

# A Showcase of Utah's Apps, Maps, and Services

A high-level tour of our portfolio



Presented by Greg Bunce

# Wheel of Fortune

[utah.maps.arcgis.com](http://utah.maps.arcgis.com)

**AGOL**  
hosted feature  
services

**Database**  
PostgreSQL  
+PostGIS

[opensgid.agrc.utah.gov](http://opensgid.agrc.utah.gov)

**UGRC  
website**

data pages  
& index

[gis.utah.gov](http://gis.utah.gov)

[opendata.gis.utah.gov](http://opendata.gis.utah.gov)

**Open  
Data**  
[opendata.gis.utah.gov](http://opendata.gis.utah.gov)

**Web API**

http service for  
geocoding and  
search

[api.mapserv.utah.gov](http://api.mapserv.utah.gov)

**Discover**  
basemaps, imagery, web  
app

[gis.utah.gov/discover](http://gis.utah.gov/discover)

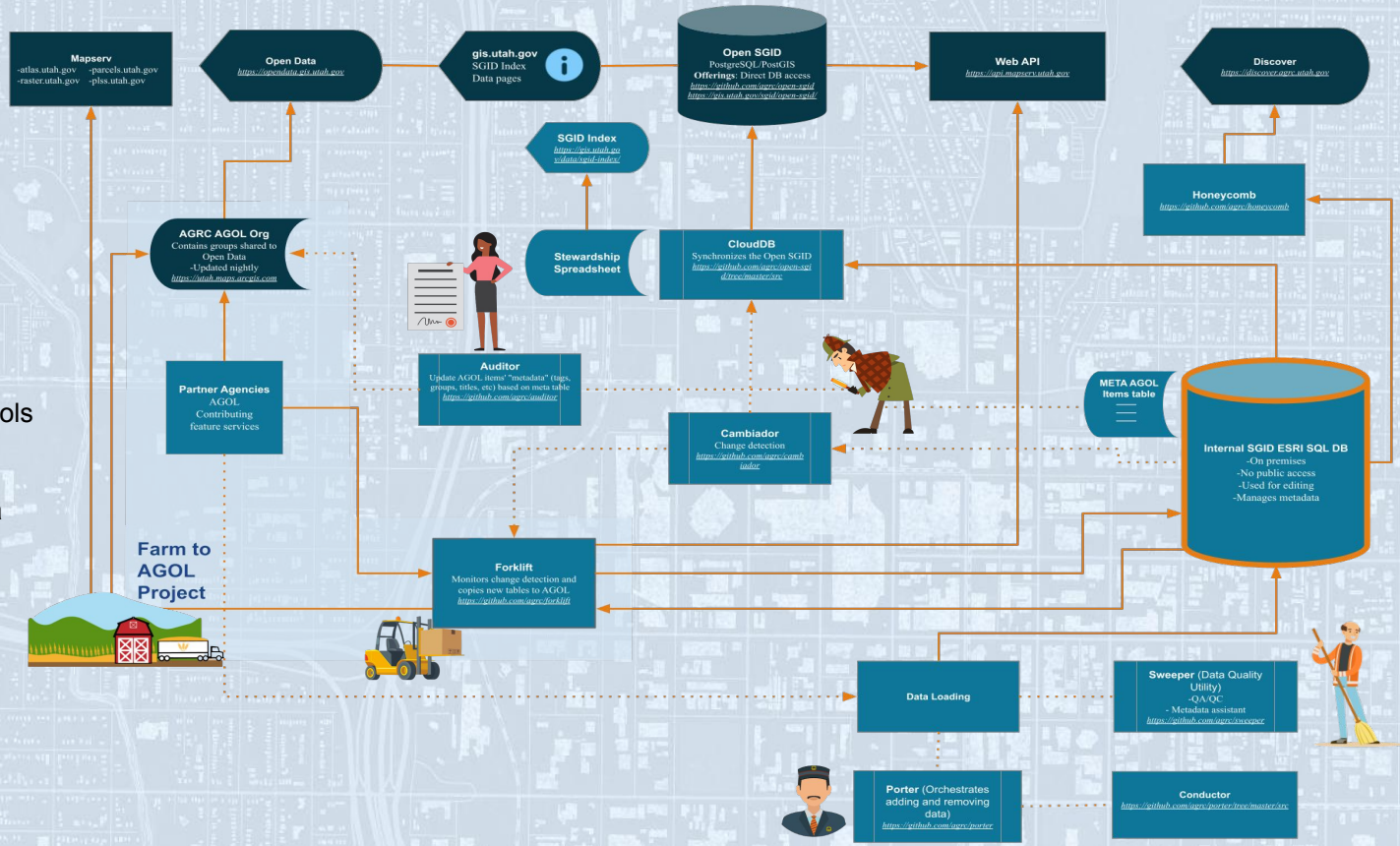
Wheel of Fortune



✓ Policies and procedures

✓ Automation & process tools

✓ Defined data flow



# Highlight Reel



## UGRC Logos and Usage



Download high resolution logos



Download high resolution logos



Download high resolution logos



Download high resolution logos



Download high resolution logos



Download high resolution logos



Download high resolution logos



Download high resolution logos



Download high resolution logos

### Do's

- Use these logos to advertise that your product (maps, apps, etc) was built with UGRC data and services
- Modify the size to fit your product

### Don'ts

- Modify the shape, colors, dimensions, or text of the logo
- Add your own text or images to the logo

# Branding media page

## Do's

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## UGRC Logos and Usage



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# Branding

## media page



our product (maps, apps, etc) was



### Don'ts

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# Branding

## media page

(c) was



on'ts

dimensions, or text of the logo  
changes to the logo



## GIS Map Data



Established in State law in 1991, Utah's State Geographic Information Database (SGID) provides one-stop download and web service access to hundreds of GIS map data layers developed, aggregated, or acquired by state government.

## Aerial Imagery & Base Maps



SGID aerial photography and base map services provide critical map context for GIS and CAD users, as well as web and mobile applications. Many vintages and themes are available, created from Utah GIS data resources.

