

## PUBLIC NOTICE

Notice is Hereby Given that the Tooele City Council and the Tooele City Redevelopment Agency will meet in a Work Meeting, on Wednesday, October 19, 2022, at 6:00 p.m. The Meeting will be Held in the Tooele City Hall Council Chambers, Located at 90 North Main Street, Tooele, Utah.

We encourage you to join the City Council meeting electronically by visiting the **Tooele City YouTube Channel**, at <https://tinyurl.com/ykjpjx4z> or by going to [YouTube.com](https://www.youtube.com) and searching "Tooele City Channel".

## AGENDA

1. **Open City Council Meeting**
2. **Roll Call**
3. **Mayor's Report**
4. **Council Members' Report**
5. **Discussion Items**
  - a. **City Code Text Amendment** Regarding Residential Treatment Facilities and Programs in the MU-G Mixed Use-General Zoning District  
*Presented by Jim Bolser, Community Development Director*
  - b. **LTAP Sidewalk Study Report**  
*Presented by Jamie Grandpre, Public Works Director*
6. **Closed Meeting**  
*~ Litigation, Property Acquisition, and/or Personnel*
7. **Adjourn**

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Michelle Y. Pitt, Tooele City Recorder

Pursuant to The Americans With Disabilities Act, Individuals Needing Special Accommodations Should Notify Michelle Y. Pitt, Tooele City Recorder, At 435-843-2111 Or [Michellep@Tooelecity.Org](mailto:Michellep@Tooelecity.Org), Prior To The Meeting.

**UTAH CODE**

**Title 62A. Utah Human Services Code**  
**Chapter 2. Licensure of Programs and Facilities**

**62A-2-101. Definitions.**

- (41) (a) "Residential treatment" means a 24-hour group living environment for four or more individuals unrelated to the owner or provider that offers room or board and specialized treatment, behavior modification, rehabilitation, discipline, emotional growth, or habilitation services for persons with emotional, psychological, developmental, or behavioral dysfunctions, impairments, or chemical dependencies.
- (b) "Residential treatment" does not include a:
  - (i) boarding school;
  - (ii) foster home; or
  - (iii) recovery residence.
- (42) "Residential treatment program" means a program or facility that provides:
  - (a) residential treatment; or
  - (b) intermediate secure treatment.

**TOOELE CITY CODE**

**Chapter 16. Zoning District Purpose and Intent. Mixed Use, Commercial, Industrial and Special Purpose Districts**

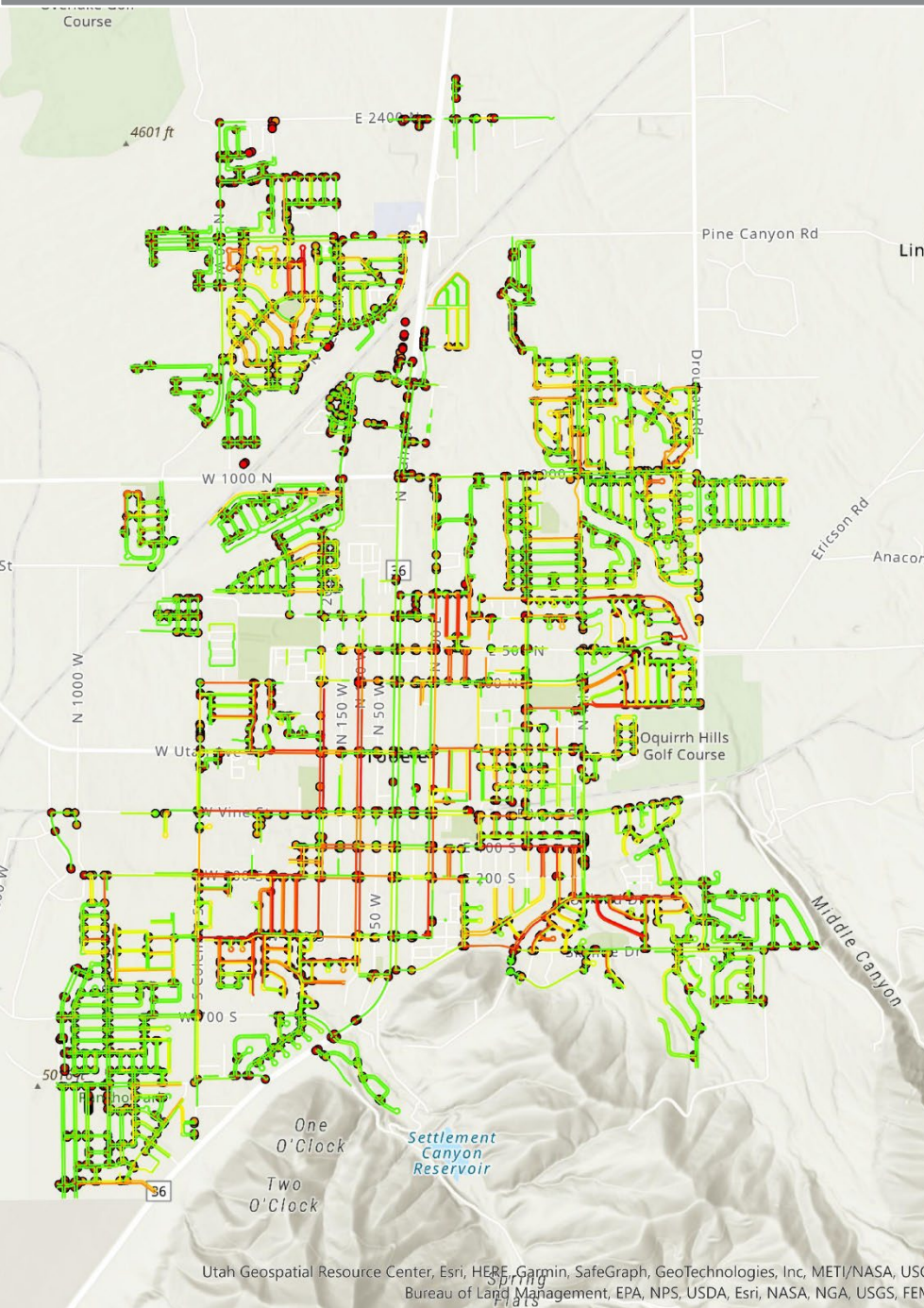
**TABLE 1  
TABLE OF USES**

DEVELOPMENT REQUIREMENT	DISTRICT								
	Mixed Use - Broadway (MU-B)	Mixed Use - General (MU-G)	Neighborhood Commercial (NC)	General Commercial (GC)	Regional Commercial (RC)	Light Industrial (LI)	Industrial Service (IS)	Industrial (I)	Research & Development (RD)
<a href="#"><i>Residential Treatment Facilities and Programs</i></a>		C							

# Tooele City

## 2022

# Sign/Sidewalk Assessment and Budget Recommendations



## UTAH LTAP

Utah Local Technical Assistance Program

Utah LTAP Center

4111 Old Main Hill

Logan, UT 84322-4111

[Utahltap.org](http://Utahltap.org)

801-395-4054

**UtahState**  
University

## **Section 1: Introduction**

The purpose of this report is to provide budget estimates and suggested priorities for proper sidewalk maintenance, obstruction removal, and accessibility ramps. Sidewalk maintenance is crucial to preserve infrastructure and enhance the walkability of a city. Data gathering for signs was also performed.

