

## 8. Providing for children and youth on bicycles (and other wheels)

The guidelines in this section directly concern riding bicycles (and in some cases tricycles), which are the main ways young people ride between places on non-motorized wheels. Other wheels – including skateboards and rollerblades – are becoming increasingly popular means of active transport and should be encouraged as such. We have not addressed these other means here because making specific provision for them can be a complex matter. Moreover, attitudes to, for example, skateboarding are changing rapidly in some parts of Canada, usually but not always towards greater acceptance.

Often, guidelines for cycling can be adapted for use with other wheeled modes of active transport. However, unlike bicycles, skateboards, rollerblades, and scooters are not classified as road vehicles and their use on roadways should not be encouraged. Often their use on separate bicycle paths makes sense. With more experience as to how best to accommodate their use, development of one or more guidelines for these other wheels will be appropriate and useful.



The following guidelines are meant to complement rather than in any way replace bicycle safety programs for children and youth.

**Guideline 8. For older children and youth, ensure that destinations that cannot be a walk away are no more than a bicycle ride away.**

In transport and land use planning, bicycle use should have a priority similar to that for walking and wheelchair use. Indeed, for youth (about 13 years and older), bicycling could well have a higher priority, to ensure as much non-motorized mobility and independence as possible.

Walking is most suitable for journeys of less than two kilometres (a 25-minute walk by a teenager), while bicycling can be appropriate for journeys of up to five kilometres (also a 25-minute trip by a teenager) and even longer.<sup>84</sup>

Thus, in land use planning:

- Ensure that pedestrians' destinations are less than two kilometres distance (one kilometre for the youngest walkers).
- Ensure that bicycling destinations are less than about five kilometres from homes.

**Guideline 9. For destinations to be reached by bicycle, provide separate bicycle paths or trails or, if not possible, install bicycle lanes on regular roads.**

The best solution for all bicycle users is to have bicycle paths that are not used by motorized vehicles. The bicycle paths can be alongside sidewalks and pedestrian paths or, if they are well signed and accessible, have different routings.

Where sidewalks are wide enough (four metres or more) a section could become a dedicated path for bicycles and other non-motorized vehicles. This is a frequent arrangement in other countries. Aligning bicycle riders with pedestrians rather than with motor vehicles provides for greater safety and more clearly positions bicycle riding as non-motorized transport.

As a last resort, bicycle lanes should be provided on the pavement. Here are some requirements for bicycle lanes on regular roads:

- They should not be too wide (i.e., not more than about 1.5 metres) or else motor vehicles will travel in them.
- When they are passing parked cars, each side of the lane should be marked, with the nearside line a sufficient distance from the parking areas to avoid cyclists being hit by opening car doors.

We say 'as a last resort' fully recognizing that bicycle riders have as much legal right to be on most roads as operators of other vehicles. Our words recognize the North American reality that there is less acceptance of and familiarity with bicycles in regular traffic than in other countries. Many adult cyclists argue that bicycle lanes should receive priority in transport planning because many kilometres of bike lane can be provided for the cost of installing and maintaining one kilometre of a bike path. This argument may have less merit when children and youth are considered.

One measure of the overall acceptance of cycling could be the extent to which children are carried on adults' bicycles. Where bicycling is common, children

Figure 3. A family riding together in Kansas City, Missouri (children aged 17 months and four years)<sup>85</sup>



aged 10-30 months may be carried as much on adults' bicycles as by stroller. This can be a convenient and healthful way of carrying a child, that may also please the child.

Making roads safe enough for adults to be confident about riding with young children on their bikes or riding with them could be a reasonable objective for transport planners.

