What can Organizations and Practitioners do to Improve ADA Implementation for Infrastructure Design and Supply?

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Motivation

ADA was passed in 1990 to prevent discrimination of people with disabilities, including removing physical barriers within the public right-of-way under (Title II of ADA)

Research reveals that people with disabilities face barriers to daily life and opportunity because of insufficient transportation options and the condition of infrastructure

Reports by scholars, FHWA, and U.S. DOJ document agencies are still falling short of ADA compliance minimums within the public-right-of-way

Photo Credit: Dr. Scott Crawford, Smart Growth America

Research Question

What can organizations and practitioners do to improve ADA implementation for infrastructure design and supply?

Definitions

ADA: Americans with Disabilities Act

PROWAG*: Public Right-of-Way Accessibility Guidelines

ADAAG: Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities
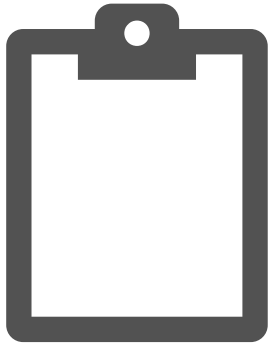
MUTCD: Manual on Uniform Traffic Control Devices for Streets and Highways

FHWA: Federal Highway Administration

U.S. DOJ: United States Department of Justice

*At the time of this study (January – July 2023), PROWAG was still in draft form. The U.S. Access Board announced Final Rule in August 2023. All references to PROWAG are in its draft form.
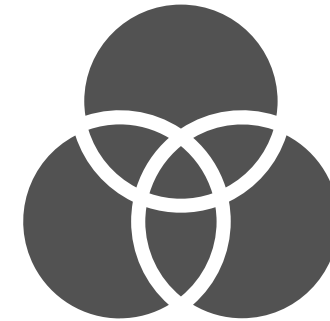
Methods & Analysis

Stage 1: Online Survey

‣ 206 Transportation practitioners responded across the U.S.

