Planning for pedestrians with disabilities: Sharing successes and gaps from ADA Transition Plans around the U.S.

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Overview

• Research ~ 40 minutes
  • Describe current gaps and limitations of transition planning for the public rights-of-way
  • Share successful practices gathered from ADA coordinators with high quality plans.

• Practice ~ 30 minutes
  • Case study about the City of Tempe, Arizona’s ADA Transition Plan.
  • Dialogue with Tempe’s ADA Compliance Specialist and GIS Enterprise GIS Manager

• Q & A ~ 20 minutes

RESEARCH PROJECT #1: SYSTEMATIC EVALUATION OF ADA TRANSITION PLANS
SOME BACKGROUND

PROW – All the places where we walk and roll

Public Rights-of-Way (PROW)

• Pathways for walking and wheeling are important for people to get to the places they want to go to and to be a part of their community.

• However, pathways that are broken or not built in ways that are easy for people with disabilities to use make walking or wheeling difficult.
Pedestrians with disabilities experience barriers in the PROW¹-⁵

Image of street sign in middle of sidewalk

Image of bus stop on grassy hill

Image of a badly broken sidewalk and corner with no curbcut

Barriers affect community participation

Image of an Arm Ergometer

Image of man with cane walking on sidewalk

Image of women in wheelchair picking an apple at the grocery store
Barriers are not going away

Several large lawsuits

- Barden et al. v. City of Sacramento, 2002
- Reynoldson v. City of Seattle, 2017
- Project Civic Action
How can cities address barriers and mitigate the risk of lawsuits?

- Develop an Americans with Disabilities Act (ADA) Transition Plan for the PROW
- Required under Title II of the ADA
  - State and Local Government Services

### ADA Transition Plans

- Provide an understanding of current conditions (inventory)
- Layout plan for improvement, which includes
  - **How** (methods for barrier removal)
  - **When** (schedule)
  - **Who** (responsible official)
  - **Priorities** (public participation)
Research Gap

- Although the ADA was passed in 1990, we lack an understanding of progress made in planning for and implementing changes to the accessibility of the PROW in the US

Limited research on ADA Transition Plans

- Existing studies focus on barriers to plan development
- A survey of local governments from 1997 reported that 65% have ADA transition plans\(^\text{6}\)
  - Self-reported
  - Don’t know the quality of plans
  - No follow-up
Purpose

• Systematically examine the presence, content, and quality of ADA transition plans in the U.S.

and

• Summarize current levels of PROW accessibility reported in ADA transition plans.

METHODS
**Methods**

1. Developed audit tool with Expert Panel
2. Stratified random selection of 401 local public agencies from the 2012 Census of Governments.
   - Greater than 50 full time employees
   - Government type - Townships, Counties and Municipalities
3. Standardized website search for ADA transition plans
   - Supplemented with direct phone and email contacts
4. Descriptive analysis for meeting requirements and quality indicators

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**RESULTS**
Results: Progress on plans

- 13% (54) of LPAs had an ADA transition plan ‘readily available’
- 7% (28) LPAs were ‘in-progress’
  - Working on inventory
  - Hiring consultants
  - Figuring what they need to do
- 50% response rate from direct contact

Results: Plans by region

<table>
<thead>
<tr>
<th>Census Region</th>
<th>Sample</th>
<th>Had a plan</th>
<th>% from each region</th>
<th>% of sample strata with a plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>375</td>
<td>40</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>112</td>
<td>19</td>
<td>48%</td>
<td>17%</td>
</tr>
<tr>
<td>West</td>
<td>62</td>
<td>10</td>
<td>25%</td>
<td>16%</td>
</tr>
<tr>
<td>South</td>
<td>130</td>
<td>9</td>
<td>23%</td>
<td>7%</td>
</tr>
<tr>
<td>Northeast</td>
<td>71</td>
<td>2</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>
## Results: Met basic requirements

<table>
<thead>
<tr>
<th></th>
<th>Proportion (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed inventory</td>
<td>88% (35)</td>
</tr>
<tr>
<td>Described methods to</td>
<td>66% (25)</td>
</tr>
<tr>
<td>make accessible*</td>
<td></td>
</tr>
<tr>
<td>Opportunity to participate</td>
<td>65% (26)</td>
</tr>
<tr>
<td>Identify responsible official</td>
<td>55% (22)</td>
</tr>
<tr>
<td>Schedule*</td>
<td>41% (16)</td>
</tr>
</tbody>
</table>

*two plans were unclear about these two categories and so were left out of the denominator.

