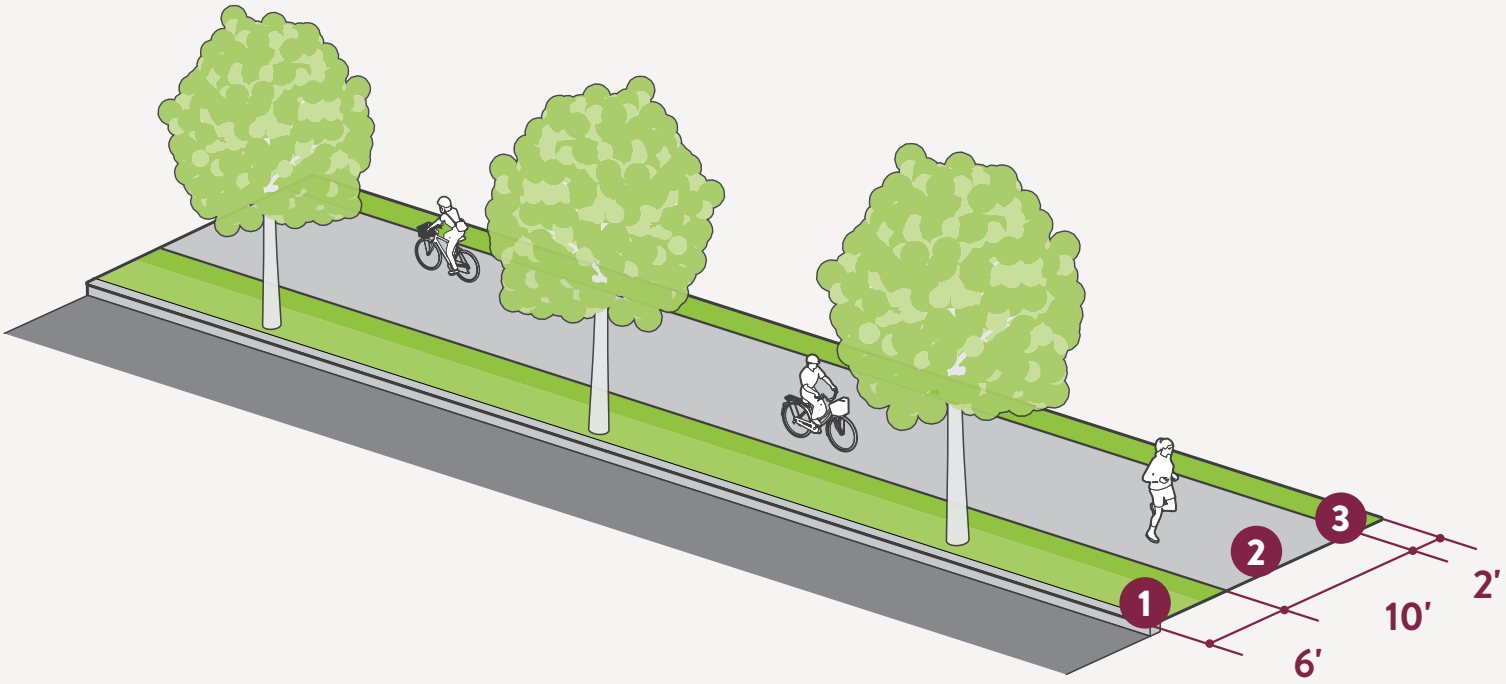

Sidepaths

Making space along the roadway more comfortable for people walking, bicycling, and driving

Minnesotans overwhelmingly prefer bicycling on facilities separated from motor vehicle traffic.[1] Separated bicycle facilities are one of the most important factors that increase safety for all road users, reducing road deaths by 44%.[2]

Sidepaths are the most common separated bicycling facility that MnDOT implements. They are essentially shared-use paths built alongside the road, buffered from motor vehicle traffic by a landscaped or paved area. While separated bike lanes separate bicyclists from both motorists and pedestrians, sidepaths are typically shared by people walking and biking.

By separating people walking and biking from motor vehicles, sidepaths can help prevent some of the most deadly types of crashes. They typically provide more separation from drivers than do separated bike lanes, which can increase user comfort. Bicyclists traveling against the direction of vehicle traffic are vulnerable to an elevated crash risk at intersections.[3]

Sidepath Components & Preferred Minimum Widths

1 BUFFER

- Preferred minimum width 6 feet. Under constrained conditions the buffer may be reduced to 2–3 feet.
- Moderates driving speeds by visually narrowing the roadway.
- Landscaped buffers are strongly encouraged where possible. Buffer spaces provide room for snow storage, signs, and utilities.

2 SHARED USE PATH

- Shared by bicyclists and pedestrians. Preferred minimum width is 10 feet. Where high usage is expected, a 12 feet or wider path is recommended.

3 CLEARANCE FROM BACK OF RIGHT OF WAY

- Preferred width 2 feet, to keep fences and other obstructions out of the path of travel.

Intersection design is key to sidepath safety.

1 MnDOT's District Bicycle Plans http://www.dot.state.mn.us/bike/district-bicycle-plans.html

2 Marshall, Wesley E., and Nicholas N. Ferenchak. "Why Cities with High Bicycling Rates Are Safer for All Road Users." Journal of Transport & Health, 2019, doi:10.1016/j.jth.2019.03.004.

3 Sanders, R., Pritchard, H., and Remias, S. Sidepath Application Criteria Development for Bicycle Use. SPR-1675. Michigan Department of Transportation, 2018.

DEPARTMENT OF TRANSPORTATION

Making Space for Sidepaths

When installing a sidepath along an existing roadway, consider the following options to create space in the right-of-way.

- Reduce the number or width of travel lanes using a lane diet or road diet (see Roadway Reallocation infosheet)
- Remove on-street parking on one or both sides of the street
- Reduce the buffer and/or the shared-use path to the minimum width. Deciding which to reduce first depends on context, such as roadway speeds and volumes, and expected bicyclist volumes.

Overhead view of a sidepath.

When to Separate Bikes and Pedestrians

Sidepaths that separate bicyclists and pedestrians from one another should be considered where:

- Pedestrians comprise more than 30% of the total path volume.
- Higher numbers of children, older adults, or people with mobility challenges are expected.

Separation can be provided using a divided sidepath that physically separates bikes and pedestrians—requiring additional width—or, in constrained spaces, with pavement markings.

What to Consider with Sidepaths at Intersections

Intersections can be challenging for bicyclists riding along sidepaths because motorists may not be expecting them, especially if they are operating in the contraflow direction. To mitigate crash risk on sidepaths, consider the following:

- Using the smallest practicable curb radii to slow right-turning vehicles.
- Using advance stop lines and warning signs for crossings of major streets.
- Restricting parking in advance of the intersection (e.g., 30 feet) to improve visibility.
- Providing raised crossings at driveways and lower volume cross streets.
- Separating bicycle and vehicle movements with traffic signals, or bicycle signals.

DESIGN RESOURCES

FHWA-SA-18-077: Bikeway Selection Guide

AASHTO Guide for the Development of Bicycle Facilities

MnDOT Bicycle Facility Design Manual

RELATED INFOSHEETS

Separated Bike Lanes

Roadway Reallocation

DEPARTMENT OF TRANSPORTATION