Separating Road Users in Physical Space

The road safety designs, devices and strategies in this chapter are intended to improve safety for people who walk and cycle—the vulnerable road user. By physically separating these road users from motor vehicle traffic, the possibility that these road users will be involved in a motor vehicle crash is greatly reduced.

Wider and Connected Sidewalks

Description

Sidewalks that are wide enough to accommodate all pedestrians will help foster a highly walkable city environment. An uninterrupted network of sidewalks will ensure that pedestrians can complete their trips without ever having to expose themselves to motor vehicle traffic by leaving the protective sidewalk space.

How it Works

Well-designed sidewalks create a dedicated pedestrian space that is unambiguously marked off from the roadway. The best sidewalks are wider, connected and as far from the roadway as possible.

Sidewalks should be wide enough to accommodate users who require extra space, including people in wheelchairs, those on mobility scooters and those pushing carts or strollers.

Narrowing roads and vehicle lanes, and removing vehicle lanes, can help create space for wider sidewalks.

Studies have shown that:

- Sidewalks can provide between a 50 and 88% reduction in vehicle-pedestrian crashes compared to locations without sidewalks.

Best results occur when:

- Sidewalks are built with at least a 2 metre-wide area (the "clear width") that is free of any obstructions such as trees and utility poles. Each additional "lane" of pedestrian travel requires a minimum of 0.7 metres of additional clear width;

- Sidewalk designs include buffers that place them as far away from the roadway as possible to reduce the likelihood of run-off-the-road vehicles striking people on the sidewalk. These buffers can be made of street furniture and landscaping, for example; and

- When there are raised crossings (e.g. along local streets), corner bulges (e.g. along collectors and major roads), and/or other physical treatments, as discussed in following sections.