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A topographic map of a region in Utah, showing various towns and geographical features. The map is in a light, faded color. Towns labeled include Fruit Hts., Richville, Morgan, Henefer, Emory, Farmington, Porterville, Bountiful, West Bountiful, Woods Creek, South Salt Lake, Kimball Jct, Millcreek, Snyderville, Holladay, Murray, Park City, Jordanella Res., Oakley, Marton, and Kamas. Highway markers for 15, 80, and 40 are also visible.

# **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)**

Boulder

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





**UTAH'S WATERSHED RESTORATION INITIATIVE**

Projects
Maps
About Us
Register
Login

Upper Provo Watershed Restoration Phase 3 (4415) Current

[Adjacent Projects](#) [Project Details](#)

Details

**Description**

Improve soil, water, and vegetation conditions within the Upper Provo Watershed to help restore the overall watershed health and reduce hazardous fuels through a variety of fuels treatments such as: mastication of encroaching juniper on 155 acres along highway 150, 409 acres of topscatter north of Samak Utah, 178 acres of removal of encroaching conifers in wetland habitat and 6,007 acres of Prescribed fire.

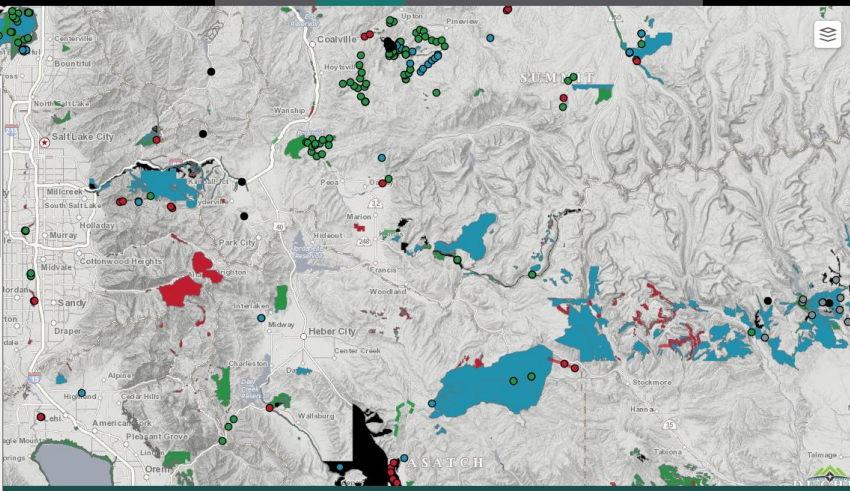
**Project Manager:** Riley Bergseng  
**Lead Agency:** U.S. Forest Service  
**Region:** Northern  
**Terrestrial Acres:** 6,807.8366 ac  
**Aquatic/Riparian Acres:** 178.3161 ac  
**Stream Miles:** 10.208 mi  
**County**

SUMMIT: 6,918.3953 ac  
WASATCH: 67.7574 ac

**Land Ownership**

Federal, USFS: 6,986.0616 ac

Private, BLM: 0.0000 ac



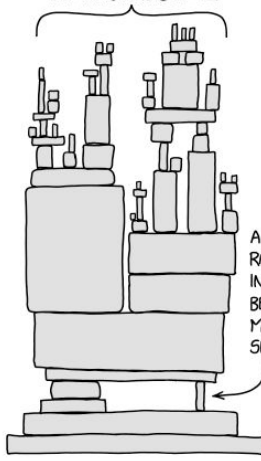
[Accessibility Policy](#)
[Translate](#)
[Contact Us](#)

Some functionality will not work. Please use a recent version of Chrome, Firefox, Edge or Safari