## VRS GPS Network



VRS (virtual-reference-station) GPS Network is the foundation for live, up-to-sub-centimeter precision GPS field surveying, mapping, and construction. We currently maintain two networks, TURN GPS, which covers Utah and surrounding areas, and Nevada GPS covering Washoe County Nevada.

## Utah Map Applications



UGRC's development team designs, builds, and hosts cutting edge map-based web applications, custom designed to best meet specific agency/program requirements. From [up-to-date Utah reference maps](#) to [custom designed web apps](#) that best put specific agency/program information at your fingertips.

## Geo APIs



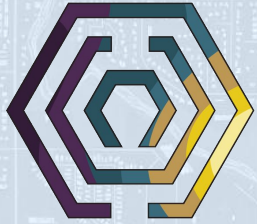
Are you designing or coding an app or process that needs "Where is?" or "What's At?" answers? Geocoding and point-in-polygon map queries are available via web APIs, from [api.mapserv.utah.gov](#). Sign up for your complimentary account today!

## News, Events, & Coordination



Utah is widely recognized as a leader in the GIS field. Coordination, partnering and information sharing — in the form of news, events, tips, and data — fuel our collective success. [Sign up](#) for our newsletter to stay in touch!





# SGID

STATE GEOGRAPHIC  
INFORMATION DATASOURCE

Data clearinghouse

200+ layers

Goal

- One-stop-shop search catalog

## Find Utah Authoritative Data

SGID - Connecting people with information

Explore the SGID through data categories

**Ba**  
Basemaps

**Bi**  
Bioscience

**Bo**  
Boundaries

**Ca**  
Cadastre

**Di**

**Dr**

**En**

**EI**

### SGID Index

Show Filters

Simple Filter (matches text in individual columns with list.js)

category	name	agency	description	service
basemap	Address Points	UGRC	A muted basemap great for overlaying data.	
location	Address Points	UGRC	Address points	

# Sweeper

The data cleaning service



- Addresses
  - Checks that addresses have minimum required parts and optionally normalizes them
- Duplicates
  - Checks for duplicate features
- Empties
  - Checks for empty geometries
- Metadata
  - Checks to make sure that the metadata meets the Basic SGID Metadata Requirements

# Auditor


- Audits AGOL Feature Service items

- Title
- Group
- Folder
- Metadata
- Shelved/static
- Thumbnail image
- Delete protection
- Export to different formats (Open Data)
- Authoritative



Utah County Boundaries Edit Overview Data

Edit thumbnail



This data set represents county boundaries. Edit

Feature Layer (hosted) from Utah Automated Geographic Reference Center (AGRC)  
Managed by UtahAGRC

