




AGRC's Discover Server Not Just Google Imagery


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Currently 26 Discover Layers


 Basemap-Address_Points

 Basemap-Hybrid

 Basemap-Lite


 Basemap-Overlay


 Basemap-Terrain


 Basemap-Topo


 Utah


 Google


 Google 2011archive

 Google 2012archive


 Google 2013archive


 Google 2014archive


 Google 2015archive


 Google 2016archive


 NAIP 2006 NRG


 NAIP 2006 RGB


 NAIP 2009 RGB


 NAIP 2011 NRG


 NAIP 2011 RGB


 NAIP 2014 NRG


 NAIP 2014 RGB

 NAIP 2016 NRG

 NAIP 2016 RGB

 DOQ 1990s BW

 HRO 2012 RGB

 Hillshade



Utah vs. Google Layer

- Basemap-Address_Points
- Basemap-Hybrid
- Basemap-Lite
- Basemap-Overlay
- Basemap-Terrain
- Basemap-Topo

Utah

- Google
- Google 2011archive
- Google 2012archive
- Google 2013archive
- Google 2014archive
- Google 2015archive
- Google 2016archive

Utah - scale dependant rendering of the most recent **NAIP** and **Google** imagery

- Displays **NAIP** until you zoom in past approx. 1:6,500 and then switches to **Google**

- NAIP 2006 NRG
- NAIP 2006 RGB
- NAIP 2009 RGB
- NAIP 2011 NRG
- NAIP 2011 RGB
- NAIP 2014 NRG
- NAIP 2014 RGB
- NAIP 2016 NRG
- NAIP 2016 RGB

DOQ 1990s BW

HRO 2012 RGB

Hillshade

Google - just the most recent 6" Google imagery

Hybrid Basemap

- Basemap-Address_Points
- Basemap-Hybrid
- Basemap-Lite
- Basemap-Overlay
- Basemap-Terrain
- Basemap-Topo

- Utah

- Google
- Google 2011archive
- Google 2012archive
- Google 2013archive
- Google 2014archive
- Google 2015archive
- Google 2016archive

Basemap - Hybrid -
composite of **Utah** and
Basemap - **Overlay**

- NAIP 2006 NRG
- NAIP 2006 RGB
- NAIP 2009 RGB
- NAIP 2011 NRG
- NAIP 2011 RGB
- NAIP 2014 NRG
- NAIP 2014 RGB
- NAIP 2016 NRG
- NAIP 2016 RGB

