



UTAH AGRC
Automated Geographic Reference Center



THIS THING CALLED LOVE GIS:

AN INTRODUCTION TO AGRC



OUTLINE

- INTRO TO AGRC
- OUR DATASETS
- CITY AND COUNTY GIS
- CAREER ADVICE



Bluff



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WHO (AND WHAT) IS AGRC?

Boulder



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UTAH GEOSPATIAL RESOURCE CENTER (UGRC)

Our new name gives a better idea of what we do



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Our team! (ok, not really)



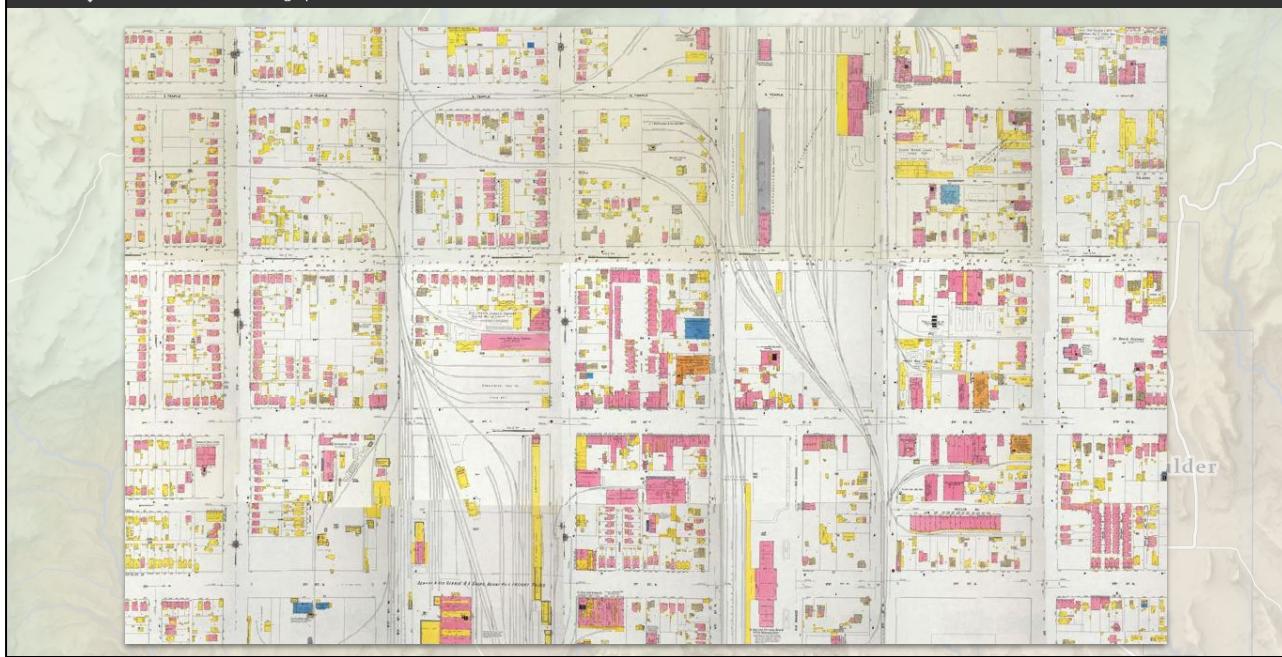
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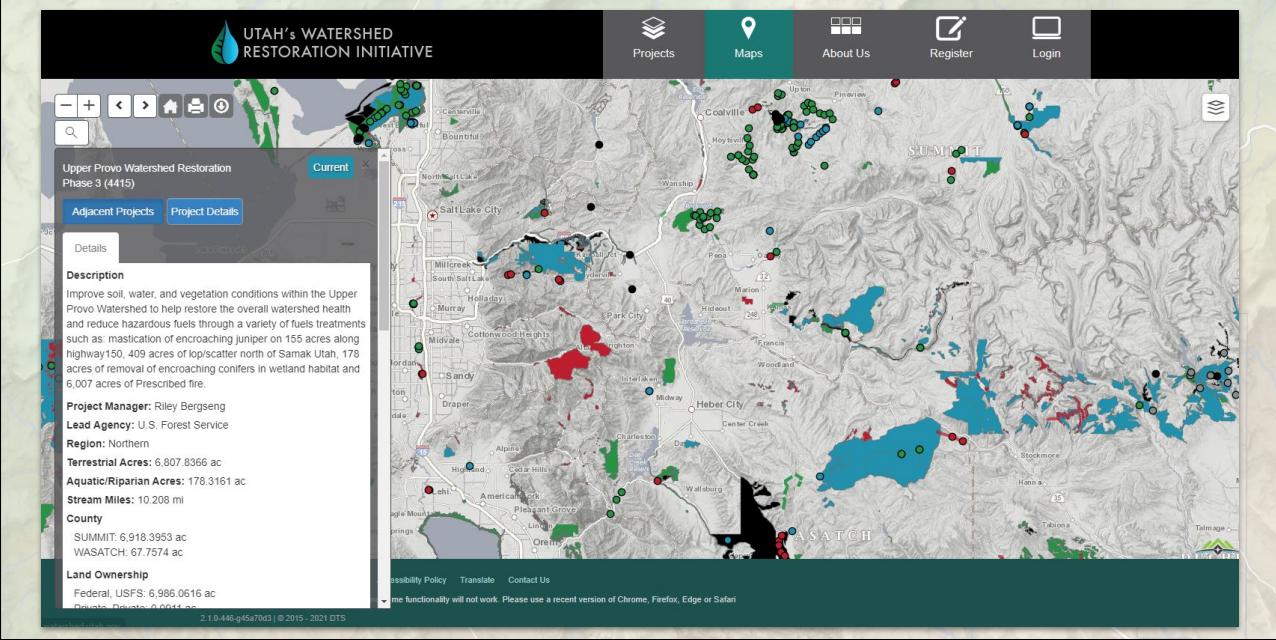
The real team.



