

Design Approaches, Benefits and Constraints

	MULTI-USE PATHWAY	WIDENED SIDEWALK & PROTECTED BICYCLE LANE	WIDENED SIDEWALK & LOCAL STREET BIKEWAY	NATURAL SURFACE PATHWAY
EXAMPLES	 	 	 	 

	MULTI-USE PATHWAY	WIDENED SIDEWALK & PROTECTED BICYCLE LANE	WIDENED SIDEWALK & LOCAL STREET BIKEWAY	NATURAL SURFACE PATHWAY
DESCRIPTION	Off-street pathways that are physically separated from motor vehicle traffic and can be shared by people using active modes including walking, cycling, skateboarding, scootering, and in-line skating. Typically carries two-way active transportation modes on one side of the street.	Separated bicycle and pedestrian facilities that are similar to multi-use pathways. The key difference is that people cycling, skating, or scootering are separated from pedestrians by a painted line or other physical barrier treatments. The facilities can be one-way on both sides of a road or a two-way facility on one side.	Streets with low motor vehicle volumes and speeds, often with traffic calming treatments, that are comfortable for people cycling to share the road with motor vehicles. Local streets provide a more enjoyable and comfortable walking experience through separation of modes and slowing of vehicle traffic.	Off-street pathways through under-developed areas, such as parks, can use gravel or other natural materials as a cost-effective alternative. The facilities are typically two-way for active transportation modes, and can be on one side of the street or through a park.
BENEFITS	• Suitable for people of all ages and abilities. • People walking, wheeling, or rolling are physically separated from traffic. • Requires less space than wider sidewalks and protected bicycle lanes side by side. • Can be adapted and adjusted to a park setting (width, lighting, etc.)	• Suitable for people of all ages and abilities. • People walking, wheeling, or rolling are physically separated from traffic. • People cycling are physically separated from other active users. This creates a more comfortable environment and minimizes the potential safety conflicts between people walking and faster-moving users. • May be more attractive to people cycling for commuter purposes than a multi-use pathway.	• Suitable for people of all ages and abilities. • People cycling on the street are separated from people walking on the sidewalk. • Does not require additional space for dedicated infrastructure. • Slow the speed down on the street leading to increased safety for all users. • May be more attractive to people cycling for commuter purposes than a multi-use pathway.	• Appropriate for environmentally sensitive areas. • More cost-effective. • May allows for future improvements such as paving if desired. • Maintains the natural look and feel of natural settings such as a park or forested area.
CONSTRAINTS	• There is a mix of users and speeds travelling in both directions, which creates potential for conflicts and may be a less comfortable environment for some. • May be less attractive to people cycling for commuter purposes	• Requires more space than multi-use pathways or local street bikeways.	• People cycling share the road with motor vehicles with no physical separation. This may not feel comfortable for less confident or experienced cyclists • Less intuitive for cyclists and drivers than designated facilities with clear space allocated to each user.	• Not considered appropriate for all ages and abilities. • Gravel pathways are inaccessible for certain user groups, including skateboarders and in-line skaters. • Gravel pathways may also be more difficult to navigate for people cycling and people using mobility devices.
IMPACTS	• On-street parking is typically impacted. • Encroachments within the City right-of-way may need to be removed. • Tree removal may be required to accommodate paving and path widening. • Limited impacts to traffic operations.	• On-street parking is typically impacted. Impacts may be more significant than a multi-use pathway due to the space required. • Encroachments within the City right-of-way may need to be removed. • Tree removal may be required to accommodate paving and path widening. • Limited impacts to traffic operations.	• Limited impacts to on-street parking. • Traffic calming and/or diversion may be required to reduce traffic speeds and volumes, which may have impacts on vehicle access and circulation.	• Limited impacts in natural spaces, however slope stabilization and tree removal may be required depending on the ground conditions.