- DOQ 1990s BW
- HRO 2012 RGB

- Hillshade

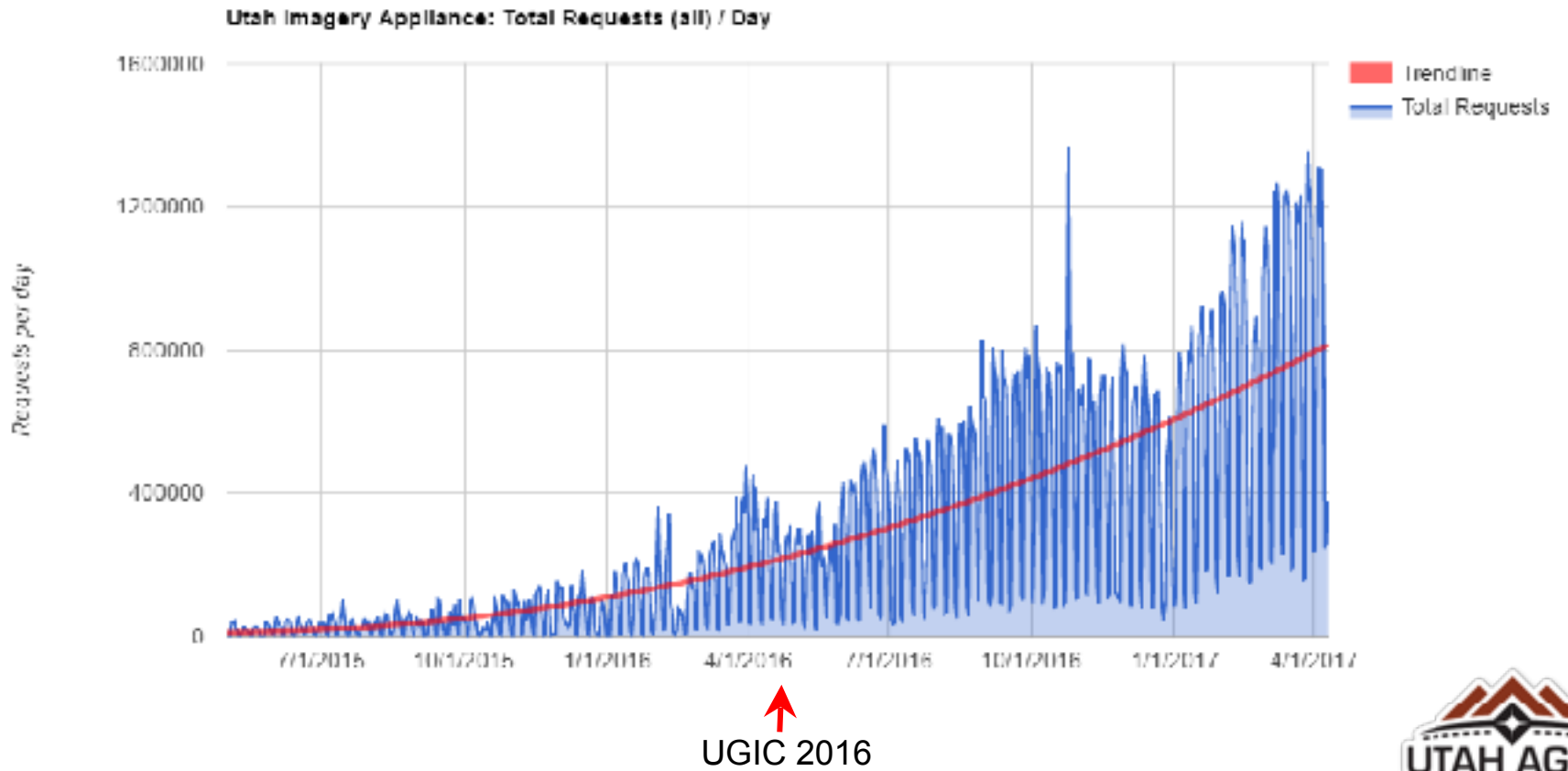


Discover is not just a Base Map and Imagery Server

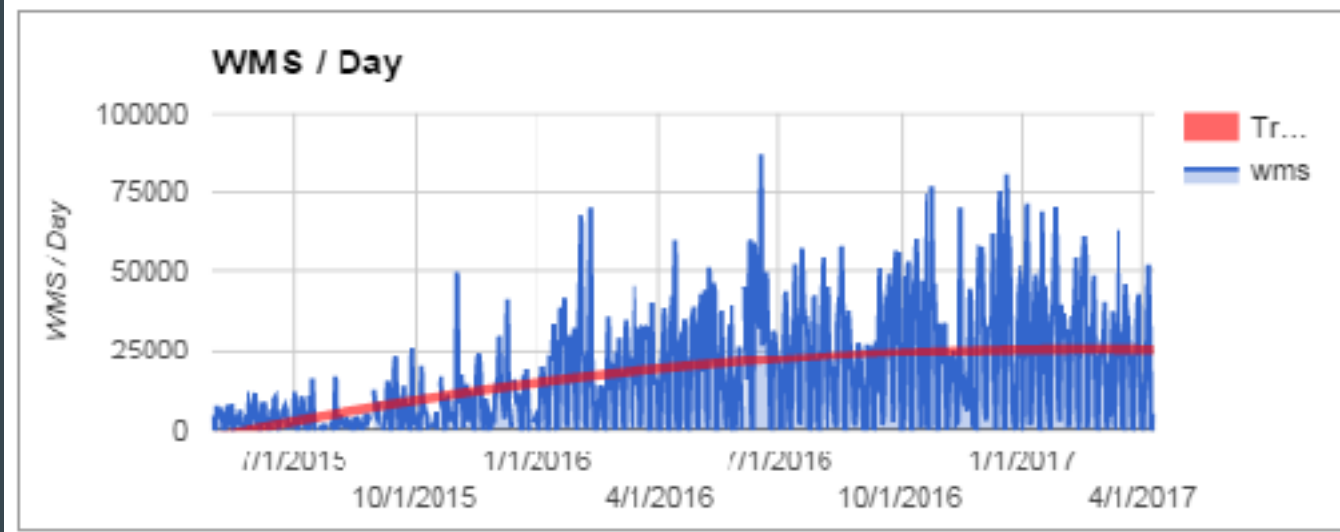
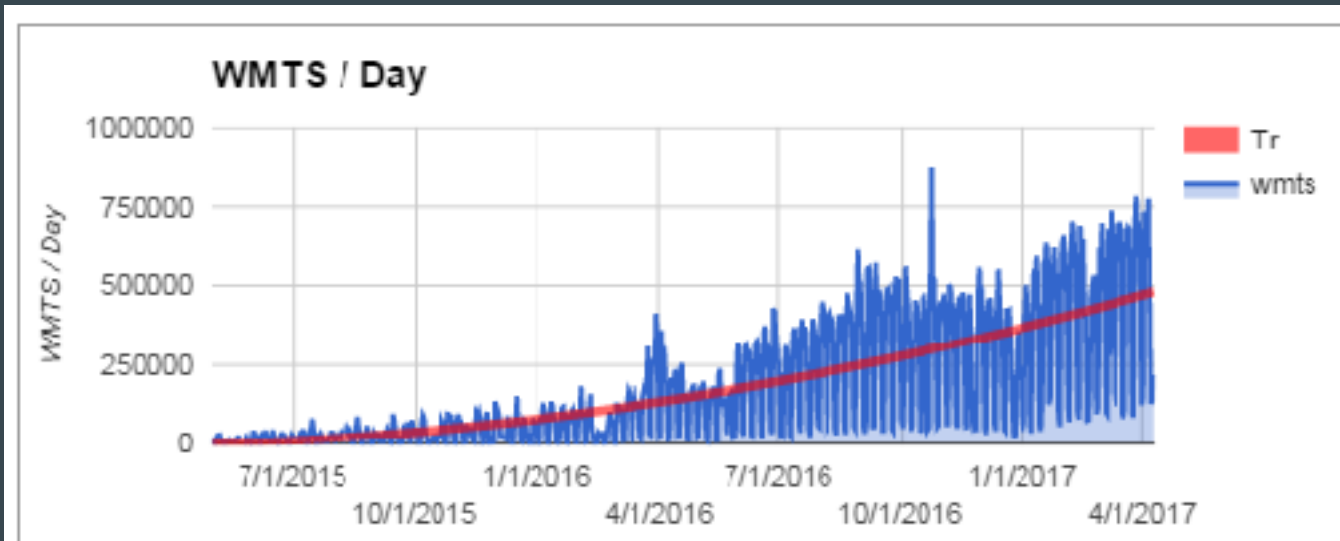
- **Provides endless valuable usage metrics !**
 - **How much does it get used**
 - **How long are user requests to the server taking (in real-time)**
 - **How much data is being transferred**
 - **What layers are being used Or not being used**
 - **Where are they being used**
 - **Who are the top users**