To develop reasonable maintenance priorities and budgets, an extensive survey of the Tooele City sidewalks was performed by the Utah Local Technical Assistance Program (Utah LTAP). This Utah State University (USU) extension service is funded by the Utah Department of Transportation (UDOT) to promote transportation management throughout the state. One aspect of the program is to promote asset management to local governments.

## **Section 2: Data Collection**

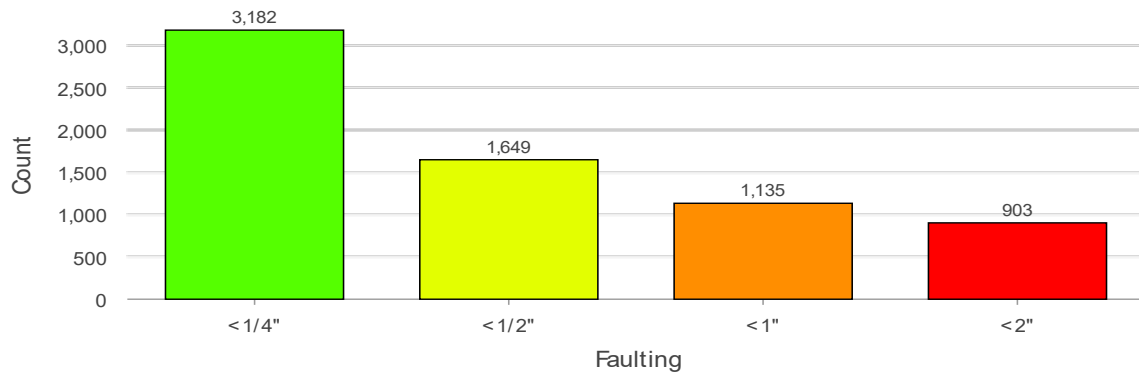
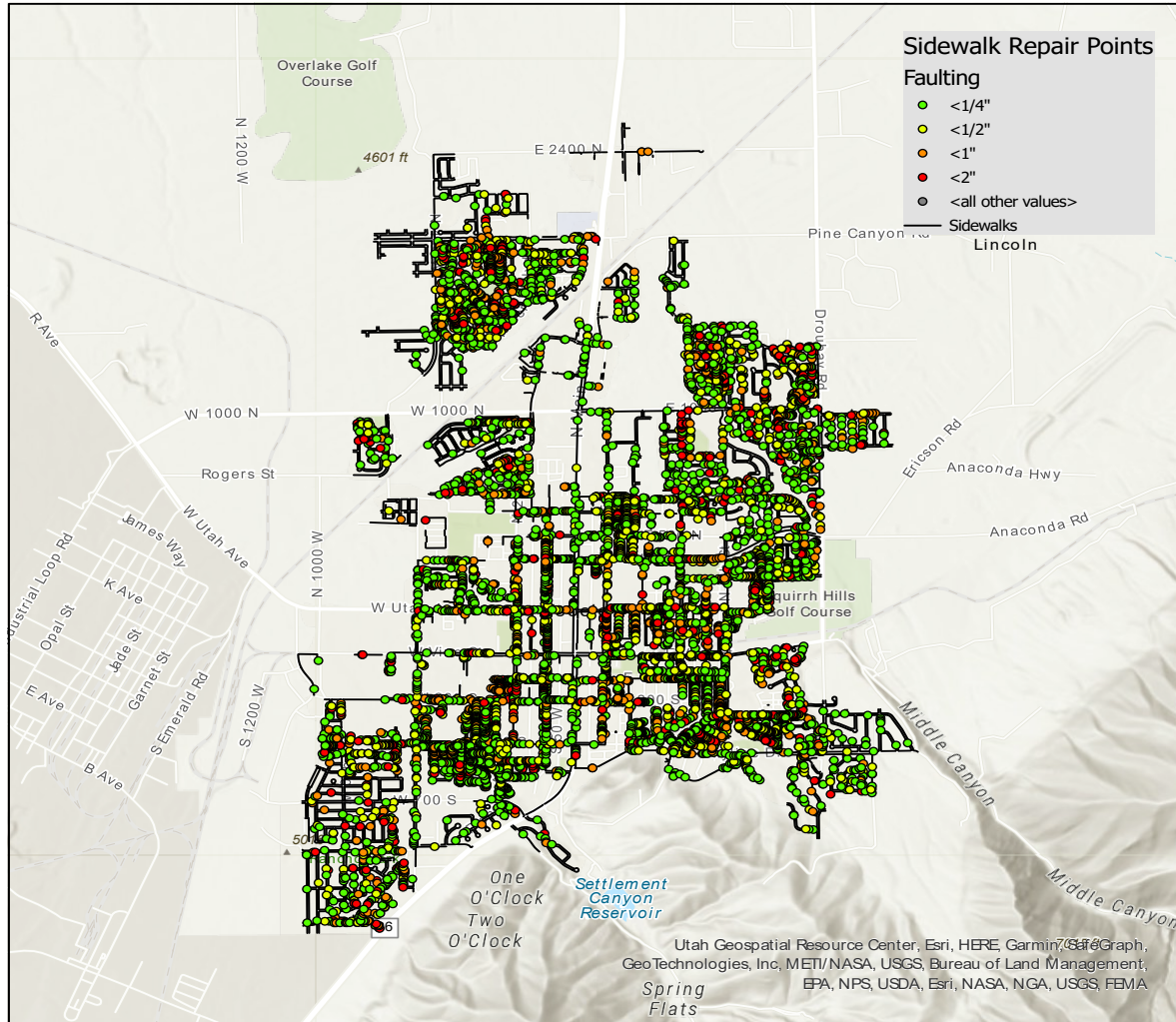
The first step in the inventory process involved incorporating the shape files of the sidewalk network into a GIS file that includes fields for sidewalk repairs, obstructions, and ADA ramps. The shapefile fields are used for maintenance budget calculations. A similar file was developed for the regulatory signs throughout the City.

The GIS file is used to catalog the field survey of signs/sidewalks. The digital GIS files associated with these surveys will be transmitted to the community GIS specialist.

LTAP engineering technicians used golf carts to traverse and access the sidewalks of the city; These allow for timely and accurate collection of data. The technicians used tablets to record data entries which were then uploaded to the GIS file in real time. LTAP engineering technicians had three options to report upon: sidewalk repairs, obstructions, and ADA ramps. For regulatory signs, there were similar report options: sign condition, sign height/location, pole crooked.

