Unsignalized Intersection Improvement Guide



This crosswalk utilizes a combination of longitudinal and diagonal lines.



This crosswalk utilizes transverse lines to increase its conspicuity.



Two longitudinal lines delineate this crosswalk.



Install or Modify Crosswalk Markings

Application or alteration of a marked path across the roadway that designates a crossing location for pedestrians.

Targeted Crash Types

Pedestrian

Bicyclist

- Problems Addressed
- Vehicle conflicts with non-motorists

Conditions Addressed

- Crash history or observed conflicts between vehicles and non-motorists crossing the roadway.
- Observed vehicles not yielding to pedestrians in existing crosswalk or unmarked crosswalk.
- High volume of pedestrians in the area.
- A need to relocate crosswalk to allow stop line to be moved closer to intersection and provide better sight distance.
- School crossings.

Considerations

- Supplement the crosswalk with warning signs or beacons along uncontrolled approaches.
- If used on uncontrolled multilane approaches, a yield (or stop) line should be applied properly (see <u>MUTCD Section 3B.16</u>) and placed an adequate distance (20 to 50 feet) in advance of the crosswalk to give motorists and pedestrians a clear line of sight for one another. May be supplemented with a Yield Here to (Stop Here for) Pedestrians (R1-5, R1-5a, R1-5b, R1-5c) sign.
- The placement of the crosswalk should be near the pedestrian traveled pathway (extension of the sidewalk network) to deter jaywalking.
- Crosswalks should be accompanied by wheelchair ramps on either side to allow access for persons with disabilities.
- Crosswalk lines should not be used indiscriminately. An engineering study considering the factors described in <u>MUTCD Section 3B.18</u> should be performed before a marked crosswalk is installed at an uncontrolled location.
- For uncontrolled crosswalks on multilane streets of 10,000 ADT or more (15,000 ADT with a raised median), additional treatments should be considered to improve safety and facilitate crossings.
- Wider lines, wider crosswalks, and ladder or diagonal (high visibility) markings are easier for drivers to see. Continental or ladder markings should be placed between wheel paths to extend the service life of the markings.

Industry Standard

MUTCD

Section 3B.18: Crosswalk Markings

Section 3C.05: Crosswalk Markings at Roundabouts

Section 7C.02: Crosswalk Markings (Traffic Control for School Areas)

AASHTO Green Book

Section 2.6. The Pedestrian

Section 2.6.5 Intersections

Other Resources

Marked Crosswalks and Enhancements, PEDSAFE

NCHRP 562 & TCRP 112: Improving Pedestrian Safety at Unsignalized Intersections

Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations Final Report and Recommended Guidelines, FHWA

Select Examples

Marsol Rd. & Woodhurst Ave., Mayfield Heights, OH Casa Ybel Rd. & Periwinkle Way, Sanibel, FL Stinson Dr. & Broughton Dr., Raleigh, NC