2.1.0-446-g45a79d3 | © 2015 - 2021 DTS

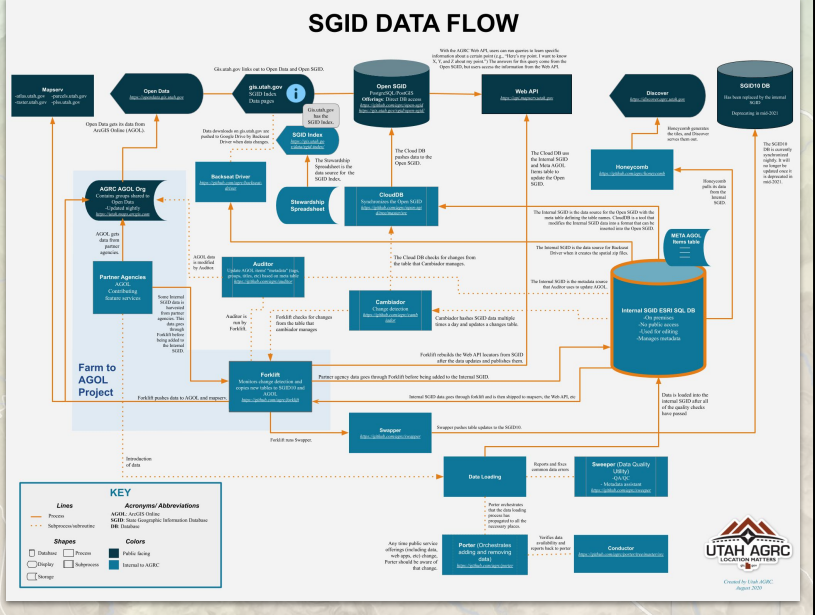
Example Project: WRI

ALL MODERN DIGITAL INFRASTRUCTURE



A PROJECT SOME RANDOM PERSON IN NEBRASKA HAS BEEN THANKLESSLY MAINTAINING SINCE 2003

[XKCD.COM/2347/](http://XKCD.COM/2347/)



Our data offerings and framework





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# WHAT DATA DOES AGRC HAVE?

Green River



Green River



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**25**  
SGID years

**Utah's State Geographic Information Database**  
- established 1991 -



**Find Utah Authoritative Data**  
SGID Connecting people with information

What are you looking for?

Explore the SGID through data categories

<b>Ba</b> Basemaps	<b>Bi</b> Bioscience	<b>Bo</b> Boundaries	<b>Ca</b> Cadastral
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Green River

SGID: Open SGID, SGID Open Data  
Discover, raster.utah.gov  
TURN network



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**SGID OPEN  
DATA**

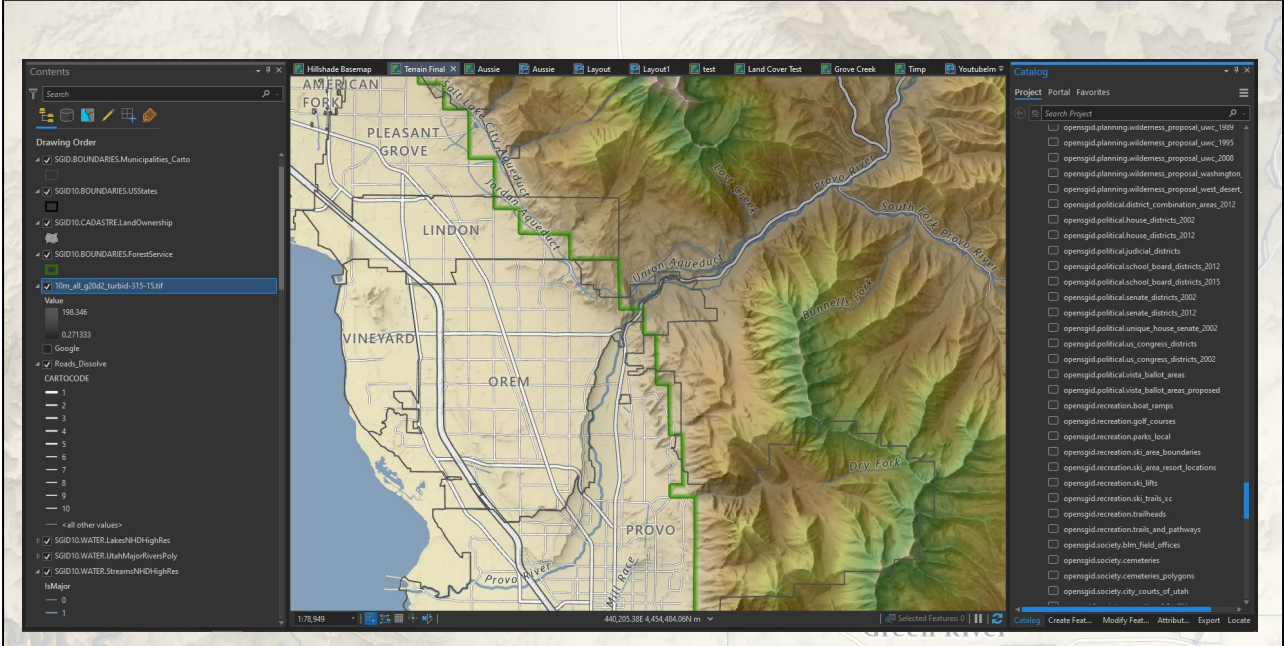
**OPEN  
SGID**



Green River

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



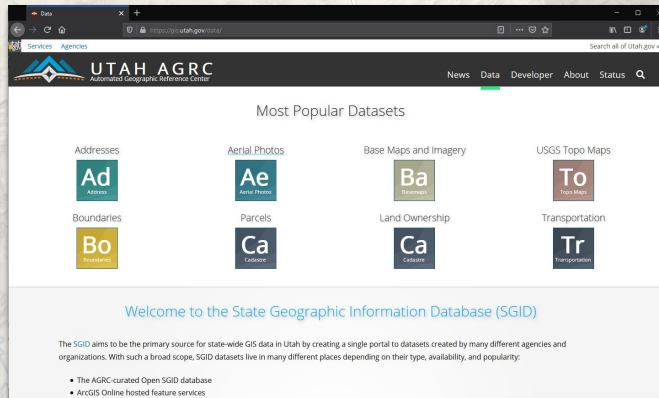


Example map using SGID data- roads, boundaries, streams and lakes, elevation, etc  
Anything that is of statewide importance