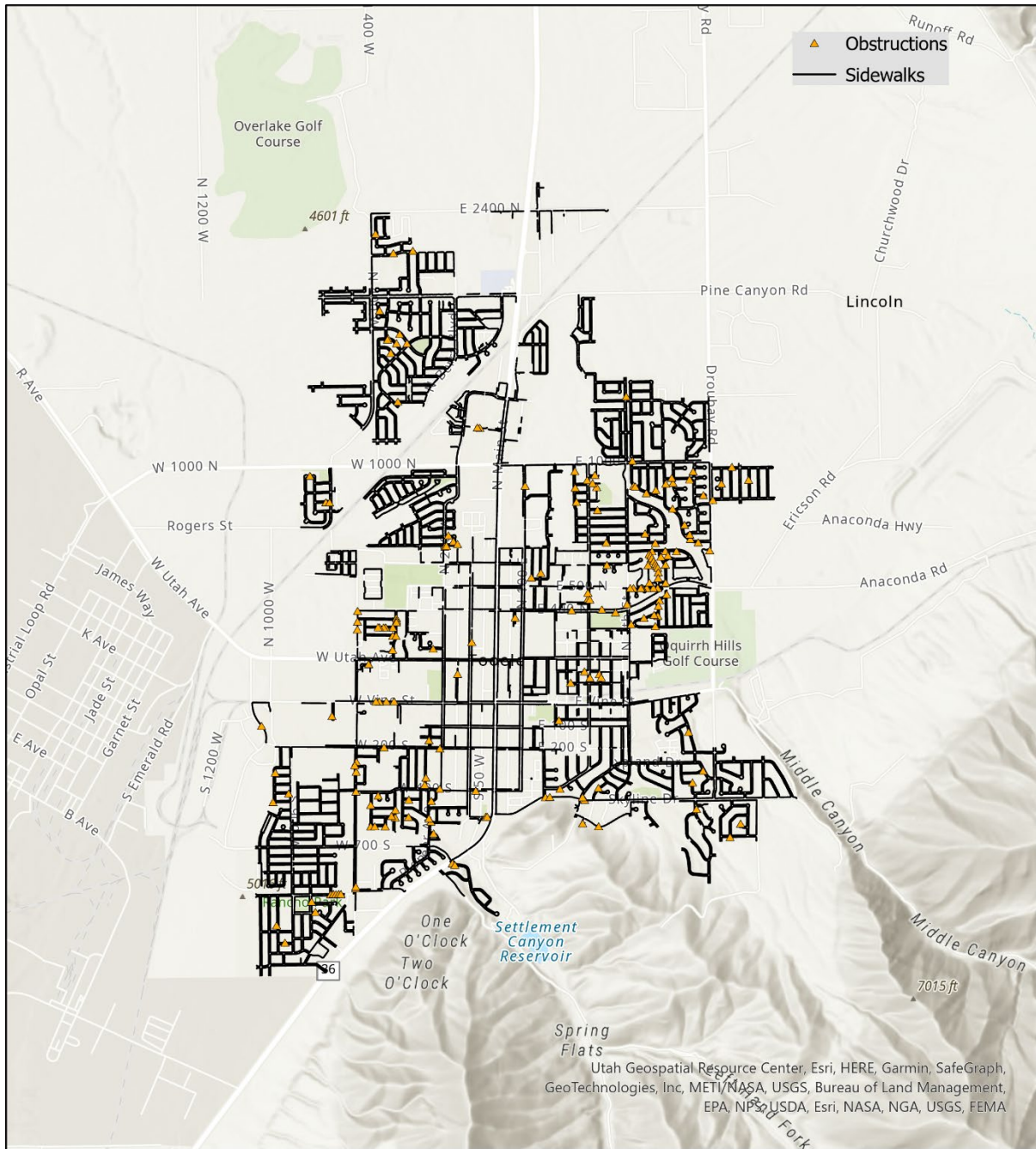


**Sidewalk repairs** include the following damage types: vertical separation, sag, and damaged/missing panels. These damage types have varying classifications and repair costs associated with them as seen in Table One. Figure One is a map/chart of the 6,869 damage points recorded throughout the city.



**Figure One - Map/Data of Sidewalk Faults**

**Obstructions** include the following issues that impact full use of the sidewalk: bushes, trees, landscaping, and mailboxes. Obstructions are single points that represent a section of sidewalk that needs to be corrected. Figure Two shows the locations of 188 obstructions.



**Figure Two - Map of Sidewalk Obstructions**

ADA ramp data includes the following: ramp with detectible warning surface, ramp without detectible warning surface, and no ramp/no detectible warning surface. Figure Three is a map/chart that which of the 2,411 crossing locations, over 50 percent need upgrades.