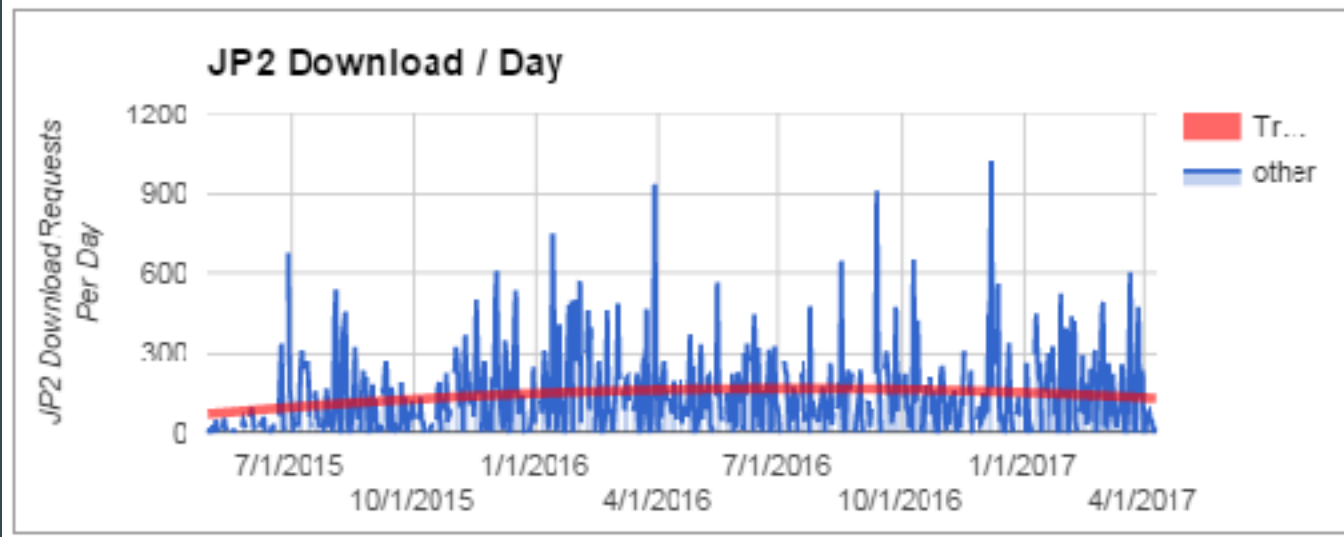
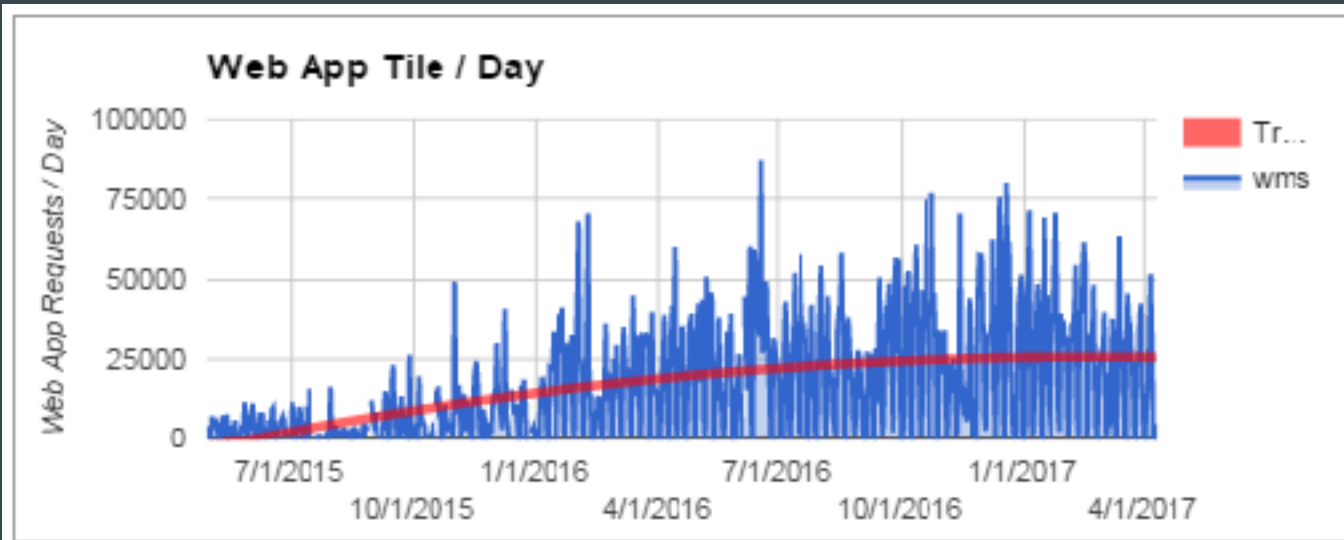
Total Requests to the Server / Day



