

**When to Install a Crosswalk? Do you have a formal policy?**

Asked by New York State DOT on 1/19/2017

State	Formal Policy?	Comments
<b>Alabama</b>	No	Alabama has no formal policy or guidance on when to install a crosswalk. Engineering judgement is applied on a case by case basis.
<b>Arizona</b>	Yes	Crosswalks: <a href="http://www.azdot.gov/docs/default-source/traffic-library/tgp0910-2015-06.pdf">http://www.azdot.gov/docs/default-source/traffic-library/tgp0910-2015-06.pdf</a> School crosswalks: <a href="http://www.azdot.gov/docs/default-source/traffic-library/tgp0920-2015-06.pdf">http://www.azdot.gov/docs/default-source/traffic-library/tgp0920-2015-06.pdf</a> Arizona Traffic Safety for School Area Guidelines: <a href="http://www.azdot.gov/docs/business/adot-traffic-safety-for-school-area-guidelines.pdf">http://www.azdot.gov/docs/business/adot-traffic-safety-for-school-area-guidelines.pdf</a> ARS 28-797 (defining school crosswalks): <a href="http://www.azleg.gov/ars/28/00797.htm">http://www.azleg.gov/ars/28/00797.htm</a>
<b>Arkansas</b>	Yes	Here's what we use. The table we hang our hat on is on P. 54.
<b>Delaware</b>	Yes	At signalized intersections, we have a little bit of guidance from our Traffic Design Manual: The number of pedestrian crossings required is determined based on the surrounding land use and pedestrian patterns at the intersection, combined with consideration to avoiding crossing pedestrians across the heaviest vehicular movements, where possible. Typically, DeIDOT will install crosswalks across both minor street approaches and one mainline approach. Two mainline crosswalks will be considered based on pedestrian desire lines and the impact to both pedestrian and vehicular traffic. At unsignalized intersections and/or mid-block locations, we don't have any formal guidance. On lower speed/lower volume roads we will generally allow uncontrolled crosswalks, although new ones can only be installed if/when ADA compliant curb ramps are installed. For higher volume/higher speed/wider roadways, we require analysis per NCHRP 562 and use that to assist in decision making (e.g., no crosswalk, crosswalk only, crosswalk with ped warning signs, crosswalk with RRFB or HAWK or full signal). Also for reference, DeIDOT standardized on continental crosswalk markings for all crosswalks probably 15 years ago (unless aesthetic treatments are used in which case we're back to parallel lines enclosing the aesthetics).

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<b>Florida</b>	Yes	<p>Florida has developed guidance and procedures for installing marked pedestrian crosswalks at midblock and uncontrolled approaches. The detailed procedure and criteria is described in the Department’s Traffic Engineering Manual, Section 3.8 (TEM). Florida also has a requirement to install special emphasis “high visibility crosswalks” at all new signalized intersections, mid-block crossings, and school crossings per FDOT Standard Design, Index 17346. This requirement is in the Department’s Plans Preparation Manual, Chapter 8. Furthermore, any marked crosswalk proposed for an uncontrolled approach on the State Highway System must be reviewed and approved by the appropriate District Traffic Operations Engineer prior to installation. Criteria for installing mid-block crosswalks include:</p> <ul style="list-style-type: none"> <li>• Minimum levels of pedestrian demand.</li> <li>• Minimum distance to nearest alternative crossing location is 300 feet.</li> <li>• The proposed location must be outside the influence area of adjacent signalized intersections.</li> <li>• The location for a marked crosswalk must provide adequate stopping sight distance.</li> <li>• Crosswalk illumination shall be provided at all newly constructed uncontrolled approach crosswalks.</li> <li>• At uncontrolled approach locations with vehicular volumes greater than 12,000 ADT or where crossing distances exceed 60 feet, a refuge island or raised median should be considered.</li> <li>• Consideration should be given to the location of nearby bus stops when locating a proposed pedestrian crossing.</li> <li>• For locations where signal warrants are met, consideration may be given to</li> </ul>
<b>Indiana</b>	Yes	<p>Crosswalk markings are either required or recommended with curb ramps- see the first two attachments which are from the Indiana Design Manual. There also recommended at intersections of shared use paths with roadways (third attachment).</p>
<b>Louisiana</b>	Yes	<p><a href="http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc%20Documents/Traffic%20Engineering%20Manual.pdf">http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc%20Documents/Traffic%20Engineering%20Manual.pdf</a></p>
<b>Maine</b>	Yes	<p>This is what we use in Maine. The part we struggle with is which crosswalks we allow to remain when we do overlays in terms of ADA compliance, crosswalks to nowhere are getting removed.</p>

