

Broadband Service Mapping

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Context


- The FEDS (FCC/NTIA) are “giving” Oregon \$689 Million to improve broadband service in Oregon
- Communities will be able to have some impact on this process
- This program is being managed by The Oregon Broadband Office
(https://www.oregon.gov/biz/programs/Oregon_Broadband_Office)

Oregon Broadband Office Media Kit

Resources

-  [The Broadband Equity, Access and Deployment \(Bead\) Program Overview](#)
-  [Digital Equity Act Programs Overview](#)
-  [Community Outreach Flyer](#)

Press Releases

-  [Business Oregon Requests Community Input Before Federal Broadband Funding Arrives \(June 21, 2023\)](#)
- [Biden-Harris Administration Announces State Allocations for \\$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda \(June 26, 2023\)](#)
- [Oregon to Receive \\$689 Million for Broadband Infrastructure \(June 26, 2023\)](#)

Just Google: “Oregon Broadband Office”

Important Definitions

BEAD: Broadband Equity, Access, and Deployment program (\$689 million)

ARPA: American Rescue Plan Act (\$157 million)

FCC: Federal Communications Commission (built the new broadband map)

NTIA: National Telecommunications and Information Administration (gives out the money)

COSTQuest: Built the licensed location fabric for FCC.

BEAD Initial Proposal: Step 2 in Plan for Oregon to get the money. Contains an Appendix of location ids of all Unserved and Underserved locations in Oregon.

Location: Broadband Serviceable Location (BSL) ie. home, apartment, small business, etc.

Location Fabric: The proprietary location file built by CostQuest for FCC

Broadband Availability: A public file of services available at these locations (contains ID) from FCC and lots of ISP info.

Unserved Location: Less than 25/3 Mbps (not mobile, satellite, or unlicensed wireless)

Underserved Location: Less than 100/20 Mbps (not mobile, satellite, or unlicensed)

Get Your Data

Broadband Availability (FCC Source)

Simple : Download Appendix 2 and 3 from the BEAD Initial Proposal Volume 1 (CSV Files)
(https://www.oregon.gov/biz/programs/Oregon_Broadband_Office)

ISP Info: Download ISP Details from FCC

(<https://broadbandmap.fcc.gov/data-download/nationwide-data?version=dec2022>)

Location Fabric

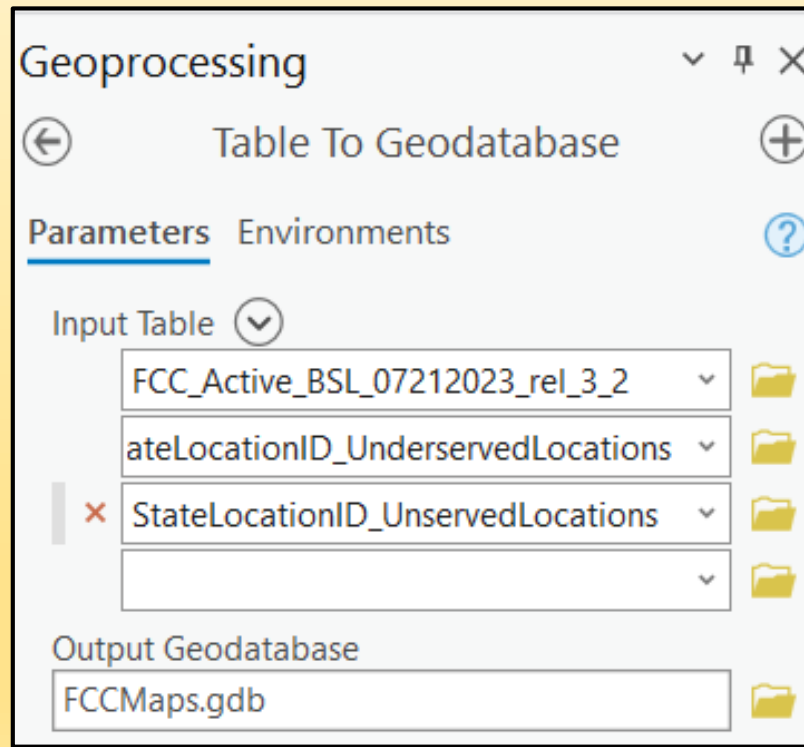
Get a License to use the Location Fabric and get the data– Getting a license is a multi-step process so be prepared. You also want the license to let you use the data for more than just updating the fabric (initial licenses were ONLY for that)

(<https://help.bdc.fcc.gov/hc/en-us/articles/5375384069659>)

These are just CSV Files!

