

SIDEWALK MAINTENANCE ISSUES

Sidewalks are a vital part of the transportation infrastructure in a community. Unfortunately, many sidewalks suffer from issues including deferred maintenance, hazards, obstructions, and gaps. Most municipalities have ordinances requiring property owners to maintain sidewalks; however, LTAP experience from around the state shows that many municipalities are not enforcing these ordinances. This can lead to a variety of issues, including:

- Unwalkable sections of sidewalks, which may force pedestrians into conflicts with vehicles in the street.
- Sidewalks that are not in compliance with the Americans with Disabilities Act (ADA), creating barriers to access for impaired pedestrians.
- Trip, slip, and fall hazards for pedestrians, which can result in injury to residents and lawsuits.

Maintenance Approaches

Some communities annually inspect sidewalks each spring, after the winter freeze/thaw cycles. This approach ensures that all sidewalks are in good repair every year. Another approach is to inspect the sidewalks in conjunction with street resurfacing projects. This approach identifies the sidewalks and the curb ramps that need upgraded simultaneously.

What to look for when inspecting sidewalks

Some common hazards and obstructions to search for include:

- Vegetation blocking the pedestrian access route (PAR). The minimum width of the PAR is 4 feet, per ADA.
- Sidewalk panels that are deteriorating and are not smooth
- Gaps in the sidewalks/pedestrian transportation network
- Uplifted panels, gaps between panels, bumps, and edge drop-offs
- Locations without curb ramps
- Locations where the sidewalks do not continue across residential driveways
- Signs and other posts that limit the PAR
- Drainage issues
- Short- or long-term work zones that block sidewalk access
- Snow and ice removal

It may be helpful to create a form or checklist to ensure consistent and accurate inspections. PennDOT has curb ramp/sidewalk inspection form (CS-4401) that you can download from PennDOT's ADA webpage: <https://www.penndot.pa.gov/ProjectAndPrograms/RoadDesignEnvironment/RoadDesign/Pages/ADA-and-Pedestrian-Accommodations.aspx>. The form is an Excel spreadsheet and can be modified for your needs. You can also develop your own form, as shown in Figure 2 from the Borough of Paxtang.



Figure 1: This sidewalk inspection marks the repair location with white marks.

SIDEWALK INSPECTION BOROUGH OF PAXTANG

DATE: _____

LOCATION/ADDRESS OF DEFECT: _____

PROPERTY OWNER NAME: _____

PROPERTY OWNER ADDRESS: _____

INSPECTOR: _____ DATE PASSED INSPECTION: _____

STREET NAME

STREET NAME

HOUSE ADDRESS NUMBER

STREET NAME

TYPE OF DEFECT	# OF SQUARES

<p>TYPE A</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> IS DISPLACED 1/2 INCH OR MORE VERTICALLY AT ANY POINT IN THE PANEL 	<p>TYPE B1</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> IS RAISED MORE THAN 4 INCHES FROM THE NORMAL LINE OF GRADE 	<p>TYPE B2 ANY OF THE FOLLOWING:</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> IS DEPRESSED MORE THAN 1/4 INCHES FROM THE NORMAL LINE OF GRADE PONDS WATER COLLECTS DEBRIS
<p>TYPE C1 ANY OF THE FOLLOWING:</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> IS CRACKED INTO 4 OR MORE PIECES IS MISSING A PIECE EQUAL TO OR EXCEEDING 18 SQUARE INCHES IS MISSING A FULL DEPTH PIECE OF ANY SIZE 	<p>TYPE C2</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> IS MISSING 3 PIECES OR LESS, WITH EACH PIECE BEING LESS THAN 18 SQUARE INCHES, BUT GREATER THAN 4 SQUARE INCHES 	<p>TYPE D1 ANY OF THE FOLLOWING:</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> IS SPALLED 7/8" OR MORE OVER SURFACE HAS A SPALLED AREA DEEPER THAN 1/2 INCH HAS LOOSE OR DETRIMENTAL DAMAGE OVER THE MAJORITY OF THE SURFACE DOES NOT DRAIN PROPERLY
<p>TYPE D2 EITHER OF THE FOLLOWING:</p> <p>MINOR SURFACE DAMAGE:</p> <ul style="list-style-type: none"> SIDEWALK IS SPALLED BETWEEN JOINTS-THE OVER SURFACE MAJORITY OF THE PANEL SEEMED STRUCTURALLY SOUND WITHOUT DRAINAGE ISSUES 	<p>TYPE E1 ANY OF THE FOLLOWING:</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> HAS SEPARATION EQUAL TO OR EXCEEDING 1/2 INCH AT ANY POINT IN THE PANEL HAS MORE THAN ONE SEPARATION HAS ELEVATION OR DRAINAGE ISSUES HAS SHIFTS MORE THAN 2 INCHES <p>⊙ GREATER THAN 1/2 INCH ⊙ GREATER THAN 2 INCHES</p>	<p>TYPE E2</p> <p>SIDEWALK</p> <ul style="list-style-type: none"> HAS ONE SEPARATION GREATER THAN 1/4 INCH AND LESS THAN 1/2 INCH AT ANY POINT IN THE PANEL IS LEVEL HAS NO OTHER APPARENT HAZARDS <p>→ 1/4" < 1/2"</p>

WIDTH OF SIDEWALK: 4 FT 6 FT 8 FT APPROX. SQUARE FEET TO BE REPAIRED: _____



Figure 4: This photo shows vegetation limiting the width of the sidewalk, and a sidewalk panel that is not smooth and in need of repair or replacement.



Figure 5: Edge drop-offs can be tripping hazards.



Figure 3: Per ADA and PennDOT standards, sidewalks shall be smooth, stable, and slip resistant. This shows a repaired section of sidewalk.



Figure 6: No curb ramps are present here.



Figure 8: An example of a sidewalk gap in the pedestrian network is shown here. This could lead pedestrians into conflicts with traffic.



Figure 7: Sidewalks should continue across residential driveways.



Figure 9: Ponding and other drainage issues can limit the functionality of a sidewalk and/or ramp. Also note the utility pole restricting the width of the sidewalk and PAR.



Figure 10: Old signposts and other objects can be tripping hazards and not compliant with the ADA. ADA identifies any protruding object over ¼ inch as a hazard.



Figure 11: A work area that blocks a sidewalk, and forces pedestrians into conflict with traffic.



Figure 12: Water, snow, and ice can create barriers to access a sidewalk and/or ramp.