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<b>Massachusetts</b>	No	From MassDOT’s point of view we do not have any set procedures or policies that we follow. That being said, we have discussed this with our District Traffic Engineers and have decided that we would start to develop our own pedestrian crossing treatment guidelines. We intend on using FHWA’s Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations as a starting point. Table 11 in that link is a good, research-based decision point that is based upon ADT, vehicle speeds, and roadway type (number of lanes, divided, etc.) and recommends whether the location is a candidate for a crosswalk, has a possible increase risk for crashes unless there are additional enhancements associated with it, or is not recommended as a candidate.
<b>Michigan</b>	Yes	Thank you for the information on your current high visibility crosswalk markings – it’s great to see what other states are doing and what we can learn from them! In Michigan, we have crosswalk guidance to help make decisions on when and how to cross trunklines. I am attaching this for your review.
<b>Minnesota</b>	Yes	MnDOT’s link to our Technical Memo on Pedestrian Crossing Facilitation.
<b>New Hampshire</b>	No	<p>We have been trying to develop similar objective criteria for new marked crosswalks for a number of years. We do not have anything published at this time, but the gist of what we are working on is:</p> <ul style="list-style-type: none"> <li>· Mid-block crosswalks are generally discouraged as they are not where motorists expect to see pedestrians</li> <li>· For low volume (this number varies, 7-9,000 vpd), two lane roads with speed limits &lt; 35 mph, marked crosswalks with flanking W11-2 warning signs may be sufficient</li> <li>· Stopping sight distance for the posted speed limit must be available (measured to the crosswalk markings)</li> <li>· Overhead lighting per the FHWA guidelines for mid-block crosswalks must be provided</li> <li>· Continental markings must be used on all new mid-block crosswalks</li> <li>· Towns/cities shall maintain crosswalks unless at signalized intersections</li> <li>· Pedestrian Hybrid Beacons (PHB’s) are required when warranted per the MUTCD, shall be installed and maintained by the town/city</li> <li>· Rectangular Rapid Flashing Beacons (RRFB’s, but let’s call them “pedestrian actuated warning systems” for now) are required for higher volume, two lane roads with speed limits up to 40 mph that do not trigger the warrants for PHB’s</li> </ul>

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<b>New Jersey</b>	No	NJ is similar to NY; we have no formal policy. We have a few references; regarding at-grade intersection design, our Roadway Design Manual (Section 6.8.6) states that “where pedestrian volumes warrant, crosswalk pavement (markings) should be placed at the desired crossing location.” Also, our standard plans for a typical traffic signal design shows crosswalks painted. When it comes to midblock locations, our practice is to always paint a crosswalk, but at unsignalized intersections, the call to stripe is made based on MUTCD engineering /safety analysis and judgment. NJ’s motor vehicle law (39:1-1) establishes crosswalks at every intersection whether marked or unmarked.
<b>New Mexico</b>	No	We have no formal policy. We have crosswalks on all urban signalized intersections. For un-signalized intersections; we assess based on MUTCD and engineering judgment. Mid-block crossings are looked at individually also.
<b>New York</b>	No	Last year, my office issued guidance on the use of high visibility crosswalk markings. Somebody pointed out that the guidance assumes a decision has already been made to install a crosswalk, but it does not get into any detail as to when a crosswalk should be installed. For that part of the equation, we do not have anything formally written. It has always been more of a judgment call rather than having any strict warrants. Now, the office is tasked with developing a policy and rather than re-invent the wheel, I am looking for off the shelf guidance as to when and when not to install a crosswalk regardless whether it is high visibility or not. If you have a formal policy, I would appreciate it if you could provide either a copy or a link to it.
<b>North Carolina</b>	Yes	I am responding on behalf of State Traffic Engineer, Kevin Lacy. NCDOT and the Institute for Transportation Research and Education at North Carolina State University developed guidance for when to mark crosswalks at uncontrolled approaches in 2015. A crosswalk assessment flowchart was developed as part of that guidance to assist in decision making. Report: <a href="https://connect.ncdot.gov/resources/safety/Teppl/TEPPL%20All%20Documents%20Library/Pedestrian_Crossing_Guidance.pdf">https://connect.ncdot.gov/resources/safety/Teppl/TEPPL%20All%20Documents%20Library/Pedestrian_Crossing_Guidance.pdf</a> Flowchart: <a href="https://connect.ncdot.gov/resources/safety/Teppl/TEPPL%20All%20Documents%20Library/FlowChart.pdf">https://connect.ncdot.gov/resources/safety/Teppl/TEPPL%20All%20Documents%20Library/FlowChart.pdf</a>
<b>Ohio</b>	No	We currently do not have a formal policy.
<b>Pennsylvania</b>	Yes	Guidance for crosswalks is in our Publication 46, Chapter 3.2 and 11.9. I have attached these sections and the entire Publication is found at the following location: <a href="http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%2046.pdf">http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%2046.pdf</a>

