

People with mobility impairments include those who use wheelchairs, crutches, canes, walkers, orthotics and prosthetic limbs. However, many people with mobility impairments do not use assistive devices; they include the elderly, and in Trinidad and Tobago, also all pedestrians (abled and disabled).

Barriers can be a challenge for all pedestrians, not just those who use mobility aides. Common examples of barriers include uneven, unpaved, or cracked sidewalks; absent connecting sidewalks and pad areas for waiting; inappropriate placement of transit stop amenities such as trash receptacles or newspaper boxes; and unsafe crosswalks to the transit stop. Barrier-free design calls for a transit stop and pathway that a person with or without a disability can navigate unimpeded to the sidewalk and/or an accessible building served by the transit stop.

The Americans with Disabilities Act (ADA) requires that pedestrian facilities provide access for all pedestrians, including those with disabilities. In other words, if a pedestrian facility (such as a sidewalk and street crossing) is provided for able-bodied pedestrians, it also must accommodate pedestrians with disabilities. Discrimination is not allowed [ITE Journal, Sept 2004 “Designing Accessible Facilities in the Public Right-of-Way”].

Several abilities relevant to traffic safety are known to deteriorate with age, including [ITE Journal July 1991 “The driver: improving performance to improve safety” by Robert Dewar]:

- Visual acuity decreases starting at age 40;
- Less light gets into the eye as pupil size decreases and the lens yellows with age;

- Glare sensitivity increases, and recovery takes longer;
- Contrast sensitivity deteriorates;
- Size of the visual field is reduced;
- Night vision is reduced;
- More time is required to change focus; and,
- Eye movements are slower, and scanning is less efficient.

Several possible solutions to the problems of older drivers were then suggested, including:

- Higher levels of illumination on roads;
- More powerful headlights;
- Tinting only the top part of the windshield (rather than the entire windshield);
- Larger and brighter traffic control devices, such as pavement markings and signs;
- Making drivers aware of poor vision and its consequences;
- Ensuring drivers needing eyeglasses have the correct prescriptions; and,
- Restricted driving licenses (e. g., daytime only).

The ability to selectively pay attention, to divide attention, and to avoid distraction is known to diminish with age. In addition, physical problems, such as arthritis, often restrict neck and head movement, making over-the-shoulder traffic checks difficult or impossible...In view of the limitations experienced by many older drivers, there should be greater effort put into making them aware of the deficiencies brought on by the aging process ... [including] information that drivers may not know, such as difficulties encountered by the older driver in estimating the passage of time (to judge speed of other vehicles), in processing a lot of information at one time, in seeing at night, and in reacting to medications (Dewar 1991).

International research has also indicated that there is need for pedestrian crossing facility improvements through countdown signals [ITE Journal, January 2006 “Michigan’s Senior Driver Showcase Corridor: Implementation of Low-Cost Safety Improvements for Senior Drivers”]. Pedestrian countdown signals include a countdown timer that displays the number of seconds available for the pedestrian to complete the crossing. Pedestrian countdown signal displays offer an opportunity to provide information to a pedestrian that will make his/her highway crossing experience both safer and more comfortable. When pedestrians are provided continuous, real-time information on the time available to cross a roadway, they use this information beneficially to appropriately adjust their walking speed to avoid conflict with cross-traffic vehicles.

Continuous traffic flow roundabouts are becoming an increasingly popular alternative to signalized intersections, but they present unique challenges to access, particularly for people with vision impairments. The US Federal Highway Administration (FHWA) is investigating the usability of enhanced audible cues at roundabout crossings and soon will consider contrast requirements for detectable warnings [ITE Journal, Sept 2004 “Toward Accessible Public Rights-of-Way”].

Handicapped parking spaces are only required at self-parking facilities. At parking facilities with attendant or valet parking, however, an accessible loading zone and accessible route between the loading zone to an accessible entrance and exit must be provided [ITE Journal, Jan 1993 “Americans with Disabilities Act and the design of highway-related facilities”]. According to the ADA, one

handicapped space is to be provided for about every 25 parking spaces. This is usually applied here in TnT, but there is as yet no obligation for abled-drivers to comply, and so these handicapped spaces are often considered by daring drivers to be reserved spaces for them during peak parking periods. In fact, how is it possible to enforce this requirement in the absence of approved handicapped driver permits, temporary or permanent?

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