

Accessible Manhattan: Making sidewalks safe & navigable for all



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Introduction

New Yorkers' close relationship with their sidewalks is long and storied, going back to 1811 when the city's street commissioners certified the grid that mapped out the 11 major avenues and 155 crosstown streets along which our borough would grow. Manhattan's street grid spurred unprecedented economic development and personal mobility: pedestrians were able to figure out where they stood, physically and metaphorically, to get where they wanted to go.

Given the historical link between Manhattan sidewalks and personal success, it is important that our pedestrian pathways be accessible and convenient to all residents. Unfortunately, this is not the case in 2015 Manhattan.

Crumbling concrete and potholes can make navigating Manhattan streets problematic even for abled-bodied New Yorkers—just ask anyone who has pushed a stroller or pulled a food cart for more than a couple blocks. But for the roughly 600,000 New Yorkers who rely on wheelchairs or walkers or have vision impairments, the dilapidated conditions of Manhattan's curb cuts—sidewalk cutouts that, when in proper form, allow for a smooth descent into the street—are a serious concern.

The Manhattan Borough President's Office (MBPO) has received complaints about the condition of curb cuts from nearly every neighborhood in the borough. Accessibility concerns have also been raised by the disability advocates with whom we closely work.

To gain a better understanding of the problem, we spent a year canvassing Manhattan's curb cuts—also called “curb ramps” or “pedestrian ramps.” Of the 1,209 curb cuts our volunteers measured, only 115 (9.5%) were fully compliant with Americans with Disabilities Act (ADA) accessibility standards. This report presents and analyzes our data and makes recommendations for correcting existing problems and ensuring that all future New York City curb cuts are fully ADA-compliant.

Removing barriers for New Yorkers with disabilities

New Yorkers who do not have a disability often take equal-access accommodations for granted. But for residents protected by the ADA, challenges lurk at every turn—from inaccessible subway stations to limited career opportunities and a dearth of high school programs that focus on career and college readiness for students with disabilities.

According to 2005-2007 statistics from American Community Survey Public Use Microdata, persons with disabilities over age 5 comprise 13.6% of Manhattan's population (196,600 out of 1,253,980 individuals). Roughly 34% of this population lives below the poverty line, and 61% of those with disabilities ages 21 to 64 are not in the labor force.¹

DEDICATION

In honor of the 25th anniversary of the signing of the Americans with Disabilities Act, this report is dedicated to the tireless activists and organizers who helped bring this historic piece of legislation to enactment.

The signing of the ADA in 1990 began a new chapter in the lives of millions of persons with disabilities across the United States, offering fair treatment and new opportunities that would remove barriers to employment and lift more of them out of poverty. The ADA prohibits disability-based discrimination in language similar to how the 1964 Civil Rights Act made discrimination based on race, religion, sex, national origin, and other characteristics illegal. The ADA also requires employers to provide reasonable accommodations to employees with disabilities and imposes accessibility requirements on public accommodations.

On July 26, 2015, we celebrated the 25th anniversary of this landmark legislation, which was the culmination of decades' worth of hard and persistent work by the disability rights movement. Since then, these advocates have only doubled down in their heroic fight to ensure that those living with a disability have access to everything our society has to offer and are not excluded from it.

New York City has done much to make our streets safer for those living with disabilities. With Vision Zero, the de Blasio administration has taken concrete steps toward advancing the rights of the disability community. Crossing distances on many avenues are now shorter, for example, and the city has lowered the speed limit and is aggressively pursuing action against dangerous drivers.

The administration has also backed legislation introduced in 2014 by the Borough President and Council Member Mark Levine to increase the number of audible pedestrian signals, which help blind and low-vision New Yorkers cross the street. And the city has committed to ensuring that at least half of the city's taxi fleet is accessible by 2020.

The city has also made some efforts toward improving our city's curb cuts. In 2004, New York City settled a lawsuit brought by the Eastern Paralyzed Veterans Association (now the United Spinal Association), which claimed that the city stood in violation of the ADA because of the non-compliance of curb cuts. Since that suit, the city has installed roughly 97,664 curb cuts.

This is great progress, but the data we collected provide evidence of what we have known anecdotally for a long time: many of Manhattan's curb cuts stand in clear violation of the ADA. Because of the disrepair of Manhattan's curb cuts, the city is facing a second lawsuit by disability rights advocates to encourage compliance.

The outreach and advocacy of the disability rights movement remind us that despite the ADA's passage 25 years ago, discrimination persists against those living with a disability—whether in the workplace or through noncompliant public accommodations like curb cuts—and New Yorkers must continue to fight against all forms of it. That's a major reason that the MBPO undertook our curb cut canvass project.

Our survey strategy

When we embarked on our canvassing project in September 2014, it seemed fitting to focus on Broadway as our borough's main thoroughfare. We recruited and trained over 40 staff, interns, and volunteers to take curb cut measurements along the route's entire stretch—from the island's southern tip at Bowling Green to its northern tip in Inwood—to determine ADA compliance.