# GIS.UTAH.GOV/DATA

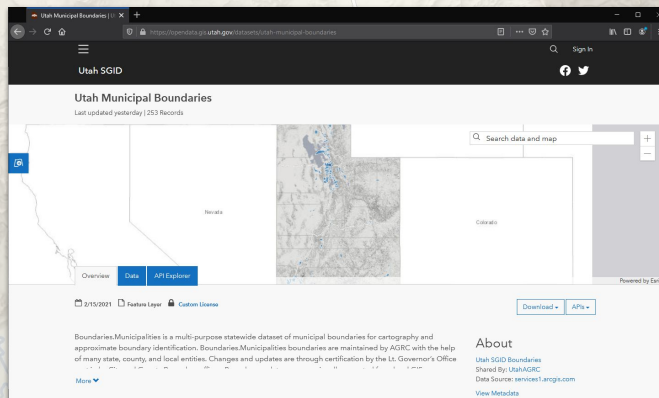


Where to find data



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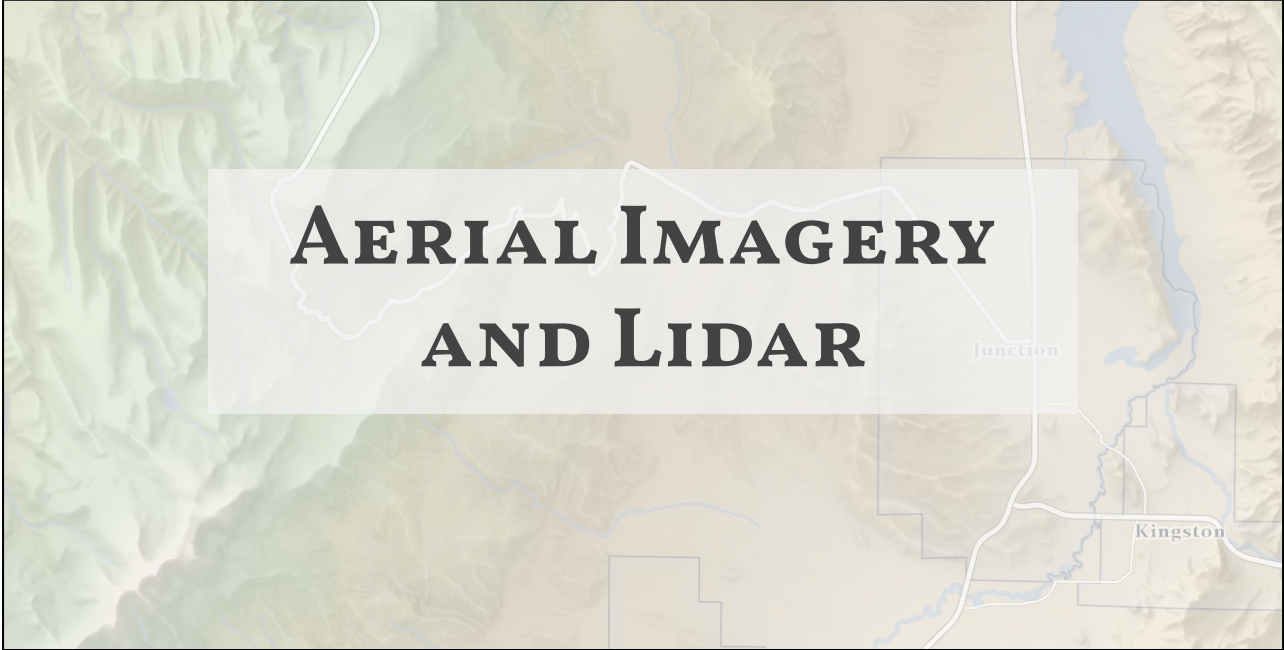
# OPENDATA.GIS.UTAH.GOV



Where to access the Open Data Portal



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Available products, future products, how to get



