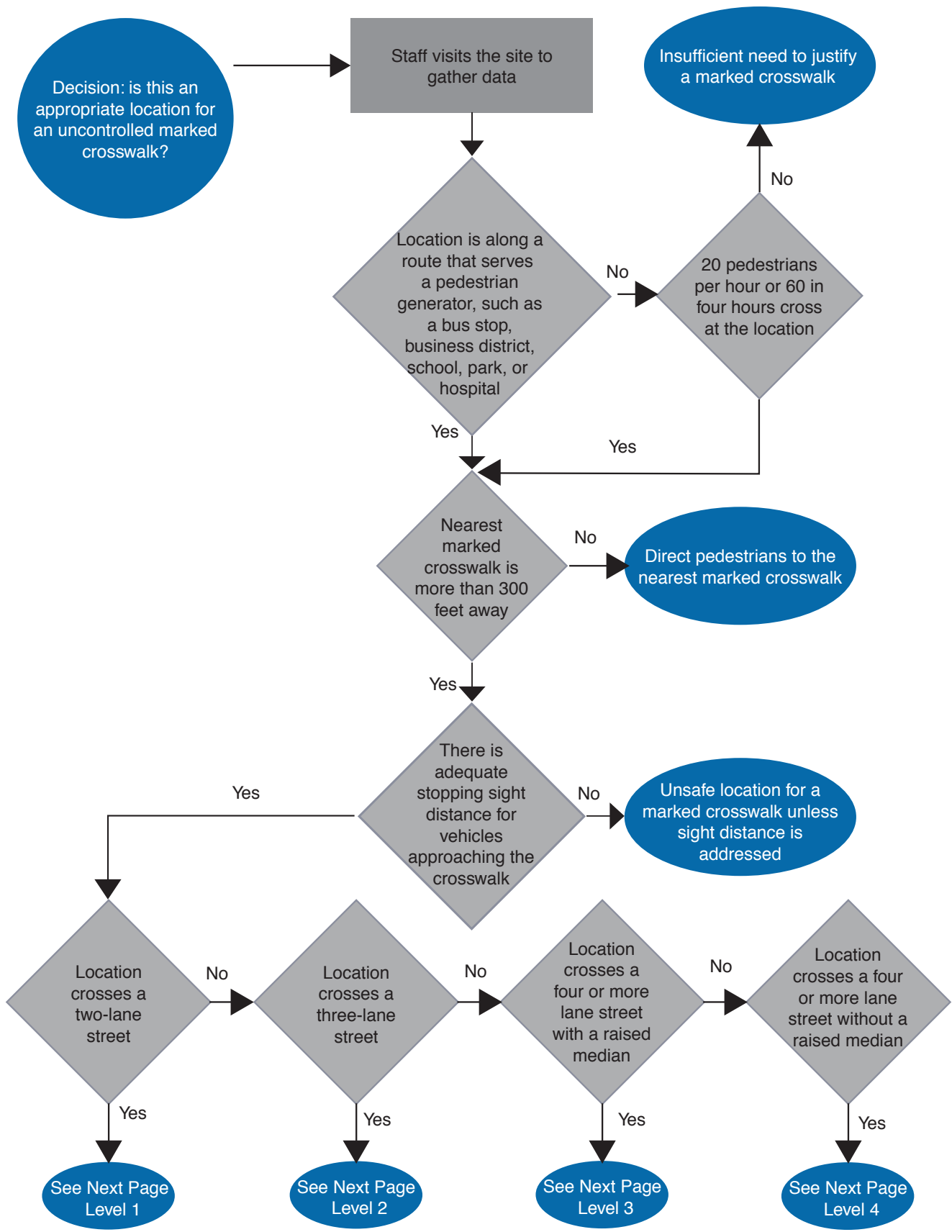


Crosswalk Treatment Recommendations



2 LANE

ADT	30 - 34 mph	35 - 45 mph	45+ mph
6000 - 9000	Optional RRFB	RRFB	RRFB or IN-ROAD System
9000 - 12000	Optional RRFB	RRFB	IN-ROAD System
12000 - 15000	RRFB	RRFB or IN-ROAD System	IN-ROAD System
15000+	RRFB or IN-ROAD System	IN-ROAD System	Ped. Signal or Grade Separated Crossing

3 LANE

ADT	30 - 34 mph	35 - 45 mph	45+ mph
6000 - 9000	Optional RRFB	RRFB	RRFB or IN-ROAD System
9000 - 12000	Optional RRFB	RRFB	IN-ROAD System
12000 - 15000	RRFB or IN-ROAD System	IN-ROAD System	Ped. Signal or Grade Separated Crossing
15000+	IN-ROAD System	Ped. Signal or IN-ROAD System	Ped. Signal or Grade Separated Crossing

4 LANE with median

ADT	30 - 34 mph	35 - 45 mph	45+ mph
6000 - 9000	Optional RRFB	RRFB	IN-ROAD System
9000 - 12000	RRFB or IN-ROAD System	IN-ROAD System	Ped. Signal or IN-ROAD System
12000 - 15000	RRFB or IN-ROAD System	IN-ROAD System	Ped. Signal or Grade Separated Crossing
15000+	Ped. Signal or IN-ROAD System	Ped. Signal or Grade Separated Crossing	Ped. Signal or Grade Separated Crossing

4 LANE with no median

ADT	30 - 34 mph	35 - 45 mph	45+ mph
6000 - 9000	RRFB or IN-ROAD System	IN-ROAD System	Ped. Signal or IN-ROAD System
9000 - 12000	IN-ROAD System	IN-ROAD System	Ped. Signal or Grade Separated Crossing
12000 - 15000	Ped. Signal or IN-ROAD System	Ped. Signal or Grade Separated Crossing	Ped. Signal or Grade Separated Crossing
15000+	Ped. Signal or Grade Separated Crossing	Ped. Signal or Grade Separated Crossing	Ped. Signal or Grade Separated Crossing

NOTE: IN-ROAD Systems may include roadside flashers for specific locations with high speeds, or as a redundancy in snowfall regions.

Disclaimer

This document is not a substitute for engineering judgement, but is intended as a supplement to assist in decision making. An engineer in the jurisdiction must assess each location and approve an appropriate treatment taking into consideration crash rate history, driver demographics, pedestrian and cyclists demographics, weather conditions, visibility, mobility, cost, and any other relevant information deemed necessary by the engineer.

References

- [1] Federal Highway Administration, "Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks." USDOT, McLean, VA, 2010.
- [2] Federal Highway Administration, "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations Final Report and Recommended Guidelines," USDOT, 2005.
- [3] Federal Highway Administration, "Evaluation of Pedestrian and Bicycle Engineering Countermeasures: Rectangular Rapid-Flashing Beacons, HAWKS, Sharrows, Crosswalk Markings, and the Development of an Evaluation Methods Report," USDOT, McLean, VA, 2011.
- [4] Traffic Engineering Division, "GUIDELINES FOR THE INSTALLATION OF MARKED CROSSWALKS," 2002.