ADA Audio Conference Series

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

August 18, 2020

Stephanie Deitrick, Enterprise GIS Manager , City of Tempe, AZ
Yochai Eisenberg , Senior Research Specialist , Institute on Disability and Human Development, UIC
Amy Heider, Research Assistant and PhD Candidate, Department of Disability and Human Development, UIC
Michele Stokes, ADA Compliance Specialist, City of Tempe, AZ

1

1

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

PLANNING FOR PEDESTRIANS WITH DISABILITIES: SHARING SUCCESSES AND GAPS FROM ADA TRANSITION PLANS AROUND THE U.S.

Yochai Eisenberg, PhD
Amy Heider, MS
Rob Gould, PhD
Delphine Labbe, PhD
Robin Jones, MS
Great Lakes ADA Center - NIDILLR Grant # 90DP0091-02-00
University of Illinois at Chicago

ADA Audio Conference
August 18, 2020

DISABILITY AND HUMAN DEVELOPMENT
COLLEGE OF APPLIED HEALTH SCIENCES
UIC

2

2

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

3

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

RESEARCH PROJECT #1: SYSTEMATIC EVALUATION OF ADA TRANSITION PLANS

4

SOME BACKGROUND

5

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.

6

Pedestrians with disabilities experience barriers in the PROW[1-5]

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

Image of person trying to hold in stuff from bursting out of a closet

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

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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[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.

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

Results: Plans by region

Census Region	Sample n	Had a plan	% from each region	% of sample strata with a plan
Total	375	40	100%	
Midwest	112	19	48%	17%
West	62	10	25%	16%
South	130	9	23%	7%
Northeast	71	2	5%	3%

Results: Met basic requirements

	Proportion (n)
Completed inventory	88% (35)
Described methods to make accessible*	66% (25)
Opportunity to participate	65% (26)
Identify responsible official	55% (22)
Schedule*	41% (16)

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

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

Results: Quality of Plans

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

Results: Percentage of PROW with barriers*

	mean	sd	min	max	number reporting
Sidewalks	48%	30%	11%	80%	9
Curb ramps	65%	23%	7%	100%	23
Traffic signals	50%	30%	15%	100%	6

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

Results: Funding for PROW improvements

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

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

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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.

29

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

References

1. Gell, N. M., Rosenberg, D. E., Carlson, J., Kerr, J., & Belza, B. (2015). Built environment attributes related to GPS measured active trips in mid-life and older adults with mobility disabilities. *Disability & Health Journal*, *8*(2), 290-295. doi:10.1016/j.dhjo.2014.12.002
2. Haselwandter, E. M., Corcoran, M. P., Folta, S. C., Hyatt, R., Fenton, M., & Nelson, M. E. (2015). The built environment, physical activity, and aging in the United States: A state of the science review. *Journal of Aging & Physical Activity*, *23*(2), 323-329. doi:10.1123/japa.2013-0151
3. Levasseur, M., Généreux, M., Bruneau, J. F., Vanasse, A., Chabot, É., Beaulac, C., & Bédard, M. M. (2015). Importance of proximity to resources, social support, transportation and neighborhood security for mobility and social participation in older adults: results from a scoping study. *BMC Public Health*, *15*(1), 503. doi:10.1186/s12889-015-1824-0
4. Kirchner, C. E., Gerber, E. G., & Smith, B. C. (2008). Designed to deter: Community barriers to physical activity for people with visual or motor impairments. *American Journal of Preventive Medicine*, *34*(4), 349-352. doi:10.1016/j.amepre.2008.01.005
5. Rosenberg, D., Huang, D., Simonovich, S., & Belza, B. (2013). Outdoor built environment barriers and facilitators to activity among midlife and older adults with mobility disabilities. *The Gerontologist*, *53*(2), 268-279. doi:10.1093/geront/gns119
6. Barden et al. v. City of Sacramento, 292 F. 3d 1073. (9th Cir. 2002).
7. Switzer, J. V. (2001). Local government implementation of the Americans with Disabilities Act: Factors affecting statutory compliance. *Policy Studies Journal*, *29*(4), 654-662. doi: 10.1111/j.1541-0072.2001.tb02118.x
8. Pfeiffer, D., & Finn, J. (1997). The Americans with Disabilities Act: An examination of compliance by state, territorial and local governments in the USA. *Disability & Society*, *12*(5), 753-774. doi: 10.1080/09687599727038
9. Condrey, S. E., & Brudney, J. L. (1998). The Americans with Disabilities Act of 1990: Assessing its implementation in America's largest cities. *The American Review of Public Administration*, *28*(1), 26-42. doi: 10.1177/027507409802800102

