



**CITY OF TEMPE**  
**ADA Self-Evaluation & Transition Plan**  
**Phase II**  
**– *Public Involvement* –**

**cole**<sup>®</sup>



# Introduction



## Presenters:

- **Michele Stokes**, ADA Compliance Specialist - City of Tempe/Office of Strategic Management and Diversity
- **Catherine P. Hollow, PE**, Sr. Civil Engineer - City of Tempe/Public Works/Engineering
- **Belinda Banger**, Vice President, ADA Liaison – Cole
- **Mike Vonderheide, PE**, Senior Project Manager – Cole
- **Kristi Avalos**, President, CEO – Accessology

# Introduction

**The City of Tempe is committed to accessibility:**

- Mayor's Commission on Disability Concerns
- Past and current accessibility improvements
- Updated Self-Evaluation & Transition Plan
  - Phase I was completed in 2017
  - Phase II is being presented today

# Today's Discussion

- **Who We Are**
- **ADA Self-Evaluation & Transition Plan**
  - Purpose, Approach & Process
- **Present an Overview of Phase II Findings**
  - Pedestrian Access Elements
  - Parks Elements
  - Transit Stops
- **Summary of Findings Document**
  - Importance of Public Involvement and Survey
- **Next Steps / Questions & Answers**

## ADA Self Evaluation & Transition Plan

### > What is it?

- **Self Evaluation** = a review of city policies, programs, services, facilities, parks, communications and pedestrian access (sidewalks, curb ramps, bus stops, traffic signals) to identify barriers that people with disabilities may encounter in order to remove them
- **Transition Plan** = an action plan that includes the responsible party and an estimate of time and cost to remove barriers to city programs and services



# Purpose



## ADA Self Evaluation & Transition Plan

- **Three-year evaluation began in 2015**
- **Phase I:** Evaluation of ramps, sidewalks, signals, bus stops, parking within the downtown Tempe areas and 10 parks
- **Phase II:** Evaluation of ramps, sidewalks, signals, bus stops north of Guadalupe, surrounding the Phase I area 9 parks and multi-use trails
- **Phase III** will include remaining parks and trails, on-line communications, service accommodations, all facilities, park restrooms, and emergency operations and shelter

# > Purpose

**Our goal is to receive your information on:**

- Your highest priorities
- If we are accessible to you
- Where we can improve
- What we are missing
- What agencies to include



## > Technology for Collection & Tracking

- City of Tempe has taken a progressive technological approach to reviewing accessibility
- Surveyors are skilled in assessing ADA compliance
- Pedestrian Access (sidewalks, ramps, bus stops, shade and signals) and Multi-Use Trails – by **Cole**
- Parks – by **Accessology**



## Technology for Collection & Tracking

- We use technology for efficiency and effectiveness in evaluating and documenting compliance issues
  - Data Collectors
  - ULIP-ADA (Ultra-Light Inertial Profiler attached to a Segway)
  - GIS mapping integration

## > 2 Technologies for Collection & Tracking

**IPads and customized forms to input ADA compliance issues**



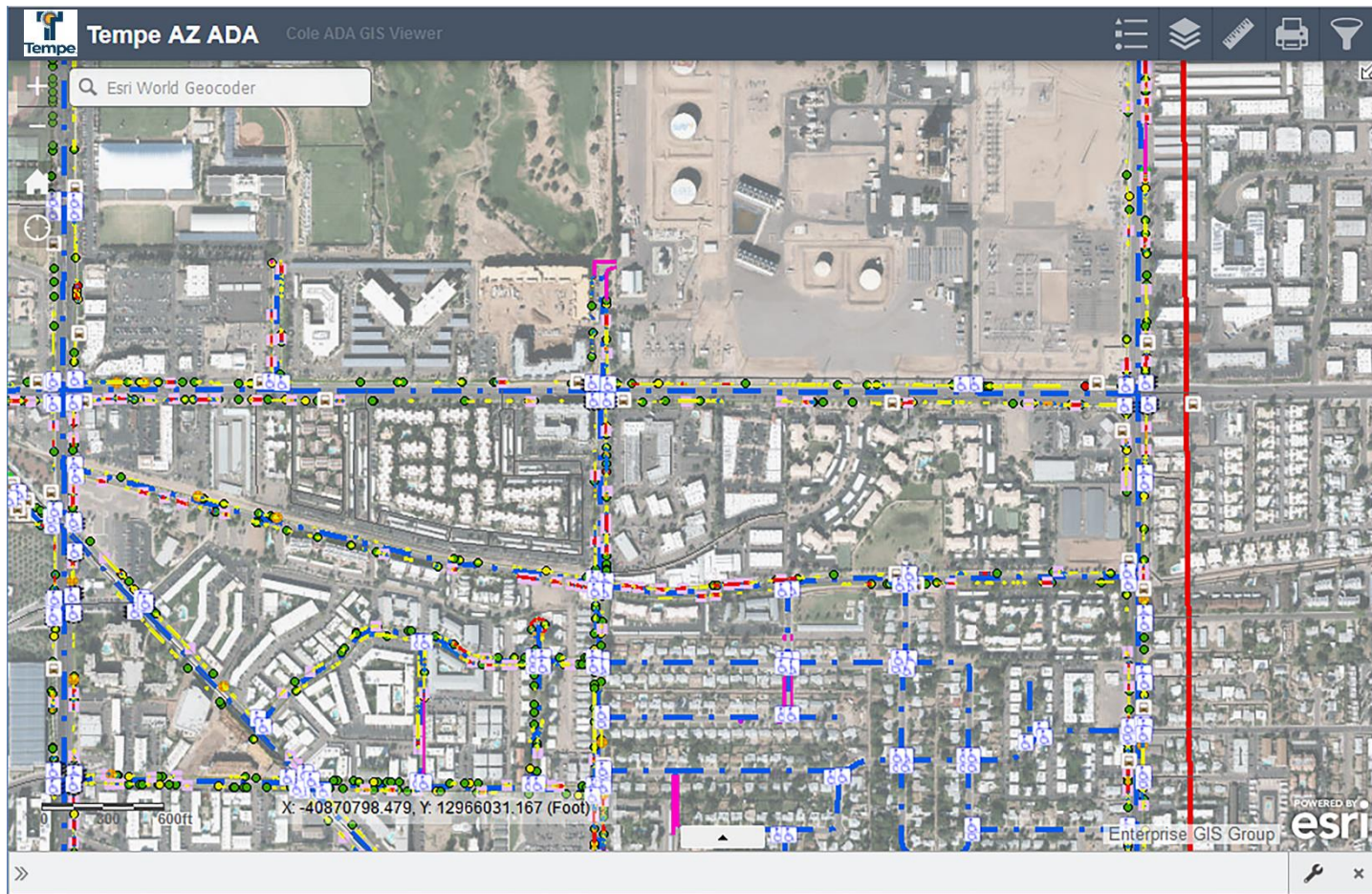
**ULIP-ADA: Ultra Light Inertial Profiler attached to a Segway to collect features of sidewalk compliance**



