

AN **IMS** WHITEPAPER

Does Your City Have a Sidewalk Problem?



From ADA compliance to injuries and the resulting liability lawsuits, sidewalks are a major liability for municipalities. Unfortunately, many cities don't even know how bad the problem is because they don't have any data. Knowing how much you own and where these deficiencies are is key.

This white paper explains sidewalk infrastructure problems and solutions and emphasizes the importance of gathering data. It also explains how IMS provides that critical data by completing sidewalk surveys.

How are your sidewalks?

Most cities and towns that we visit have a sidewalk problem just waiting to happen. Whether it's a lack of accessible curb ramps in violation of the Americans With Disabilities Act (ADA), severe degradation of sidewalk surfaces, or displacement of sidewalk blocks caused by overgrown tree roots, ignoring the problems with your sidewalks may be putting your jurisdiction at risk for a lawsuit.

Not us, you say. Our sidewalks are the responsibility of the adjacent landowners, not the locality. But how's that working out for you? Are your sidewalks crumbling in disrepair? Is it easier to find a leprechaun with a pot of gold than an ADA-accessible ramp? At some point, you're probably going to have to take back the sidewalks or risk having the Department of Justice (DOJ) accuse you of allowing a broad pattern of discrimination against the disabled.

We've been across the whole country surveying sidewalks, so we can say with confidence that most cities are struggling with a compliance and repair backlog that remains largely unfunded at the local level.

What exactly are the problems, and what can you do to start addressing them?

Common Problems With Sidewalks

Sidewalks experience several common problems that fall into two general categories. First, sidewalks may be so damaged that they create a risk of injury to pedestrians. Alternatively, they may lack the basic accessibility requirements of the ADA. Some problems, as it turns out, fit in both categories: sidewalks can be so damaged that they create a risk of injury *and* are inaccessible for individuals in wheelchairs.

Vertical displacements

A vertical displacement occurs when two adjacent sections of sidewalk shift so that they are no longer level with one another. These displacements often occur due to tree roots growing beneath the sidewalk or seasonal variations in temperature, such as severe freezing and thawing cycles. Displacements can range from the minor—perhaps half an inch or less—to the major—a difference of more than two inches. Extreme displacements are also known as heaving or buckling.



Excessive slope

The ADA requires that sidewalks not slope sideways too severely, either along the entire travel route or at curb cuts such as driveways. It's easy enough to see why: piloting a wheelchair over a bumpy sidewalk can be difficult enough without simultaneously fighting a slope that threatens to propel wheelchair users into the street.



Surface damage such as cracks and spalling

When freeze-thaw cycles happen repeatedly—especially when they're accompanied by deicing applications on heavily traveled sidewalks—water can infiltrate the surface of the sidewalk. This causes the top layer of concrete to break apart, exposing the rough aggregate underneath. This damage is known as spalling or scaling. In severe forms, it can cause holes in the sidewalk surface. Less severe damage such as cracks can also occur; this damage tends to get significantly worse over time as vegetation grows in cracks and expands them.



Gaps in sidewalk coverage

Many jurisdictions have missing sections of sidewalk. Sometimes, sidewalks end abruptly mid-block, where the original sidewalk construction was incomplete. In other places, sidewalks may have become so damaged that they're impassable, particularly to wheelchair users.



Missing curb ramps or curb cuts

Under the ADA, wheelchair users should have unimpeded access to sidewalks, meaning that they could freely use any sidewalk that a nondisabled pedestrian could. This rarely happens in reality. If a wheelchair user on a sidewalk needs to cross a street, but the intersection lacks access ramps, that user must either detour to find another way off the sidewalk—potentially having to travel in the street—or try to navigate the curb and risk a serious fall. Many city sidewalks lack safe curb cuts, especially in noncommercial districts, rendering those sidewalks inaccessible to wheelchair users. And while wheelchair users suffer the most, parents with strollers or pedestrians using utility carts also feel the absence of curb cuts.



Partial or complete obstructions

Similarly, while nondisabled pedestrians may be annoyed by sidewalk obstructions, even partial obstructions can completely block access for wheelchair users. Obstructions may be temporary, such as overgrown vegetation or even improperly parked vehicles, or relatively permanent. We've encountered every type of obstruction you can imagine: guy wires from utility poles, fire hydrants, signal masts for traffic lights, and even mailboxes installed directly in the path of travel.



In most cities, you can walk around a single block and encounter every one of these problems. If they're so widespread, then, why do they matter?

Why Sidewalk Problems Are Your Problem

In a word: lawsuits. Pedestrians don't hesitate to file lawsuits against cities alleging that they were injured by poorly maintained sidewalks. These injuries run the gamut from ankle sprains to broken bones to head injury and even death. In one locality, 20 to 40 cases were pending at any given time; in the last year, one of those settled for \$105,000, while another—which sought \$3.5 million in damages—settled for \$450,000.

You can repair a lot of sidewalks with \$555,000.

