way separated bike lanes will not be mapped if they do not meet these requirements.

### Bike Lanes

Per AASHTO, "bicycle lanes are a portion of the roadway designated for preferential use by bicyclists with pavement markings." MARC classifies bike lanes without any separation differently than bike lanes with separation.

AASHTO suggests in section 9.4.1.3 that the "practical minimum" width for bike lanes is 4 feet when the there is no curb, and 5 feet wide when the lane is adjacent to the curb, exclusive of the gutter. MARC may not map bike lanes if they do not meet these minimums and do not include MUTCD-compliant markings.

#### **Subtypes of Bike Lanes**

- Simple striped bike lanes without any additional striped buffers.
- **Buffered** striped bike lanes with an adjacent striped buffer for additional separation from automobile traffic.

## Marked Bike Route

A marked bike route is a street with no dedicated bike lanes that has been signed or marked in some way to indicate preference for bicycle travel. Due to unclear labeling from facility categories used in the past and the commonality of a lack of dedicated infrastructure, some facility types have been combined into the Marked Bike Route facility type. The individual facility types are expressed in the subtypes of this category.

#### **Subtypes of Marked Bike Route**

- **Signed Bike Route** This subtype is describes routes which feature MUTCD-compliant guide signs, especially the green and white D11-1 "BIKE ROUTE" sign and related signage.
- Shared Lane Markings This subtype refers to the markings on the street depicting a bicycle and chevrons above the bicycle, commonly known as "sharrows." Shared Lane Markings are intended to indicate where a cyclist should ride within the travel lane. In the 5<sup>th</sup> edition of the Guide for the Development of Bicycle Facilities, section 9.3.3, AASHTO states that "by themselves, shared lane markings are not considered a bikeway because they do not change the geometric or operational conditions of the roadway to improve comfort and safety for bicyclists." Because some cities in the metro area have installed shared lane markings in a pattern that looks like a network for cycling, they are included in the RTBM under the Marked Bike Route category for the time being.
- Share the Road Signage (legacy facility subtype; not included on the print edition of the RTBM) This subtype refers to streets which have yellow and black W11-1 bicycle warning signs with W16-1 "SHARE THE ROAD" plaques. AASHTO's 4<sup>th</sup> edition of the Guide for the Development of Bicycle Facilities was clear in section 4.3.2 that an assembly of these signs was "not a substitute for appropriate geometric design measures that can improve the quality of service for bicyclists" and "this sign should not be used to indicate a bike route." The 5<sup>th</sup> edition echoes the concern about geometric design considerations in section 9.3.4. Share the Road Signage routes were removed from the printed edition of the RTBM while the 4<sup>th</sup> edition was current. They are only included in the online edition of the RTBM.

Marked bike route signage or markings should be observable in imagery and reasonably continuous in at least one direction through a route to be mapped in the RTBM. If a route does not meet this standard, it may be removed.

# Walking Trail

A Walking Trail is a paved or unpaved trail. Its intended users are pedestrians (walkers, hikers, joggers, etc.). Cyclists and other similar users are either not encouraged or allowed, which distinguishes it from the Shared Use Path category. Beyond the intended user, there are no specific technical requirements for a Walking Trail. However, there should be some perceived difference between a Walking Trail and a common sidewalk. The distinguishing factor is often the Walking Trail's presence in a park or greenway.

There are no subtypes of Walking Trail.

## **Paved Shoulders**

Some paved shoulders in rural areas are usable by cyclists. AASHO states in section 12.4.3.2 that "where bicyclists are to be fully accommodated within a shoulder, a minimum useable shoulder width (paved and clear of rumble strips) of 4 ft should be provided to accommodate the bicyclists' operating space." If rumble strips are built into the shoulder, these should preserve the minimum bicyclist operating space and have gaps so that the cyclist can exit the shoulder if necessary (section 12.5.1.3). MARC may not map paved shoulders that do not meet these conditions.

In certain locations in the metro area, there are also shoulders in urbanized areas. These "suburban shoulders" are similar in appearance to bike lanes, but without any bike lane-specific markings. For these shoulders, MARC may apply the same width standards as for bike lanes.

There are no subtypes of Paved Shoulders.

## Mountain Bike Trail

Mountain bike trails are purely recreational facilities, and they are always off-street. In addition to mountain bike cyclists, a mountain bike trail may also allow hikers if specified by the rules of the individual trail.

There are no subtypes of Mountain Bike Trail.

# **Equestrian Trail**

Equestrian trails are purely recreational facilities, and they are also off street. In addition to equestrians, mountain bike cyclists and hikers may also be allowed if specified by the rules of the individual trail.

There are no subtypes of Equestrian Trail.

## National Historic Trail

Legacy facility type; not included in the print edition of the RTBM. Past print editions of the RTBM depicted the Missouri-side route of the historical Santa Fe, Oregon, and California Trails, which are National Historic Trails. This route is marked on the Missouri side of the metro through National Historic Trail signage. However, this signage does not indicate the National Historic Trail as a bike route and there is little cycling infrastructure. The National Historic Trail will not appear on the print edition of the RTBM but is viewable in the online edition.

There are no subtypes of National Historic Trail.