The ADA requires state and local governments to meet the following curb-cut specifications² to ensure accessibility for people with disabilities:³

- Curb cuts must be built wherever a sidewalk or pedestrian walkway intersects with a curb.
- The slope of the curb cut must be 8.33% (1:12) or less.
- The width of the curb cut cannot be less than 36 inches.
- The curb cut must have “detectable warnings” or truncated domes that extend the whole width and depth of the ramp.
- The transition from the ramp to the walkway must be flush or free from abrupt level changes.

Volunteers measured the curb cut’s slope and width and noted its overall condition—such as whether the curb’s concrete was crumbling, led to a pothole, or was missing entirely. Volunteers recorded whether certain dangers for blind and low-vision pedestrians were present, including lack of detectable warnings and the presence of “center cuts,” which lead into the middle of an intersection.

From our assessment of 178 intersections along Broadway, our canvassers recorded data on 1,357 locations where curb cuts are mandated. We were able to measure 1,209 existing cuts; the remaining locations were immeasurable because the cuts were missing entirely or were obstructed by construction materials and various other barriers.

Violations discovered

A curb cut that met all of the above-cited ADA Accessibility Guidelines can be seen at the 115th Street and Broadway intersection. Curb cuts like this one, however, were in the minority along Broadway. Out of the 1,209 measurable curb cuts canvassed, only 115 were fully compliant. Below are the major problems our canvass identified.

1. Curb Cut Missing

Out of 1,357 curb cuts canvassed, 142 (10.5%) were missing entirely. The curb cut at 119th Street and Broadway is an example of a curb lacking a proper cut. Obviously, lack of a curb cut presents a mobility challenge for New Yorkers using wheelchairs. Encountering a curb cut like this, wheelchair operators must either attempt to unsafely maneuver off of the curb or find another route, which can often involve traveling well out of their way.

2. Curb Cut Blocked

According to the ADA, “Street furniture, including fixed or movable elements such as newspaper and sales racks, café seating and tables, bus shelters, vender carts, sidewalk sculptures, and bicycle racks, shall not reduce the required width of the pedestrian access route.” However, of the 1,357

OF 1,209 CURB CUTS SURVEYED...

- 10.5%** ...were missing entirely
- 6%** ...led directly to a pothole
- 18%** ...were blocked by street furniture
- 88.7%** ...had no “bumps” to warn users of ramp
- 28%** ...were too steep
- 59.6%** ...were uneven where cut meets street
- 24%** ...were crumbling concrete
- 8%** ...had the entire corner ramping down

curb cuts canvassed, 74 led to a pothole, and an additional 218 had physical barriers such as a garbage can, newsstand, or scaffolding at a construction site that prevented safe passage. At several of these curb cuts, the barriers even prevented canvassers from taking adequate measurements.

While these barriers are often not permanent, they are an everyday nuisance that makes safely using a curb cut to cross the street difficult, if not impossible, for New Yorkers who use wheelchairs or are blind or have low vision.

3. No Detectable Warnings

Imagine driving up to an “all-way stop” intersection in which one or more stop signs is missing. That’s essentially what blind and low-vision New Yorkers face every day as they travel on Manhattan’s sidewalks.

Since 2001, the ADA has required that each curb cut have detectable warnings in the form of what are called “truncated domes” to help blind and low-vision pedestrians know that a curb cut exists.⁴ These bumps look like bumps on the ramp of a curb cut—and are similar to the bumps at the edge of most subway platforms—and function as a stop sign, alerting people who are blind or have low vision to the curb cut’s presence.

Lack of proper truncated domes is dangerous—just as dangerous as if a stop sign was missing from an intersection, and this condition was by far the most common problem recorded by our canvassers. Of the 1,209 measureable curb cuts canvassed, only 154 (11.3%) had proper detectable warnings—over 88% were missing these bumps. In fact, if we remove the presence of detectable warnings from consideration, 43.3% of the curb cuts measured would be fully compliant.

Some curb cuts included outdated detectable warnings in the form of lines or grooves in the concrete. These grooves have been found to provide insufficient warning for people who are blind or have low vision.

The ADA also requires that the domes contrast in color with the surrounding street and sidewalk and extend the full width and depth of the curb cut. (Recently, however, the city DOT deemed a curb cut compliant as long as the two feet closest to the street are covered.) While we did not collect data on these specifications, many of our canvassers reported that the locations where truncated domes did exist often failed to provide proper contrast or extend the full width and depth of the curb cut.

4. Curb Cut Too Steep

Many New Yorkers who use wheelchairs liken navigating the city’s streets to being on a roller-coaster given the steepness of Manhattan’s curb cuts. Very often, residents have called or written to the MBPO with complaints of curb cuts that are far too steep for safe travel, creating dangerous

“Non-ADA-compliant curb cuts present enormous challenges to pedestrians like me who are blind or visually impaired. The bumps of the warning surfaces, part of an ADA-compliant curb cut, give me vital information about a street crossing. When the curb cut is flat, I have no clue about where the street begins, which is dangerous. If the bumps are in disrepair or improperly installed, travel is much more difficult. Noncompliant curb cuts result in longer times spent at intersections determining whether it’s safe to cross or mistaking environmental cues that can result in increased safety risks and a greater possibility of a life-threatening accident.”