Children under 13 years of age generally ride on sidewalks unless there are bicycle paths. Such riding should be encouraged rather than seen as a nuisance to pedestrians. Early bicycle users may be more likely to be bicycle users as teenagers and adults. Here are some requirements for bicycle riding on sidewalks:

- Sidewalks should be wide enough (at least 3.0 metres and up to 4.0 metres) to accommodate pedestrians and young cyclists comfortably.
- Even though young cyclists should be walking their bicycles at crossings, ensure that roads are crossed at the same grade as sidewalks, or that ramps are in place. (See Guideline 5.)
- Young bicycle riders should be required to give way to pedestrians at all times, to ride at a speed that is comfortable to pedestrians (i.e., less than 10 kilometres per hour), and always to stop and dismount when crossing roads.

The last point reinforces the principle that sidewalks are primarily for pedestrians. Box 5 sets out the City of Toronto's position on this matter, which notes that riding on sidewalks

Box 5. Toronto's 'Sidewalks are for Pedestrians' campaign<sup>86</sup>

Pedestrians use sidewalks to travel safely along busy city streets. During the summer months sidewalks are congested with pedestrians, cafes and vendors. When cyclists, in-line skaters and scooters are also involved, conflicts arise that could be prevented.

A City bylaw allows cyclists with a tire size of 61cm or 24 inches or less to ride on the sidewalk. The intent of this bylaw is to allow young children to cycle on the sidewalk while they learn to ride. The bylaw is based on wheel size because it is difficult for Police to enforce age-based bylaws, as most children do not carry identification. This is a municipal bylaw and rules vary in communities across Ontario.

The Toronto bylaw states that riding a bicycle with tire size over 61cm (24 inches) on sidewalks is prohibited, as is riding/operating a bicycle (or roller skates, in-line skates, skateboard, coaster, toy vehicle) on a sidewalk without due care and attention and reasonable consideration for others. The fine in downtown Toronto for not following this bylaw is \$90 and aggressive cyclists can also be charged with careless driving.

There are many hazards involved when cycling on the sidewalks. If a cyclist hits a pedestrian, the injuries can be severe. Seniors are especially vulnerable and can fall merely by being startled. Anyone with a visual or hearing impairment is at increased risk.

Many cyclists ride on the sidewalk because they are afraid of cars. But choosing to ride on the sidewalk does not eliminate the risk of a car and bike collision. Cycling on the sidewalk is a contributing factor in 30 per cent of car and bike collisions. Collisions occur when cyclists ride off the sidewalk into the roadway or when motorists are exiting a laneway or driveway.

also carries the risk of dangerous bike-car collisions. Many other communities in Canada have similar positions.

**Guideline 10. Ensure that bicycle riders are well provided for at intersections and have sufficient priority for forward movement.**

Whether riding on bicycle paths, bicycle lanes or roads, intersections and road crossings pose the greatest challenges for bicycle riders. They are where most collisions occur.

The best solution for bicycle lanes is to provide a space in front of other vehicles with priority of movement for bicycles, whether or not the intersection is signalized. At the least, there should be a clearly marked, separate space for bicycles at the intersection. (See Figure 4 for an example: one of ten or more ‘bike boxes’ installed at intersections in Portland, Oregon.<sup>88</sup> On a red traffic signal, bicycles stop at the forward line; other vehicles stop at the rear line.)

Figure 4. Priority for bicycles at an intersection in Portland, Oregon<sup>87</sup>



The best solution for bicycle paths is to provide separate routing or signalling that guides riders safely through the intersection.

**Guideline 11. At destinations, provide secure, convenient bicycle parking.**

Bicycle theft is a regrettable impediment to bicycle use today, whatever the age of the rider. Several measures help, including use of older bicycles of evident little value, and double locking with removal of portable parts such as lights, saddles, and even wheels.

The strongest protection can be provided by secure bicycle storage. This should be a routine service provided by schools and other places where young bicycle riders congregate. Locating bicycle storage in a highly visible location increases security and safety for cyclists. Ideally, there would also be provision of shower facilities and locations to store cycling gear.

Regular bike posts and racks should be positioned away from walls – to allow for maximum use – and always be in highly visible locations.

According to an Australian report, providing secure bicycle storage on school property “can increase the number of students riding to school by 50 per cent overnight”.<sup>89</sup>