‣ 24 questions

‣ Hosted on Qualtrics

Stage 2: Semi-Structured Interviews

‣ 36 practitioners participated in 30-minute interviews
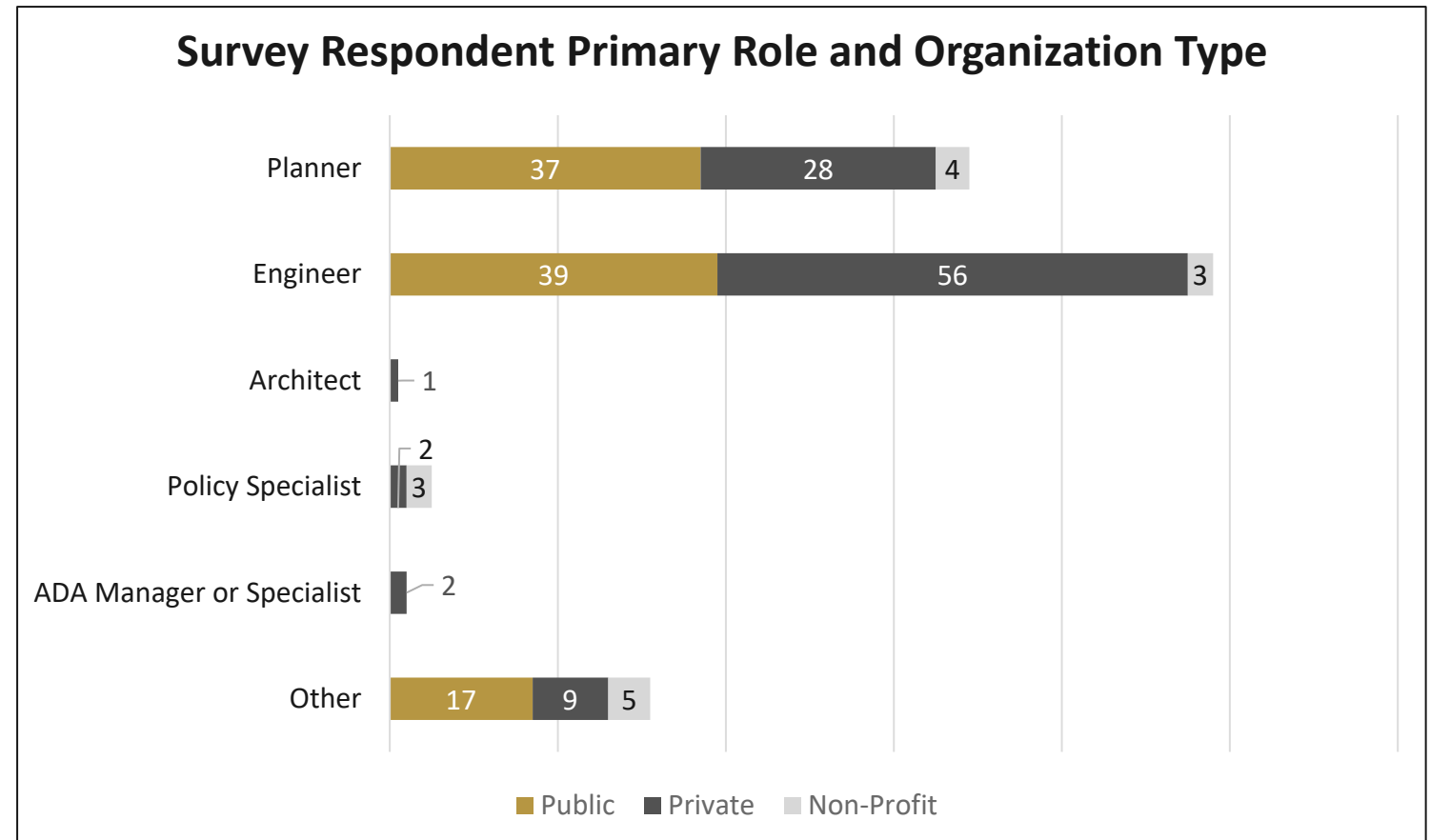
‣ 7 questions