## Results: Quality of Plans

<table>
<thead>
<tr>
<th></th>
<th>Proportion (n)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>List physical barriers</td>
<td>68% (27)</td>
<td>40</td>
</tr>
<tr>
<td>Targeted outreach to people</td>
<td>18% (7)</td>
<td>40</td>
</tr>
<tr>
<td>with disabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsible official is in a</td>
<td>41% (13)</td>
<td>32</td>
</tr>
<tr>
<td>position of authority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funding sources identified</td>
<td>70% (28)</td>
<td>40</td>
</tr>
<tr>
<td>Transition plan signed</td>
<td>33% (13)</td>
<td>40</td>
</tr>
<tr>
<td>into ordinance/other regulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor progress</td>
<td>48% (19)</td>
<td>40</td>
</tr>
<tr>
<td>Dates are attached to</td>
<td>44% (16)</td>
<td>36</td>
</tr>
<tr>
<td>barrier removal plans</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Results: Percentage of PROW with barriers*

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>sd</th>
<th>min</th>
<th>max</th>
<th>number reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewalks</td>
<td>48%</td>
<td>30%</td>
<td>11%</td>
<td>80%</td>
<td>9</td>
</tr>
<tr>
<td>Curb ramps</td>
<td>65%</td>
<td>23%</td>
<td>7%</td>
<td>100%</td>
<td>23</td>
</tr>
<tr>
<td>Traffic signals</td>
<td>50%</td>
<td>30%</td>
<td>15%</td>
<td>100%</td>
<td>6</td>
</tr>
</tbody>
</table>

* Barriers in the PROW across LPAs reporting detailed results of inventories

### Results: Funding for PROW improvements

<table>
<thead>
<tr>
<th>Funding types</th>
<th>n</th>
<th>% of plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvement Plan (CIP)</td>
<td>17</td>
<td>85%</td>
</tr>
<tr>
<td>Transportation specific fund (Highway, sidewalk, or street)</td>
<td>5</td>
<td>26.3%</td>
</tr>
<tr>
<td>Community Development Block Grant</td>
<td>2</td>
<td>10.5%</td>
</tr>
<tr>
<td>Local Option Sales Tax (LOST)</td>
<td>1</td>
<td>5.3%</td>
</tr>
<tr>
<td>County Economic Development Income Tax (CEDIT)</td>
<td>1</td>
<td>5.3%</td>
</tr>
<tr>
<td>State Department of Transportation funds</td>
<td>1</td>
<td>5.3%</td>
</tr>
<tr>
<td>State gas tax fund</td>
<td>1</td>
<td>5.3%</td>
</tr>
<tr>
<td>Federal grant</td>
<td>1</td>
<td>5.3%</td>
</tr>
</tbody>
</table>
DISCUSSION

Discussion

• Development and implementation of ADA transition plans for the PROW is low
  • Lower rate compared to previous research

• Even among those with plans, a small proportion meet the quality criteria for the plan to be effective
  • Are communities just checking the boxes?
  • Monitoring is needed to hold LPAs accountable
  • Trainings to support involvement of people with disabilities
Discussion: continued

• A large % of the PROW is still inaccessible
  • First study to report on the level of PROW accessibility
  • Doesn’t tell us if priority areas are inaccessible

• Variation by region
  • Regional working groups and pressure from the state DOT may be important facilitators

Limitations

• Smaller then expected % with a plan
• Half of LPAs directly contact didn’t respond
• Some difficulty coding plans
• Plans in-progress were not assessed
The Takeaway

- Communities in the US do not have strong plans for building accessible pathways for people with disabilities.
- Local governments need to begin making or updating their transition plans with concrete details and timelines so that people with disabilities can get around their communities.
- Meaningfully involving people with disabilities in making transition plans can help cities and counties develop plans and prioritize community locations that matter most.
- People with disabilities and advocates can encourage their local governments to make a transition plan or can use the audit tool developed in this study to measure the quality of their communities' current plan.

References

Contact info

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Website -

RESEARCH PROJECT 2: SUCCESSFUL IMPLEMENTATION FACTORS IN ADA TRANSITION PLANNING
Purpose of Interviews

- Identify factors that lead to excellence in implementation of Americans with Disabilities Act transition plans.
- Learn from those with high-quality plans
- Improve understanding of how the ADA has been successfully implemented across local governments.