A video showing the ULIP-ADA in action

# Technology for Collection & Tracking

**GIS: We integrate all information in Tempe's Geographic Information System for better planning and tracking**

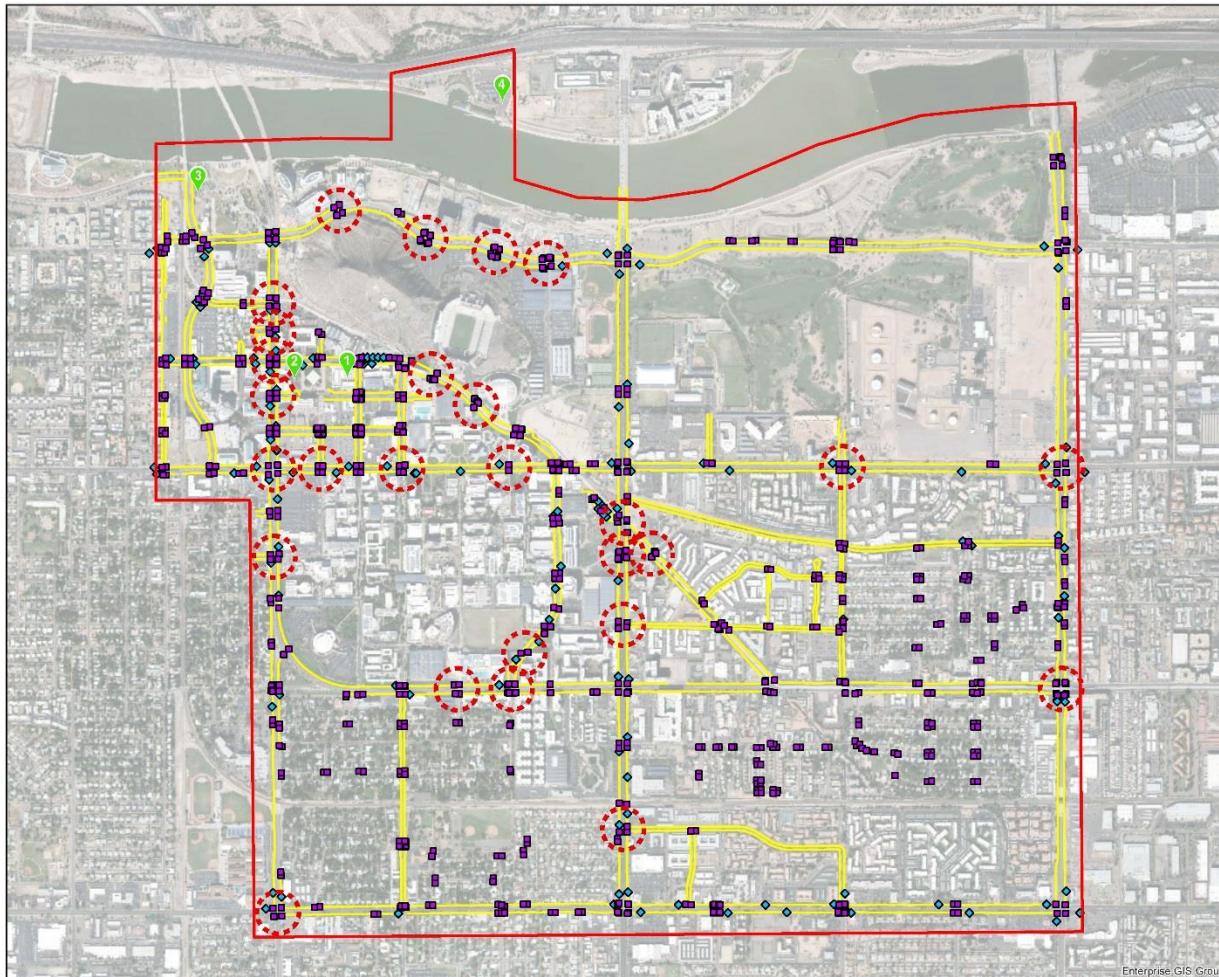




# Boundaries of Phase I



City of Tempe - Accessible Parking and R.O.W. Facilities



**LEGEND**

- Phase 1 Right of Way Survey Limits
- Parking Lot Name**
  - 1 City Hall Parking Garage
  - 2 City Hall West Lot
  - 3 Tempe Beach Park Lot
  - 4 Tempe Town Lake Lot
- Intersections with Collected Signals
- Ramps
- Transit Stops
- Sidewalk Corridors

