Pedestrian and Bicycle Facility Requirements, Policies, and Street Standards

A Review of Local Ordinances and Standards in the Greater Madison MPO Planning Area and Recommended National Best Practices

Addendum - October 18, 2021

This addendum lists references, best practices, and other information that was not included in the original report. Items listed here will be fully integrated in future versions of this report; here they are summarized under the source and listed by the report topic (e.g. *curb radii, block length*, etc.).

Block Length and Street Network Connectivity

Recommendations

NACTO and Global Designing Cities Initiative¹

Crossing should be no more than 200 m (656 ft.) apart in urban settings; in areas with high pedestrian volumes crossing should be provided every 50-100 m (164-328 ft.).

Street Width – Rural Roadways

Recommendations

$FHWA^2$

For local streets that do not carry through-traffic, a <u>Yield Roadway</u> may be appropriate, and when less than 20' wide can help encourage lower vehicle speeds. Total travel width of Yield Roadways can vary from 12-20', but be sure to plan to avoid conflicts between EMS vehicles and features such as mature street trees when building on the narrower end of that range, as well as providing intermittent pull-out areas to allow vehicles to pass each other.

<u>Advisory Shoulders</u> are another potential design tool, with 10-18' travel lane in the center and two 4-6' "shoulders". Finally, it may be appropriate to construct a separated path of 8-12' width instead of 5' sidewalks on each side of the road; although this facility type requires many trips to cross the street at the beginning or end, it provides a low-stress bike route for those who are not comfortable riding in traffic. Various types of separated paths exist; <u>sidepaths</u> and <u>shared use paths</u> are the most common and are appropriate for rural areas.

¹ <u>Designing Streets for Kids</u> (2020), 112.

² Small Town and Rural Multimodal Networks (2016), see also Small Town and Rural Design Guide

Curb Radius

Recommendations

NACTO and Global Designing Cities Initiative³

Reducing crossing distance improves safety; cities can shorten turning radii, widen sidewalks, and extend curbs at intersections to reduce crossing distances.

Width of Bicycle and Pedestrian Facilities

Recommendations

NACTO and Global Designing Cities Initiative⁴

Sidewalks are composed of multiple zones, each with its own unique purpose. The standard sidewalk zone types and guidance for each are detailed in Table 2.

Zone	Notes
Frontage zone	A pause and play space that functions as an extension of
	building; should be at least 0.5 m (1.6 ft.) wide.
Clear path	A clear, unobstructed path for pedestrian movement that
	should be wide enough to accommodate several people walking
	side-by-side, as well as mobility devices, strollers, etc.; at least
	1.8-2.4 m (5.9-7.9 ft.) in residential areas and 2.4-4.5 m (7.9-
	14.8 ft.) in other areas with high pedestrian activity.
Street furniture zone	An area between the clear path and the street that may contain
	trees, street furniture, bike parking, etc.; may be combined with
	the buffer zone.
Buffer zone	A buffer area separating pedestrians from the roadway that
	may contain utility poles and lighting; may be combined with
	the street furniture zone.
Curbside	The edge of the roadway abutting the buffer zone; may be used
	for parked cars, bike lanes, curb extensions, etc.

Table 1 Sidewalk Zones and Width Requirements

Bicycle facilities should be wide enough to accommodate children cycling side-by-side with their caregivers; ideally, 2.4 m (7.9 ft.) wide in each direction. Buffers should be at least 1 m (3.3 ft.) wide.

³ <u>Designing Streets for Kids</u> (2020), 112.

⁴ Ibid, 114, 126.

Complete Streets

The Benefits of Complete Streets Toolkit provides a series of Excel-based modules to estimate impacts of Complete Streets projects. Modules include Equity, New Cyclists, Cycling Environment, Pedestrian Intersection Safety, Speed Reduction, Tree Planting, Cycling and Pedestrian Health, and Economic Impacts. The Toolkit and User Guide are available at https://benefits.completestreets.org/.