Approach used Implementation Science

- Focuses on mechanisms for successful implementation
  - “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice,” (Bauer et al. 2015)
- Strengths
  - Understand why things worked in certain settings
  - Use validated framework for implementation research to organize and map out factors leading to successful implementation
Methods

- Sought recommendations of municipalities who developed high-quality ADA transition plans from:
  - ADA coordinators in State Departments of Transportation (DOT),
  - Regional ADA technical assistance centers,
  - State Local Technical Assistance Programs (LTAP) coordinators.
- Independently evaluated plans using a short version of our transition plan audit tool
- 1 hour interviews via Webex with selected municipalities using a structured interview guide that focused on topics such as:
  - Motivation for starting the transition planning process
  - Outside resources
  - Inventory process
  - Public involvement
  - Prioritization system
  - Implementation successes

Consolidated Framework for Implementation Research (CFIR)

- CFIR is a theoretical model for implementation that assesses environmental factors that influence implementation.
- Often used for interventions in clinical settings
- Value to us = structured coding guide for coding data on implementation using these domains:
  - Intervention Characteristics
  - Inner Setting
  - Outer Setting
  - Characteristics of Individuals
  - Process
Results

• Preliminary results will be reported using the codes that were most frequently used in each CFIR domain.

![Number of codes per CFIR domain graph]

- Characteristics of ADA Coordinators: 65
- Outer Setting: 141
- Transition Plan Characteristics: 198
- Inner Setting: 515
- Transition Plan and Implementation Process: 555

Transition plan characteristics

Code 1: Design quality and packaging of the transition plan

“While there’s no golden template out there that works for everyone, other people have done this before”

• Data collection
  • iPad with automatic coordinates, ARC collector programs, linked to GIS, dividing city into sections

  “Another great tool that we’ve used is Google Maps Street View. When you’re sitting there wondering, ‘Hey, I wonder when this subdivision was built, what was the standard curb ramp at the time?’ You can sit at your computer, pull up Street View on Google Maps and this is what it was.”
Transition plan characteristics continued

Code 1 (cont): Design quality and packaging of the transition plan

- Prioritization
  - The worst conditions in the highest priority areas, creating rating systems labeled by numbers, letter grades, or colors
  - Strictly quantitative calculations
  - Input from grievances and disability committees to help prioritize
- Document design
  - Some intentionally kept the plan document simple so that the contents were accessible to the general public
  - Story map
  - Plain language reports

Transition plan characteristics continued

Code 2: Adaptability and complexity of creating a transition plan

- Adaptability: Municipalities used creative approaches and leveraged existing resources
- Complexity: Given the challenge of the scale of the work and requirements of transition planning, it is important to
  - Break it down into manageable pieces
  - Adapt to fit your community’s needs, resources, and priorities.

“Eat the elephant one bite at a time, take baby steps. Okay. What is the first thing you need to do? And then, when you do that, find someone, for example, for me, it was, let’s get this data collection. Let’s try an engineer. But for other communities, that don’t have that money. We’ve gotta get this data collection. Let’s find a partner with our schools or our volunteer groups to make this happen.”
Outer setting

Code 3: The degree to which the municipality is networked with other external organizations
- Connected with state departments of transportation, the Federal Highway Administration
- Built regional coalitions of ADA coordinators, “peer cities,” and local universities

Code 4: External policies and incentives influencing transition planning development
- Negative consequences of being out of compliance such as threat of lawsuits, threats to lose funding opportunities like grants
- Given deadlines by their state DOT
- Existing settlement agreement with DOJ
- Positive incentives from external policies such as availability of new grants

Outer setting continued

“*Threats of lawsuits or losing federal funding— that's a pretty big hammer. And if you want grants for your community, then you better get on it. And unfortunately, that speaks to more people than doing the right thing because it's the right thing and because everyone should have equal access to neighborhoods, to businesses, to be able to live their lives.*”
Inner setting

Code 5: Municipal Government Culture
- The way ADA became an embedded part of the values and philosophical approach of municipalities
  - “now its just part of absolutely everything that city does.”
  - “It’s not just a block on a checklist, right? That’s not what the intent of the ADA is in my opinion, it’s a complete philosophy change in the way that we look at and treat other people. It’s a sense of awareness that someone who might have a disability still has the same rights and accessibility to everything that we provide as a city.”