‣ Hosted on Zoom

Analytical Approach

‣ Thematic content analysis

‣ Statistical analysis
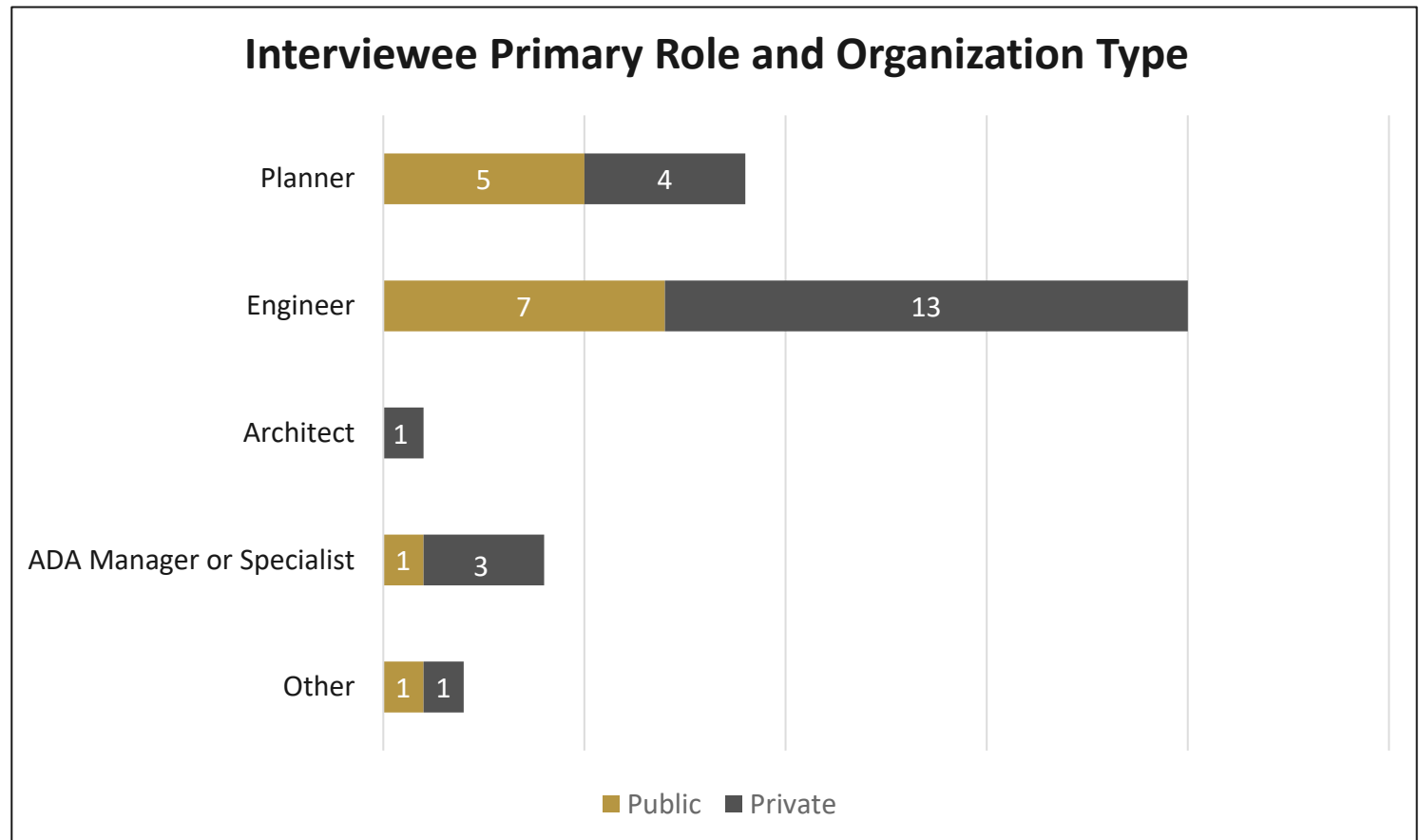
Sample

Survey Respondents (n = 206) Characteristics

▸ **48%** work in the private sector

▸ **45%** work in the public sector

▸ **33%** are planners

▸ **47%** are engineers

▸ **9%** shared they had a disability

▸ Respondents work in **38** states

   ▸ Colorado (**11%**)

   ▸ California (**8%**)

   ▸ Arkansas (**6%**)

Survey Respondent Primary Role and Organization Type

Role	Public	Private	Non-Profit
Planner	37	28	4
Engineer	39	56	3
Architect	1		
Policy Specialist		2	3
ADA Manager or Specialist	2		
Other	17	9	5

■ Public ■ Private ■ Non-Profit

Sample

Interview Participant (n = 36) Characteristics

- **61%** work in the private sector

- **39%** work in the public sector

- **25%** are planners

- **56%** are engineers

- **19%** shared they had a disability

- **9%** shared they are a caretaker of a household member with a disability

Interviewee Primary Role and Organization Type

Role	Public	Private
Planner	5	4
Engineer	7	13
Architect		1
ADA Manager or Specialist	1	3
Other	1	1

Legend: ■ Public ■ Private

Findings

There is no "one-size fits all" solution nor is more funding alone going to reduce the backlog of projects and improve accessibility within communities.

There are multiple challenges that exist.