WMTS & WMS Requests



Web Browser Usage and Downloads



250 Million Total Requests To Date

19 Total Terabytes of Data Transferred To Date

From the beginning of time to April 2016 Usage by Layer

↕layer	↕data	▼requests
utah	649.27 GiB	5,003,941
overlay_basemap	9.74 GiB	804,401
lite_basemap	6.53 GiB	717,436
topo_basemap	5.70 GiB	78,701

From the beginning of time to April 2017 Usage by Layer

↕layer	↕data	▼requests
utah	15.64 TiB	144,372,945
overlay_basemap	348.93 GiB	36,271,337
lite_basemap	268.71 GiB	21,158,105
terrain_basemap	266.82 GiB	9,487,878



April 2017 Usage

~ 28 Million Total Requests

~2 Total Terabytes of Data Transferred

layer	data	requests
utah	1.46 TB	13,216,367
overlay basemap	30.93 GB	8,418,679
lite_basemap	44.48 GB	2,632,322
terrain_basemap	47.00 GB	1,912,632
hybrid_basemap	90.57 GB	960,701
naip_2014_rgb	98.25 GB	681,340
topo_basemap	12.23 GB	351,062
utah_2016	53.72 GB	237,760
google	25.19 GB	229,515
none	31.60 GB	150,006
naip_2016_rgb	18.84 GB	118,714



Top Users by # of Requests

user	tags	data	requests
mapserv	agrc	503.89 GIB	36,985,617
Sica_Suresyn	sica	410.58 GIB	26,583,134
udot	udot	3.05 TIB	23,012,056
boxelder	county	2.05 TIB	16,873,412
wri	dnr	729.67 GIB	12,385,403
wjc	city	593.36 GIB	8,106,670
horrocks	sub	2.14 TIB	7,784,798
uliah	uliah	745.54 GIB	6,752,683
carbon	county	703.72 GIB	6,056,116
deq	deq	48.40 GIB	3,806,377
walker	county	796.64 GIB	3,580,994
wri	dnr	52.96 GIB	3,560,991
agrc	agrc	182.02 GIB	3,388,301
slcorp	city	236.11 GIB	3,263,435
hdr	sub	116.45 GIB	2,907,274
allies	agrc	44.69 GIB	2,524,768
ugs	dnr	97.57 GIB	2,114,950

AGRC Apps. -

Error -

UDOT -

County -

State -

City -

Subcontractor -

State -

County -

State -

County -

AGRC App. -

State -

City -

Subcontractor -

AGRC App. -

State -

Top Users by Data Transferred

User	Org	Data	Requests
udol	udol	3.55 TB	23,812,866
harricks	sub	2.14 TB	7,784,788
boxelder	county	2.05 TB	16,873,412
carbon	county	783.72 GB	6,055,116
spanishfork	city	644.03 GB	527,845
wjc	city	503.36 GB	8,106,678
mapserv	agrc	503.09 GB	36,905,517
avenue	sub	443.40 GB	733,503
Sloo Surveyor	sloo	410.06 GB	26,503,131
washc	city	313.07 GB	362,011
webster	county	296.64 GB	3,580,944
saniloga	city	261.79 GB	2,233,464
ublm	nlsh	245.64 GB	6,752,683
pleng	sub	242.67 GB	553,159
sicorp	city	238.11 GB	3,253,435
wrt	dnr	229.67 GB	12,385,403
hwlochner	sub	227.84 GB	1,863,412
jub	sub	227.75 GB	1,657,051
agrc	agrc	102.02 GB	3,300,301