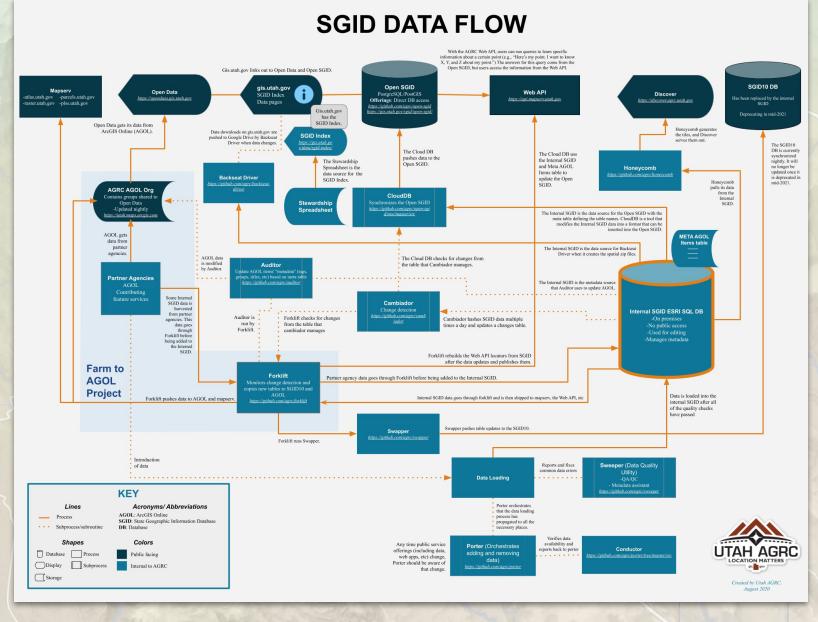
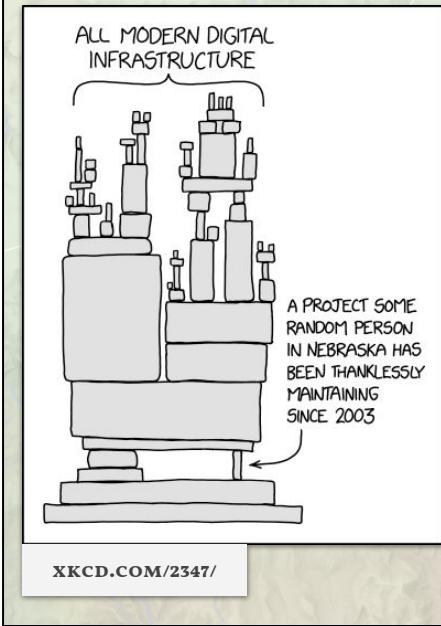
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Example project: Sanborn Maps



Example Project: WRI





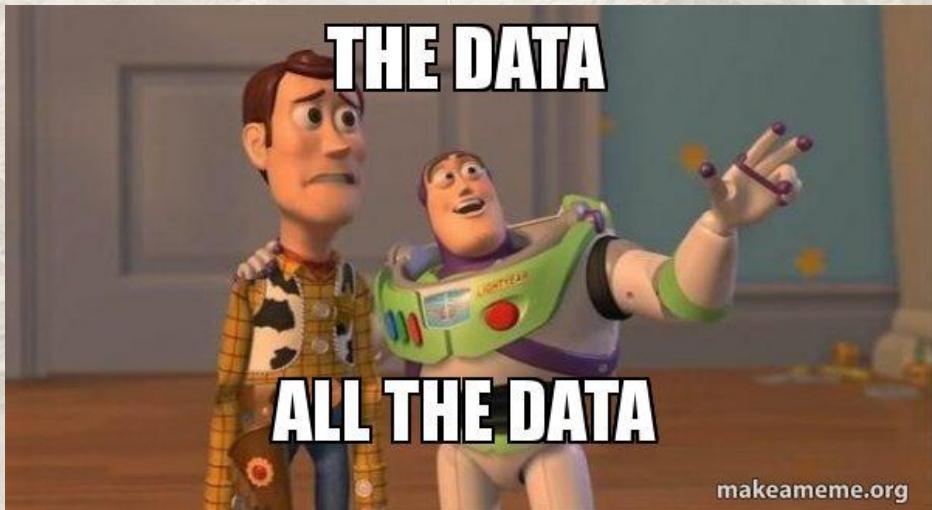
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WHAT DATA DOES AGRC HAVE?