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<b>South Dakota</b>	No	South Dakota does not have a formal policy. We tried recently to create one, but could not come up warrants, especially volumes, that would work for all situations. We stopped trying to create a policy when we heard FHWA was coming out with a crosswalk guidance document soon that may have such criteria or guidelines.
<b>Utah</b>	Yes	<a href="https://www.udot.utah.gov/main/uconowner.gf?n=10468627839481648">https://www.udot.utah.gov/main/uconowner.gf?n=10468627839481648</a>
<b>Vermont</b>	Yes	<p>Vermont has ped crossing guidance here:  <a href="http://vtrans.vermont.gov/sites/aot/files/highway/documents/Itf/Guidance%20for%20Pedestrian%20Crossing%20Treatments%20-%20202016.pdf">http://vtrans.vermont.gov/sites/aot/files/highway/documents/Itf/Guidance%20for%20Pedestrian%20Crossing%20Treatments%20-%20202016.pdf</a> Vermont has ped crossing guidance here:  <a href="http://vtrans.vermont.gov/sites/aot/files/highway/documents/Itf/Guidance%20for%20Pedestrian%20Crossing%20Treatments%20-%20202016.pdf">http://vtrans.vermont.gov/sites/aot/files/highway/documents/Itf/Guidance%20for%20Pedestrian%20Crossing%20Treatments%20-%20202016.pdf</a></p> <p>Or, go to the VTrans website <a href="http://vtrans.vermont.gov/">http://vtrans.vermont.gov/</a> and search on "pedestrian" (don't ask me why, but "crosswalk" is not a searchable keyword for this document...)</p>
<b>Virginia</b>	Yes	<p>The link to Virginia DOT's guidance document "IIM-TE-384 Pedestrian Crossing Accommodations at Unsignalized Locations" is: IIM/TE-384 (see: Attachment A). If you have trouble with the hyperlink above, try the Web Page for our Traffic Engineering Memorandums at:  <a href="http://www.virginiadot.org/business/traffic_engineering_memoranda.asp">http://www.virginiadot.org/business/traffic_engineering_memoranda.asp</a> FYI- The Signalized Intersection Version of Pedestrian Crossing Accommodations is still in the development stage. Once approved, the Signalized version will be on the above Web Page.</p>
<b>Wisconsin</b>	Yes	<p>Here is a link to the Wisconsin crosswalk policy  <a href="http://wisconsinstate.gov/dtsdManuals/traffic-ops/manuals-and-standards/tgm/03/03-02-03.pdf">http://wisconsinstate.gov/dtsdManuals/traffic-ops/manuals-and-standards/tgm/03/03-02-03.pdf</a></p>
<b>Wyoming</b>	Yes	<p>WYDOT Traffic Operations Manual Section 2.6 Designated Pedestrian Crossing Warrant A Designated Pedestrian Crossing shall be justified by an engineering study. Normally a Designated Pedestrian Crossing should be considered when:</p> <ol style="list-style-type: none"> <li>1) The pedestrian volumes exceed 50% of the minimum pedestrian volume required to meet the pedestrian volume warrant for the installation of a traffic control signal (see MUTCD 2009 Chapter 4C), regardless of traffic volumes on the major street; or</li> <li>2) There are a minimum of 20 pedestrians per hour for each of any 4 hours with fewer than 60 adequate gaps per hour during the same time periods.</li> </ol>