Item created: Jun 5, 2017 Item updated: Sep 19, 2023 View count: 508,548

Add to Favorites Authoritative

Description Edit

This dataset reflects the most current version of Utah county boundaries plus modifications made to correct known issues along the Davis-Weber and Duchesne-Uintah county boundaries, (20111108) and boundary agreement (certified 20120612) between Juab and Millard Counties. And an adjustment between Morgan and Summit Counties (4/3/2013). Minor adjustments were made to align with the Newest PLS-GCDB layers from BLM (CadNSDiv2), any where from 10 to 50 feet all in non-populated areas (7/18/2014). Minor adjustment between Davis and Weber County (20201105)

Data is current through Nov. 15, 2021; Population Figures from 2020 Census. Population Estimates are Null until we get a 2021 update.



Layers

- Counties  
Polygon layer


Terms of Use


The data, including but not limited to geographic data, tabular data, and analytical data, are p

Share Edit

 + 

Owner Change owner

 Utah Automated Geographic Reference Center (AGRC)

Managed by:  
 UtahAGRC

Folder Move

- Boundaries

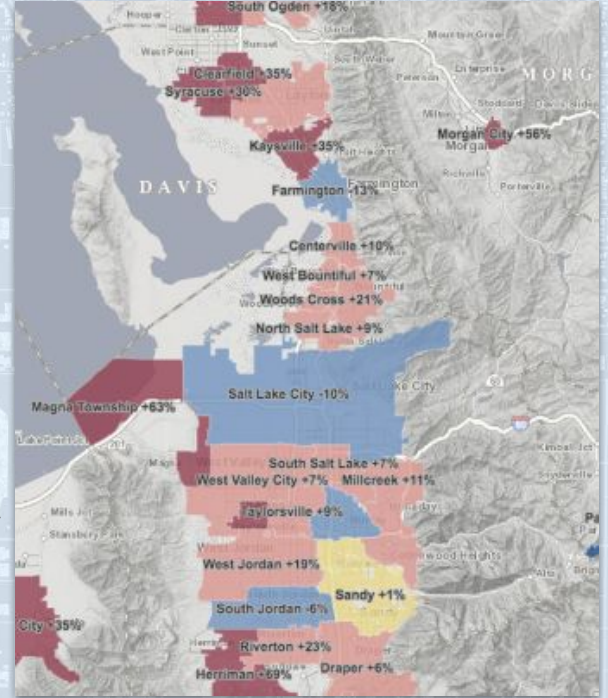
Tags Edit

SGID, Counties, Boundaries, UGRIC



# Palletjack

Updates AGOL feature services with data from several different types of external sources.



# API Client

Desktop geocoding application  
No GIS required



1	address	zipcode	x	y	score	match_address
2	2987 S 6070 W	84128	-112.0358	40.7058	100	2987 S 6070 W, SALT LAKE CITY
3	223 W 300 N	84302	-112.0197	41.5167	100	223 W 300 N, BRIGHAM CITY
4	136 E SOUTH TEMPLE ST	84111	-111.8871	40.7691	100	136 E SOUTH TEMPLE ST, SALT LAKE CITY
5	618 E 1700 N	84414	-111.9617	41.2891	100	618 E 1700 N, OGDEN
6	2334 MONROE BLVD	84401	-111.959	41.2238	100	2334 MONROE BLVD, OGDEN
7	3439 S BARCELONA DR	84790	-113.5728	37.0506	100	3439 S BARCELONA DR, ST GEORGE
8	655 S 300 W	84720	-113.0663	37.6662	100	655 S 300 W, CEDAR CITY



← BACK

## Add your data

The UGRC API requires 2 inputs to geocode. The first is a street address in the form of

<b>301</b> house number	<b>South</b> prefix direction	<b>Main</b> street name	<b>Street</b> street type or suffix direction
----------------------------	----------------------------------	----------------------------	--

The second required input is a zone. A zone can be a zip code or a city name. If your data has both available, prefer the zip code. This data needs to be structured data in a CSV format with a header row.