Green River



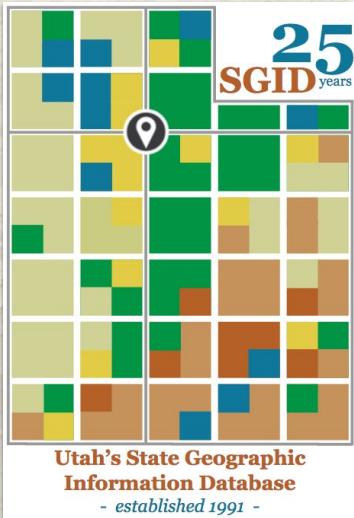
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Green River



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discover
utah's imagery and basemap services
raster.utah.gov/discover

TURN GPS
real-time precision
turngps.utah.gov

Find Utah Authoritative Data

SGID - Connecting people with information

Q. What are you looking for?

Explore the SGID through data categories

Ba
Basemaps

Bi
Bioscience

Bo
Boundaries

Ca
Cadastral

Green River

SGID: Open SGID, SGID Open Data

Discover, raster.utah.gov

TURN network



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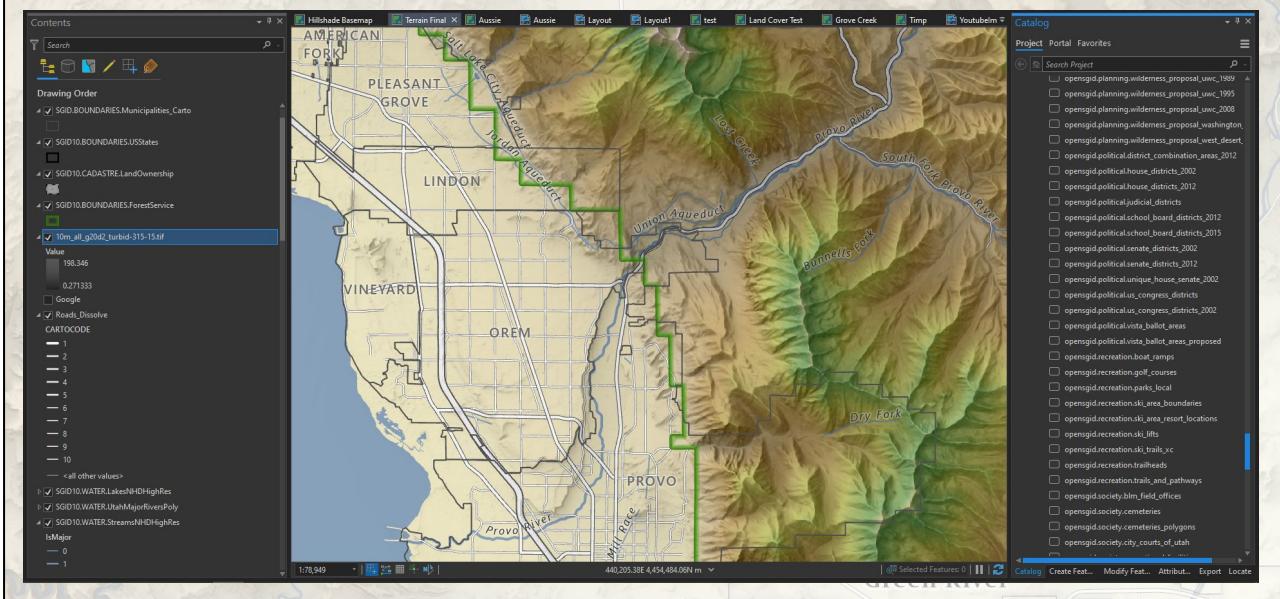
SGID OPEN
DATA

OPEN
SGID



Green River

Two pathways: Esri-land via ArcGIS Online or everyone via Open SGID



Example map using SGID data- roads, boundaries, streams and lakes, elevation, etc
Anything that is of statewide importance



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GIS.UTAH.GOV/DATA

The screenshot shows a web browser window displaying the UTAH AGRC website at <https://gis.utah.gov/data/>. The page title is "Most Popular Datasets". Below the title are eight dataset icons arranged in two rows of four:

Addresses	Aerial Photos	Base Maps and Imagery	USGS Topo Maps
Ad Address	Ae Aerial Photo	Ba Basemaps	To Topo Maps
Boundaries	Parcels	Land Ownership	Transportation
Bo Boundaries	Ca Cadastral		Tr Transportation

Below the datasets, a section titled "Welcome to the State Geographic Information Database (SGID)" contains the following text and links:

The SGID aims to be the primary source for state-wide GIS data in Utah by creating a single portal to datasets created by many different agencies and organizations. With such a broad scope, SGID datasets live in many different places depending on their type, availability, and popularity.

- The AGRC-curated Open SGID database
- ArcGIS Online hosted feature services

Where to find data



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OPENDATA.GIS.UTAH.GOV

The screenshot shows a web-based map application titled "Utah Municipal Boundaries". The main interface includes a map of the state of Utah with municipal boundaries highlighted in blue. A legend indicates the boundaries of Nevada to the west and Colorado to the east. Below the map are three tabs: "Overview", "Data", and "API Explorer", with "Data" currently selected. To the right of the map is a sidebar with a search bar labeled "Search data and map", a "Powered by Esri" logo, and download links for "Download" and "APIs". At the bottom left is a "More" link, and at the bottom right is an "About" section containing the following text:

About
Utah SGID Boundaries
Shared By: UtahAGRC
Data Services: data.utah.gov
[View Metadata](#)

