

Is ADA Effective?

An Assessment Based on Everyday Travel Experiences and Transportation Infrastructure Challenges

Molly Wagner, MURP; Manish Shirgaokar, PhD, AICP; Wesley Marshall, PhD, PE



BACKGROUND

In the United States...

1 in 8 have a disability 1 in 3 over the age of 65 have a disability



1 in 24 working in design and transportation occupations have a disability



There is an assumption that with the passing of the Americans with Disabilities Act in 1990, that the transportation needs of people with disabilities are routinely considered. While much progress has been made there are still significant barriers that are prohibitive and dangerous.



Image Credit: New York City Department of Transportation

Image Credit: Denver Streets Partnership

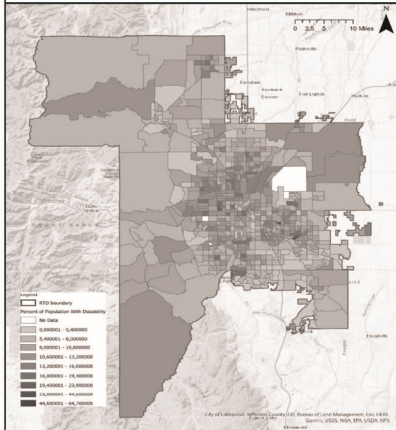
RESEARCH QUESTIONS

1. Given disability type, how do attributes of the transportation infrastructure impact the daily mobility of people with disabilities?
2. How does the programming and management of transportation assets impact navigation for people with disabilities?

STUDY CONTEXT

Using the Denver region as a case study, our intent is to shed light on the reality of transportation challenges faced by people with disabilities, by planners whose work operationalizes ADA, and the importance of involving individuals with disabilities in planning and design processes.

Percent of People with Disabilities within the Denver Region



Map Author: Dervis Cemal Akcacek

RESEARCH APPROACH

Semi-Structured Interviews Conducted in Two Stages:

Stage 1: Interviews with People with Disabilities

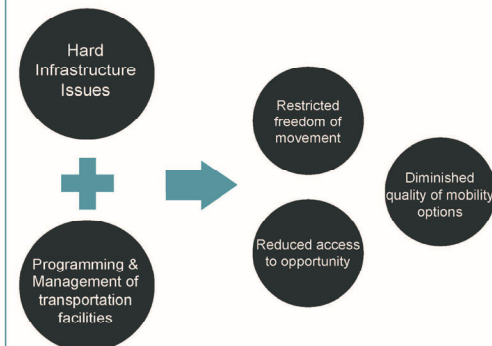
Gender	Interviewees (n=28)	Percentage
Male	15	54%
Female	13	46%
Non-binary	0	0%
Disability*		
Ambulatory	16	
Hearing	3	
Cognitive	2	
Visual	9	
Self-Care	3	
Independent Living	2	
Multiple	7	
Use of Mobility Aid		
Yes	19	62%
No	9	32%
Drives Independently		
Yes	13	46%
No	15	54%

*Percentage not presented since interviewees identified as having one or more disability

Stage 2: Interviews with Planners/Engineers

Agency Type	Interviewees (n=9)	Percentage
Public	2	22%
Private	5	56%
Public Transit Agency		
Public Transit Agency	1	11%
Non-profit	1	11%
Position		
Engineer	1	11%
Project Manager	2	22%
Planner	4	44%
Executive Leadership	1	11%
Other	1	11%

FINDINGS



INTERVIEWS REVEALED FAILURES WITH...

Hard Infrastructure Issues



Sidewalks
Sidewalks with limited connectivity or in poor condition can be dangerous or limiting, regardless of disability.



Intersection Design
The lack of safe crossings can require long travel distances to reach a safe crossing. The distance required to travel can be time intensive, physically demanding, or preventative altogether.



Paratransit
Frustrations with scheduling in advance, extended time off work, missed appointments, and humiliating approval processes make Paratransit a last-ditch option for participants across all disabilities.



Public Transit Facility Design
Participants found the design of public transit facilities and connections to facilities inconsistent, often leading to frustration, especially for blind participants. The placement of transit stops and the surrounding conditions of sidewalks and crosswalks influenced participants' decision to take transit or how far out of their way they would travel on transit to find a safe route.

Programming and Management



Maintenance
Multiple challenges were identified with the building and maintenance of projects, including funding, staffing shortages, and challenges in developing equitable approaches to sidewalk maintenance programs.



Transit Communications & Services
People with disabilities have lost trust in transit based on feelings of poor communication about route changes and limited access to visual and auditory information.



Street Furniture, Emerging Tech, & Temporary Route Closures
Street furniture, emerging technology (e.g., e-scooters and e-bikes), and temporary route closures put additional demand on sidewalk space, causing concerns for the safety and navigability of sidewalks.



Involving people with disabilities in planning, design, and decision making
Minimal engagement with people with disabilities on transportation projects leads to frustration and feeling undervalued in planning processes.



“In America...we love building but do not maintain (existing infrastructure).”
– professional interview participant



“Getting dropped off at a (bus) stop, it's like, I'm never quite sure of sidewalks. I have fallen going to and from the bus. I know that sidewalks can be dangerous because they're not eye level. You know there's not always a ramp to go up and down.”
– #5-I, Woman with multiple disabilities



“Any time announcements happen, hearing people can hear drivers speaking over the intercom, but deaf people don't have access to that.”
– #15-I, Deaf woman

DISCUSSION & IMPLICATIONS

For over 30 years, the ADA has intended to protect people with disabilities from discrimination and ensure that they have the same access to opportunities as anyone else. However, the infrastructure and current planning processes fail disabled members in our communities. Our work suggests:

- The daily mobility challenges that people with disabilities face and the underrepresentation of people with disabilities in the transportation field risk reinforcing acts of ableism and othering in transportation planning.
- Planners and engineers generally do not have the lived experience to visualize how design standards, features, and programmatic considerations can leave out people with disabilities.
- There are ways to learn from stakeholders who identify as being disabled, and to rely on their expertise to improve policy and design of transportation infrastructure.
- The findings from this study foreground how current policies, funding limitations, perspectives, and practices for ADA within public planning agencies can result in limited access for people with disabilities.