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# 2006 NAIP

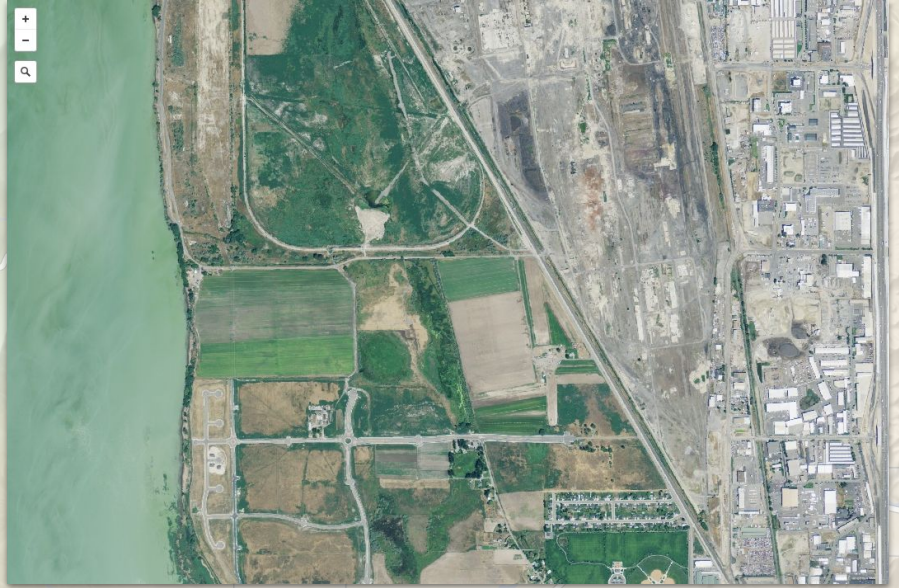






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# 2011 NAIP







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# 2016 NAIP





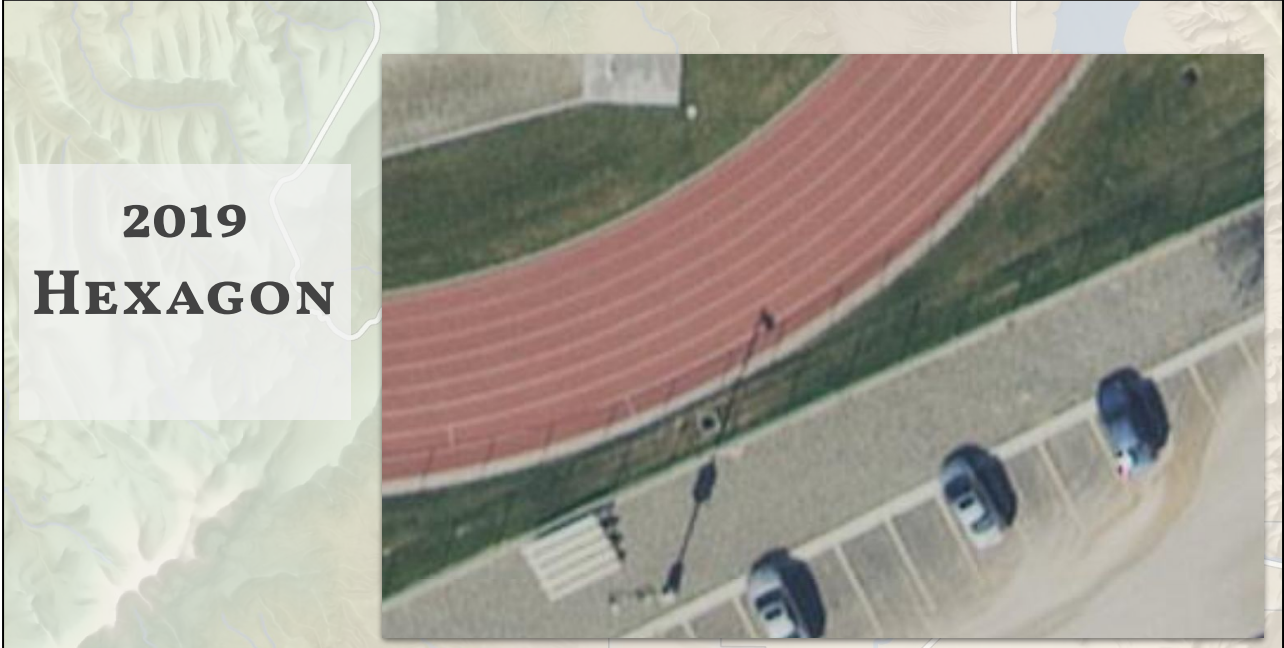
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**2019**  
**HEXAGON**





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Higher resolution- 15cm/30cm  
2021: statewide 15cm  
Previous years of Google imagery as well