Code 6: Available resources for ADA transition planning work
- Transition planning methods and available technology varied based on access to resources
- Had to make an argument for prioritization of the transition plan and barrier removal process in their city, regardless of city size/wealth
- Several faced state-wide restrictions on how much money they can raise through increased city and property taxes

Inner setting continued

Code 7: Nature and quality of social networks and communications within an organization
- Suggestion to bring in all relevant staff members, interns, leadership, and stakeholders early on to build ownership along the way
- Data as communication—How data is stored and communicated and collected so that it is consistently measured and usefully displayed—i.e. using an interactive map
- Educating leadership, making case for funding
  - “It’s amazing how a 30-year-old law requires so much handholding and educating, but yeah, that is consistently being reinforced.”

Code 8: Leadership engagement
- Varying degree of support and involvement from leadership
- Importance of supportive leadership at the beginning of the process
Characteristics of ADA Coordinators

Code 9: Knowledge and belief about the intervention

- Previous experience at different municipalities or transit organizations gave unique knowledge
  - “I come from TA, doing Technical Assistance for the ADA for a long time, knowing the ADA as well as I do is a huge plus”

- Personal investment in access and equity as a cause
  - “I understand it, I grew up near Berkeley, so I know about the independent Living Movement.”
  - “I am very passionate about what we do here”

Transition Plan and Implementation Process

Code 10: Strategic public participation

- Partnerships with local disability rights and advocacy organizations, senior centers
- Mayor’s committee’s and disability advisory boards (most common)
- Balancing the most vocal requests with the highest level of need

- “So, we have one neighborhood where we had literally had one person who’s got a lot of time. And there was hundreds of reported things that we could barely find a crack in the sidewalk. And then we have other neighborhoods where it’s non-English speaking, economically-challenged. We had no reports and the sidewalks are complete disaster and so, we set all these mechanisms up for a public communication, but we’ve got to understand certain populations that just don’t have the time or resources to communicate with us at all.”
Transition Plan and Implementation Process

Code 11: Executing the transition plan
• Cyclical and continuous process
• Frequent updates
  • Some update live as repairs are made, some schedule regular updates
• A “living document”
  “The DOT training brought it to our attention, ‘Hey, this needs to be a living document. You need to update it.’ We came back, found the 1993 version and really tailored ours to the right-of-way.”

Code 12: Reflecting and evaluating
• Data and quality control systems reevaluated with use, city crew instead of concrete contractor
  “Our actual biggest challenges are not tripping over our own feet by creating right-of-way, permitting roadblocks for our own projects, Development permit issues that are self-imposed.”

Take away
• Factors of success are related to relationships with people inside and outside the local government
• Different aspects of pre-planning support more implementation later on
  • Good data in = Good data out
• Experience/training of ADA coordinators is necessary
• Organizational change is needed to built support and buy-in for the plan and implementation
Citations


Questions remaining

• Does a high quality plan lead to a more accessible community
  • What about greater community participation?
• How can transition planning be best integrated into other municipal planning initiatives (pedestrian and transportation plans)?
• What data models can be developed to leverage the data on accessibility of the PROW?
ADA Story Map
Tempe, Arizona

Presenters
Stephanie Deitrick, PhD, GISP
Information Technology Dept.
Enterprise GIS & Analytics Manager

Michele D. Stokes
Strategic Management and Diversity Office
ADA Compliance Specialist
Tempe’s ADA Story Map Presentation

1. Introduction
2. ADA Title II – Transition Plan
3. Public Involvement Plan
4. Tempe’s ADA Story Map
5. Q & A

ADA is included in City Council Priorities

- ADA - NONDISCRIMINATION ON THE BASIS OF DISABILITY
- City Council Priorities
  - Disability Social Inclusion (3.13) – Programs & Services
  - ADA Transition Plan (3.14) – ROW, Parks & Facilities
    - Data gathering was contracted out to an engineering firm – Cole
Collecting the Right of Way Data

- Cole and Associates
- Cole’s team conducts the ADA public inventory in an accurate and cost-effective manner by using an Ultra Light Inertial Profiler (ULIP) mounted on a Segway.