**DROP THE CSV FILE HERE**



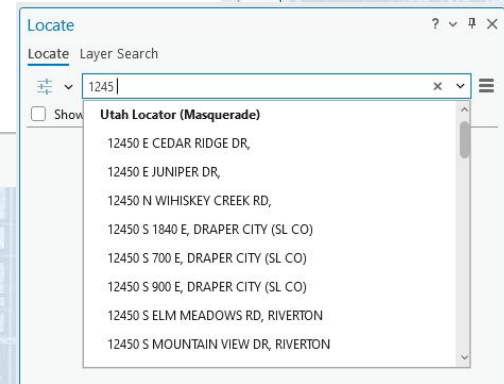
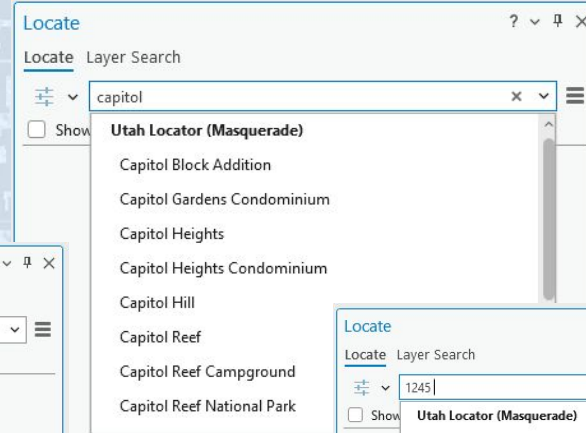
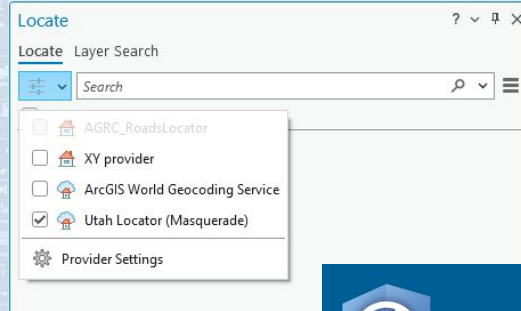
## Choose your spatial reference

The way the coordinates are returned from the API can vary based on the spatial reference. They can be returned as meters, feet, or decimal degrees. Below are the three most used spatial references. If you require something different, please add the wkid.

<b>26912</b> <small>(425602.11, 451349.102)</small> UTM Zone 12 North (state standard)	<b>4326</b> <small>(1188, 4076)</small> WGS 84 (lat/lon)	<b>3857</b> <small>(-1284597.87, 4978333.39)</small> Web Mercator (web mapping)
---	--	---

# Masquerade

A proxy service that impersonates an Esri locator using UGRC data and web services.



# Atlas

## Atlas Utah

### What's here?

**Approximate Street Address**

9899 S Homestake Rd  
[Google Street View](#)

**City**

Alta

**Zip Code**

84092

**County**

SALT LAKE

**UTM 12 NAD83 Coordinates**

448071.67, 4491387.97 meters

**WGS84 Coordinates**

-111.6135, 40.57165

**Elevation Meters**

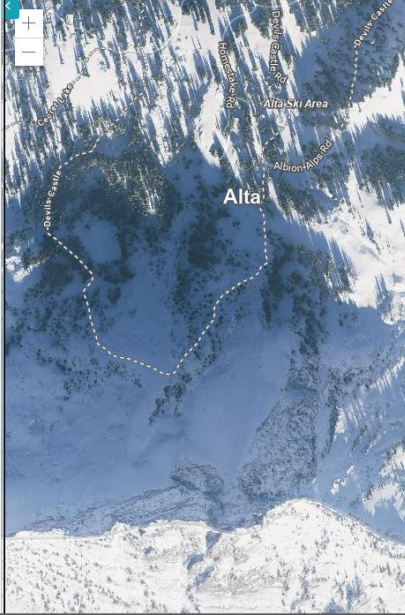
2947.41

**Elevation Feet**

9670

**Land Administration**

**Category**  
Private



## Atlas Utah

5.4.8



Data and services provided by UGRC.