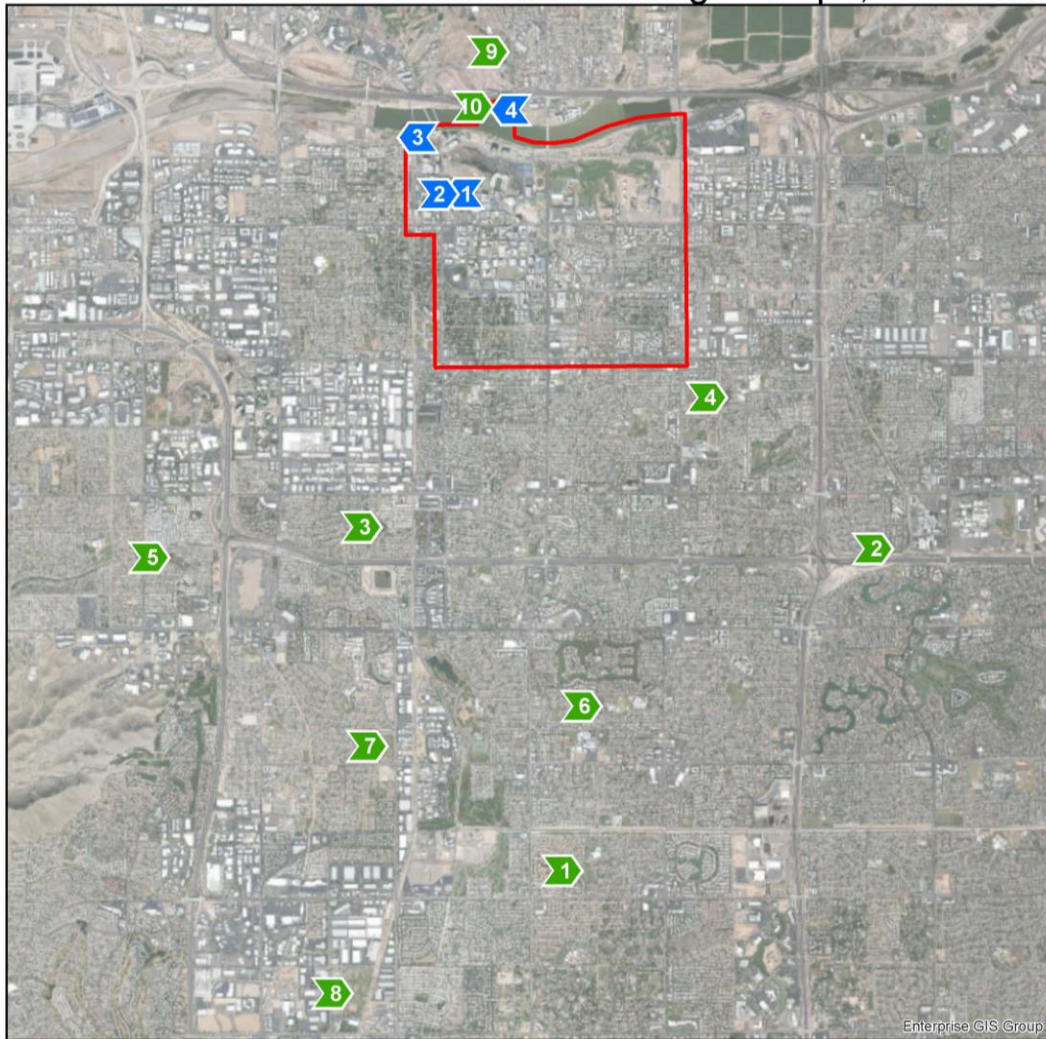
Enterprise GIS Group



# Boundaries of Assessment Phase I



## Parks and Parking - Tempe, AZ : Exhibit A



### LEGEND

Phase 1 Right of Way Survey Limits

#### Parking Lot Name

- City Hall Parking Garage
- City Hall West Lot
- Tempe Beach Park Lot
- Tempe Town Lake Lot