Where to access the Open Data Portal



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AERIAL IMAGERY AND LIDAR

Available products, future products, how to get



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**2006
NAIP**

+

-

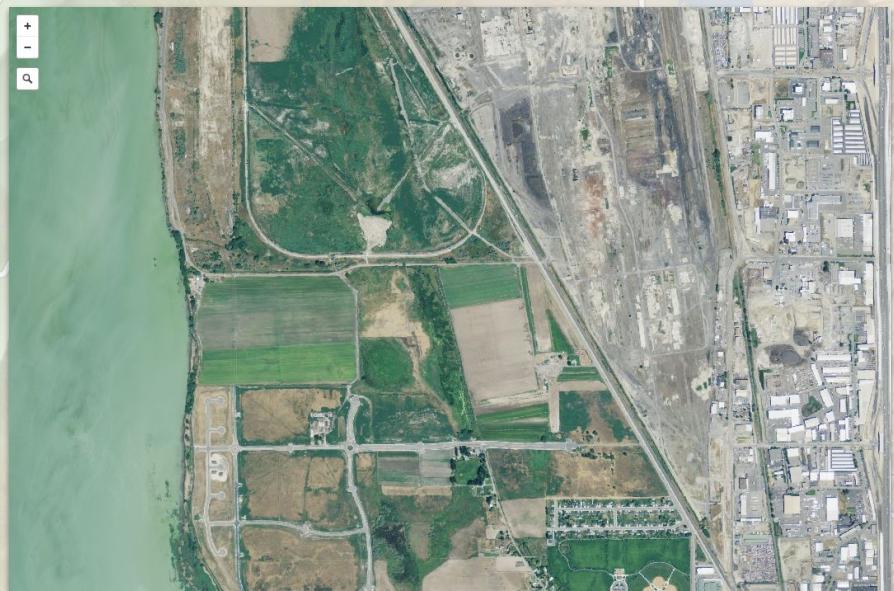
🔍





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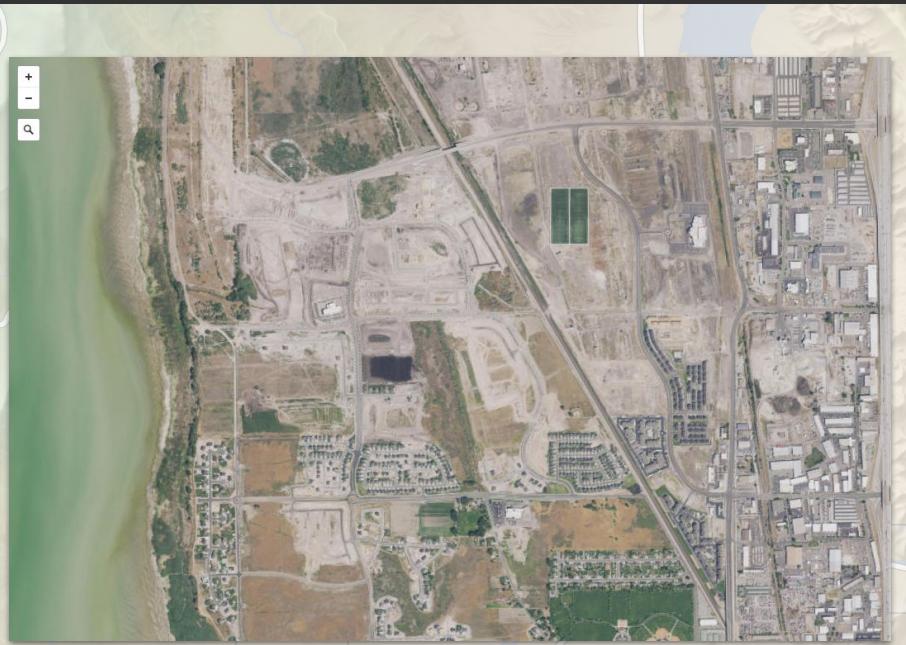
**2011
NAIP**





