

4.5 CLEARANCES

Additional operating space is required beyond the width of the facilities provided in Sections 4.2 to 4.4. These buffers and clearances are required for a number of reasons:

- **Lateral clearance:** Additional useable width or “elbow room” is required to account for the comfortable operating space beyond the essential surface on which people walk or bicycle. This space can be used for other purposes as long as it does not contain hazards for people who may encroach on the area. For example, it can be hardscaped or contain grass or low plantings. It should not include vertical surfaces higher than 75 mm. Lateral clearance around pedestrian and cycling facilities also help to provide spaces for snow storage during the winter months.
- **Frontage zone:** Pedestrians do not typically walk immediately adjacent buildings and walls so a frontage zone is needed to improve comfort and usability. For buildings fronting sidewalks or pedestrian clearways, space is required for doors to open outward. A 0.6 m wide frontage zone is typically needed between the pedestrian clearway and buildings. This may be included in the road right-of-way width if the buildings have zero setback, or may be accounted for in the adjacent property if the building setback is 0.6 m or more.
- **Clearance to hazards:** Shy distance or clearances are required between users of any facility and potential hazards or objects. Clearances are required between the facility and vertical objects such as walls, railings, fences, trees, planters, streetlights, hydro poles, sign posts, parking metres, hydrants, transit shelters, vertical curbs (both higher than the facility that a pedal could strike and lower than a facility that someone could fall off of), street furniture, bicycle parking racks, etc. An exception is the post or pole for push-buttons to active traffic control signals. These must be accessible, i.e. adjacent the facility so as to be accessible to users, but must not block the operating space of the facility.
- **Door zone:** A door zone adjacent parking lanes is required to allow for the opening door of the parked vehicle adjacent pedestrian and cycling facilities. The provision of a door zone not only keeps users on pedestrian and cycling facilities out of the way of doors opening near their path, it also provides a place for people and goods to disembark and alight the vehicle. It is critical adjacent cycling facilities due to the higher speed of cyclists at which they may strike an opening door and the resulting injuries or death from a crash. People new to cycling or with little training often ride close to parked cars, underestimating the potential danger. Where parking turn-over is higher and vehicle sizes vary, such as in commercial areas and downtowns, a wider door zone up to 1.2 m wide is recommended; where turn-over is lower and vehicles are predominantly passenger cars, such as near residences and offices, then a minimum door zone could be used.

A summary of clearances is provided in Exhibit 4-8, with illustrative photos shown in Exhibit 4-9.

Exhibit 4-8. Summary of Clearances Adjacent to Active Transportation Facilities

Type of Clearance	Type of Facility	Width	Notes	Exclusions
Continuous, linear clearances				
Frontage zone	All facilities	Typ. 0.6 m	May be within or outside the road right-of-way	
Lateral clearance	Multi-use trails and in-boulevard cycle tracks	Min. 0.5 m	Includes face of curb, fences, guide rails, railings, retaining walls, etc.	<ul style="list-style-type: none">Plantings or other soft-scape not more than 100 mm high may be located within the lateral clearanceNon-linear, fixed objects may be located within the lateral clearance as long as clearances to hazards are met (see below)
	Raised cycle tracks	Min. 0.5 m to face of curb	Face of curb is 100 mm or more below the surface of the cycle track	
	Bike lane or buffered bike lane	Min. 0.25 m to face of barrier curb	Face of curb is 100 mm or more above the surface of the bike lane	
Accessibility clearance	Clearance should be provided between the accessible path of travel for pedestrians and shared-use or cycling facilities to guide pedestrians away from the area of potential conflicts. Research into this guidance is on-going and standards may be identified locally in consultation with accessibility committees. Shared streets research suggests a minimum width of 0.3 m for directional indicators parallel to the direction of travel.			
Clearance to hazards				
Lateral clearance to non-linear, fixed objects 100 to 750 mm high	All facilities	Min. 0.25 m	Planters, seating, hydrants, shorter bollards, etc.	
Lateral clearance to non-linear, fixed objects more than 750 mm high	All facilities	Min. 0.5 m	Utility poles, sign posts, trees, parking meters, furnishings, transit shelters, bike racks, etc.	
Lateral clearance for door zone adjacent parking lanes	Raised cycle tracks	Min. 1.0 m to face of curb		Non-linear, fixed objects such as parking meters may be located within the lateral clearance as long as clearances to hazards are met (see above)

Exhibit 4-9. Sample of Clearance Requirements

Examples of Clearance Requirements



Operating space is required beyond the edge of the bikeway especially for cyclists when passing



Poorly-defined frontage zone and pedestrian clearway



Well-defined frontage zone and pedestrian clearway



Clearance is provided between the multi-use path and adjacent fence.



Cyclists need space to travel past the opening doors of parked cars