Click a location on the map for more information

### Find Address

Street address

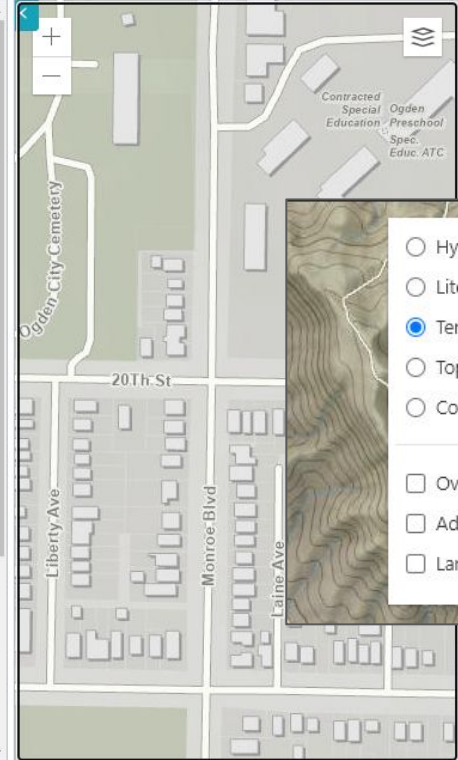
City or Zip code

Find

### Find Point of Interest

### Find City

Export Map



- Hybrid
  - Lite
  - Terrain
  - Topo
  - Color IR
- 
- Overlay
  - Address Points
  - Land Ownership





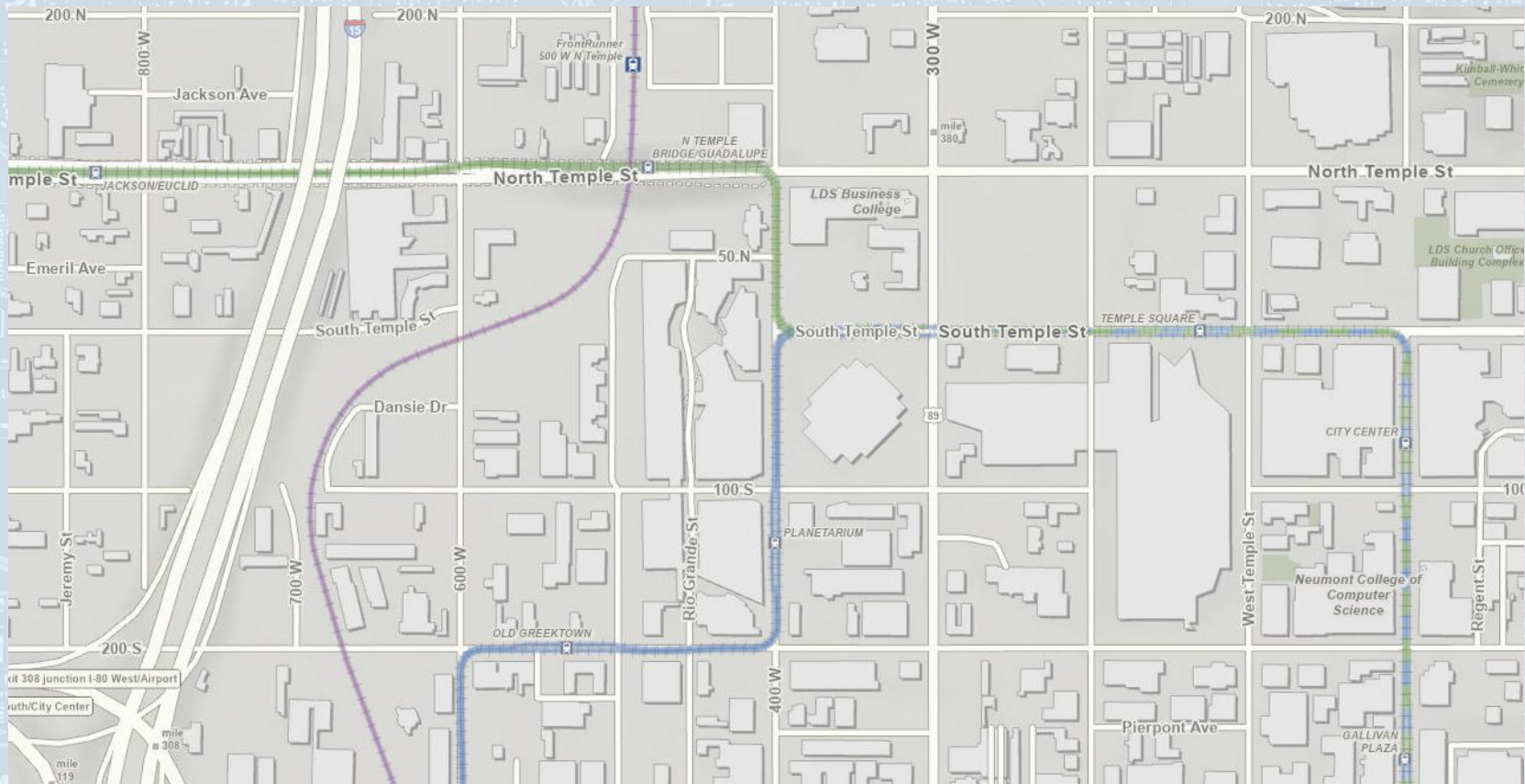
# Basemaps



# Basemaps



# Basemaps



## Step 2 - Define Area of Interest

Find an address

Address

Zip or City

Find

Or draw on the map



You may use the tools above to draw an area of interest on the map.