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**2016
NAIP**





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2019

HEXAGON

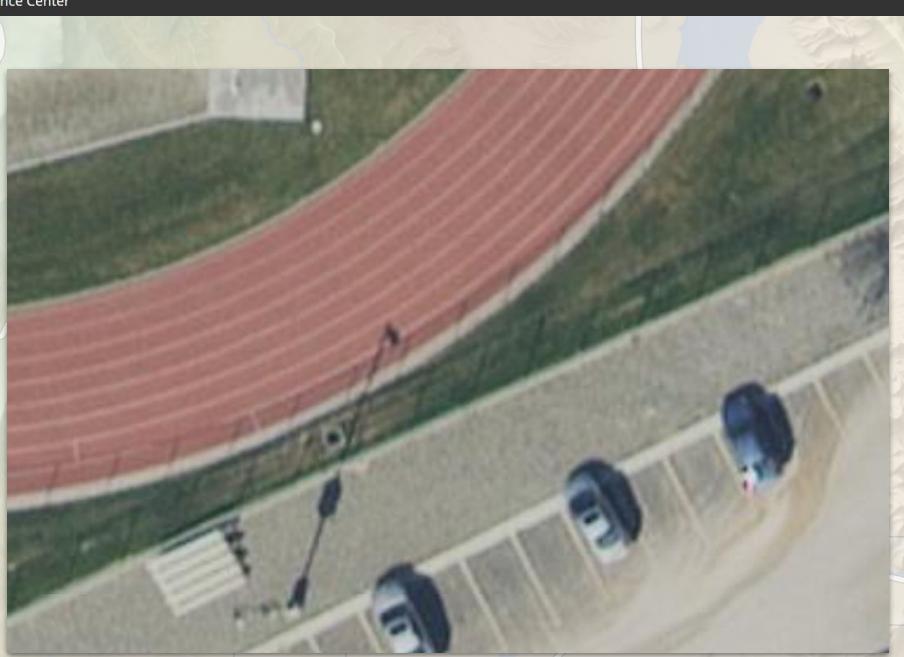




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2019

HEXAGON



Higher resolution- 15cm/30cm

2021: statewide 15cm

Previous years of Google imagery as well



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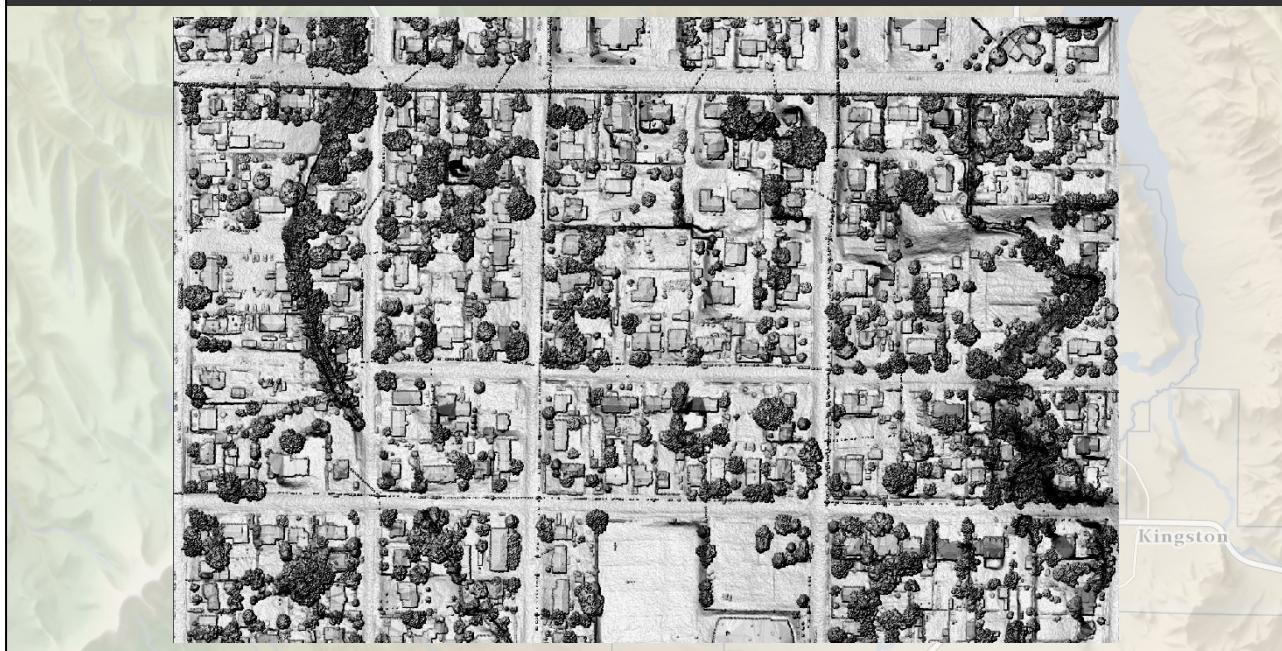


GIS.UTAH.GOV/DISCOVER

Open standards webmap access



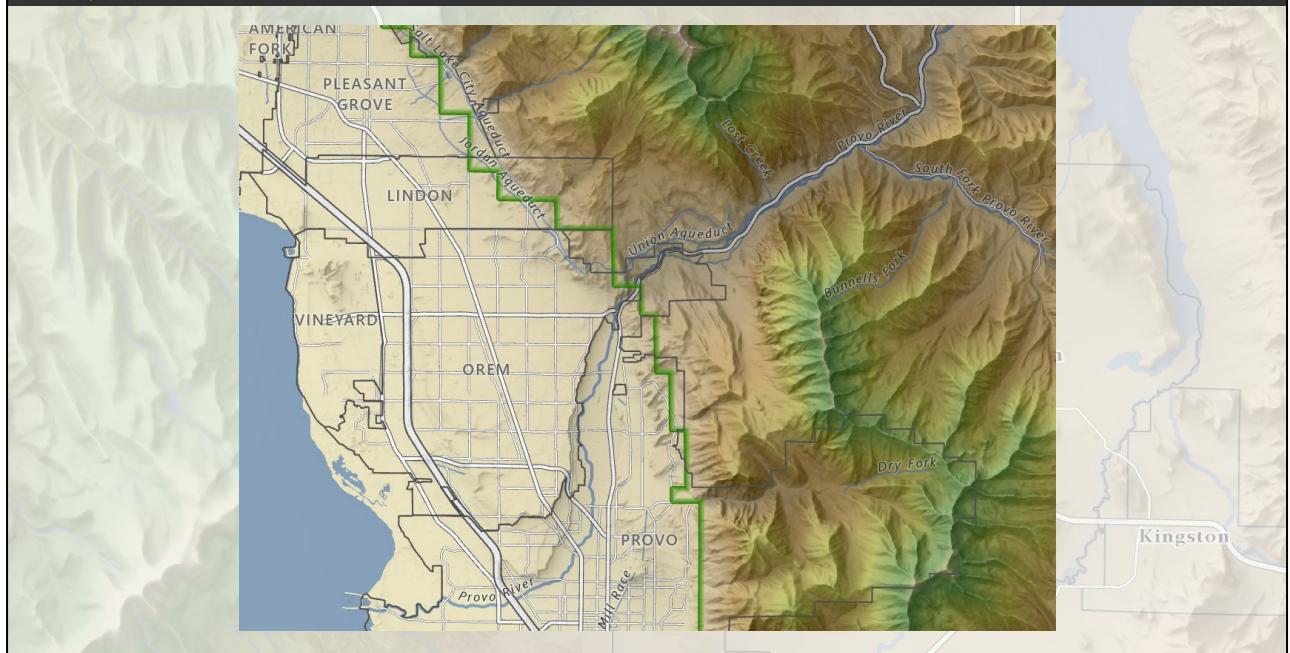
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Lidar in partnership with USGS
DEM and DSMs