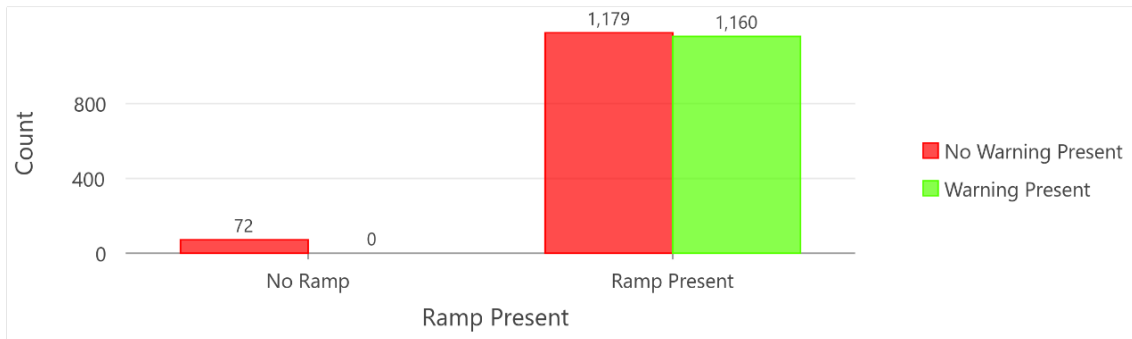
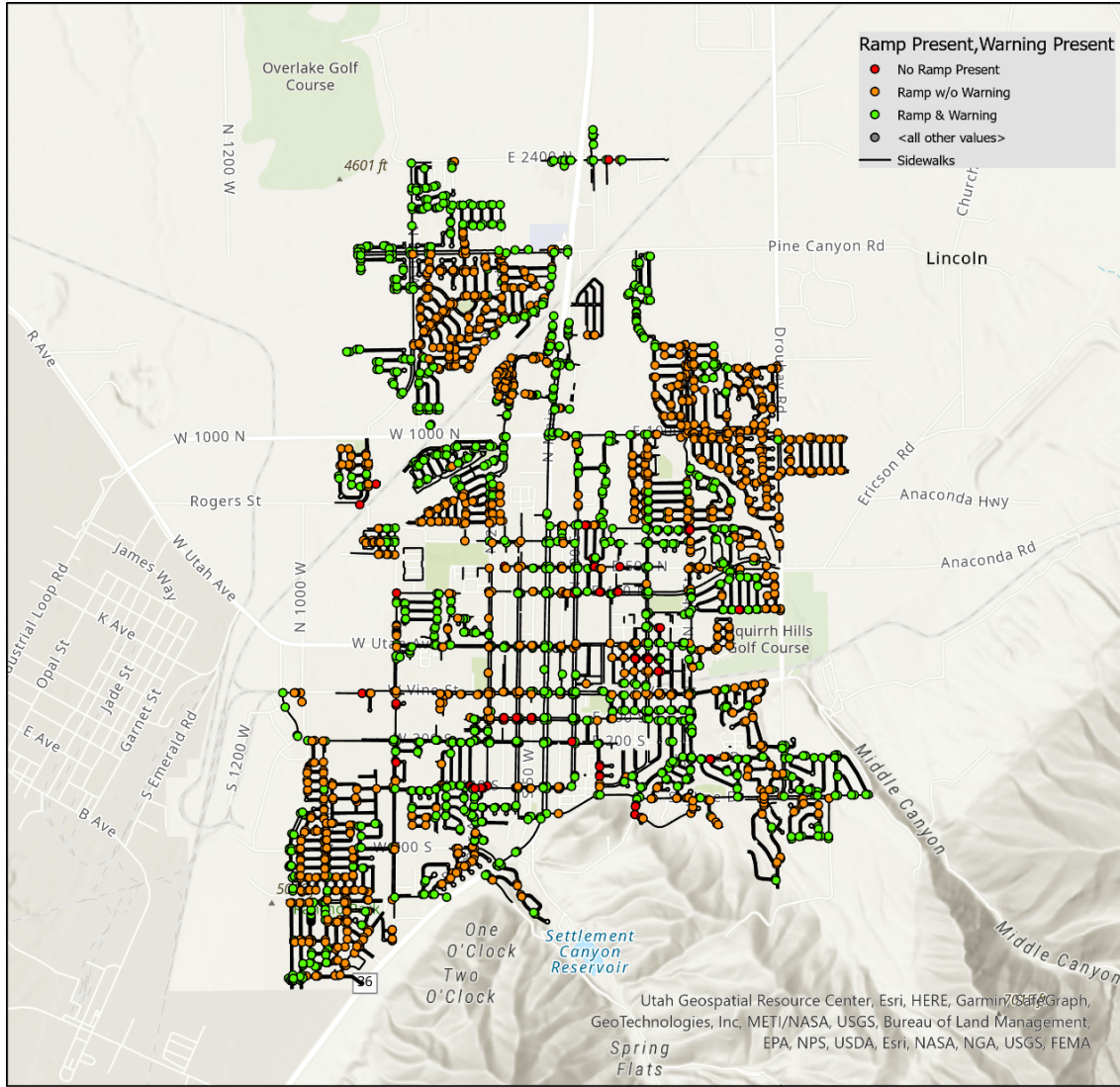
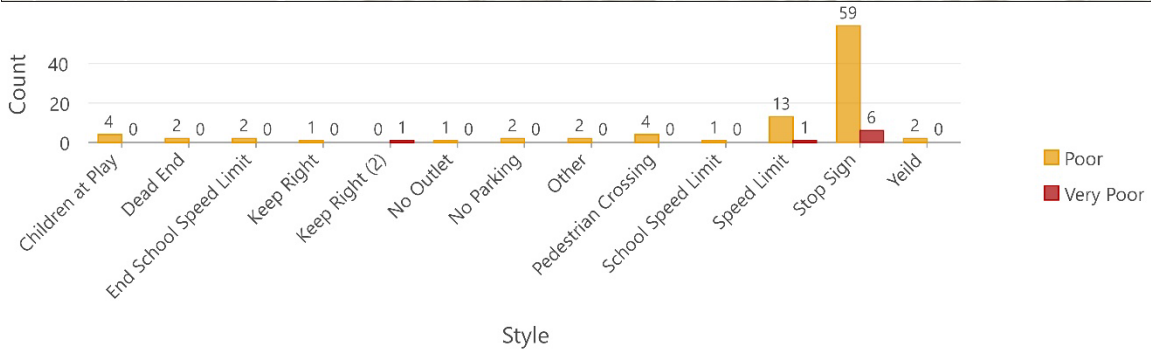
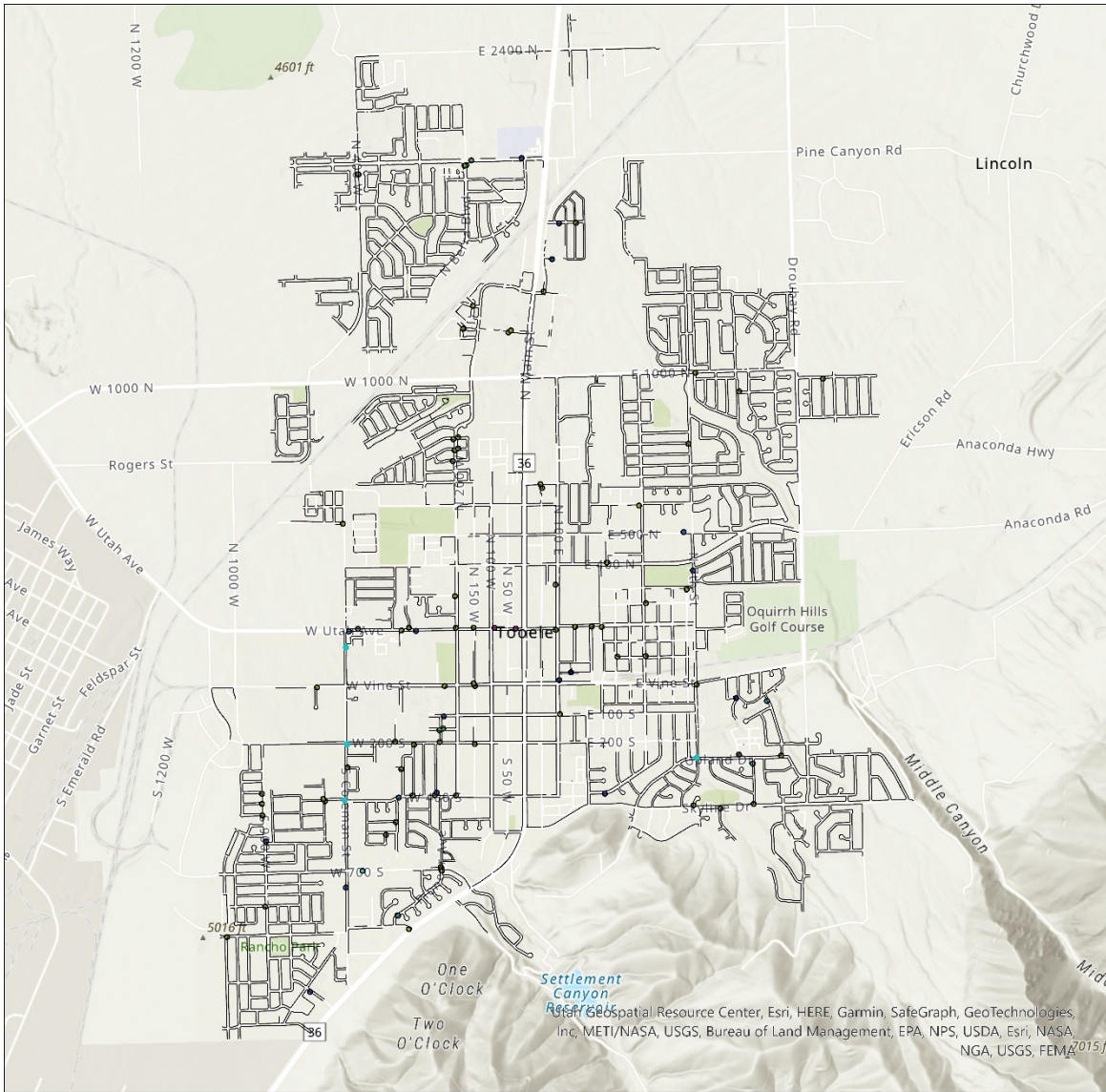