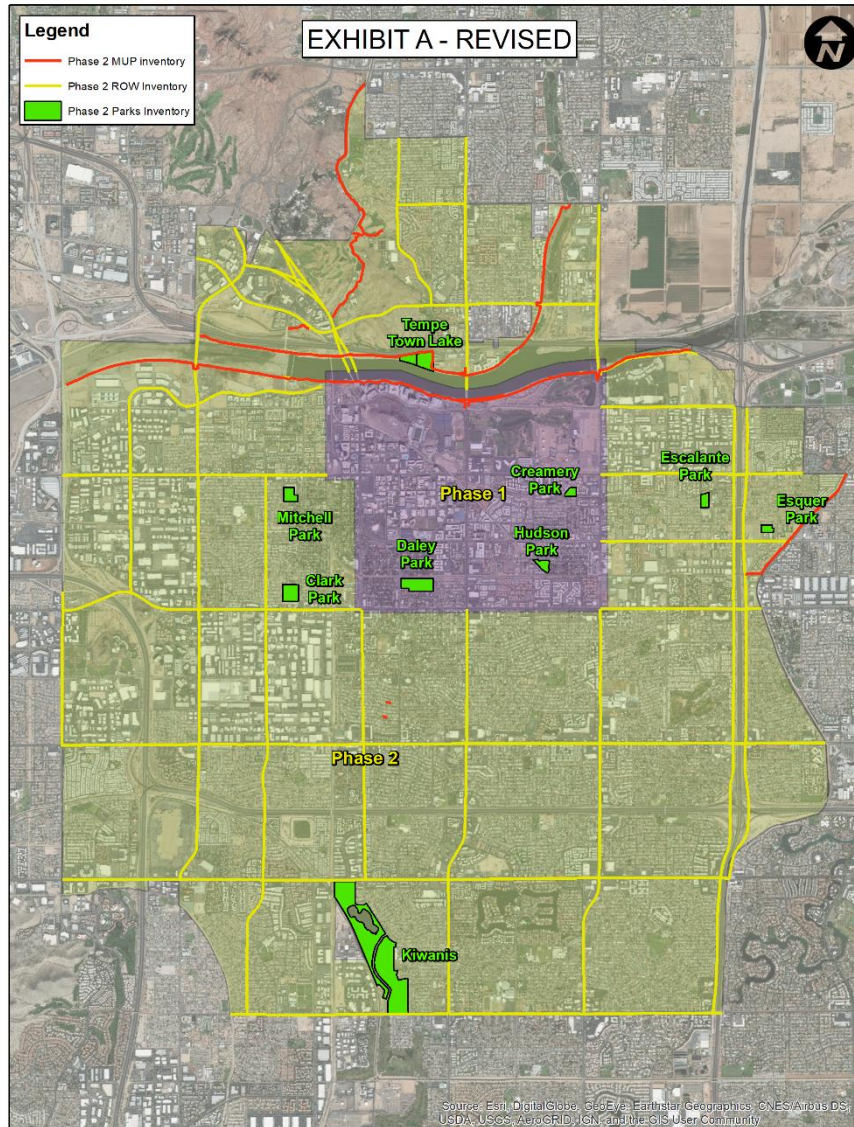
#### Park Name

- Corbell Park
- Ehrhardt Park
- Dwight Park
- Selleh Park
- Svob Park
- Scudder Park
- Benedict Field
- Tempe Sports Complex
- Papago Park
- Tempe Town Lake Park

Enterprise GIS Group



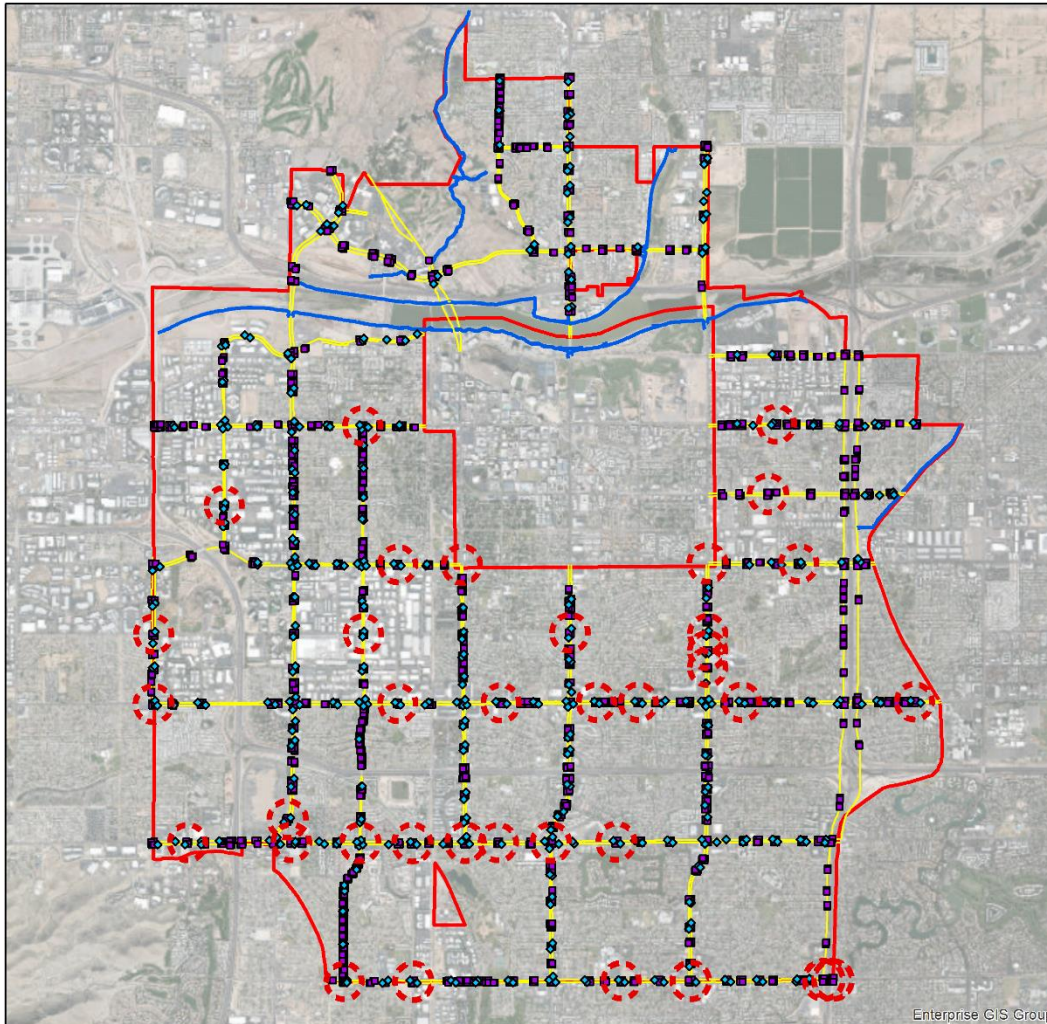
# Boundaries of Assessment Phase II





# Boundaries of Phase II – R.O.W.

City of Tempe - Accessible Parking and R.O.W. Facilities



**LEGEND**

- Right of Way Survey Limits
- Intersections with Collected Signals
- Ramps
- Transit Stops
- Sidewalk Corridors
- Multi-Use Paths

