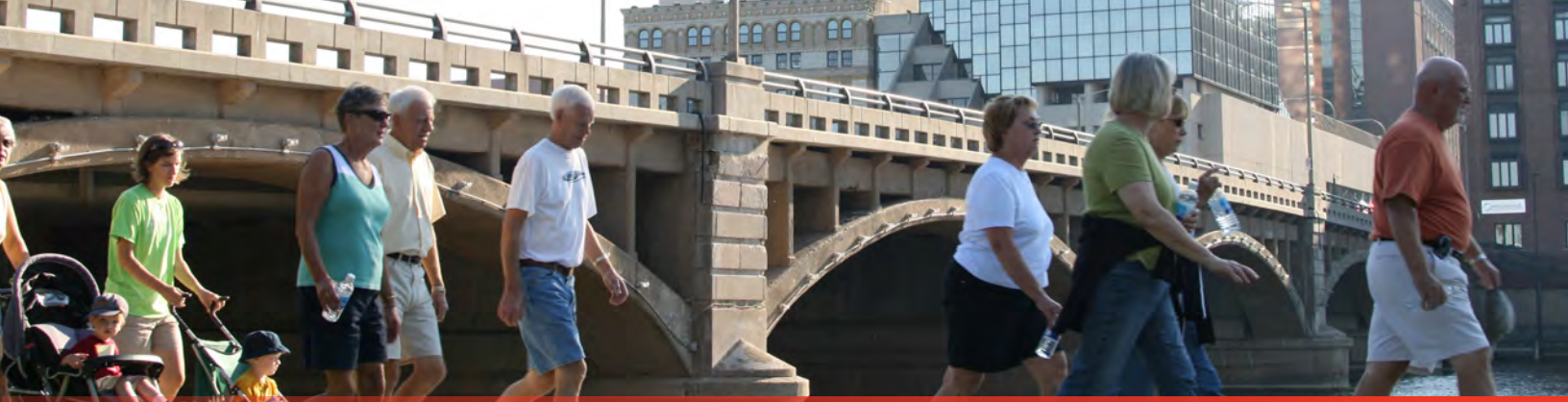

SHARED USE PATH

Shared use paths—also called multiuse paths or sidepaths—are facilities shared by pedestrians, bicyclists, and other non-motorized users. These facilities are generally wider than typical sidewalks and are most suitable in areas that feature lower levels of concentrated pedestrian and business activity. Shared use paths are separated from vehicle travel lanes, providing a more comfortable experience for a wide range of non-motorized users.

USE

- Shared use paths are commonly used as recreational facilities along rivers, streams, and other waterways; adjacent to railways or along utility corridors; or within parks and open space areas.
- Shared use paths may be a viable solution on higher volume or higher speed streets, such as Crosstown Connector. Driveways, access streets, and other points of conflict between vehicles and non-motorized travelers must be severely limited and carefully designed to reduce conflicts between trail users and intersecting vehicular traffic to ensure safety.
- Shared use paths attract a wide range of users traveling at widely varied speeds —from people moving at a leisurely pace to bicyclists traveling at higher speeds. Care must be taken to minimize conflict between different user types through additional path width, signage, or design cues such as striping or separation.
- Shared use paths are further described in the 2017 Grand Rapids Parks and Recreation Strategic Master Plan. The Plan creates a vision for the long-term development, programming, and sustainability of Grand Rapids' parks, public open spaces, and recreation facilities.

DESIGN

- Shared use paths should not be immediately adjacent to vehicle travel lanes or curbside parking. A minimum parkway width of five feet is typically required, although more generous parkways are desired.
- Shared use paths must have a minimum, unobstructed width of 10 feet; 12-16 feet is preferred.
- Shared use paths with a higher intensity of use should consider separation of users—separating pedestrians from bicyclists and/or separating oncoming directional travel.
- Shared use paths should have less than a two percent cross slope to facilitate stormwater runoff and meet ADA requirements. As with sidewalks, grades greater than eight percent should be avoided to the extent possible.
- Drainage and/or stormwater infiltration facilities must be included to avoid ponding. Adjacent land uses cannot discharge stormwater onto trail facilities.
- Shared use paths should extend across driveways and be clearly marked and signed at street crossings.
- Shared use paths are commonly constructed of concrete and/or asphalt.
- Trail-oriented stop signs and/or bicycle or pedestrian signals may be advised in some instances.
- Shared use paths should provide logical connections to the on-street community and commuter bicycle network and trail networks.
- A vertical clear height of at least ten feet should be maintained over a shared use path.
- Motorized vehicles are not permitted on shared use paths except mobility devices for persons with disabilities like motorized

wheelchairs and scooters.[10] In some cases, bollards or other barriers may be needed to prevent motorized access. However, shared use path designs should consider dimensions that facilitate snow removal, and provide access for sweeping maintenance and snow clearance vehicles.

- Pervious materials, such as porous concrete or asphalt, can be considered for trail pavement. Flexible porous pavement allows stormwater to pass through the pavement to a stone storage layer beneath. The water then either infiltrates into the soil or flows through an underdrain to the storm drain network. It is effective in storing, infiltrating, and treating runoff from impervious surfaces. A variety of flexible porous pavements can be used, including concrete pavers, paving grids, pervious concrete, porous asphalt, porous rubberized asphalt, and glass porous paving.
- Given the limited number of crossing points, the parkway adjacent to shared use paths is an ideal opportunity for green infrastructure, such as a bioswale. Low impact design features should be designed to prevent pedestrians or bicyclists from inadvertently tripping or falling into the facility.
- High limbed street trees contribute positively to the overall comfort and appeal of shared use paths and should be provided wherever possible. However, the distance of the trees from the edge of the trail is an important consideration to ensure adequate clearance.

SPECIAL CONSIDERATIONS

- Wayfinding is a strong complement to shared use paths. Wayfinding signs and maps are important elements to make available along trail facilities, at trailheads, and as resource materials so residents and visitors can more easily utilize the on-and off-street nonmotorized transportation network. A coordinated wayfinding system within the City and throughout the region should be developed and implemented.
- Designers may consider providing layby areas of seating or bicycle parking. These areas should be offset from the shared use path and should not constrain the clear width of the path.
- In some instances, shared use paths do not need to be paved; however, the surface of the trail should still be firm and stable and well drained.

OPERATIONS AND MAINTENANCE

- Shared use paths may or may not include striping and associated routine maintenance.
- Sweeping, debris removal including bulk dumping removal
- Pavement crack sealing
- Adjacent property owners, the city, or nearby businesses may be responsible for clearing snow and ice, and removing typical debris.
- Shared use paths should not be used for snow storage.
- Use of flexible porous pavements may require additional maintenance activities to maintain permeability.
- Sweeping to keep free of debris and hazards.

REFERENCES

- AASHTO: Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2012
  - Section 3.2.14: Off-Road and Shared-Use Paths
- AASHTO: Guide for the Development of Bicycle Facilities, 2012
  - Chapter 5: Design of Shared Use Paths
- Federal Highway Administration.
  - https://www.fhwa.dot.gov/environment/bicycle_pedestrian/resources/design_nonmotor/shared/index3.cfm#s22

10 Michigan Penal Code. Act 328 of 1931. Section 750.419 Operating or riding motorcycle; moped, or other motor vehicle on bicycle path or sidewalk; misdemeanor; exception. http://www.legislature.mi.gov/(S(4tjdb0u5w4pwm10ckjagqauc))/mileg.aspx?page=getObject&objectName=mcl-750-419