UDOT

Subcontractor

County

County

City

City

AGRC App

Subcontractor

County

City

County

City

City

State

Subcontractor

City

State

Subcontractor

Subcontractor

State

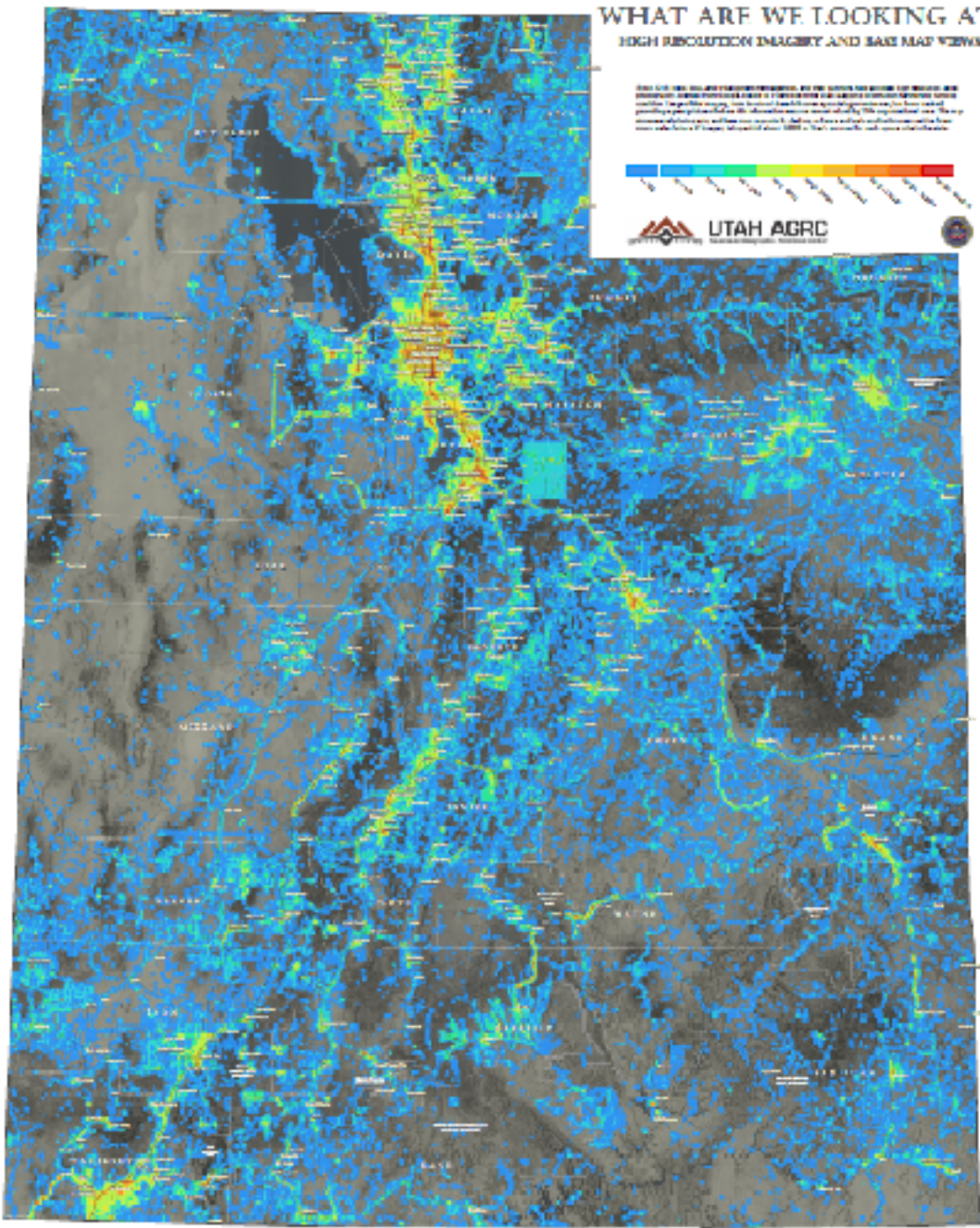
WHAT ARE WE LOOKING AT?

HIGH RESOLUTION IMAGERY AND BASE MAP VIEWS

THIS IS A HEATMAP REPRESENTING THE NUMBER OF REQUESTS TO DISCOVER FOR EACH LOCATION. THE COLOR SCALE IS A LOG SCALE OF REQUESTS. THE COLOR SCALE IS A LOG SCALE OF REQUESTS. THE COLOR SCALE IS A LOG SCALE OF REQUESTS.