Enterprise GIS Group





# > Assessment - Phase II

## Street Corridors included:

- › Sidewalks
- › Curb Ramps
- › Signals (at roadway intersections)
- › Bus Stops and Shade

## Major Corridors included:

- McClintock
- Rural
- College
- Mill
- Kyrene
- Hardy
- Priest
- Guadalupe
- Baseline
- Southern
- Broadway
- Apache
- University
- Rio Salado
- Curry
- McKellips



# > Assessment - Phase II

## City Parks:

- Hudson
- Kiwanis
- Clark
- Creamery
- Daley
- Escalante
- Mitchell
- Esquer
- Tempe Town Lake Boat Launch & Marina

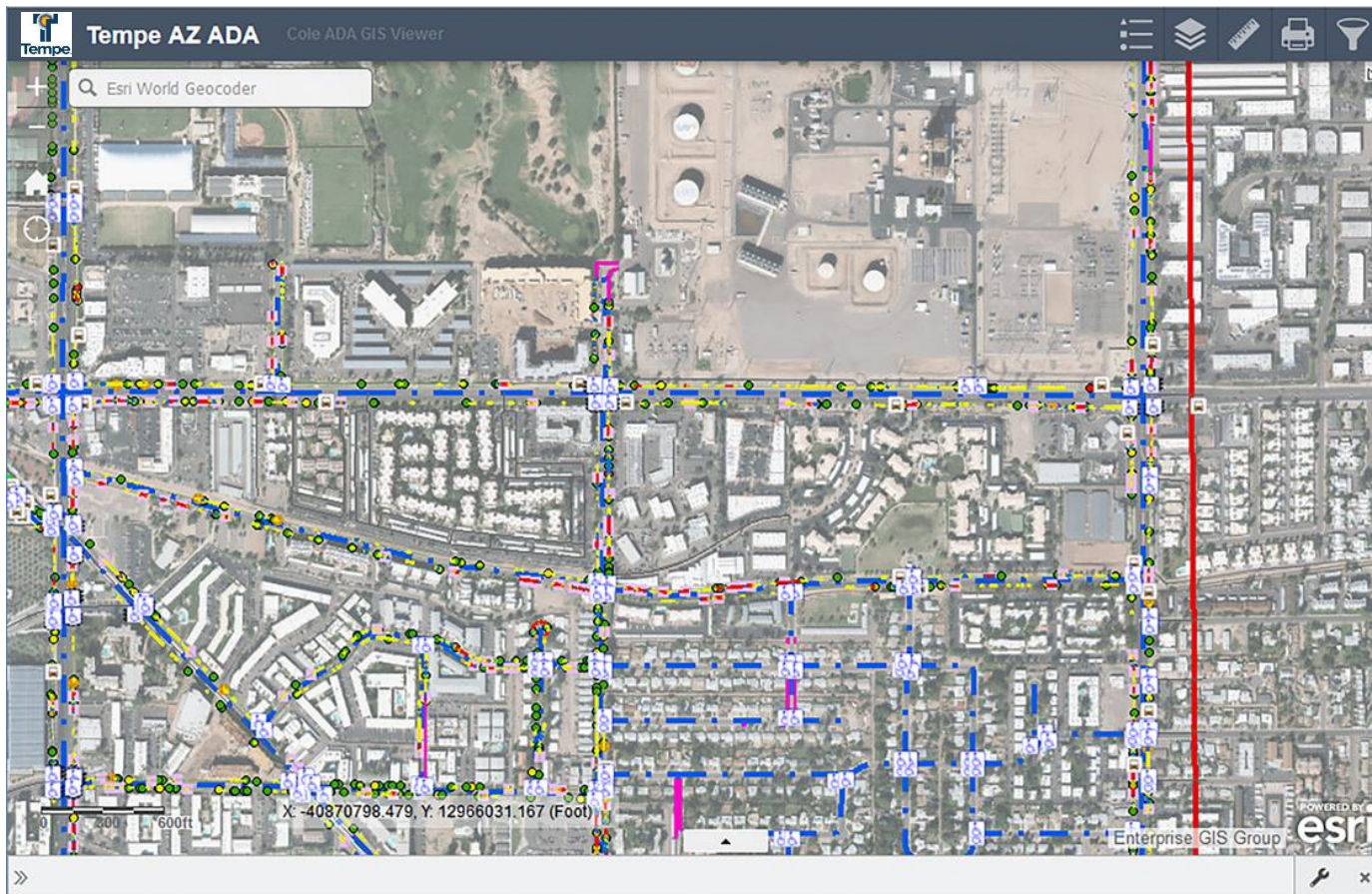


*Pictures of Clark Park  
Sand volleyball pit  
and playground areas*



# > Boundary – Pedestrian Access Routes

These are compliance issues plotted in GIS to allow for better planning and tracking:



# Findings – Phase II Total Costs

Facility Type	Evaluated	Non-compliant	Percentage Non-compliant	Cost
Sidewalk miles	104	42.9	41 %	\$30,040,350
Curb ramps	1,690	1,567	93 %	\$4,472,195
Pedestrian Signals*	157	151	96%	\$487,100
Transit Stops	386	325	84%	\$359,500
Transit Stop Shade**	386	148	38%	NA
Parks***	9	9	100%	\$779,750
Trail miles	13.4	4.7	35%	\$1,994,575
<b>Total</b>	-	-	-	<b>\$38,133,470</b>

\* Signal pushbuttons have minor clear floor space slopes and distance from pushbutton to pedestrian crossing is too long.