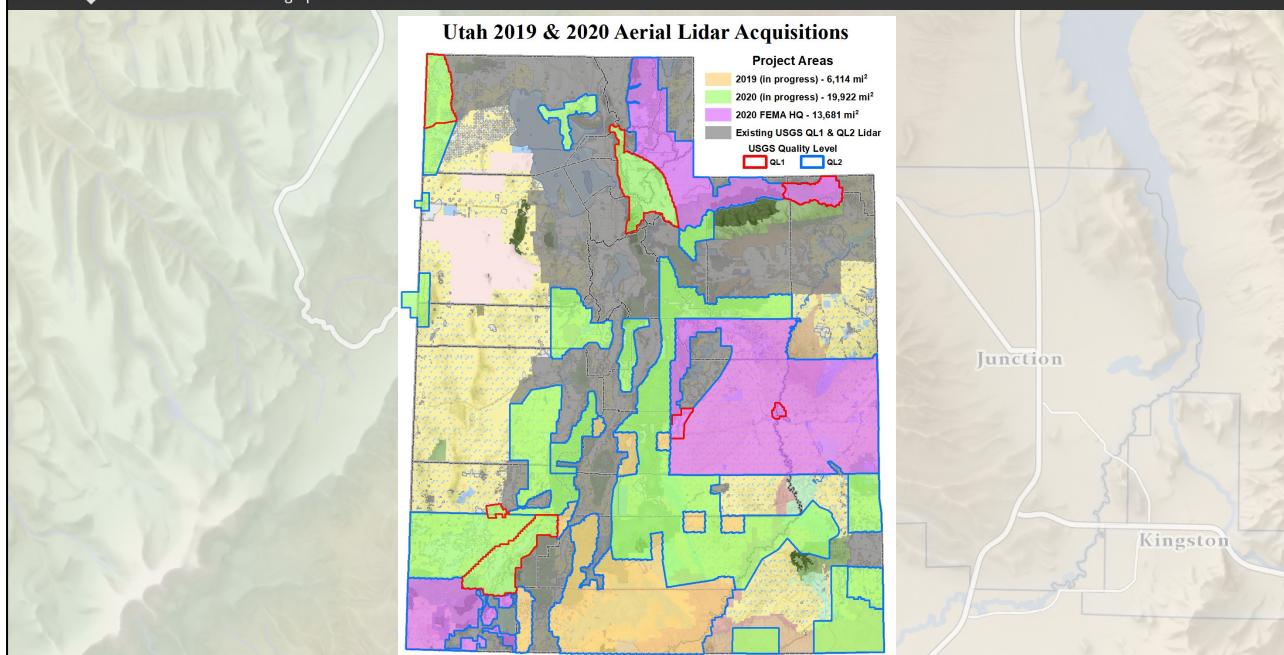
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Also USGS NED 10m DEMs



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Current and future coverage

QL1: 8ppm/ half-meter DEM/DSM

QL2: 2ppm/ 1-meter DEM/DSM



AGRC Raster Data Discovery 2.2.4

Step 1 - Select Products

Step 2 - Define Area of Interest

Step 3 - Results

▼ USGS DEMs

[Clear Preview](#)

▼ 10 Meter

▼ USGS DEM

[Extent](#) [Preview](#)

10 Meter USGS DEM

[more info](#)

[web page](#) [Download](#)