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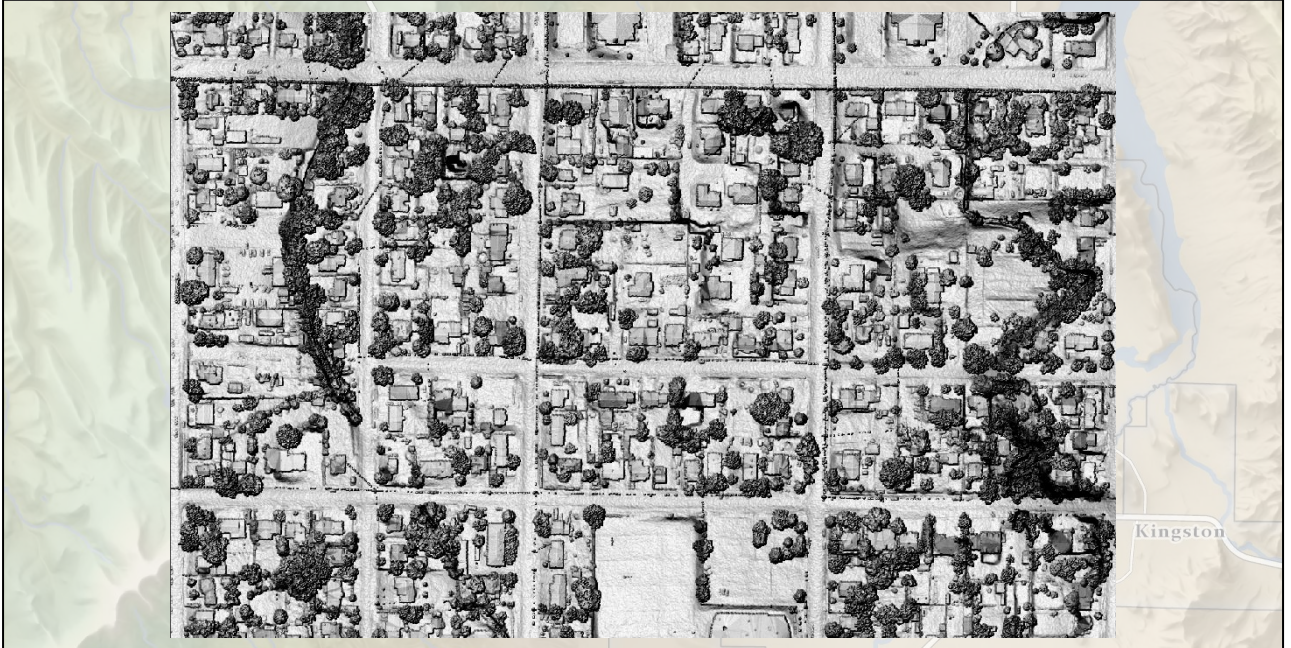
**GIS.UTAH.GOV/DISCOVER**

Open standards webmap access





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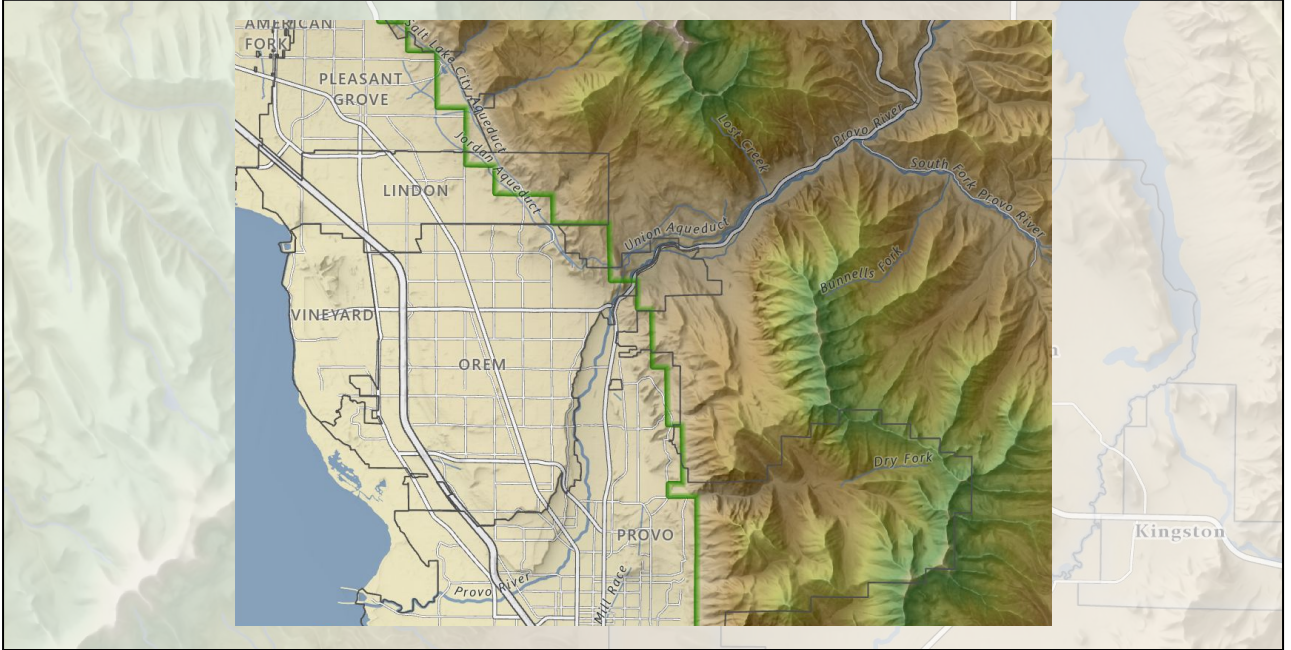