Figure Three - Map/Data for ADA Ramps



**Sign data** includes the many varieties of signs. The presented signs are rated at a poor or very poor rating. Figure Four is a map/chart that which of the 1080 signs recorded, just under 10 percent are rated with poor or very poor.



**Figure Four – Map/Data for Signs**

### Section 3: Repair Estimates

The cost to replace a concrete slab was estimated at \$396. This limits the repair costs to \$396 because it would be more cost effective to replace a damaged concrete slab than to do multiple repairs that cost more than a slab replacement. Table One displays the cost to repair varying distress types as well as ADA ramp costs.

**Table One – Repair Cost Estimates**

Trip Hazard	1/4"	1/2"	1"	2"	>2"
Vertical Separation	\$51	\$102	\$204	\$396	\$396

Single Hazard	Yes
Missing panel	\$396

Varying Hazard	Fair	Poor
Sag	\$200	\$396

ADA Ramp Costs	
Install new ramp & plate	\$2,500
Install new plate	\$500

Panel Price	\$396
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### Section 4: Budget Forecasting

The cost to repair or replace each segment is calculated spatially using the list of points within 5 feet of the given segment. These individual repair points have their budget calculated and then sequentially summed together for each given segment.

Obstructions are not calculated as a cost. The cost of repairing these obstructions is left to the property owner. Tooele City is responsible for informing the property owner of said obstructions.

A budget was not developed for replacing signs. This is due to their being many ways to address sign replacements through the MUTCD. Many cities are just budgeting to replace a percentage of signs each year and then replacing them in zones. These cities have found this to be more cost effective than trying to evaluate the retro-reflectivity of the sign, which was outside of the scope of this study. Therefore, the process of budgeting and replacing these signs is left to the discretion of City.

Figure Five shows the total repair estimates for sidewalk distresses. The graphic illustrates a heatmap which shows the most expensive repair areas (shown in yellow). These areas are in the southwest, southeast, and northwest. This heatmap might be used to prioritize locations for initial projects.

## Sidewalk Distresses

Figure Five shows the overall costs of repairing all the sidewalk faults. The total cost of repairing all damage is \$1,377,510. The largest segment of repairs was ¼” trip hazards, totaling \$531,828.

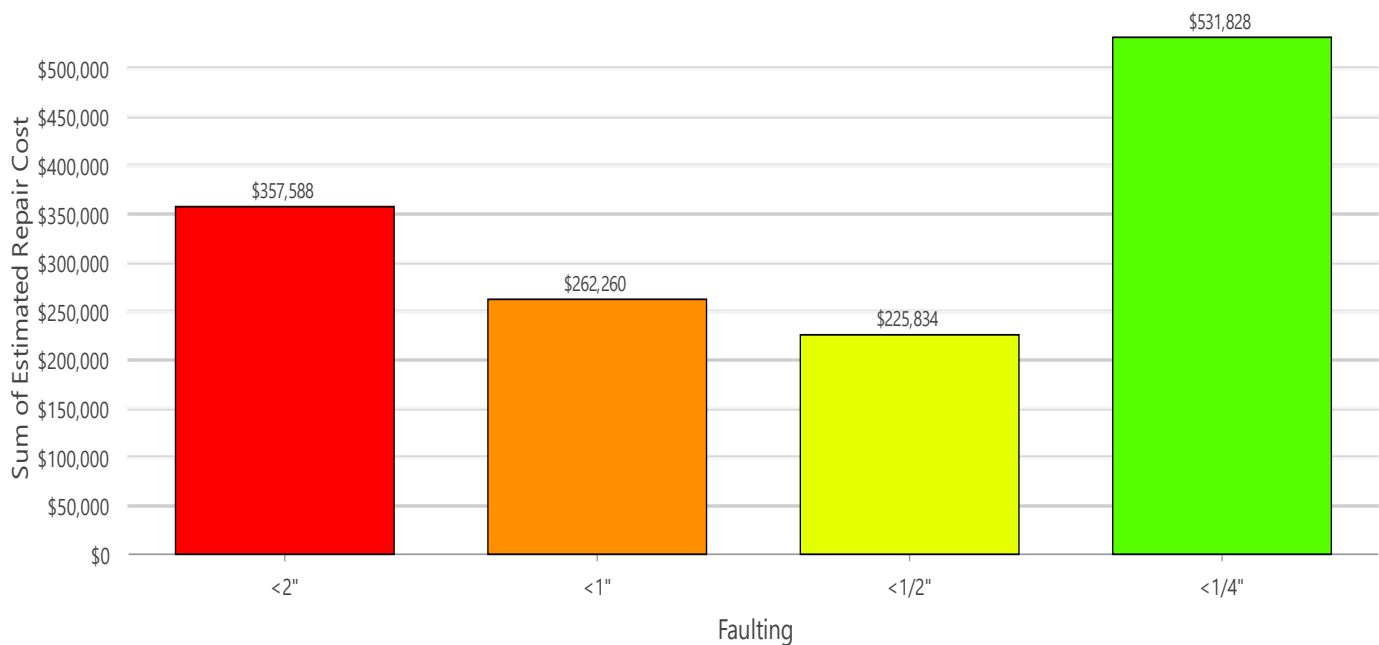
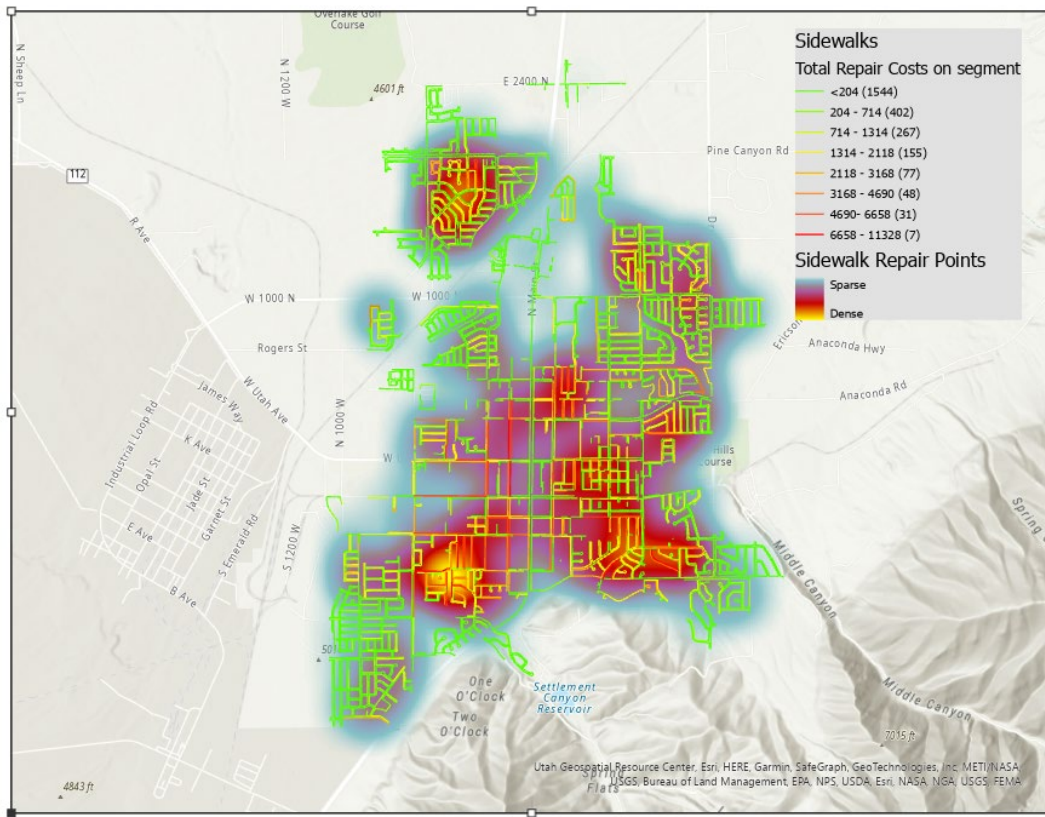