# UGRC Raster Data Discovery 2.3.5

## Step 1 - Select Products

Please select the type of product(s) that you are looking for...

- Aerial Photography ?
- LiDAR DEMs ?
- USGS DEMs ?
- Auto-Correlated DEMs ?
- Contours ?
- USGS Topo Maps ?

...then proceed to Step 2 below.

## Step 2 - Define Area of Interest

## Step 3 - Results

## Step 4 - Download Data

[Help](#) | [UGRC Imagery Services Info](#)



# Locate Utah

## UTAH ECONOMIC DEVELOPMENT MAP

ABOUT  
CONTACT US

Click on the map and Summary Report for detailed info about the current location.

Find Address

Econ Development

Utilities

Broadband

Transportation

Lifestyle

edcUTAH ECONOMIC DEVELOPMENT CORPORATION OF UTAH



Governor's Office of Economic Opportunity

Utah.gov

## UTAH ECONOMIC DEVELOPMENT MAP

ABOUT  
CONTACT US

Click on the map and Summary Report for detailed info about the current location.

Find Address

Econ Development

- Tax Increment Areas
- Enterprise Zones 2022
- Qualified Opportunity Zones
- Higher Education Schools
- Workforce Services Centers
- Business Resource Centers
- Procurement Technical Assistance Centers

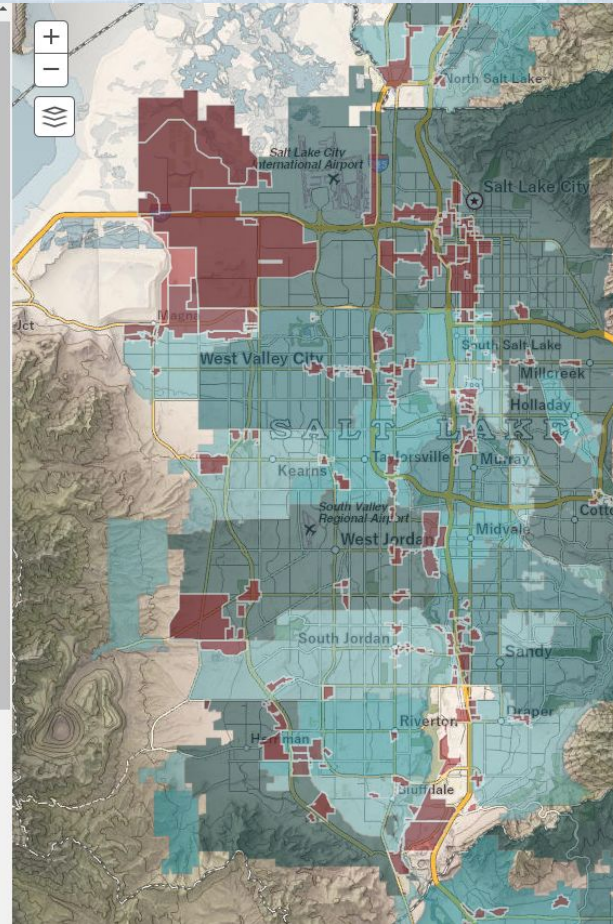
Utilities

- Natural Gas Service Areas
- Electric Utility Territory
- Local Exchange Areas
- Culinary Water
- None

Broadband

Transportation

- Freight Rail
- Commuter Rail



# Roadkill

The **Utah Roadkill Reporter** app is now available in the Google Play store and in Apple's App Store. With this free app, anyone can identify and submit locations where animals have been hit by vehicles on Utah's roads.