*—Audrey Schading,
Academic Communication Instructor
Lighthouse Guild*

conditions when wheelchair users descend into the street.

The ADA allows for the slope of curb cuts to rise 1 inch for every 12 inches of curb (a ratio of 1:12) because anything greater poses difficulties for wheelchair users. Of the 1,209 measurable curb cuts canvassed, 321 (28%) were not compliant, meaning that their slope was greater than the 1:12 ratio.

5. Curb Cut Not Flush to the Street

According to the ADA, “transitions from ramps to gutter and streets should be flush and free of level changes.” However, many of the curb cuts we canvassed failed to meet this requirement. Of the 1,209 measurable curb cuts canvassed, 389 had an uneven “lip” or bump at the end of the bottom of the cut. Of these, 232 (59.6%) had a lip or bump that measured greater than 0.5 inches. Although wheelchair users may be able to navigate over a bump or lip of a smaller scale, a bump of this magnitude can present great difficulty. It can also present a tripping hazard for people with low or no vision.

6. Crumbling Concrete

Although the ADA specifies that the “usability of accessible features” of the city’s streets and curb cuts “be maintained,” out of 1,209 measurable curb cuts canvassed, 291 (24%) had concrete that was not adequately maintained. Most often, this meant the concrete was cracked or crumbling, which can create an unsafe tripping hazard for anyone trying to safely cross the street let alone those who use wheelchairs or have low or no vision.

7. Combined Ramp for Two Directions at One Corner

People who are blind or have low vision rely on curb cuts to point them in the correct direction in order to safely cross the street. Although not specifically required by the ADA, two distinct curb cuts should be mandatory for each corner—each leading pedestrians directly to the opposite side of the street. However, in place of two distinct curb cuts, oftentimes a single curb cut fanning out over the entire corner has been installed. These “center cuts” can position people who are blind or have low vision to walk directly into the middle of an intersection rather than safely to the other side of the block. Of the 1,209 measurable curb cuts canvassed, in fact, 8% were center cuts.

Recommendations & next steps

New York already has a system for ensuring the proper maintenance of curb cuts. According to Section 19-152 of New York’s Administrative Code, property owners are responsible for installing, repairing, and maintaining sidewalks adjoining their properties. Though this responsibility lies with building owners, the DOT is responsible for inspecting sidewalks and then notifying property owners when and if repairs are needed. If property owners don’t make repairs within 45 days of receiving notice, the city is allowed to hire private construction firms to do the repairs and bill the property owners for the cost.

One need only take a quick walk around Manhattan’s streets, however, to learn that this system is not working. Many property owners neglect the sidewalks and curb cuts for which they are responsible, and the city is not able to conduct enough inspections to enforce compliance. Additionally, as our data demonstrate, even when property owners do take it upon themselves to hire a contractor to fix sidewalks and curb cuts, the repairs are sometimes inconsistent with ADA specifications.

The 25th anniversary of the ADA is the perfect opportunity to refocus and recommit ourselves to the spirit of this law by identifying and correcting our city's remaining areas of discrimination against those living with disabilities. Repairing our city's curb cuts and sidewalks is a great place to start.

- NYC must properly educate property owners on their responsibilities to maintain sidewalks and curb cuts.
- NYC must ensure that DOT is adequately resourced to conduct curb cut inspections.
- NYC must ensure that DOT is adequately resourced to ensure ADA compliance.
- DOT must ensure that curb cut inspections occur regularly.
- DOT must repair noncompliant curb cuts in a timely manner.
- DOT should update its sidewalk repair guidelines to ensure two distinct curb cuts are created at each intersection corner and all center cuts are replaced.

Much more work will need to be done to continue identifying ways to best ensure the accessibility of our city's streets and sidewalks. This report should serve as the beginning of that conversation. To facilitate ongoing dialogue, the MBPO is excited to announce the reconvening of the Disability Task Force, which will be made up of members and advocates from the disability rights community. A primary agenda item for our Task Force will be facilitating discourse between the disability rights community, the DOT, and property owners regarding the findings and recommendations in this report, with the goal of finding the best methods for ensuring proper maintenance of our city's sidewalks and streets.

As we celebrate how far we've come in the first 25 years of the ADA, we must remain focused on what we still need to accomplish in the next 25. Back in 1990, we knew that deep-seated assumptions and biases against persons with disabilities were not going to disappear overnight with the signing of the ADA. But this legislation is the foundation for change. Removing all barriers to navigating New York City sidewalks is an essential part of this foundation.

ENDNOTES

1. See http://disabilityplanningdata.com/site/county_population_table.php?cntyname=New+York&state=newyork&submit=submit.
2. See <http://www.ada.gov/pcatoolkit/chap6toolkit.htm#fn3>.
3. See <http://www.ada.gov/pcatoolkit/chap6toolkit.htm>.
4. See <http://www.ada.gov/pcatoolkit/chap6toolkit.htm#fn3>.



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