Findings: Thematic Analysis

Insights from Open-Ended Responses and Interviews

Three Main Challenge Themes:

▸ <u>Theme 1:</u> Political Priorities and Organizational Coordination Limit ADA in Practice

▸ <u>Theme 2:</u> Limited Guidance, Resources, and Capacity

▸ <u>Theme 3:</u> Challenges with Retrofits, New Construction, and Maintenance

Findings: Thematic Analysis

Theme 1: Political Priorities and Organizational Coordination Limit ADA in Practice

Key Challenges:

▸ Guiding accessibility policies and plans do not exist

▸ Project decision-making is influenced by funding or political motives rather than a needs assessment or practitioner expertise

▸ Project prioritization is siloed between departments or organizations

"Ramps and sidewalks are impacted by more than our transportation department. For example, utility companies are not as willing to work with us. Sometimes we will go back to intersections they worked on, and they do not put a ramp back. We have this disconnect of knowing what has been done with other groups and agencies outside of transportation. It is a very murky world."

– Interview ID 11, Engineer and ADA Coordinator, Local Government

Findings: Thematic Analysis

Theme 2: Limited Guidance, Resources, and Capacity

Key Challenges:

▸ Conflicts or misinterpretation between ADAAG, PROWAG (draft), MUTCD, and federal/state/local guidelines

▸ Not enough easy-to-access resources or educational training for people working in different transportation practice areas

▸ Building inventory tracking programs and applying for federal funding can be resource intensive for smaller agencies

"I just don't know a whole lot about ADA and don't think my colleagues in my company do either. Reading the legislation sounds tedious and difficult to overcome. I think that ADA doesn't necessarily capture the full breadth of accessibility concerns…"

– Survey ID 1090, Planning Consultant

Findings: Thematic Analysis

Theme 3: Challenges with Retrofits, New Construction, and Maintenance

Key Challenges:

‣ Existing built conditions, topography, or cost to acquire public right-of-way can make retrofitting infrastructure infeasible

‣ Unplanned resources and funds are needed in new construction and retrofits if curb ramps don't meet requirements

‣ Maintenance of facilities is not often planned or budgeted for during the planning, design, and construction phases

"The reality is ADA improvements almost never fit seamlessly into the surrounding topography. It usually takes significantly more time and resources to design and implement ADA compliant facilities than budgeted simply because of lack of ROW and constrained surrounding conditions."

- Survey ID 1135, Engineering Consultant

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Findings: Statistical Analysis

Familiarity with ADA and PROWAG

- ▸ 52% of survey respondents self-reported that they are "Very Familiar with ADA"

- ▸ 28% of survey respondents self-reported that they are "Very Familiar with PROWAG"
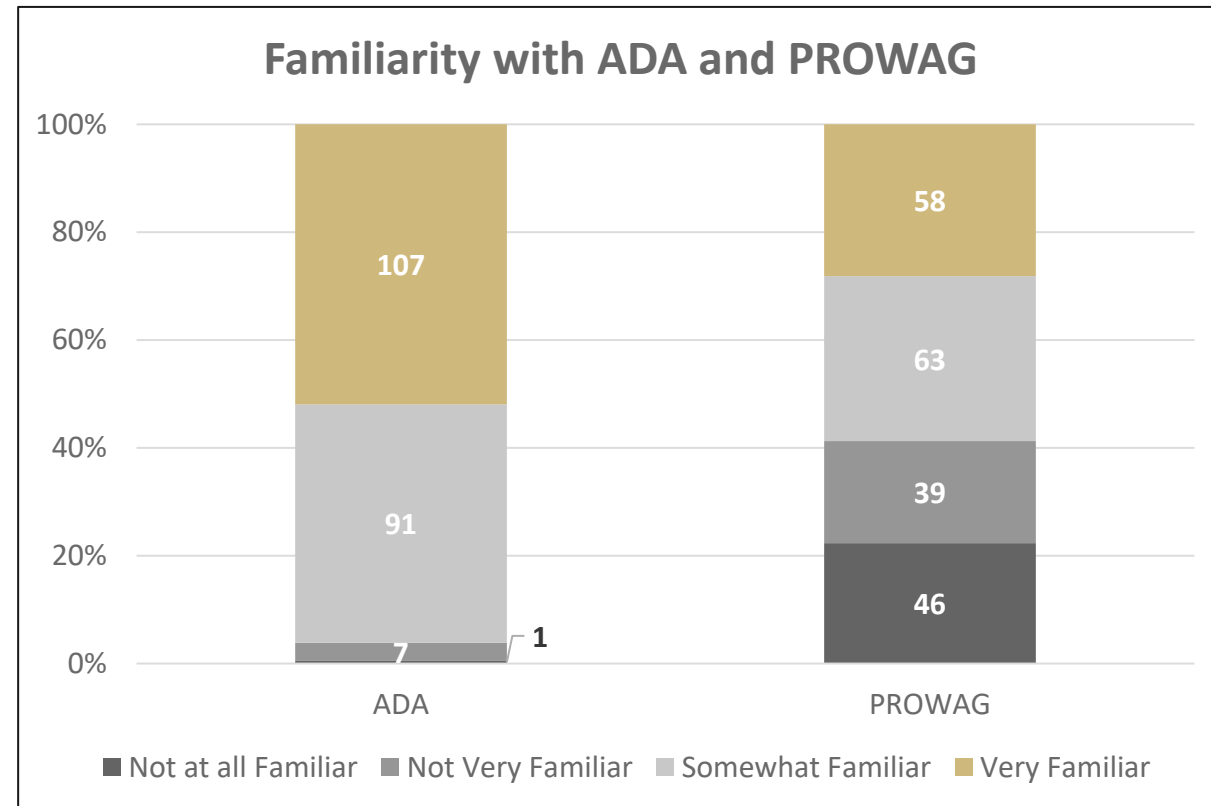
Familiarity with ADA and PROWAG

