

Utah's E-911 Tower Coverage

- Presentation by Matt Peters



The Problems/Issues



Cell Sector Routing Sheet

1 per provider per county

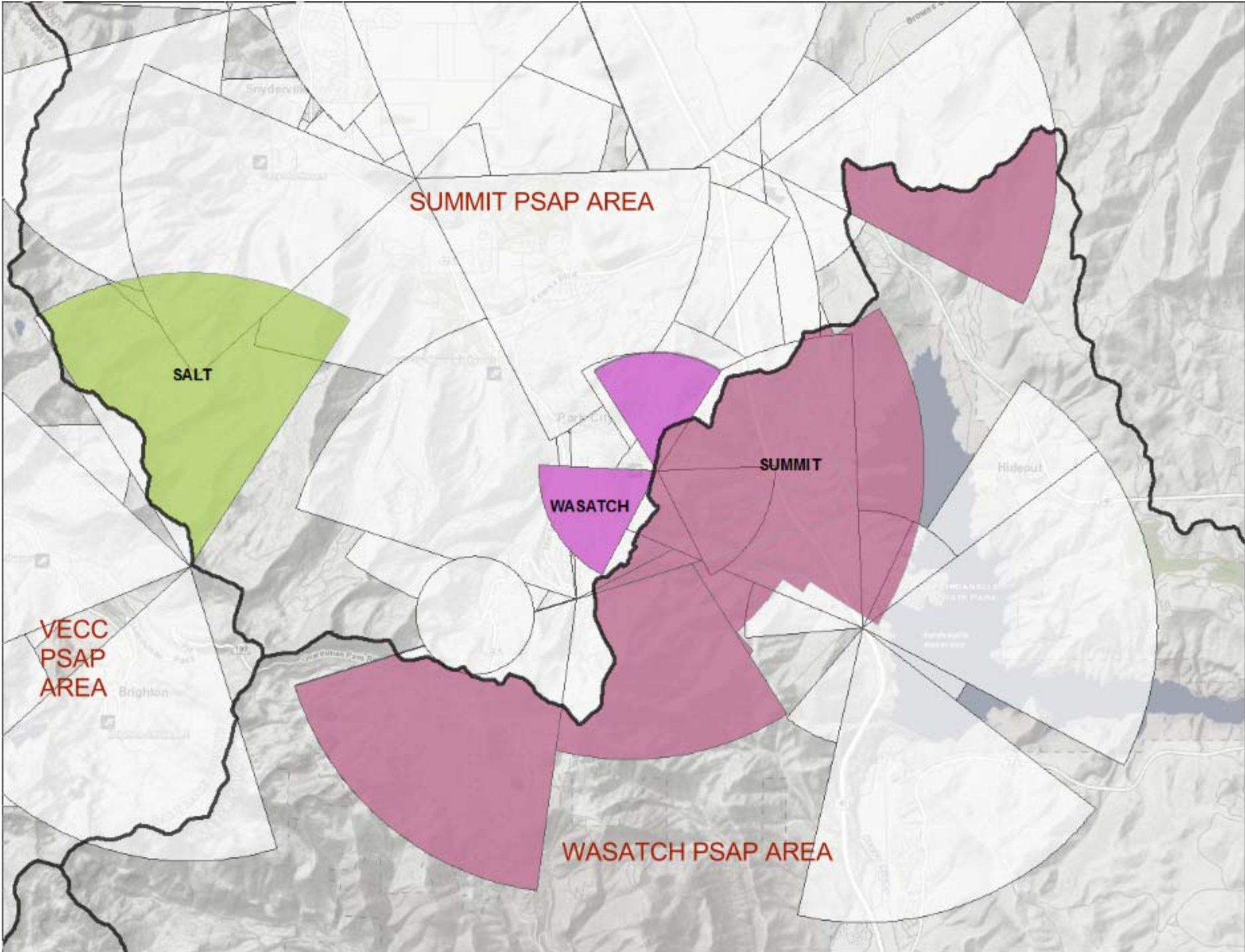
[Latitude, Longitude, Direction, Width, Distance]