\*\* Transit Stop Shade is not required by ADA or other laws but is preferred by the City of Tempe.

\*\*\* Parks are broken down by numerous features – not all features were non-compliant.

# Findings – Pedestrian Access Routes

**We evaluated using 2010 ADA Standards and the 2011 Public Rights-of-Way Accessibility Guidelines Criteria, the following:**

- › Cross slopes and running slopes
- › Driveway crossings slope
- › Heaves in concrete
- › Gaps in connectivity
- › Obstructions
- › Curb ramp elements
- › Clear floor space at bus stops
- › Detectable Warnings (truncated domes) at curb ramps
- › Communication features at signalized intersections, such as audible tones, vibro-tactile & push buttons locations.

# Findings – Pedestrian Access Routes

## General Findings

- Newly constructed facilities tend to comply with 2011 Public Rights-of-Way Accessibility Guidelines (PROWAG)
- Pedestrian facilities constructed before 2013 have a higher propensity of minor access issues
- Construction Standard Details were updated in 2017 to increase accessibility

# Findings – Pedestrian Access Routes

## Sidewalks and common issues:

- 104 miles of sidewalks were evaluated
  - 61.1 miles were compliant and 42.9 miles have cross slopes that exceed the 2% maximum
  - Driveway cross slope crossings were a common issues, often exceeding the 2% slope limit

- Changes in level or sidewalk joint displacement. There are 65 locations of 1 inch or higher.

Sidewalk Corridor Cross Slope	Miles	Status
0% to 2%	61.1	Compliant
2% to 3%	25.8	Non-compliant
3% to 4%	7.7	Non-compliant
4% to 5%	2.5	Non-compliant
5%+	6.9	Non-compliant





# Findings – Pedestrian Access Routes

## Sidewalks, common findings:



*accessible path behind driveway*

# Findings – Pedestrian Access Routes

## Trails/Multi-Use Paths:

- 26.7 miles of accessible path were evaluated on 13.4 miles of trail (note that more than one pass is made to assess the path)
- 22 miles found compliant



*Multi-use Tempe Town Lake Trail*

Trails/Multi-use Path Cross Slope	Miles	Status
0% to 2%	22.0	Compliant
2% to 3%	3.2	Non-compliant
3% to 4%	1.0	Non-compliant
4% to 5%	0.4	Non-compliant
5%+	0.1	Non-compliant

# Findings – Pedestrian Access Routes

## Curb Ramps, common issues:

- 1,690 curb ramps were evaluated
  - Documented the presence of and type of curb ramp
  - 235 locations had missing curb ramps

- Evaluated elements such as running slope, cross slope, side flares, landings, detectable warning truncated domes and transitions from ramp to pavement

Curb Ramp Type	Total	Compliant	Non-Compliant
Perpendicular	1,152	80	1,072
Parallel	141	33	106
Directional	92	2	90
Combination	39	2	37
Blended	31	4	27
No Ramp	235	0	235
Total	1,690	121	1,567

- The City intends to remove and replace all Diagonal Curb Ramps as part of their program.

# > Findings – Pedestrian Access Routes

## **Curb Ramps, common issues:**

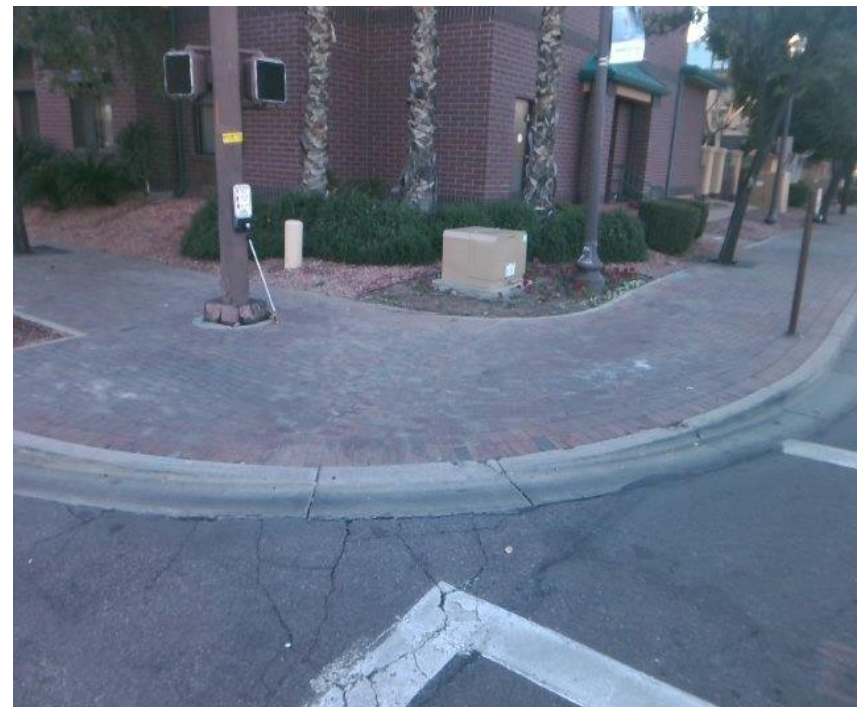
- Most new curb ramps comply with 2011 PROWAG
- Of non-compliant curb ramps, the most common issues:
  - Non-compliant or missing landings
  - Missing detectable warning truncated domes
  - Missing curb ramp where one needs to be installed