Abbreviations: ADA, Americans with Disabilities Act; PROWAG, Public Right-of-Way Accessibility Guidelines

Findings: Statistical Analysis

Exploring Familiarity with ADA and PROWAG using Bivariate Chi-sq Tests

Practitioners are <u>more</u> likely to be familiar with…

▸ PROWAG when working as an engineer and on transportation projects

▸ ADA/PROWAG when working at agencies that have ADA transition/compliance plans, ADA asset inventories, or design guidelines for inclusive mobility and safety

▸ ADA/PROWAG when there are regular ADA evaluations and compliance checks throughout the transportation lifecycle

Practitioners are <u>less</u> likely to be familiar with…

▸ PROWAG when working in construction, urban design, maintenance, and land use planning

▸ ADA when organizational priorities focused on non-ADA infrastructure
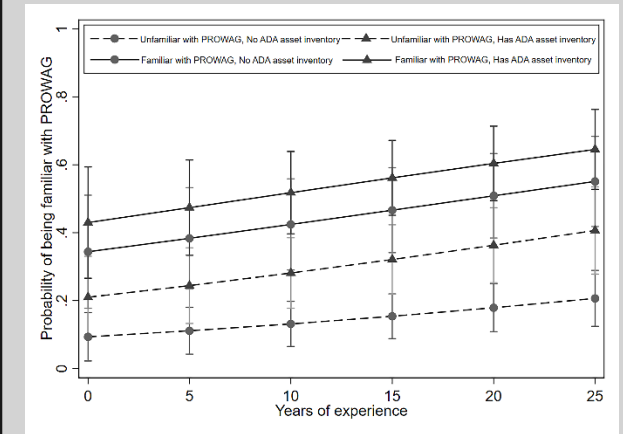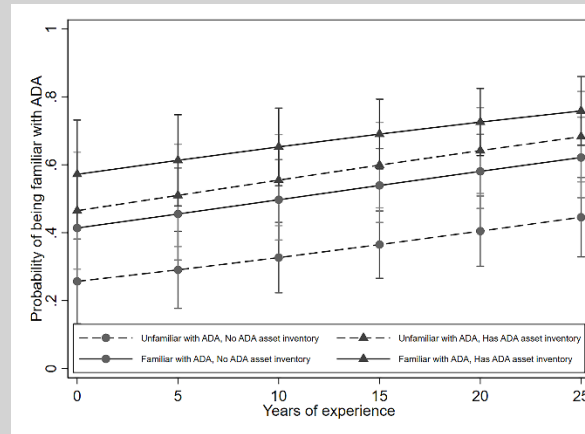
Findings: Statistical Analysis