► 30 Meter

Step 4 - Download Data

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



RASTER.UTAH.GOV

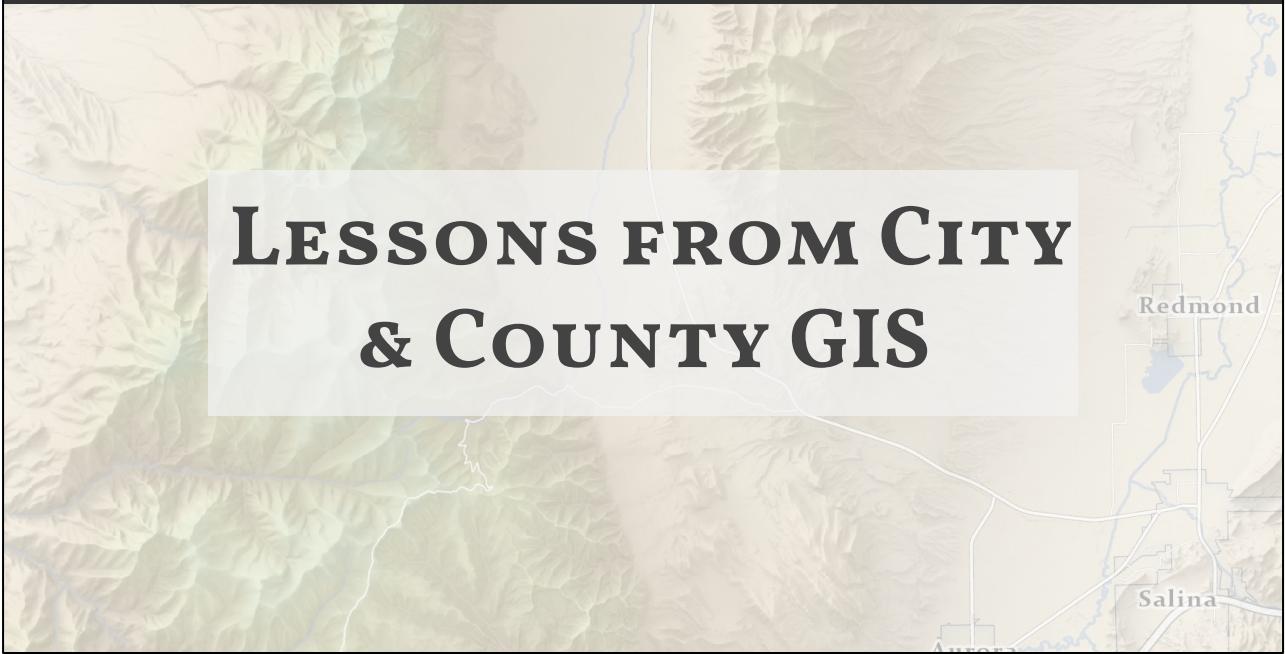
Download through raster.utah.gov

Also available: scanned topos, NAIP and B&W imagery

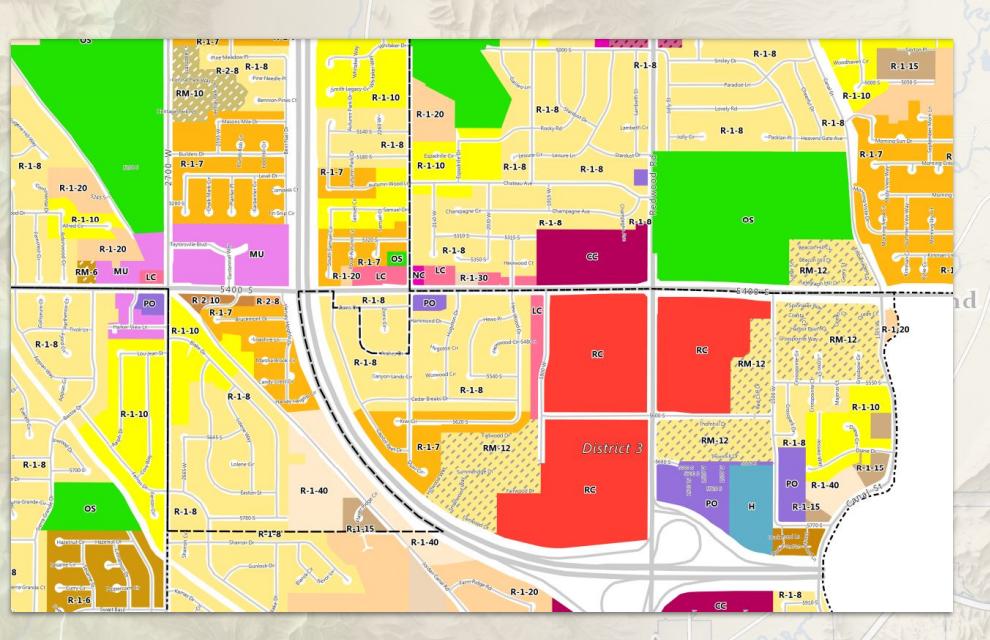


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LESSONS FROM CITY & COUNTY GIS

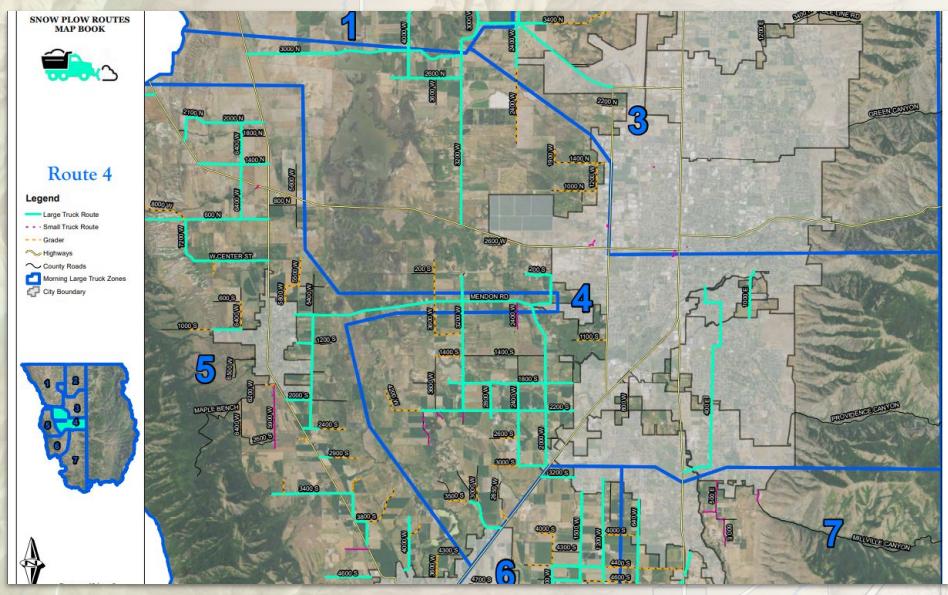


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Experiences from Taylorsville

- Quick maps (Econ dev)- opportunity for rapid improvement
- Can't be a one-trick pony- if you can do land use administration, even better.