30

Contact info

Yochai Eisenberg
yeisen2@uic.edu
312.413.9410

Website -
http://adagreatlakes.com/Research/transitionPlan.asp

31

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

RESEARCH PROJECT 2: SUCCESSFUL IMPLEMENTATION FACTORS IN ADA TRANSITION PLANNING

32

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.

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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

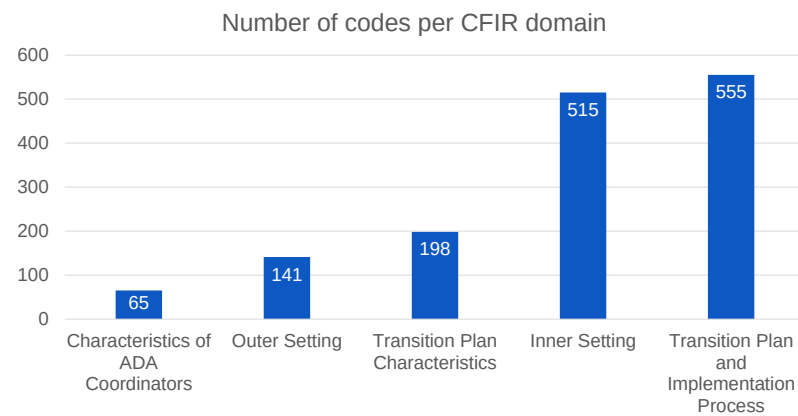
Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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.



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

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

Transition plan characteristics continued

Code 2: Adaptability and complexity of creating a transition plan

- Adaptability: Municipalities used creative approaches and leveraged of 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 with your community's needs, resources, and priorities.

"*Eat the elephant one bite at a time, take baby steps. Okay. What 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

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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."

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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

- Bauer, M. S., Damschroder, L., Hagedorn, H., Smith, J., & Kilbourne, A. M. (2015). An introduction to implementation science for the non-specialist. *BMC psychology*, *3*(1), 32. https://doi.org/10.1186/s40359-015-0089-9

Great Lakes ADA Center
A Member of the ADA National Network
800-949-4232 (V/TTY)
www.adagreatlakes.org

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

Tempe
Making waves in the desert

51

Presenters

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

Michele D. Stokes
Strategic Management and Diversity Office
ADA Compliance Specialist

52

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

53

53

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

54

54

Collecting the Right of Way Data

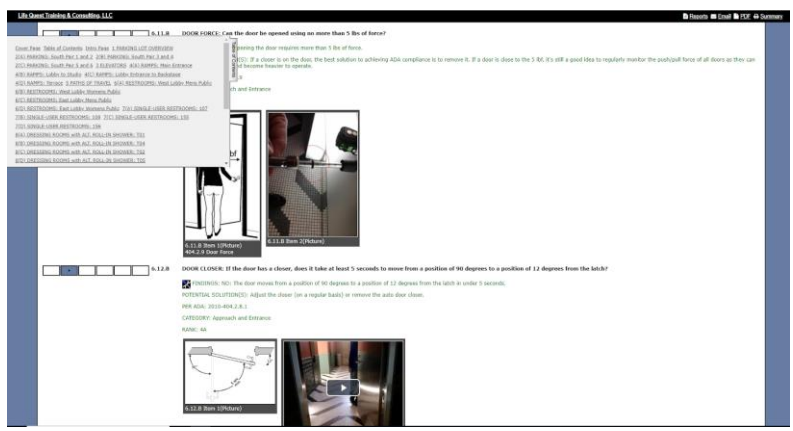
- Cole and Associates
- Cole's team conducts the ADA public inventory in an accurate and cost-effective manner by using an Ultra Light Inertial Profiler (ULIP) mounted on a Segway.