Lidar in partnership with USGS  
DEM and DSMs

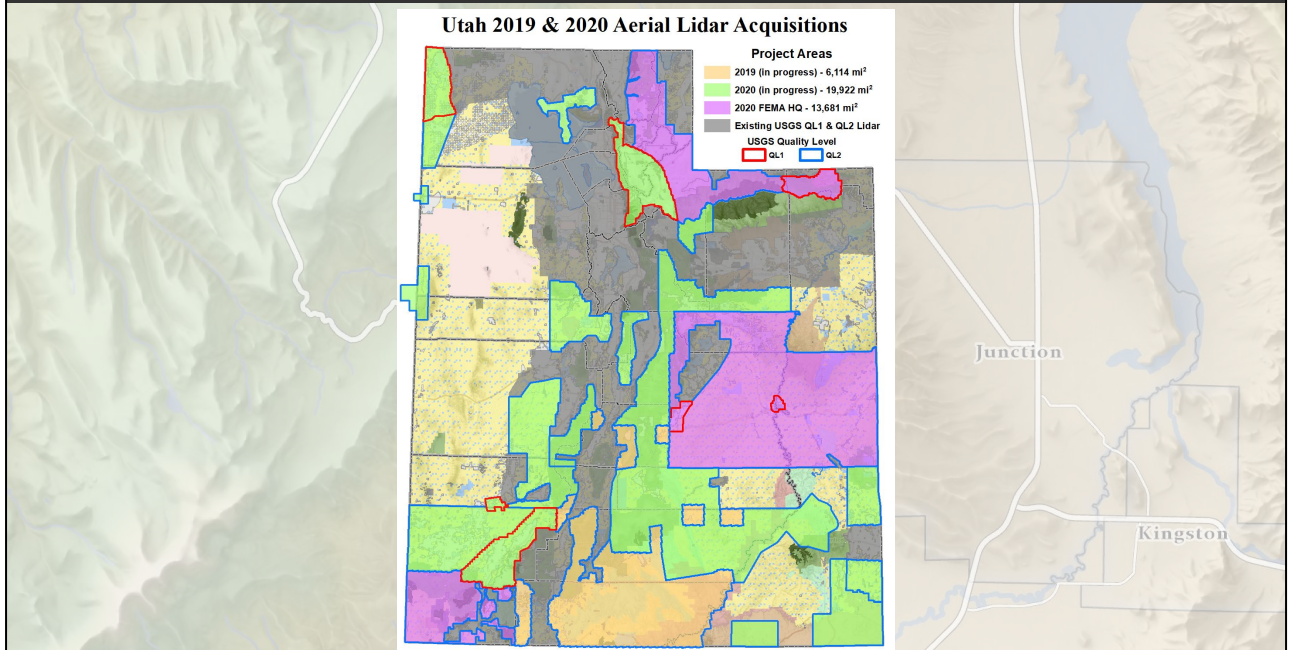




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Also USGS NED 10m DEMs



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

Extent Preview

▼ USGS DEM

10 Meter USGS DEM

more info

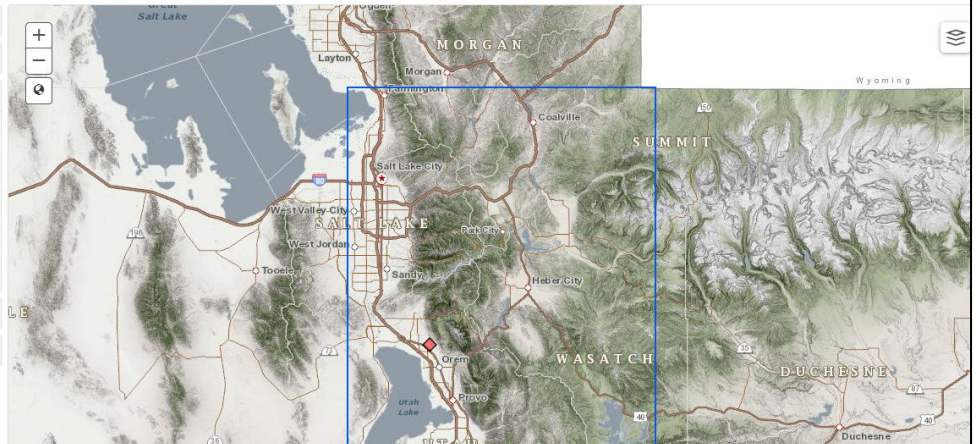
web page