Collecting Data for Facilities and Parks

- Accessology collected data for Parks in Phase I and II
- Life Quest Planning & Consulting, LLC is collecting Parks and Facility data in Phase III
Displays help with Understanding

- Accessology provided data for Parks in Phase I and II
- Life Quest Planning & Consulting, LLC is providing Parks and Facility data in Phase III

Public Involvement Plan

- **Phase II** is complete (North Tempe)
- Involvement strategies in **Phase II**
  - Easy English/Plain Language - ADA Summary report - large print at 5th grade reading level
  - Request feedback on “priority” at health & wellness community fairs
  - Visited 10 disability advocacy groups
- **Phase III** is in progress (South Tempe) and same public involvement plan will occur

ADA Transition Plan – www.tempe.gov/ADA
Sharing Results: Educate, Engage, Inform

Becoming a More Accessible City

At the City of Tempe, accessibility is a part of everyday life. From accessible playgrounds to sidewalks, cityscapes, from assistive listening devices to large print documents, we will provide the access that you need. We want everyone to be able to live, work, and play in Tempe.

Currently, the City is evaluating what needs to be removed, changed, or repaired to become more accessible for all its residents and visitors. This evaluation will form the basis of Tempe’s Americans with Disabilities Act (ADA) Transition Plan.

Contents

- Bike & Pedestrian Accessibility
- MFI: Mobility Finance Initiative
- On Demand Accessible Transit
--temp
- Self-Evaluation & Transition Plan
- Technical & Data

LEGEND

Parking & Park Facilities

- Park Facilities
- Parking Lot
- City Hall Parking

Sidewalk Obstructions

- Commercial
- Driveway
- Brick Paver
- Sidewalk
- Concrete Sidewalk
- Residential
- Storm Drain
- Grate/Manhole

Explore Data

- All Layers
- Corridors
- Curb Ramps
- Parking & Park Facilities
- Pedestrian Crosswalk / Traffic Signal
- Pedestrian Islands
- Phase Areas
- Sidewalk Cross Slope
- Sidewalk Obstructions
- Transit Stops

For more information on the ADA Transition Plan content and data evaluated, please visit the City of Tempe ADA Transition Plan page.
Becoming a More Accessible City

## Curb Ramps & Crosswalks

Curb ramps are an essential engineering design that makes mobility from a sidewalk surface to a crosswalk possible. In the self-evaluation process, curb ramps are classified as "none" (a curb without a ramp) or as one of the 5 different kinds of curb ramps. At each location, field technicians note the ramp’s running slope, cross slope, flared sides, landing area slope, detectable warning systems, and the transition from ramp to pavement.

### Common Barriers

**Missing or Non-Compliant Detectable Warning Systems & Landings**

Truncated domes are small dome shaped bumps that cover the curb ramps and are a type of detectable warning system (DWS). Detectable warning stems like the domes are designed to be felt underfoot, or under a cane or wheelchair by people who are blind or have low vision, alerting them that the pedestrian sidewalk is transitioning to a crosswalk in the roadway.

**Landings** refer to the presence of a flat, level area at the bottom and top of a ramp and allow for proper maneuvering such as a person who uses a wheelchair changing direction.

**No Ramps at Crosswalk**

When a location doesn’t have a curb ramp where one is warranted, it creates an obstacle for accessing places and a possible hazard.

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## Sidewalks

Tempe's evaluation areas cover major street corridors including sidewalks, curb ramps, crossing signals, bus stops, public parking and parks throughout the city. The next sections show examples of these types of identified barriers that need to be removed, changed or fixed.

**Sidewalk Evaluation includes running slope** and cross slopes, obstructions, joint heaving (bumps or changes in level), joint gaps (spaces or crack) and driveway crossings. Sidewalks that have access issues need to be constructed before the ADA.

### Common Barriers

**Sidewalk Cross Slopes that Exceed the Two Percent Maximum**

The degree that a sidewalk tilts across its width is the cross slope. When the sidewalk cross slope is too steep, the ease with which a person who uses a wheelchair, cane or walker can propel forward while maintaining control and balance may become difficult.

The ADA standard is a two percent cross slope and most of the sidewalk cross slope problems in Tempe are minor.
Maintaining Data in ADA Story Map

More Information

Tempe ADA Website
www.tempe.gov/ADA

Tempe ADA Transition Plan

Tempe ADA Story Map
Contact

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Michele_Stokes@Tempe.gov
480-350-2704 or via Relay 7-1-1
www.tempe.gov/ADA

QUESTIONS
Next Session:
Thursday, August 27, 2020 (special 2 hr session)

Special Session: COVID-19 and the ADA: Implications for Title II and Post-Secondary Education

Registration available at: www.ada-audio.org