PennDOT LTAP
technical
INFORMATION
SHEET #239
FALL/2025

MIDBLOCK CROSSWALKS AND TRAIL CROSSINGS

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This year, PennDOT updated the Midblock Crosswalk and Trail Crossing policy in the *Traffic Engineering Manual,* Publication 46, Chapter 11 through Strike-off Letter (SOL) 494-25-05. This policy update clarifies, and updates guidance utilizing industry standard practice to evaluate and establish unsignalized midblock crosswalks and highway trail crossings on both state and local roadways. In addition to the policy updates, PennDOT Traffic Engineering form TE-113 Midblock Crosswalk Traffic Engineering Study was updated. The updated policy provides a standard approach for the evaluation and establishment of midblock crosswalks and trail crossings.

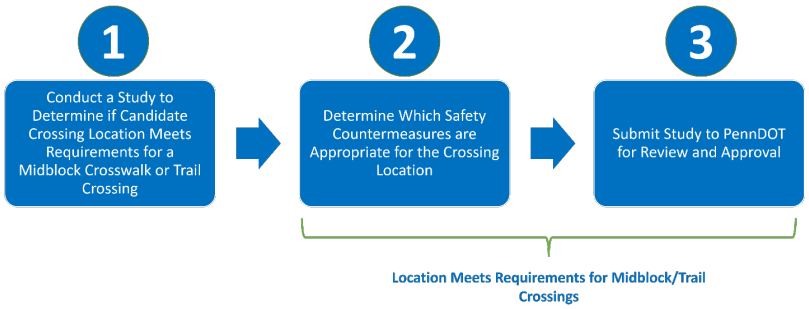

Figure showing the process for a Midblock Crosswalk or Trail Crossing Engineering and Traffic Study from PennDOT's *Traffic Engineeering Manual,* Publication 46, Chapter 11 through Strikeoff Letter 494-25-05, Attachment B, page 8.

Engineering and Traffic Study

Study Requirements: A Traffic Study is required for all candidate midblock crosswalk and trail crossing locations, on any public roadway. PennDOT engineering review and approval is required prior to the installation of any midblock crosswalk or trail crossing on a state highway, a local road with state or federal funding, or a federal aid roadway. PennDOT approval is not required on a local road with local funding. A licensed professional engineer can complete the study; however, police officers, roadmasters, maintenance supervisors, or traffic technicians may also complete it (per "Title 67, Chapter 212, Section 212.4."), which is subject to PennDOT's engineering review. If the PennDOT engineering review is not required or available, the local authorities must arrange their own engineering review. Pennsylvania's LTAP (Local Technical Assistance Program) can assist municipalities with the traffic study.

Study Process: For changes to existing midblock or trail crossings or new midblock or trail crossings, the municipality must conduct a Traffic Study per the requirements of the policy. If the crossing location meets the requirements, the study will also determine appropriate safety countermeasure(s) and traffic control devices. The municipality must submit the study findings and recommendations to their PennDOT District Office using form TE-113 Midblock Crosswalk and Trail Crossing Engineering and Traffic Study.

Study Details: The study shall document how the following requirements are met for candidate midblock crosswalk and trail crossing locations:

- Provide sufficient stopping sight distance and intersection sight distance,
- No closer than 300 feet to nearest marked crosswalk, and
- Pedestrian volumes
  - 20 pedestrian crossings per peak hour
  - 15 elderly, disabled, and/or children crossings per peak hour

Engineering and Traffic Study Areas of Study: The following should be included

Pennsylvania Department of Transportation
Local Technical Assistance Program
400 North Street, 6th Floor
Harrisburg, PA 17120
1-800-FOR-LTAP • FAX (717) 783-9152
ltap@pa.gov
https://gis.penndot.pa.gov/ltap/

and documented in the Engineering and Traffic Study:

1. Roadway geometry, including number of lanes, lanes widths, crossing length, shoulders, horizontal/vertical curves, approach grades
2. Presence of a median or other refuge area
3. Existing traffic control devices
4. Presence of on-street parking
5. Distance from adjacent intersections
6. Pedestrian volumes (for midblock crosswalks) or trail user volumes (for trail crossings)
7. Vehicle volumes
8. Vehicle speeds
9. Crash history (five years of data)
10. Sight distance
11. Trail/sidewalk geometry, including surface material, surface condition, width, trail traffic control features (chicanes, gates, signs, etc.), ADA features, and drainage issues
12. Possibility of consolidating multiple crossing points
13. Available nighttime lighting, and
14. Other appropriate factors

Study Outcomes:

Based on the Engineering and Traffic Study and the documentation using the TE-113 Midblock Crosswalk and Trail Crossing Engineering and Traffic Study form when determining if the candidate crosswalk location meets the requirements there are two potential outcomes of the study:

1. If the location does not meet the requirements for a midblock crosswalk or trail crossing, but safety issues are identified in the study, PennDOT has a responsibility to make the highways reasonably safe for foreseeable users, including pedestrians. Additional coordination with the local PennDOT District may be needed to identify other improvements to address safety issues. The local PennDOT District shall issue a letter stating that the proposed location does not meet the requirements for a midblock crosswalk or trail crossing and maintain a record of the letter, decision, and associated safety improvements (if applicable).
2. If the location does meet the requirements for a midblock crosswalk or trail crossing, refer to Table 1 to determine if the candidate location satisfies the conditions for a marked crosswalk alone with minimum treatments or if other supplemental safety measures are recommended or required.

Midblock Crosswalk and Trail or Trail Crossing Locations

Table I shows a Midblock Crosswalk and Trail Crossing Evaluation Matrix for Candidate Midblock Crosswalk or Trail Crossing locations from PennDOT's Traffic Engineering Manual, Publication 46, Chapter 11 through Strike-off Letter 494-25-05, Attachment B, page 12.

Roadway Cross-section	Roadway AADT and Speed Limit															
	Less than 9,000 AADT				9,000 to 12,000 AADT				12,000 to 15,000 AADT				More than 15,000 AADT			
	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH
Two Lanes (undivided)	A	A	B	C	A	A	B	C	A	A	B	C	B	B	C	C
Three lanes with raised median	A	B	B	C	A	B	B	C	B	B	B	C	B	B	B	C
Three lanes without raised median	A	B	B	C	A	B	B	C	B	B	B	C	B	C	C	C
Four lanes with raised median	B	B	B	C	B	B	C	C	B	B	C	C	C	C	C	C
Four lanes without raised median	B	B	C	C	B	B	C	C	C	C	C	D	C	C	C	D
Five or more lanes with or without raised median	C	C	D	D	C	C	D	D	D	D	D	D	D	D	D	D

Legend

A	Marked crosswalk alone is appropriate if installed with minimum treatments described in Section V(A)
B	Additional pedestrian safety countermeasures are recommended in addition to minimum treatments described in Section V(A)
C	Additional pedestrian safety countermeasures are required in addition to minimum treatments described in Section V(A)
D	A marked crosswalk is not recommended unless combined with full signalization. Additional pedestrian safety countermeasures are recommended

Resources

Traffic Engineering Manual, Publication 46, Chapter 11 through Strike-off Letter (SOL) 494-25-05
https://docs.penndot.pa.gov/Public/Bureaus/BOO/SOL/494-25-05.pdf

TE-113 Midblock Crosswalk and Trail Crossing Engineering and Traffic Study
https://www.pa.gov/content/dam/copapwp-pagov/en/penndot/documents/public/pubsforms/forms/te-113.pdf