Developing Capacities in Organizations and in Individuals

▸ The likelihood of familiarity with ADA/PROWAG increases with more years of work experience

▸ Having an ADA asset inventory increased the probability of familiarity of ADA/PROWAG (1a)

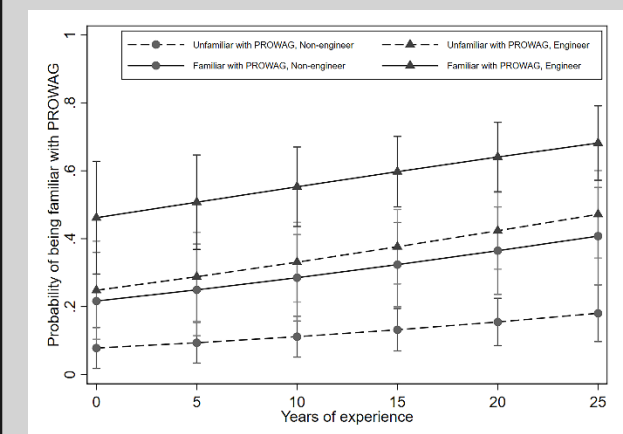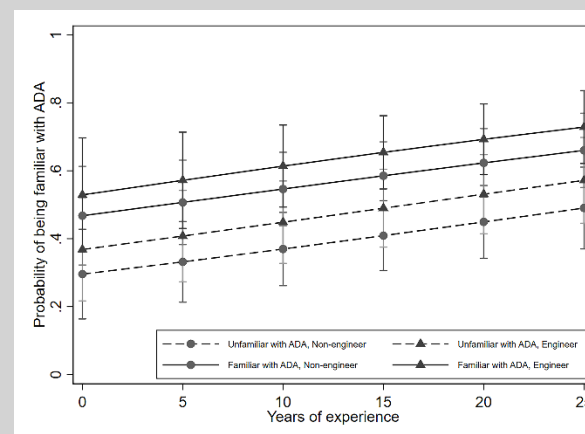▸ Engineers are more likely to be familiar with PROWAG across years of experience, compared to non-engineers (1b)

Very familiar with ADA	Very familiar with PROWAG

1a. Organization has an ADA asset inventory (or one is in development)

1b. Trained/works as an engineer

Abbreviations: ADA, Americans with Disabilities Act; PROWAG, Public Right-of-Way Accessibility Guidelines

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Discussion

What can organizations and practitioners do to improve ADA implementation for infrastructure design and supply?

Discussion

A few suggestions for improvement at all levels:

Federal, State, Regional Agencies

- ▸ Provide technical assistance and funding to local governments to develop transition/barrier removal plans

- ▸ Develop visual design guides and resources to support interpretation of requirements

Local Governments

- ▸ Integrate cross-departmental knowledge sharing opportunities

- ▸ Prioritize development of ADA inventories to increase awareness and implementation downstream

- ▸ Establish relationships between actors within the public right-of-way to improve communication of projects

Practitioners

- ▸ Work with employers and professional organizations to provide educational training opportunities

- ▸ Develop internal feedback loops between, people with disabilities, staff, and funders to explore opportunities for improvement to programs and future funding needs

Conclusion

▸ ADA compliance and accessible infrastructure does not happen just because it is required by law. Compliance requires funds, coordination of resources, and time to comply.

▸ Key challenges include:

  ▸ Differences in policies and priorities limiting ADA

  ▸ Challenges with interpretation and access to resources

  ▸ Challenges with construction and maintenance.

  ▸ Familiarity with the requirements can vary depending on organizational resources and area of practice

Focused efforts for resources and programs are needed at all levels of government to implement ADA compliant infrastructure.

Thank you

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