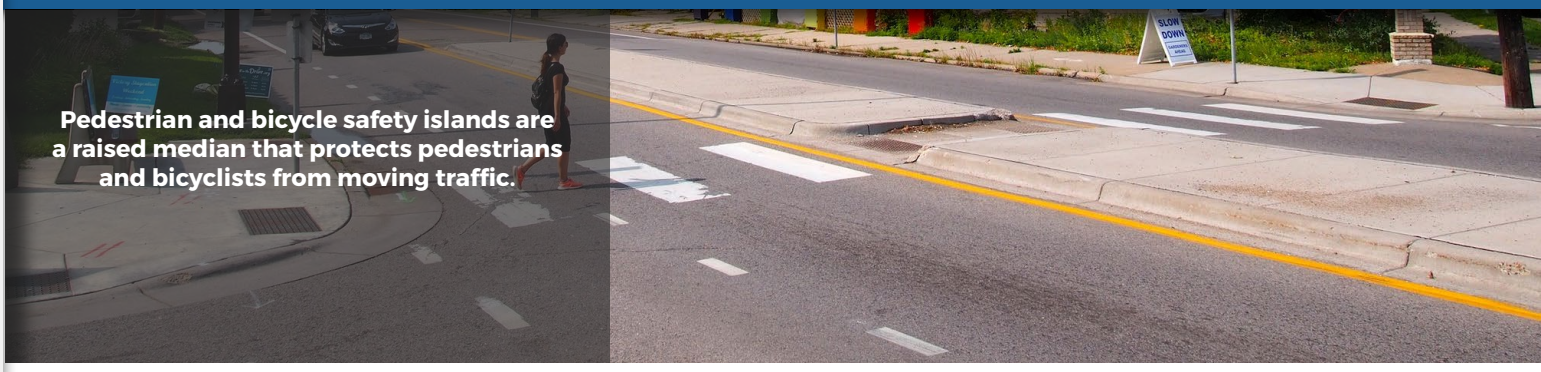
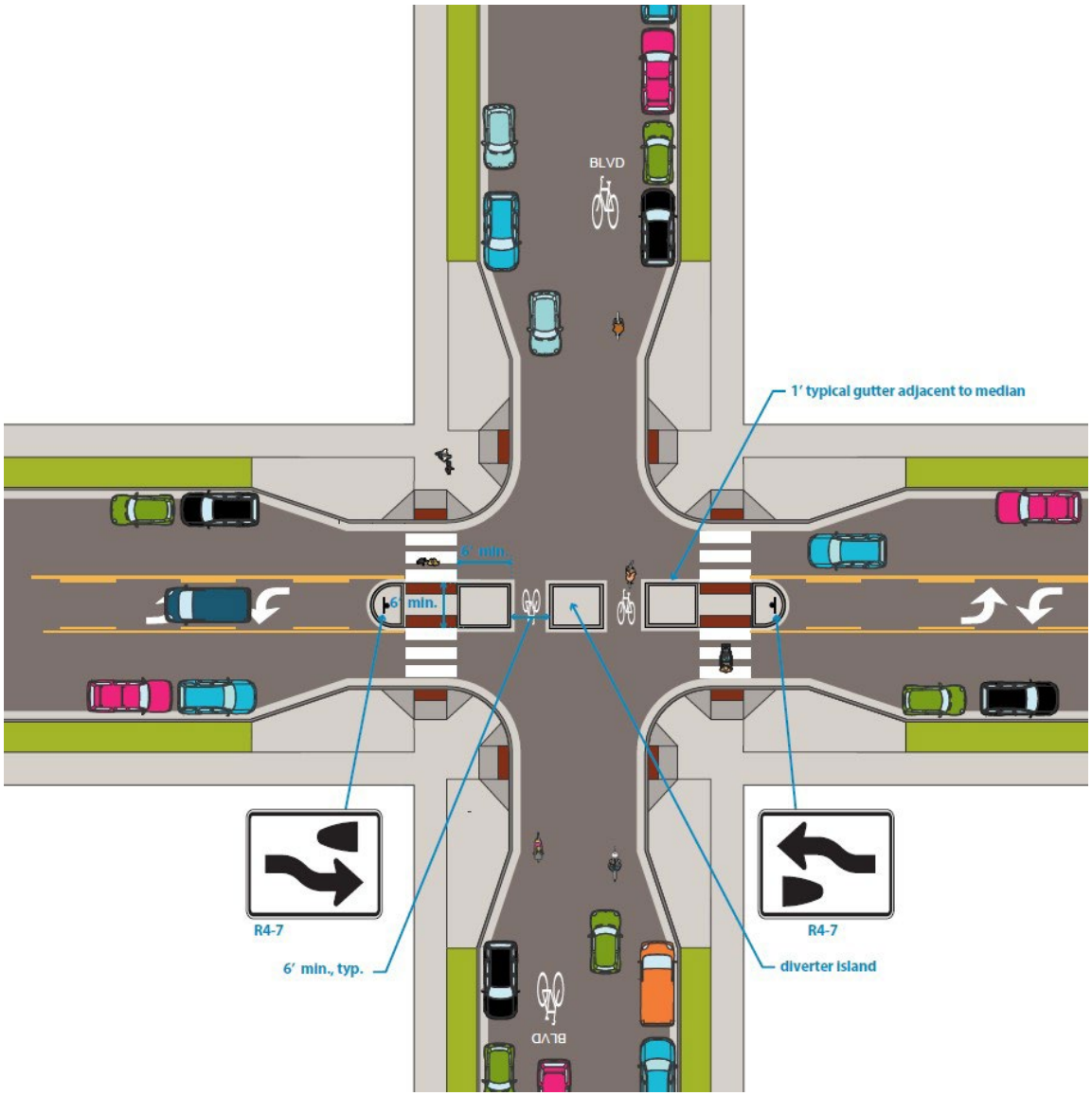
3.7D Pedestrian and Bicycle Safety Islands