Figure Five - Total Repair Estimates for Sidewalk Distresses



## ADA Ramps

Figure Six shows the overall costs of repairing the ramp repair types. The total cost of repairing all ADA ramps is \$748,200. The heatmap below shows that ramp repair priorities may not be consistent with sidewalk repair priorities.

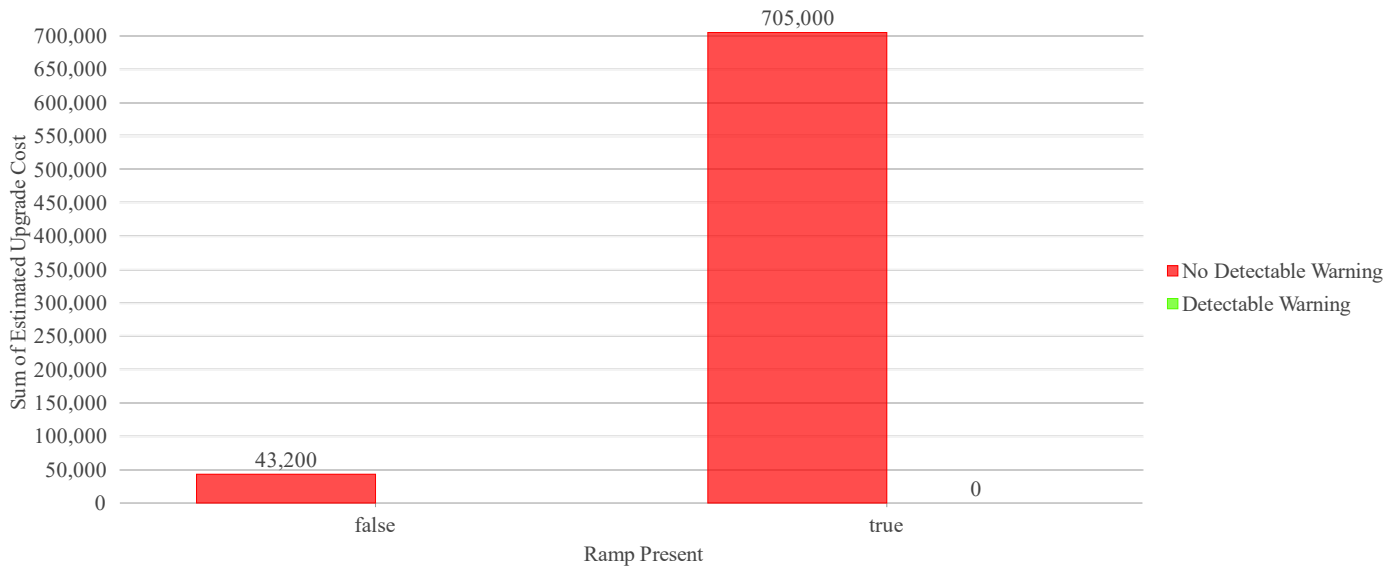
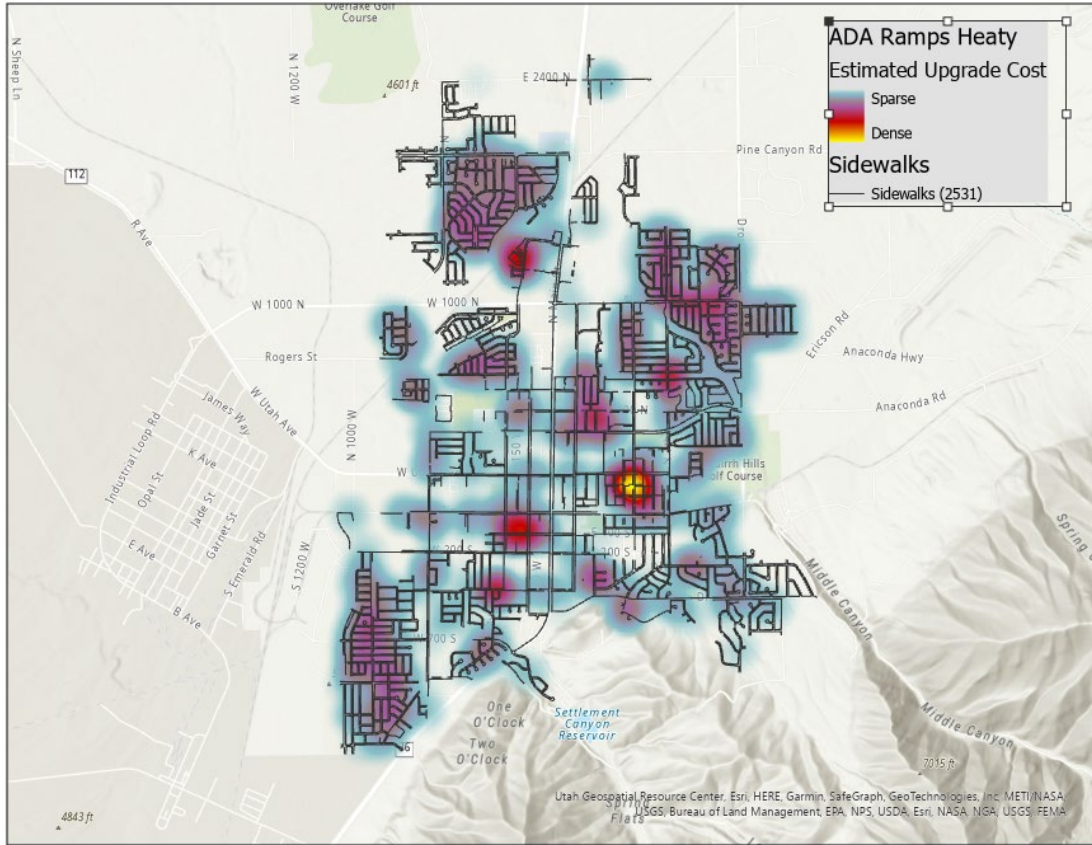