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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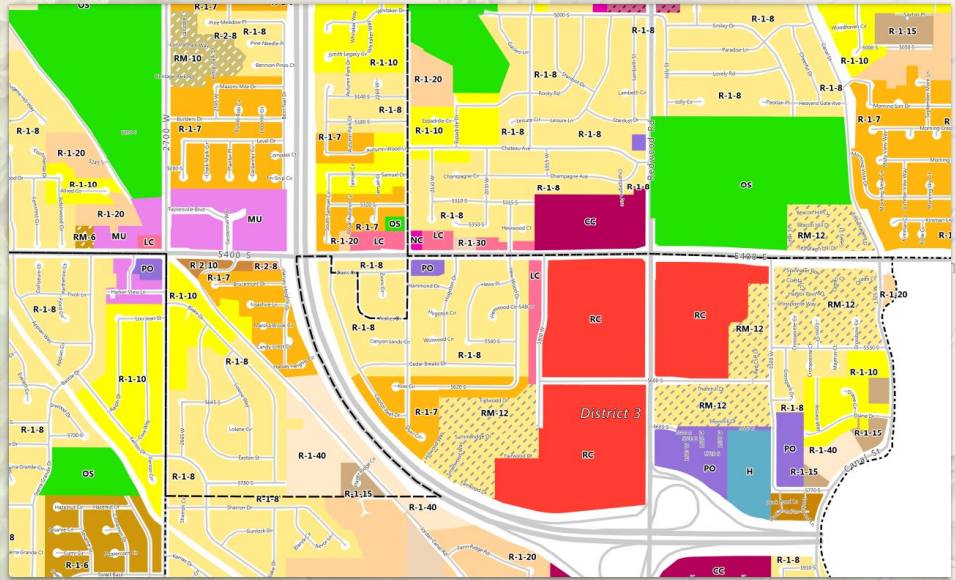
# LESSONS FROM CITY & COUNTY GIS

Redmond

Salina

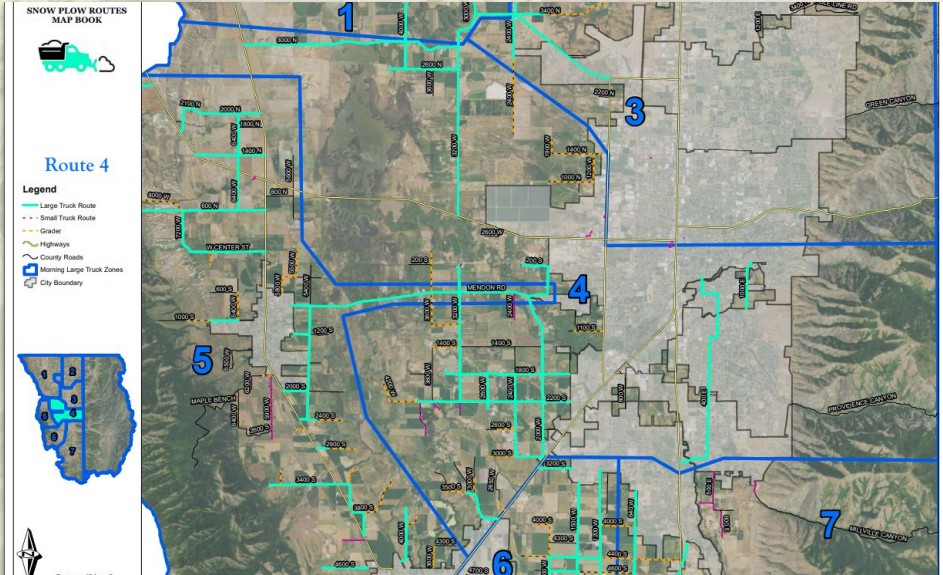
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Experiences from Taylorsville

- 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.