INTRODUCTION

Pedestrian and bicycle safety islands are a raised median that protects pedestrians and bicyclists from moving traffic. Safety islands allow pedestrians and bicyclists to navigate one direction of traffic at a time when crossing.

Figure 3.7D.5: Pedestrian and bicycle safety islands



DESIGN CONSIDERATIONS

A. When to use	**1.** Pedestrian and bicycle safety islands should be considered when there is a neighborhood greenway or high-volume pedestrian crossing across a busier street such as Mixed Use street types and Urban Neighborhood Connector streets. **2.** Safety islands should generally be used at unsignalized crossings (signalized crossings should generally prioritize curb extensions). **3.** Pedestrian and bicycle safety islands can be implemented at intersections or at midblock crosswalks or trail crossings.
B. Location	**1.** Safety islands are located in the middle of the roadway. **2.** They are often included in the space of a left-turn lane, but also can be implemented on streets without turn-lanes if there is space for a lane shift (for example, by removing parking leading up to the crossing). **3.** Safety islands can be used on one or both crosswalks on either side of a street.
C. Cut-through design	**1.** A cut-through design where the crosswalk remains at street level through the safety island is strongly preferred over ramping up to the island. **2.** The cut through should preferably be the same width as the crosswalk and always be at least 6'. See Figure 3.7D.5.
D. Nose	When feasible, safety islands should include a nose that extends past the crosswalk and protects people waiting on the island and slows turning drivers.
E. Width	**1.** Safety islands should be at least 6' wide although 8' or wider should be considered along major bicycle crossings to provide adequate space for bicyclists. **2.** Where a 6'-wide median cannot be attained, a narrower raised median can still be preferable to nothing.
F. Length	**1.** The length of safety islands varies, but should be at least 6' long. **2.** Longer medians of adequate width can accommodate trees if they are setback at least 40' from the intersection; see street trees guidance for more details.
G. Detectable warning surface	**1.** Detectable warning surfaces made of truncated domes must be installed on the edge of safety island crosswalk to alert users that they are about to enter the roadway. **2.** See MnDOT's current curb ramp guidelines, curb ramp standard plans, and other design guidance and standards for details on constructing detectable warnings.
H. Curb and gutter	Standard 6" curb tops and 1' gutters are generally used adjacent to medians. If there are catch basins adjacent to medians, 2' gutters should typically be used.
I. Signage	A Keep Right (R4-7) should be included at the start of the safety island.
J. Diverter islands	Safety islands can be implemented with a diverter to restrict traffic along neighborhood greenways or eliminate vehicle crossing at unsignalized intersections with high crash rates. Coordinate with the Fire Department if considering a diverter. See Figure 3.7D.5.

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K. Including other crossing improvements	Safety islands should be implemented with marked crosswalks and bikeway crossing markings as appropriate. Designers should also consider advanced stop bars, curb extensions, enhanced street lighting, and rectangular rapid flashing beacons (RRFBs) in conjunction with the safety island.
L. Turning vehicles	Safety islands may restrict turning movements to and from intersecting streets. Designers should consider appropriate design and control vehicles and model all turning movements.
M. Greening	Designers should generally work to include greening in medians whenever feasible. See medians guidance for more details.
N. Midblock crossings	See also NACTO guidance for midblock crosswalks for additional considerations.
O. Delineator safety islands	Low-cost safety islands can be implemented using delineators in street retrofit projects.