Figure Six - Total Repair Estimates for ADA Ramps

## **Section 5: Conclusion**

In conclusion, the total estimated sidewalk and ramp repairs for Tooele City is \$2,125,710. It is recommended that budgets should be projected to complete the projects over the next 10 years. Therefore, an annual budget of \$212,000 is recommended for sidewalk repairs. It should be noted that additional distresses will develop over the next 10 years, so sidewalk maintenance will be an on-going requirement.

It is recommended that this report be updated every five years so that both the sidewalk and budget can be monitored and re-evaluated. There could be future needs to increase the budget to keep up with construction inflation and additional sidewalk construction. Upgrading sidewalks and ramps will be an important part of transitioning Tooele City into compliance with ADA code. It is suggested that the City work with local schools through Safe Routes Utah to further prioritize the needs of schools.

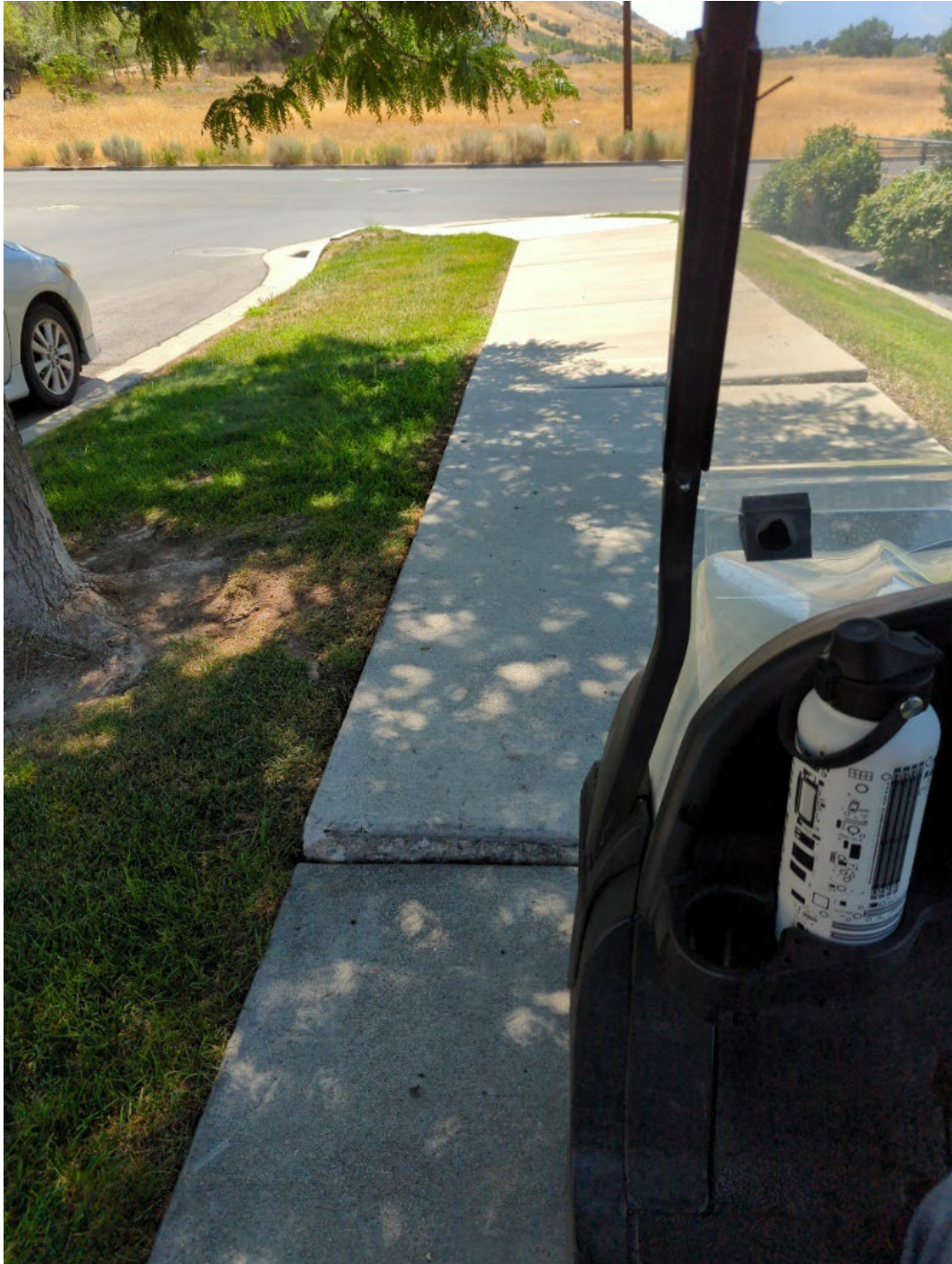
## Appendix A – Distresses

The following are example photos that help illustrate typical sidewalk distresses. As part of the field survey, some sidewalks were photographed for future reference by the city. The field survey photos are available as part of the GIS files developed.