And personal injury claims aren't the end of it: localities also face lawsuits alleging a lack of accessibility in violation of the ADA. In 2015, Los Angeles settled an ADA class action lawsuit for \$1.4 billion after wheelchair users argued that the city's crumbling sidewalks prevented them from traveling freely around the city. As the magnitude of the sidewalk problem across the U.S. has grown, the DOJ has started getting involved with ADA enforcement in cities that have shirked their sidewalk-maintenance duties. Even if insurance covers some or all of the eventual award, localities have to pay their lawyers and waste time and effort defending against these claims.

**You can repair a lot of
sidewalks with
\$555,000.**

The bottom line is that you're going to pay for your damaged sidewalks one way or another. You can start to solve the problem by paying to repair them, or you can keep paying people who complain about them without ever fixing the underlying issues.

Instead of working in triage mode, solely reacting to complaints, many cities are adopting a proactive strategy for tackling their sidewalk repair backlog. The specific approach depends on the extent and nature of the locality's sidewalk problem. With a "worst first" strategy, a city would determine which of its sidewalks create the greatest risks. This scale may incorporate overall sidewalk condition, specific hazards, and accessibility. The worst sidewalks can then be remediated first. Alternatively, a locality might decide to start by addressing its most-traveled sidewalks, perhaps those in a commercial district, while deprioritizing sidewalks in less-populous neighborhoods.

Whatever approach you choose, having a plan—even if it's a long-term plan that will take 10, 20, or 40 years to complete—provides at least two benefits. First, it ensures that you both start and continue to make positive progress toward solving your sidewalk problems. Second, and no less importantly, it proves to the courts or the DOJ that your locality is making a good-faith effort to provide safe, accessible sidewalks.

But you can't strategize about how to solve a problem that you don't understand.

Sidewalk Inventory Control

The only way to understand and control your sidewalk inventory is to collect and maintain data about its condition. Many localities instead take the "ostrich" approach of putting their heads in the sand or waiting for complaints and reacting to them. And we understand: sidewalks are generally an unfunded mandate, so it's difficult to drum up interest or—more importantly—the money to invest in them.

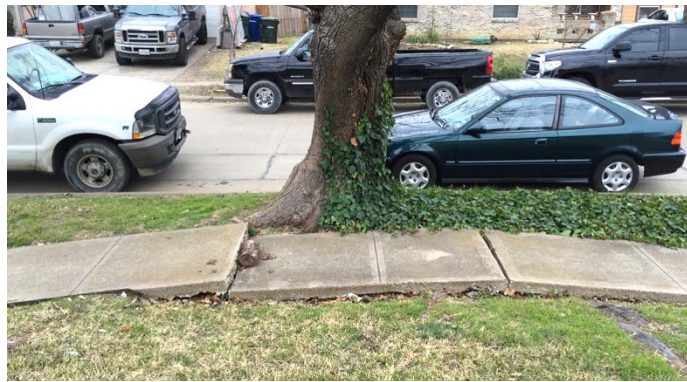
But just like your home or your car, regular maintenance on a predictable schedule is the best way to preserve your sidewalks' condition and make the most of your budget. Ignoring small problems and waiting until complete replacement is the only option—or playing the odds that you won't lose an exorbitant award in an injury or ADA lawsuit—is not good stewardship of your locality's budget or your citizens' tax dollars.

How can you comprehensively assess the condition of your sidewalks? We're glad you asked.

IMS Sidewalk Data Collection

IMS completes extensive sidewalk surveys using a variety of different technologies so that localities can gather data about the condition of their sidewalk inventory.

From sampling surveys using overhead mapping data to a comprehensive rolling video, we have a range of sidewalk survey options to meet any locality's needs. With our quad ATV sidewalk surface tester (SST), we can conduct a comprehensive mobile mapping operation. During that survey, the SST operator inputs and grades specific distresses, such as cracks, slopes, vertical displacements, and obstructions. This information, combined with GPS location data and simultaneous HD video capture, creates a "living map" of the locality's sidewalk inventory.



From our survey data, we compile a report that categorizes and details sidewalk deficiencies across the entire network, along with the cost to repair them. We give each sidewalk section a condition score between zero (indicating that there's no functional sidewalk) and 100 (for a brand-new, perfectly poured sidewalk). We then work with our clients to create a strategy or game plan for how they can prioritize deficiencies and get started solving their sidewalk problem.

If you've got sidewalks, chances are that you've got problems just waiting to happen. From injury lawsuits to ADA class actions, your risk of costly litigation grows every day. What you need is current, complete, reliable data about the nature and extent of your sidewalk problem so you can make a plan to proactively fix it. Ignoring the problem won't make it go away; your sidewalk inventory will continue deteriorating with weather and wear, whether you're keeping pace with repairs or not.

Don't bury your head in the sand or think you can just pay out individual complaints; that's akin to putting your fingers in the dike hoping that you can hold back a flood. IMS can help you get started today.