55

55

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

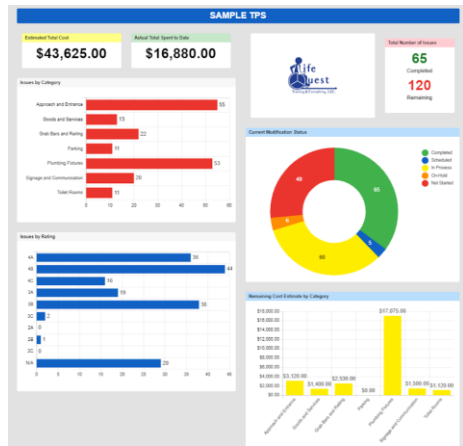


56

56

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

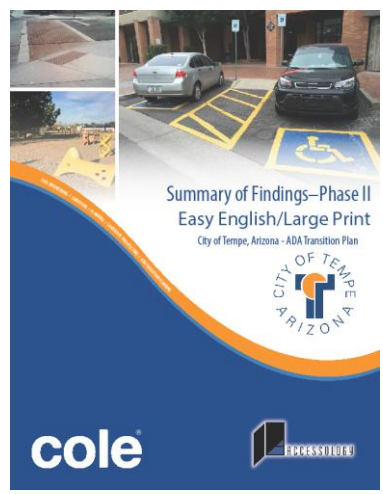


57

57

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

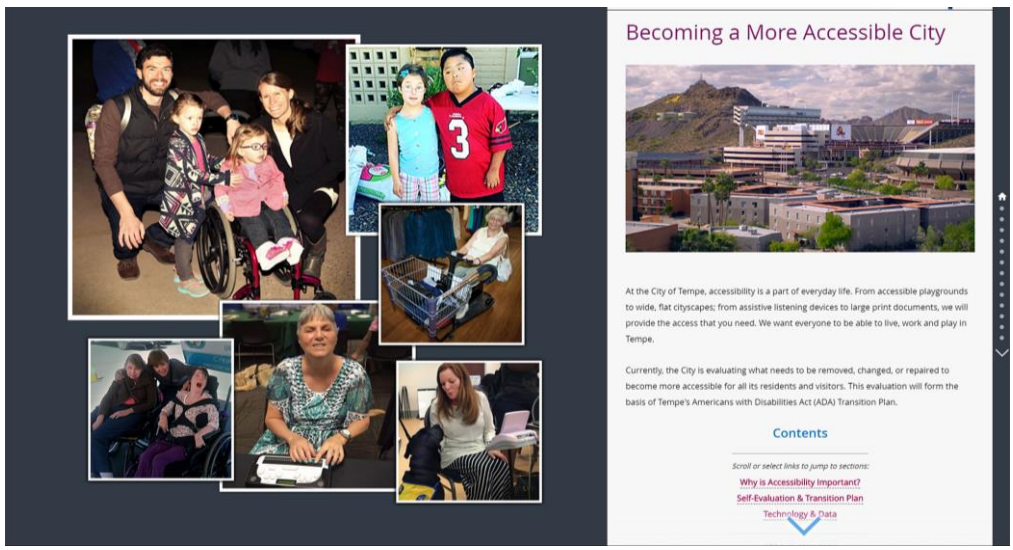


ADA Transition Plan – www.tempe.gov/ADA

58

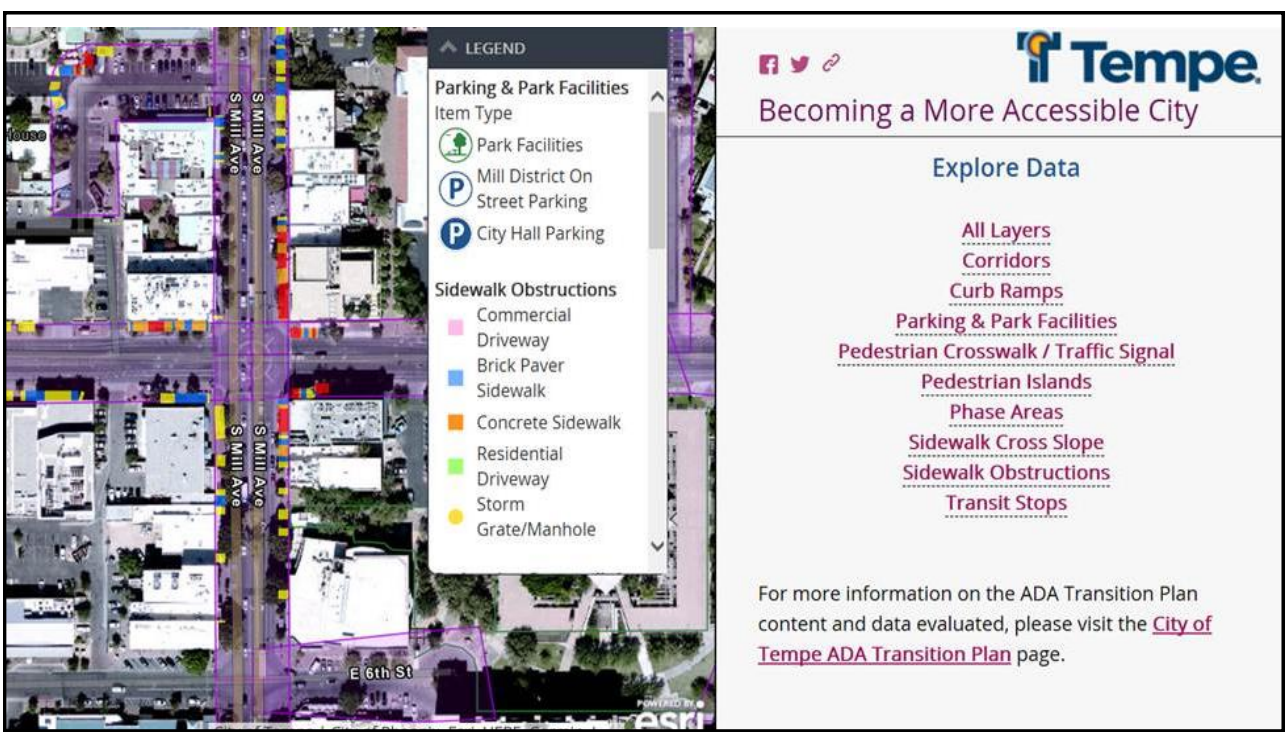
58

Sharing Results: Educate, Engage, Inform

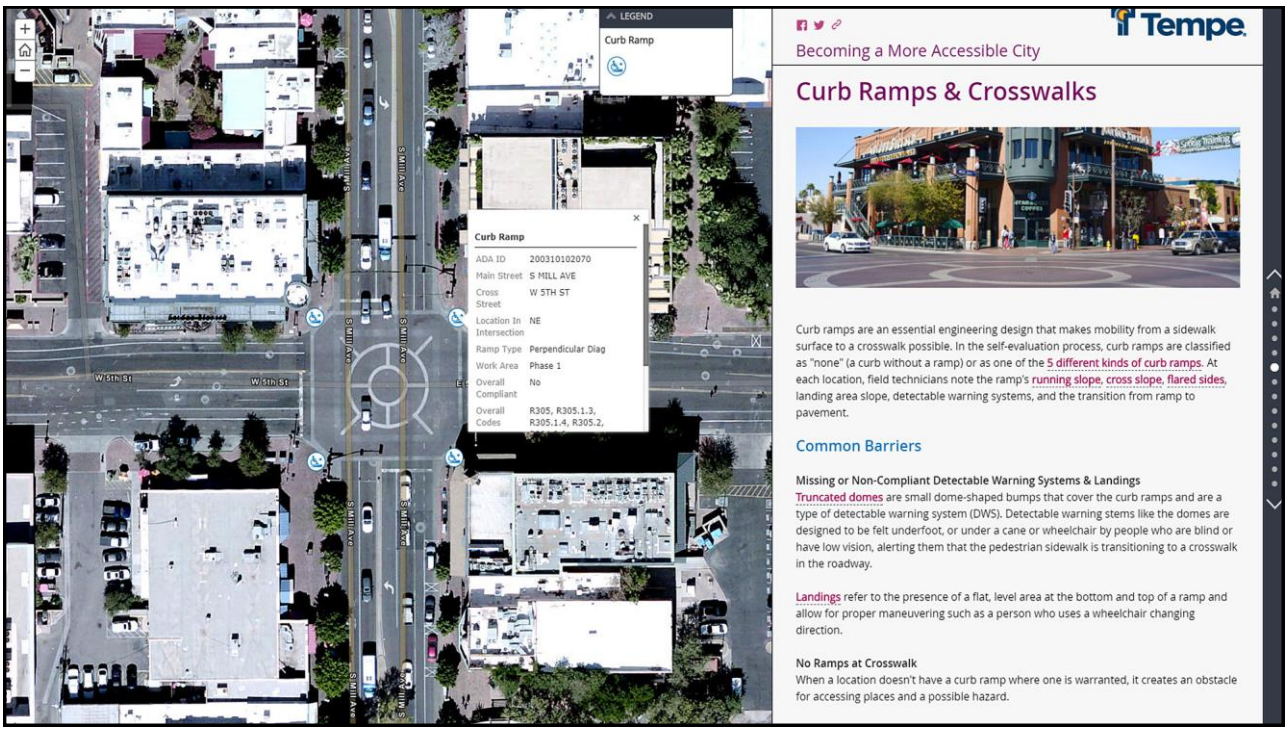