Sidewalks are prone to seven main types of distresses:

- Trip Hazards
  - Vertical Separation
- Single Hazards
  - Multiple Cracks
  - Missing Panels
  - horizontal separation
- Varying Hazards
  - missing pieces/holes
  - sag
  - spalling

**Vertical Separation** is rated at ¼ inch, ½ inch, 1 inch, 2 inches, and above 2 inches. ADA considers anything over ¼ inch as a trip hazard. The shorter trip hazards can be fixed by grinding down the raised sidewalk slab until flush with the lower sidewalk slab. These distresses are often caused by tree roots and may require removal of the roots to stop the damage from resurfacing.





**Multiple Cracks** are rated on the presence of sprawling cracks on a slab. This distress can be fixed by replacing the damaged slab.





Missing panels are fixed by constructing a new sidewalk slab.





**Horizontal separation** is rated at greater than 1 inch. Horizontal separation above 1 inch can be corrected with sidewalk calking to fill the gap between sidewalk slabs.





**Missing Pieces/holes** are given fair or poor ratings. A fair rating means the holes or missing piece would require up to half of the slab to be repaired. A poor rating means the holes or missing pieces are significant enough to require slab replacement.



**Sag** is rated with fair or poor. A fair rating means the slab is offset by at least 1 inch. A poor rating means the slab is offset by greater than 1 inch. This distress might be fixed by mud jacking the sidewalk slab up to be level with the adjacent sidewalk slabs. Larger offsets, often caused by roots may require replacement of the slab.





**Spalling** was rated as fair or poor. A fair rating means the slab is less than half covered. A poor rating means the slab is greater than half covered. This distress can be fixed with a resurface of the sidewalk slab or replacing the concrete slab depending upon the damage severity.





## Appendix B – Obstructions

Sidewalks are prone to obstructions such as trees/bushes, rocks/landscaping, mailboxes, etc. These obstructions must be removed to allow for proper usage of the sidewalk and to bring the sidewalk up to ADA standards.

**Trees/bushes** need to be trimmed back in both width and height to allow free passage of pedestrians.





**Rocks/Landscaping** could require a homeowner or city to alter the edges of the property to allow free and safe passage of pedestrians over the sidewalk.



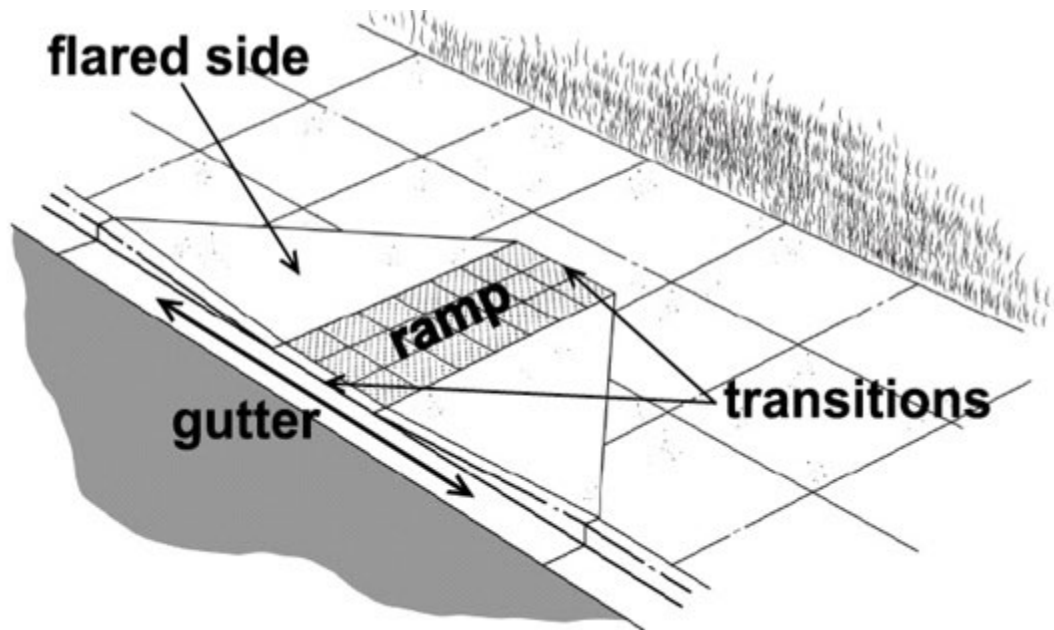


**Mailboxes** have multiple issues to fix. The first issue is when a sidewalk segment has no grass strip between it and the roadway. This causes homeowners to place their mailbox on the edge of the sidewalk causing an obstruction. The second issue is mailbox type and size. Many decorative mailboxes require more space and can obstruct the sidewalk for pedestrians.



## Appendix C – ADA Ramps

It is often difficult or impossible for a person using a wheelchair, scooter, walker, or other mobility device to cross a street if the sidewalk on either side of the street ends without a curb ramp. It is also dangerous. If curb ramps are not provided, these individuals are forced to make a difficult choice. They can either stay at home and not go to their chosen destination, or they can risk their personal safety by using their wheelchairs, scooters, or walkers to travel alongside cars and other vehicles in the streets. This is a choice that people with disabilities should not be required to make.



Title II of the ADA requires state and local governments to make pedestrian crossings accessible to people with disabilities by providing curb ramps. This requirement applies if your state or local government has responsibility or authority over highways, streets, roads, pedestrian crossings, or walkways. Some public entities have extensive responsibility for the highways, streets, roads, pedestrian crossings, and walkways in their area, but most public entities have at least limited responsibility for them.

To allow people with disabilities to cross streets safely, state, and local governments must provide curb ramps at pedestrian crossings and at public transportation stops where walkways intersect a curb. To comply with ADA requirements, the curb ramps provided must meet specific standards for width, slope, cross slope, placement, and other features. (ada.gov)

When surveying sidewalks, LTAP technicians did not check if a ramp met all the required specifications (i.e., slope, cross slope, DTM orientation, etc). They only checked whether a ramp exists and if the ramp had an acceptable detectable warning surface. It is left to the city to make sure ramps are constructed to proper specifications to meet ADA requirements.



## ADA Ramp Examples

Sidewalks are required to have ADA ramps on all corners crossing a street. These ramps are also required to have detectable warning surfaces. Detectable warning surfaces are used by those with sight impairments to recognize crossing locations.

**Ramp with detectable warning surface** requires no reconstruction but may require maintenance depending upon the quality of the ramp or if the ramp isn't following other ADA standards.



**Ramp without detectable warning surfaces** (or without the proper truncated domes) requires a reconstruction to insert the detectable warning surface into the concrete.



**No ramp no detectable warning surface** requires a removal and reconstruction of the corner on which the ramp is missing. The installed ramp should include proper detectable warning surfaces on the edge of the ramp. A new ramp should be designed to meet all ADA requirements.