Experiences from Cache County

- Long-running projects (parcel updates)
- Much broader scope, sometimes less detail
- Larger organization



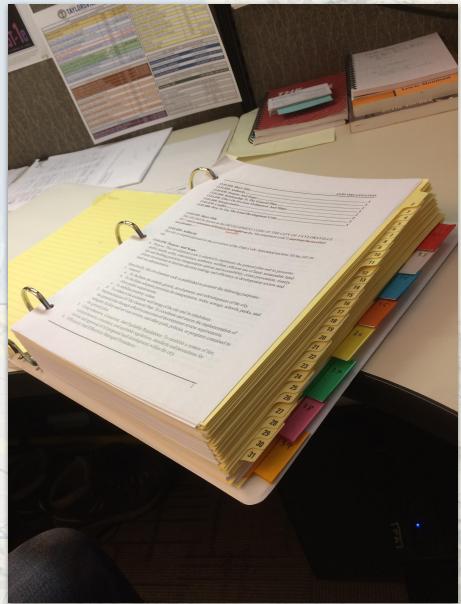
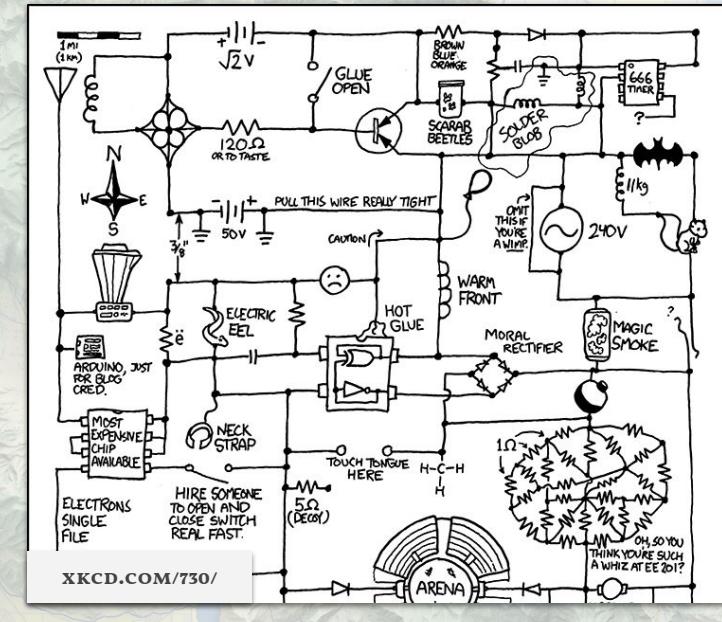
Pros of working with a larger team: You can trash their cube.

Cons of working with a larger team: They can trash yours.



So You WANT To Do THIS FOR A LIVING?

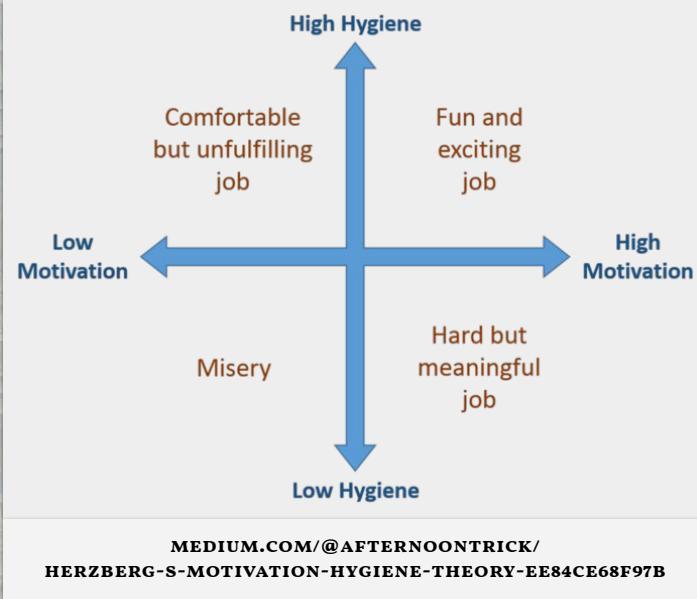
- <https://xkcd.com/519/>
- Learn how to learn, and then never stop learning
- Survivorship Bias
- Hygiene vs Motivational factors
- Spatial is not special- Bring something else to the table.
- Internships- go out and ask, chase it.
- Be active in your community- UGIC, etc. If you're an introvert, present.
(UGICConferenceLogo.jpg)
-



Let's talk about survivorship bias

EE: No passion, but high hygiene (\$\$\$)

Planning: Passion, but poor hygiene factors.



Motivation-Hygiene Theory

Motivators: advancement, growth, responsibility, doing good in the world

Hygiene: Work environment, company culture/policy, SALARY



RULE #1:

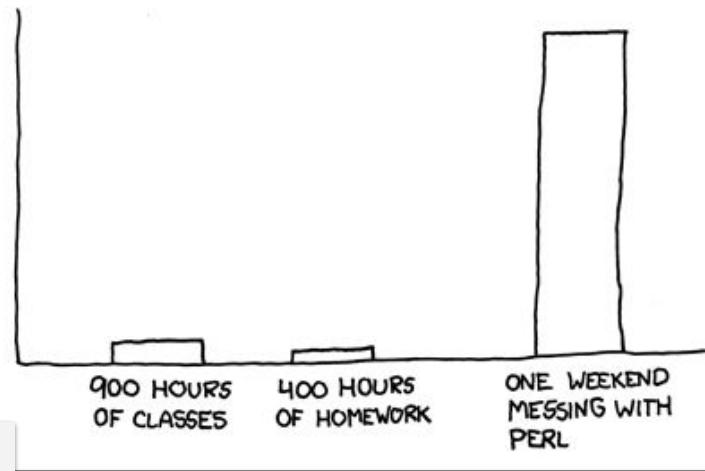
NEVER STOP LEARNING

- Learn how to learn, and then never stop learning
- Technology changes, learning and communicating skills don't.



11TH-GRADE ACTIVITIES:

USEFULNESS
TO CAREER
SUCCESS



XKCD.COM/519/

Start by learning to program, preferably Python.



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Participate!
Maps on the Hill
UGIC

Presenting can be a good way for an introvert to break in.



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