## App Store Preview



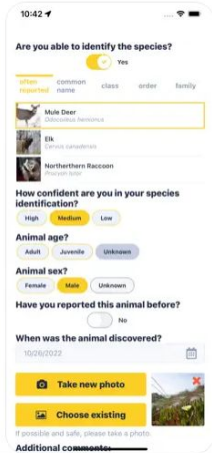
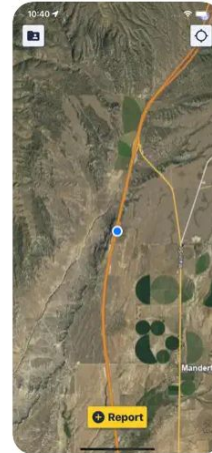
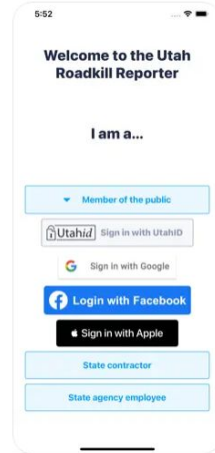
### Utah Roadkill Reporter <sup>4+</sup>

Report animal carcasses  
State of Utah Department of Technology Services

★★★★☆ 3.8 • 6 Ratings

Free

## Screenshots iPhone iPad



# StoryMap



ArcGIS StoryMaps

## The Utah Geospatial Resource Center (UGRC)

Encouraging and facilitating the effective use of geospatial information and technology for Utah since 1984.

UGRC

May 4, 2022



# PLSS



## PLSS Points Legend

What do the colors mean? Click on the question mark to learn more.

County Managed ?

Monument Record ?

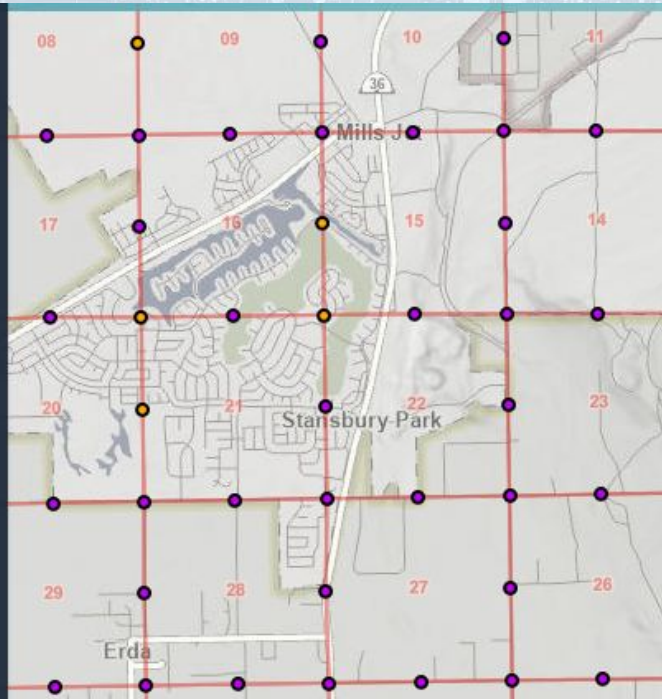
Control ?

Calculated ?

MRRC Monument Record ?



