ACCESSIBLE LOADING ZONES AND PROTECTED BIKE LANES: A UNIVERSAL DESIGN APPROACH

Accessibility Coalition
A myth exists that only able-bodied individuals can ride bicycles. In reality, people with disabilities and serious health conditions love the freedom that two or three wheels can give them. For instance, the blind can ride on the rear half of a tandem bicycle.

(Photo: American Foundation for the Blind)
Many manual wheelchair users are capable of using handcycles, recumbents, and other specially adapted bicycles as mobility devices that enable them to travel much faster than normal wheeling.
Many seniors have a difficult time walking and carrying groceries, due to conditions such as arthritis, reduced arm strength and balance problems. But give them trikes, plus a safe place to ride – and getting around is no problem.

(Photo: 1975. The U.S. National Archives)
If we want to get families out of cars, we have to make it easy for them to transport their kids, pets and 'extra stuff' in cargo bikes and trailers. This scene is from Toronto's Open Streets festival, when Bloor Street was closed to vehicular traffic.
People with disabilities, seniors, and children who are driven to school tend to get less exercise than the rest of the population. One of the best ways of reversing this situation is to make them feel comfortable riding bikes, to the point where it becomes routine.
It has been shown that providing a continuous network of high-quality, protected bike lanes provides the greatest level of safety for cyclists riding on busy arterial streets. This well-designed bike lane in Vancouver is what gets hesitant people riding. Note that it has none of the breaches that characterize Toronto's 'protected' infrastructure.
But if bike lane protection is compromised by vehicles parking or unloading in a zone designed for bicycles, the level of safety plummets. Cyclists may detour around the obstructing vehicle by riding on the sidewalk, endangering pedestrians. Or riders may unpredictably venture into the traffic lane, endangering themselves. Walking on the sidewalk can also be problematic for a parent using a cargo bike filled with groceries and two children – or the rider of a heavy recumbent who has chronic back pain. Is it reasonable to expect them to hop up onto the sidewalk with their large, heavy machines?

*Photo: Wellesley St., no barrier, no protection. (Andy Inkster)*
It might be for a noble cause that we are tempted to allow stationary vehicles displaying accessible parking permits to unload passengers with a disability in a protected bike lane – but this activity can cause dangerous disruptions to active transportation and result in streets that are not "complete". It is simply not acceptable to endanger vulnerable road users who happen to be riding bikes or walking, in order to accommodate other vulnerable road users who are relying on a motor vehicle. There are alternatives. We should be aiming at Universal Design solutions that are inclusive, and look after the needs of everyone on the street. Space on streets can be precious, so we can expect to have to make some tradeoffs.
Keeping bike lanes unobstructed is considered best practice. Another basic premise is that a protected bike lane generally should occupy a position beside the curb, because if cars are allowed to park curbside, the bike lane will have to be laid down in a dangerous sandwich between parked and moving cars.

More flexibility is available if we dedicate lay-bys and parking spaces specifically for accessible purposes. Several designs are available including mid-block, end-block, side-street, sidewalk grade, and on private driveways.
Mid-block designs are best for users of assistive devices such as canes, walkers, crutches and braces. On the other hand, the longer walk entailed by end-block and side-street options can be more easily handled by wheelchair users. In any case, it should not be overlooked that winter conditions sometimes require that a certain distance be covered on sidewalks due to the difficulty that people with mobility devices may have in negotiating the kind of high windrows and snowdrifts that are seen in this photo of Toronto's Sherbourne bike lanes.
MIDBLOCK CHICANE DESIGN - Cyclists are slowed down both by the curves and the narrowing of the bike lane. This is ideally suited for unloading near the door of the destination. (Design: Massachusetts Department of Transportation)
Chicane on 3rd St., in Austin (Texas) uses pavement paint to differentiate between the cycle track and the accessible loading area. As they approach the chicane, cyclists cannot miss the large blue square that is laid out dead ahead of them.
MID-BLOCK STRAIGHT DESIGN - More compact than a chicane, this also can be positioned close to destinations

(Design: US Federal Highway Administration)
Straight bi-directional bike lane in Montreal with accessible connection to entrance of Saint-Jean-Baptiste Church. The loading zone is to the right of the narrow concrete separator, which ought to be wider for unconstrained unloading. On the plus side, a raising of the bike lane to sidewalk level provides a level crossing for wheelchairs. (Photo: Velo Quebec)
CYCLE TRACK AT GRADE WITH SIDEWALK - Cars park beside the curb, while the cycle track is at or near the same level as the sidewalk. Wheelchairs can be unloaded onto the (gray) buffer zone near the cycle track. *(Design: London Design Standards)*
An example of a cycle track at grade with the sidewalk from Cambridge, Massachusetts. Note that the area where people with disabilities cross the cycle track is coloured blue to warn cyclists (though they may be confused by the bike logo, which suggests bike priority).
Vehicles park near intersection and people with disabilities can take advantage of nearby curb cuts to gain access to sidewalk (Design: City of San Francisco)
End block parking zone in New York (near 6th St.) gives additional safety due to stoplights that provide safe breaks in the flow of bike traffic. (Photo: New York DoT)
SIDE-STREET DESIGN - Favoured in Vancouver because accessible parking spaces can be located near arterials with bike lanes without creating conflicts with cyclists. Wheelchairs can use the curb cuts at the intersection.
Example of a ParaTrans bus stop on Bay St. in Ottawa, connected by an accessible ramp to the main entrance of 475 Laurier Ave. West. This arrangement completely avoids conflicts with the Laurier protected bike lane, which is situated far from the ramp.  

(Photo: Google Street View)
PRIVATE DRIVEWAYS WITH DROP-OFF AND PICK-UP AREAS are a hugely beneficial feature of residential buildings with accessible and assisted living units. They do not occupy valuable space in the public right-of-way – nor do they interfere with streetlife. Enlightened building design should provide this feature as a matter of course, just as it would include other important accessible amenities. It is a pity that more buildings are not like the Rekai Centre, at 345 Sherbourne,

(Photo: Google Street View)