

Shared use paths require intersection designs that safely accommodate bi-directional bicycle traffic.



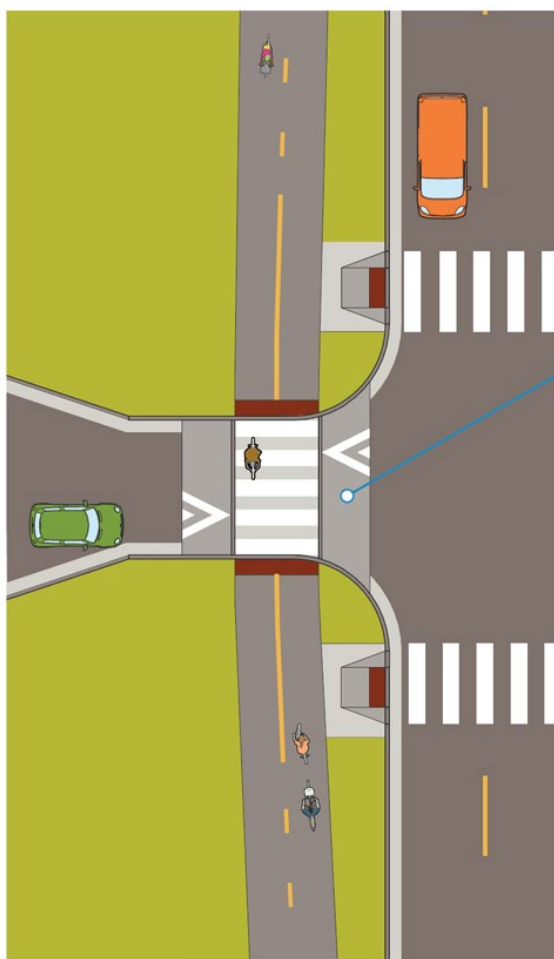
INTRODUCTION

Shared use paths require intersection designs that safely accommodate bi-directional bicycle traffic. Shared use paths with proper intersection designs are considered an All Ages and Abilities facility given their physical separation from motorized traffic and ability to appeal to a broad spectrum of people looking to travel by bike or micromobility.

Since shared use paths are usually designed to accommodate two-way travel and incorporate a buffer or boulevard space between the path and adjacent roadway, it is important to prioritize user safety and visibility at all conflict points with motorized traffic. The MnDOT Bicycle Facility Design Manual recommends the following to increase safety:

- Reduce conflict points;
- Reduce motor vehicle speeds at conflict points;
- Increase the predictability of path and roadway user behavior; and
- Increase the path separation from the roadway at conflict points.

Figure 3.7E.5: Shared use path crossings



raised crossings should generally be included when a shared use path crosses an Urban Neighborhood street and should be considered when crossing a Parkway

DESIGN CONSIDERATIONS

A. APS push button placement	APS push-button placement at signalized intersections should be located outside of the travel path of bicycles and pedestrians while still maintaining required ADA spacing dimensions.
B. Striping	Shared use paths should be striped with block-style crosswalk markings that match the width of the path.
C. Detectable warnings	A detectable warning strip made of truncated domes should extend the full width of the shared use path at intersections.
D. Bend-out bikeway design	<ol style="list-style-type: none"> 1. At signalized intersections, consider shared use path geometry such as a bend-out trail design to improve sightlines and user orientation across an intersection (see protected intersection guidance for further details). 2. Bend-out designs should maintain a minimum offset distance of 6'.
E. Raised Crossings	Raised crossings should generally be included when a shared use path crosses an Urban Neighborhood street and should be considered when crossing a Parkway.
F. Access Management	Access management can be used to remove conflict points for all roadway users, including dead-ending intersecting streets where feasible.
G. Signal phasing/timing	At signalized intersections, consider making changes to signal timing to incorporate leading bicycle interval/leading pedestrian interval, or incorporate bike/pedestrian-only signal phases per MUTCD allowance.
H. Additional details	Please reference the MnDOT Bicycle Facility Design manual pages 5-13 to 5-20, and 5-27 to 5-30 for additional intersection design guidance.
I. Driveway crossings	<ol style="list-style-type: none"> 1. Elevation and cross slope. The width and grade (not greater than 2% cross slope) of the shared use path should generally continue across driveways and alleys whenever possible. 2. Pavement materials. Trail pavement materials should be continued across driveways to eliminate the need for horizontal expansion joints and provide additional visual delineation between the path and driveway surface. 3. Driveway Consolidation. Where there are multiple driveway entrances into a single destination, consider driveway consolidation to reduce conflict points. See driveways guidance for more details. 4. Striping. A white edge line may be striped at driveways to further visually delineate the trail crossing. 5. Bend-out bikeway design. At high-volume driveway entrances, consider shared use path geometry such as a “bend out” trail design and/or a raised crossing to improve sightlines and reduce motor vehicle speed. 6. Consider marked crosswalks. Consider including crosswalk striping across high-volume driveways.