Home

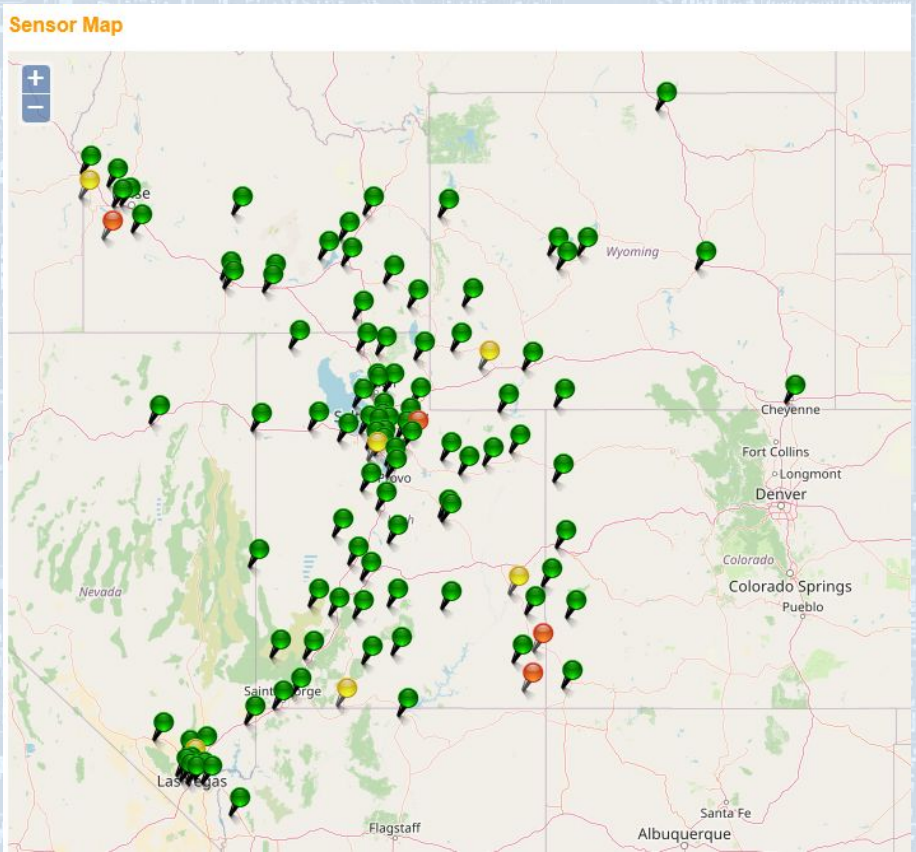




# GPS



**TURN GPS**  
real-time precision  
[turngps.utah.gov](http://turngps.utah.gov)



# Podcast



# Utah Geospatial Podcast

where location matters

# Project Planning

- SAFe
- Github Projects
  - Jira (executive view)
- Quarterly planning
  - sprints

The screenshot shows the Github Projects interface for the 'UGRC PI Planning Objectives' project. The page is in 'Plan' view, showing a list of 8 projects for the 2024-Q1 sprint. Each project is represented by a row with a title, a progress indicator (a green circle with a checkmark), a number, a '2024-Q1' label, and a 'Sprint 5' label.

Title	Progress	Number	Program Inc...	Q1 Active Sprint
2024-Q1	8			
1 UGRC Windows Servers 2012 Upgrades #129	✓	#129	2024-Q1	Sprint 5
2 GPS Server Migration grwgps4 #153	✓	#153	2024-Q1	Sprint 5
3 TURN GPS Station Hardware Upgrades #107	✓	#107	2024-Q1	Sprint 5
4 Vector Tile Base Map Hosting and Caching Planning #51	✓	#51	2024-Q1	Sprint 5
5 Web API Endpoint Feature and Response Parity #43	✓	#43	2024-Q1	Sprint 5
6 UGRC MATT - DB Schema and Data links #76	✓	#76	2024-Q1	Sprint 5
7 Install ArcGIS Enterprise Portal in GCP #22	✓	#22	2024-Q1	Sprint 5
8 ArcGIS API for JS 3x Migration Phase 1 #63	✓	#63	2024-Q1	Sprint 5

# Project Planning

- SAFe
- Github Projects
  - Jira (executive view)
- Quarterly planning
  - Sprints
- Road map

The screenshot shows a Github Projects Roadmap for the 'UGRC PI Planning Objectives' project. The interface is in dark mode. At the top, the breadcrumb path is 'agrc / Projects / UGRC PI Planning Objectives'. Below the project name, there are tabs for 'Plan', 'Roadmap - Sprints' (which is selected), and 'UGRC Project Dashboard'. A search bar is present with the text 'Filter by keyword or by field'. The roadmap is displayed as a calendar grid for August and September 2023. Two sprints are visible: 'Sprint 4' (Aug 22 - Sep 04) and 'Sprint 5' (Sep 05 - Sep 18), with 'Sprint 5' marked as 'Current'. Each sprint contains a list of tasks with their IDs and progress indicators. For example, in Sprint 4, tasks include 'HB 433: Public Assets data and mapping #131', 'Address point monthly update (2 of 3) #144', 'Basic Parcel updates (2 of 3) #156', 'Q1 - Porter issues #92', and 'WFRC app support and tech assistance #36'. In Sprint 5, tasks include 'UGRC Windows Servers 2012 Upgrades #129', 'GPS Server Migration grwgps4 #153', 'TURN GPS Station Hardware Upgrades #107', 'Vector Tile Base Map Hosting and Caching Planning #51', and 'Web API Endpoint Feature and Response Parity #43'. Each task has a progress indicator (a circle with a checkmark) and a user icon.

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