UTAH AGRC

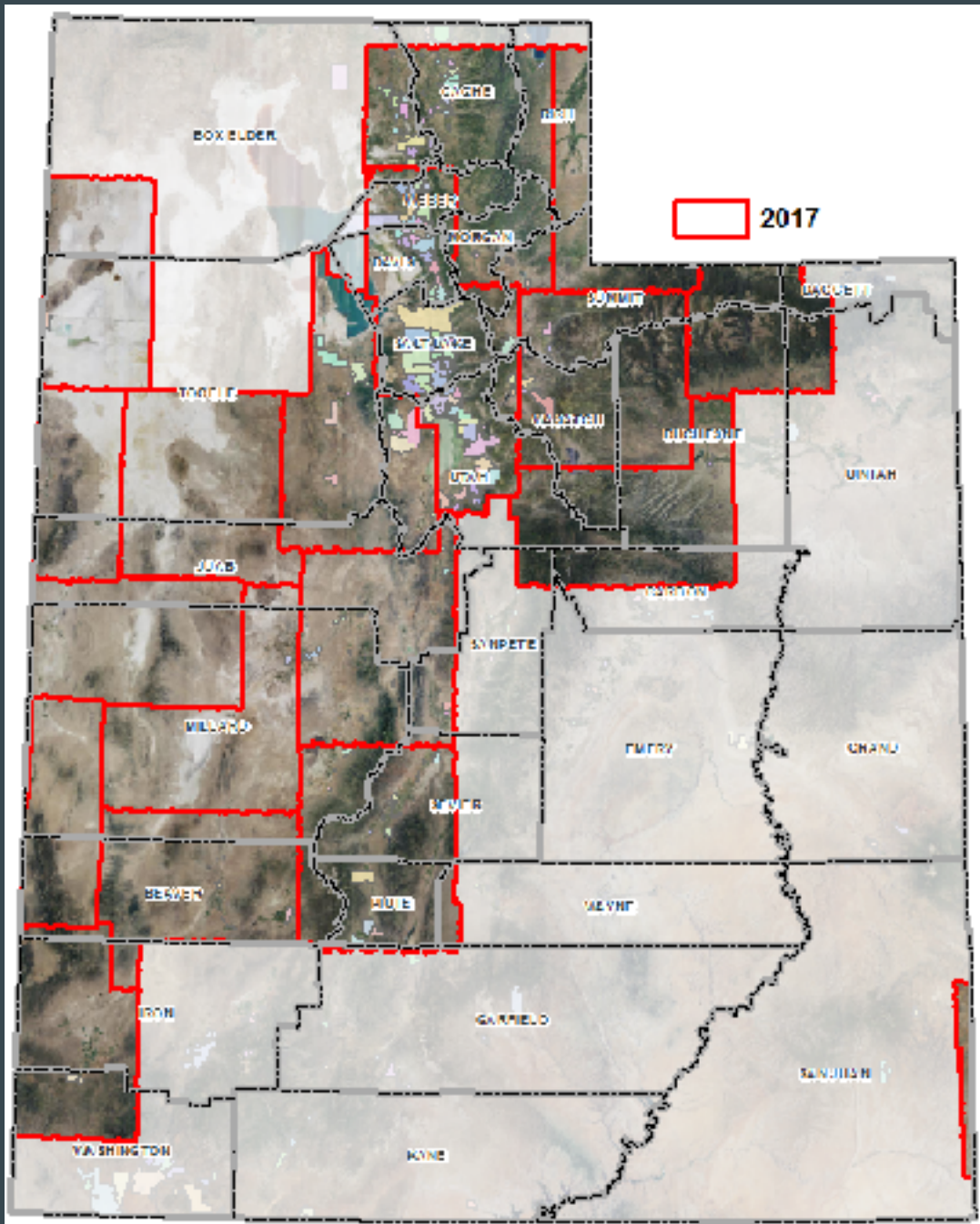


Where are the services being used? (as you might expect)

- Municipalities
- Transportation Corridors
- New Development
- Geologic Features (landslides, faults, etc.)
- Oil and Gas Fields
- Hydrology & Wetlands

(heatmap data at level 15 (1 km² tiles) of all requests to Discover for levels 18, 19 and 20)





Who wants new imagery this year?

Google Re-Fly Prediction

- Still working on the details
- ~ 95,776 km² to be flown in 2017
- \$3 per km²





Feedback & Questions?

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