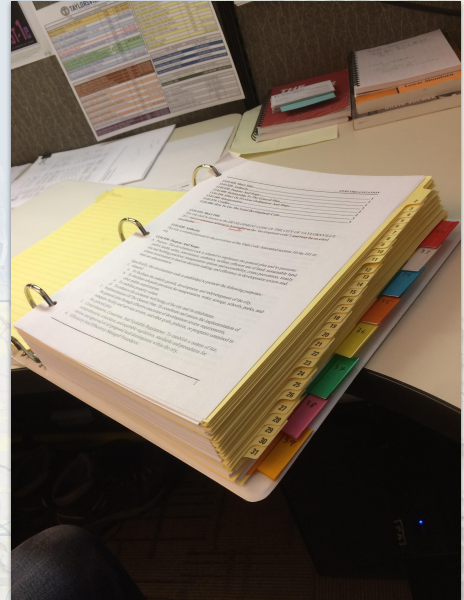
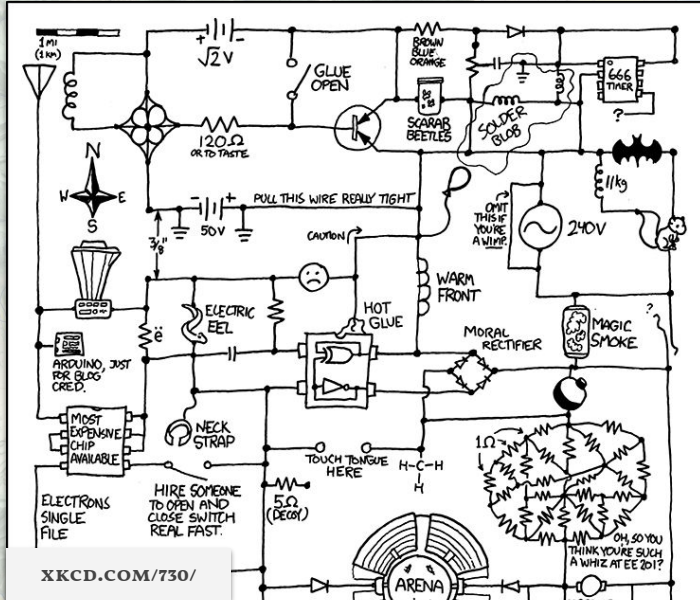




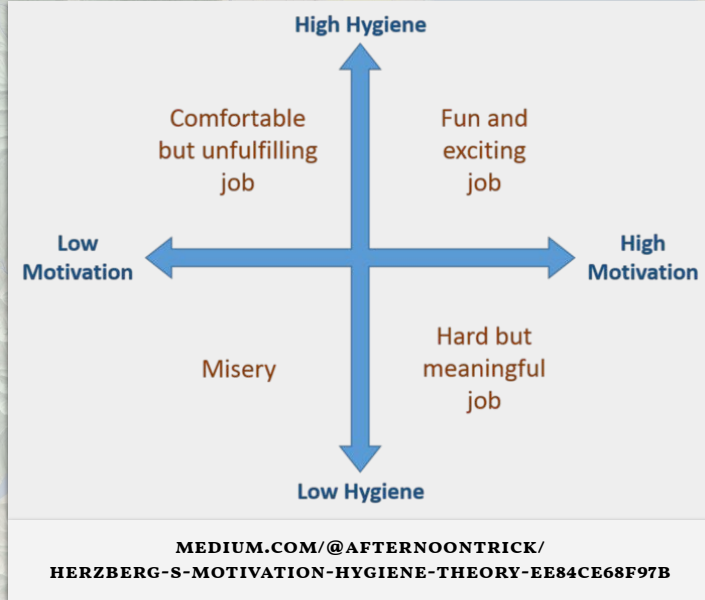
# SO YOU WANT TO DO THIS FOR A LIVING?

- <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



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A topographic map of a mountainous region, likely in Utah, showing terrain contours, a river, and a city grid. A semi-transparent white box is overlaid on the map, containing the text.

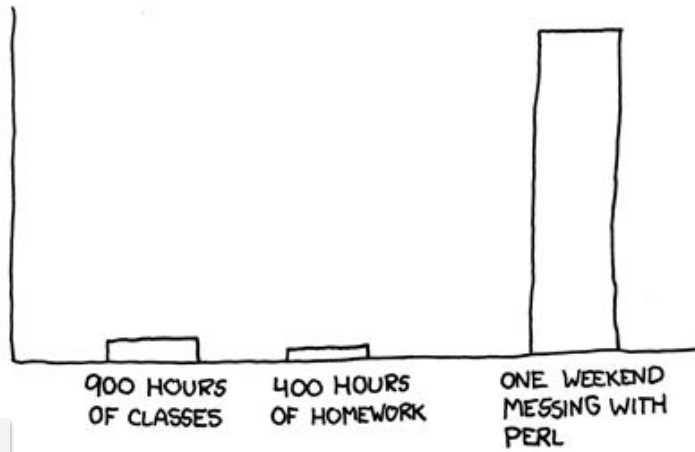
# **RULE #1: NEVER STOP LEARNING**

- 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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**TWITTER.COM/MapUtah**