Cell Site Location

Cell Site Location	Cell Site Address	Technology	Cell Sector Coverage	Cell Site Address - Function by Address Center	Cell Site Details - Service by Address											
Cell Site Location	Cell Site Address	Technology	Cell Sector Coverage	Cell Site Address	City	County	Lat	Long	Center Directional Coverage by PSAP	MSAN to Service Area by Cell	ESN	Customer Name	Service Number	Phone Number	Street Name	Street
13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
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22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27

MSAN Coordinator Signature & Date

PSAP Administrator Signature & Date



Provider 1 Sectors:

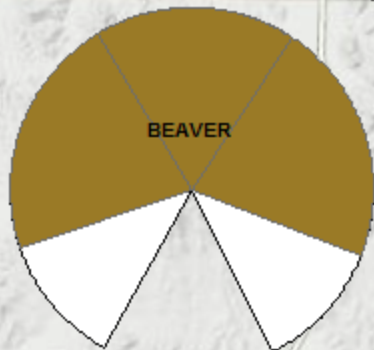
Count

6027 – only 1 PSAP area

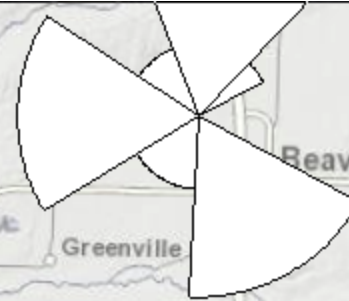
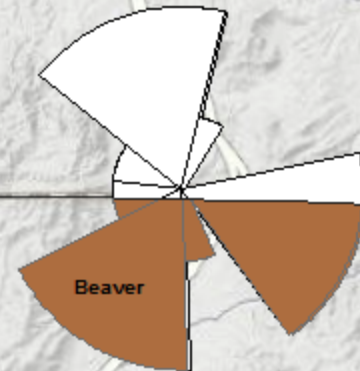
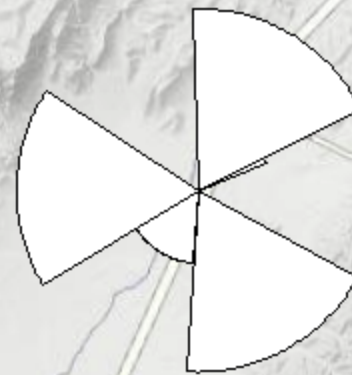
1853 – spans 2 PSAP areas

291 – spans 3 PSAP areas

42 – spans 4 PSAP areas



>50% of sector area outside assigned PSAP = 721 (8.7%)



Hidden Treasures

PSAP_NAME	ESN *
Beaver County Sheriff's Office	2009
Bountiful City Police Department	224
Box Elder Communications Center/State DP	2015
Cedar Communications Center/State DPS	2002
Clearfield City Police Department	2022
Colorado City Dispatch Center	2032
Davis County Sheriff's Office	2012
Emery County Sheriff's Office	2020
Garfield County Sheriff's Office	2017
Grand County Sheriff's Office	2039
Hill Emergency Communications Center	0
Juab County Sheriff's Office	430

Preliminary Conclusions

Input Data:

- Proprietary data coming in Routing sheets
- Tower locations look accurate
- Sector service parameters are based on routing sheet data

Analysis:

- Semi-automated process – ArcGIS Desktop
- Can identify and prioritize sectors that may need reassignment
- Almost all issues seem to be at/near PSAP boundaries
- Issues are best examined manually with local knowledge and actual call location.

Current Actions:

- Distribute the .pdfs created and allow PSAPS to review
- Make the web based tool available to do spot checks and verification of new or existing routing sheet information.

Next Actions:

- Include location of call origin, and do further analysis

Cell Tower Coverage

1.1.1



PSAP Boundaries

Transparent Opaque

Create Coverage Area

Longitude (dd)

- 111.93

Latitude (dd)

40.86

Beam Width (deg)

90

Azimuth (deg)

70

Range (meters)

1000

Create

Clear