# > Findings – Pedestrian Access Routes

## Curb Ramps, common issues:



*Compliant Perpendicular Ramp*



*Missing Curb Ramp*



# Findings – Pedestrian Access Routes



## Signals at Intersections, common issues:

- 157 pedestrian signalized intersections were evaluated
  - Some signalized intersections do have complete APS (Accessible Pedestrian Signals) features and the majority are compliant
  - Documented if street crossing signal controls existed
  - Evaluated using 2011 PROWAG and 2009 MUTCD standards. All standards, such as proximity of pushbutton to street crossing and duration of timing, were evaluated

## Findings – Pedestrian Access Routes

### **Signals at Intersections, common issues:**

- Of the non-compliant signals, the most common issues:
  - Pushbutton locations had clear floor space that was not flat, with slopes that exceeded 2% grade
  - Some pushbutton locations were located too far away from the curb and crosswalk

# > Findings – Pedestrian Access Routes

## Signals at Intersections, common issues:



*Pedestrian Push Button*





# Findings – Pedestrian Access Routes



## **Bus Stops, common issues:**

- 386 bus stops
  - Evaluated for access to the stop, the landing, boarding areas, clear floor space next to seating area, and signage
  - 62% of bus stops were found to be in full compliance

# > Findings – Pedestrian Access Routes

## Bus Stops, common issues:

- Of the non-compliant bus stops, common issues:
  - Landing pads adjacent to the curb were either too small or had cross slope issues
  - Clear floor space: the area adjacent to seating was not available or the space was insufficient

Transit Stops - Shade	Total	Percentage
Full Shade	185	48%
Partial Shade	53	14%
No Shade	148	38%
<b>Total</b>	<b>386</b>	<b>100%</b>

*The assessment included shade; however, this is not a requirement of the ADA or other laws.*

# > Findings – Pedestrian Access Routes

## Bus Stops, common issues:



*Compliant Transit Stop*



*Expand Bus Pad Landing*

# > Findings Parks Facilities

## City Parks:

- › Hudson
- › Kiwanis
- › Clark
- › Creamery
- › Daley
- › Escalante
- › Mitchell
- › Esquer
- › Tempe Town Lake Boat Launch & Marina



*Mitchell Park's basketball court*

# Findings – Parks

**We evaluated using 2010 ADA Standards and the 2011 Public Rights-of-Way Accessibility Guidelines Criteria, the following:**

- Picnic Tables
- Playground Accessible Routes to Park Amenities
- Accessible Parking
- Drinking Fountains
- Restroom Access
- Sports Courts and Fields

# Findings – Parks

## Common Issues:

- Accessible parking space markings faded or has no access aisle or compliant path of travel
- Inaccessible picnic tables/grilles
- Inaccessible routes to playgrounds, picnic areas, basketball courts, ball fields, soccer fields.
- Inaccessible playground elements or surfacing
- Inaccessible drinking fountains

# > Findings – Parks

## Common Issues:



*Drinking fountain with no accessible route.*



*At Creamery Park, the path of travel from the transit stop the Ramada has a non-compliant run slope exceeding 8.33%*

# Findings – Parks

## Common Issues:



*At several parks the entry points to the ground level play components are not the required 60-inch minimum width*



*At Clark and Creamery Park, the gate to the dog park is missing the required 18" clear space on the pull side of the gate*



# > Findings – Parks

## Common Issues:



*Several parks are missing routes to key park components. This picture shows no accessible route to the volleyball pit at Clark Park.*



*Clark Park baseball diamond with no accessible route.*

# > Findings – Parks

## Common Issues:



*Town Lake Marina has substantial compliance in most areas; however some of the striping in the park lots have faded to a point of being undetectable.*



*Accessible picnic tables need to be provided at each area where picnic tables are offered along the Town Lake Marina.*



# Cost Estimate by Category – Phase II



## Public Rights of Way & Trails

Total Cost	Sidewalks	Trails	Curb Ramps	Signals	Transit Stops
\$37,353,720	\$30,040,350	\$1,994,575	\$4,472,195	\$487,100	\$359,500