59

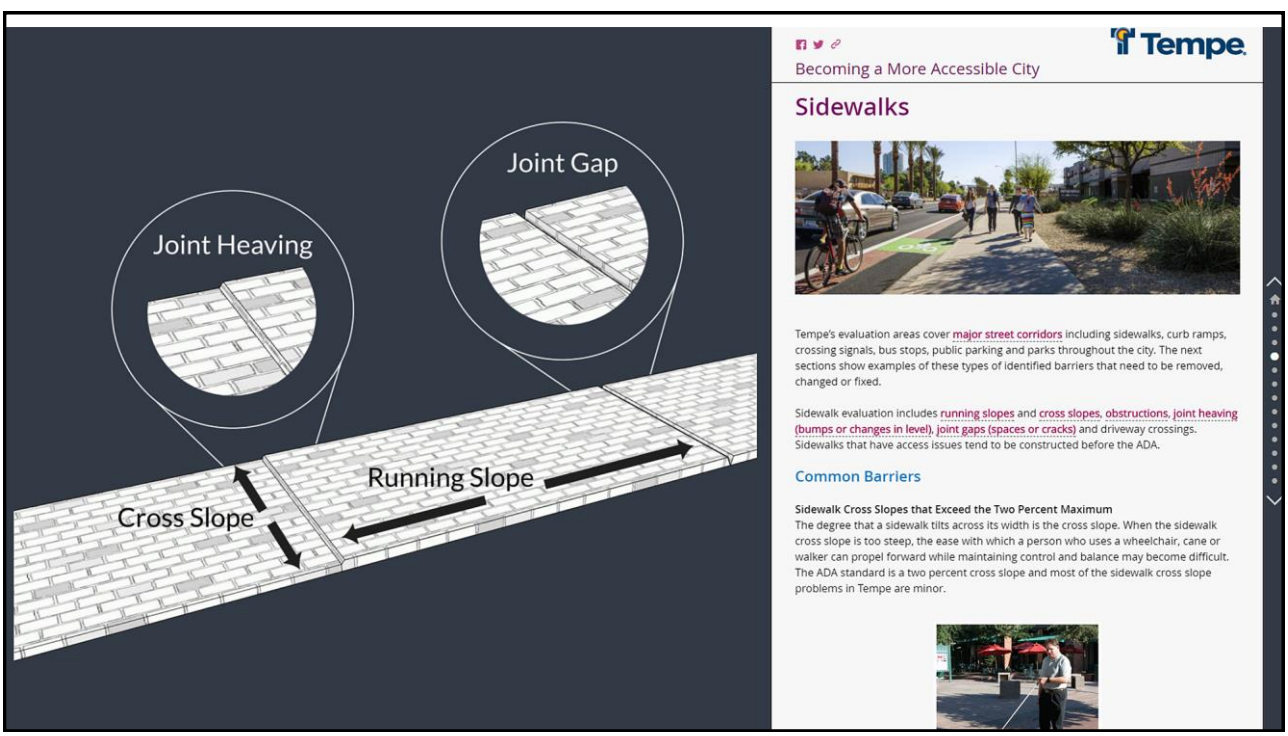
59



60

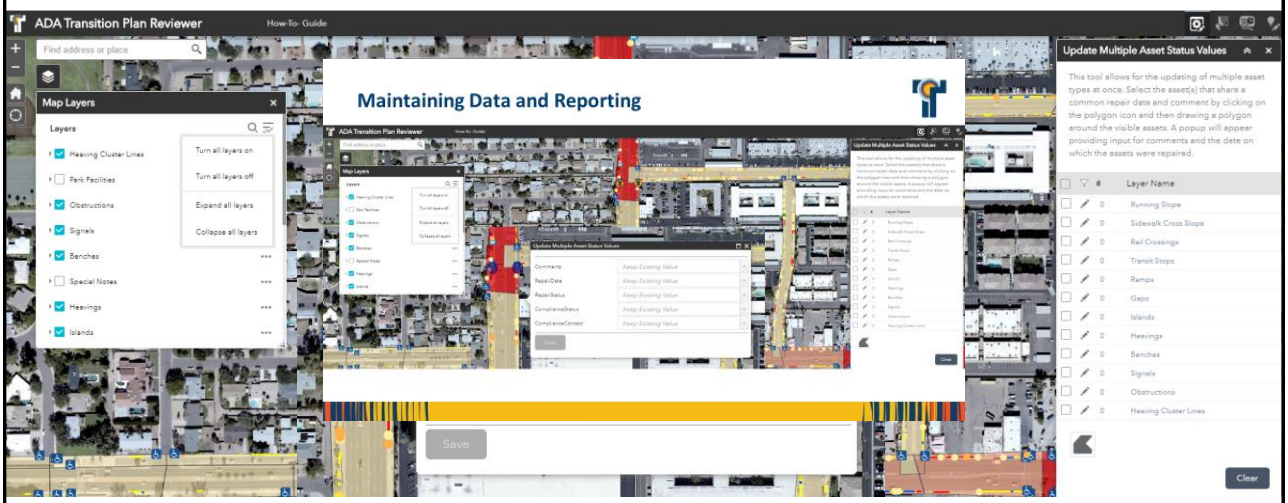

LEGEND
Curb Ramp
Curb Ramp
ADA ID 200310102070
Main Street S MILL AVE
Cross Street W 5TH ST
Location In Intersection NE
Ramp Type Perpendicular Diag
Work Area Phase 1
Overall Compliant No
Overall Codes R305, R305.1.3, R305.1.4, R305.2,
S MILL AVE
W 5th St
Tempe
Becoming a More Accessible City
Curb Ramps & 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.

61


Joint Gap
Joint Heaving
Running Slope
Cross Slope
Tempe
Becoming a More Accessible City
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 slopes and cross slopes, obstructions, joint heaving (bumps or changes in level), joint gaps (spaces or cracks) and driveway crossings. Sidewalks that have access issues tend 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.

62

Maintaining Data in ADA Story Map



63

63

More Information

Tempe ADA Website

www.tempe.gov/ADA

Tempe ADA Transition Plan

https://www.tempe.gov/government/strategic-management-and-diversity/diversity/ada-accessibility/ada-transition-plan

Tempe ADA Story Map

https://bit.ly/3gv9Ndq

64

64

Contact

Michele Stokes, Tempe ADA Compliance Specialist
Strategic Management & Diversity Office
31 E. 5th St, 2nd Floor, Tempe, AZ 85281
Michele_Stokes@Tempe.gov
480-350-2704 or via Relay 7-1-1
www.tempe.gov/ADA

65

65

QUESTIONS

66

66

Audio Conference Series

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

67

67