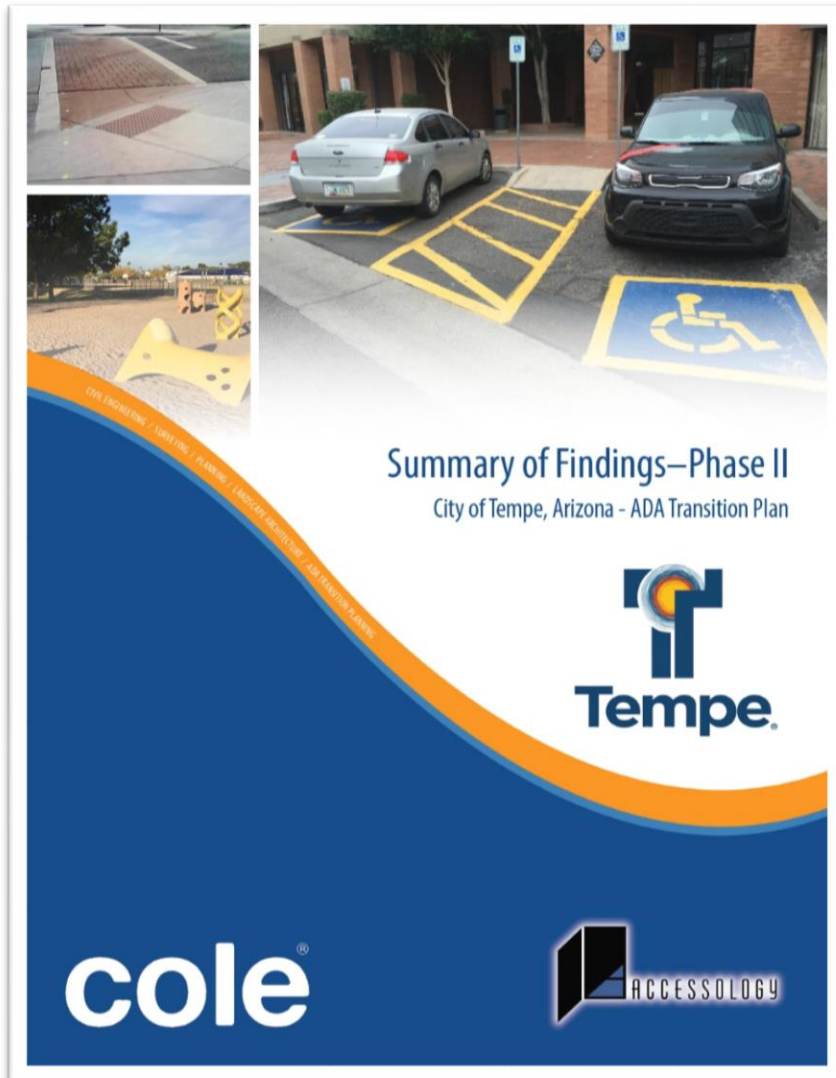
## Parks

Total Cost	Parking	Path of Travel	Playground	Restrooms	Picnic/Grills	Sports	Misc.
\$779,750	\$122,000	\$256,350	\$214,000	\$61,200	\$32,800	\$42,400	\$51,000

# Summary of Findings

Summary of Findings document available to the public for review.

[www.tempe.gov/ADA](http://www.tempe.gov/ADA)



# Community Input/Survey



*Survey document available to the public for input on accessibility priorities.*

[www.tempe.gov/ADA](http://www.tempe.gov/ADA)

## Is Tempe accessible to you?

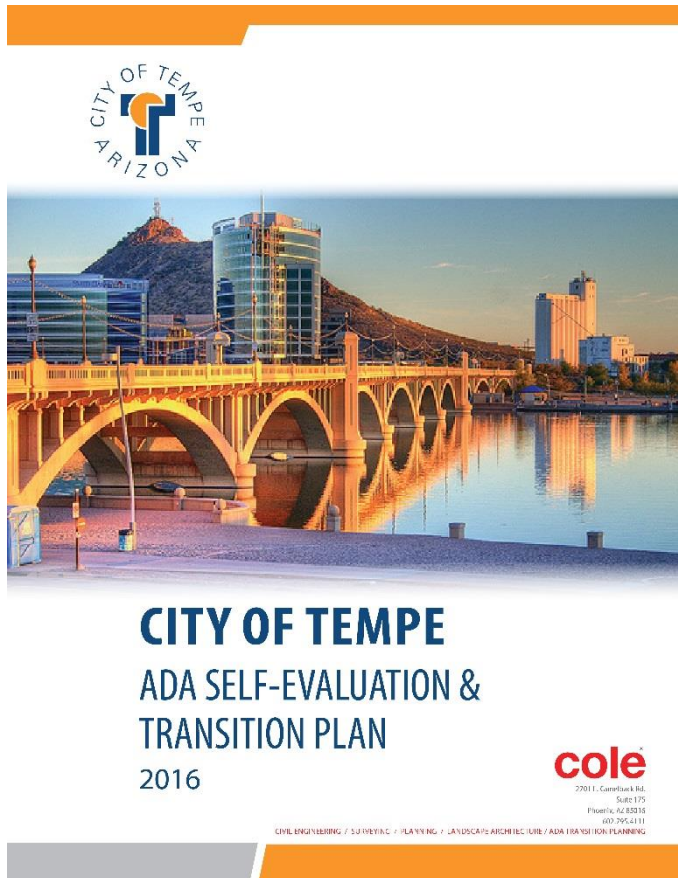
The City of Tempe is conducting an **Americans with Disabilities Act Self Evaluation and Transition Plan** to determine steps to take to ensure inclusion and access for people with disabilities. In the second phase we are surveying Tempe residents and others about the city's sidewalks, curb ramps, street crossings, parks and multi-use trails. Subsequent surveys will look at additional sidewalks, parks and facilities as well as programs, services, activities, events, policies, emergency management, training, general inclusion efforts and communications.

**Tempe would like YOUR help to determine what is most important to you! You may also take the survey on-line at [www.tempe.gov/ada](http://www.tempe.gov/ada).**

**The following nine demographic questions are optional. If you choose to respond, please mark all that apply:**

1. I am a Tempe resident, attend events, go to school, shop, and visit or work in Tempe.
  - Yes
  - No
  
2. I am a family member, caregiver, employer of, or individual that has functional needs or disabilities affecting: (mark all that apply)
  - Vision
  - Hearing
  - Thinking
  - Breathing

# Next Steps



- 6 week public involvement with on-line survey and presentations
- Transition Plan will be updated using public involvement info
- Transition Plan includes cost, time line and responsible parties for barrier removal
- Transition Plan approved by City Council
- City of Tempe will implement the Plan over a number of years

*City of Tempe's approved ADA Self Evaluation & Transition Plan Phase I*

# > Question & Answer





# Next Steps