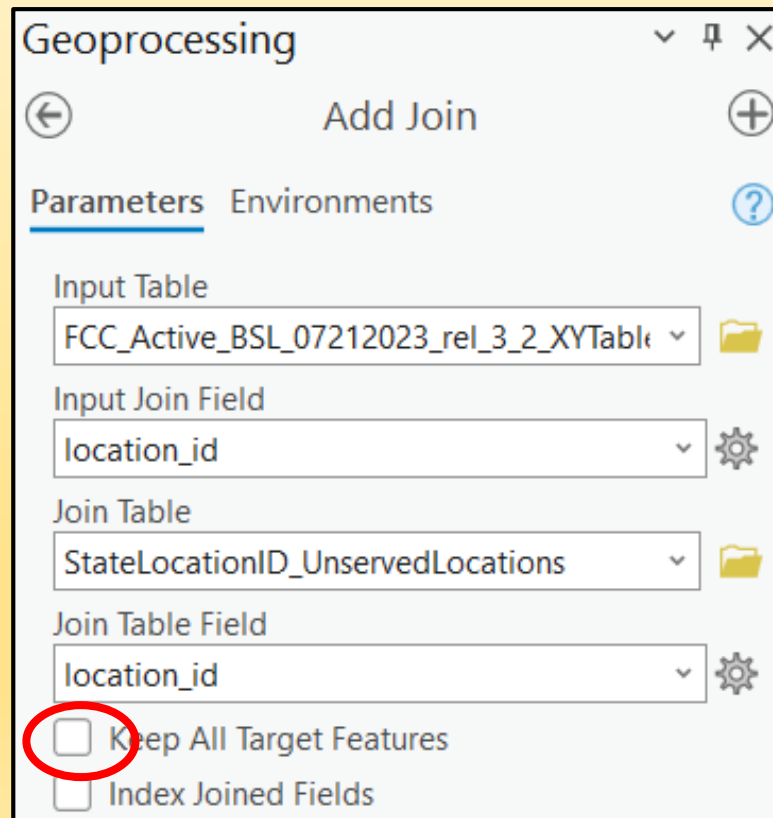
Steps To Load The Data

1. Import the tables into a geodatabase (Import Table)
(Outcome: Unserved ID's, Underserved ID's, FCC/Costquest Location File)



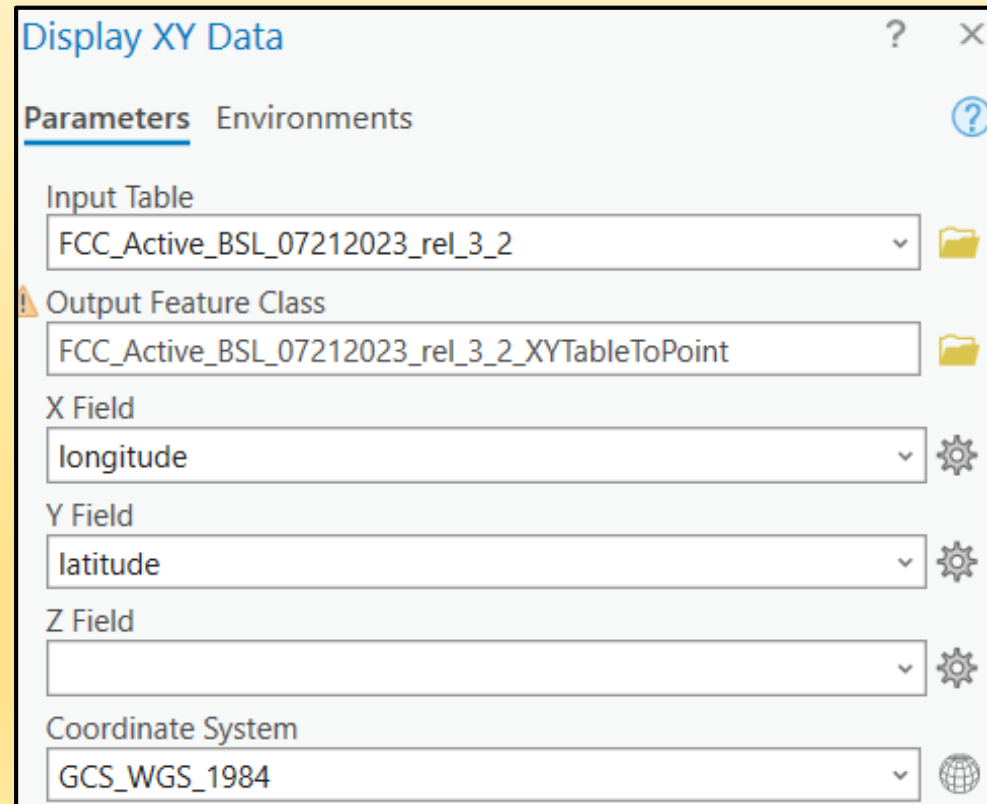
Steps To Load The Data

2. Join the Costquest Location data to the UnservedLocationTable
(Outcome: FCCLocations joined using the UnservedLocationID)



Steps To Load The Data

3. Display the data Using XY Locations



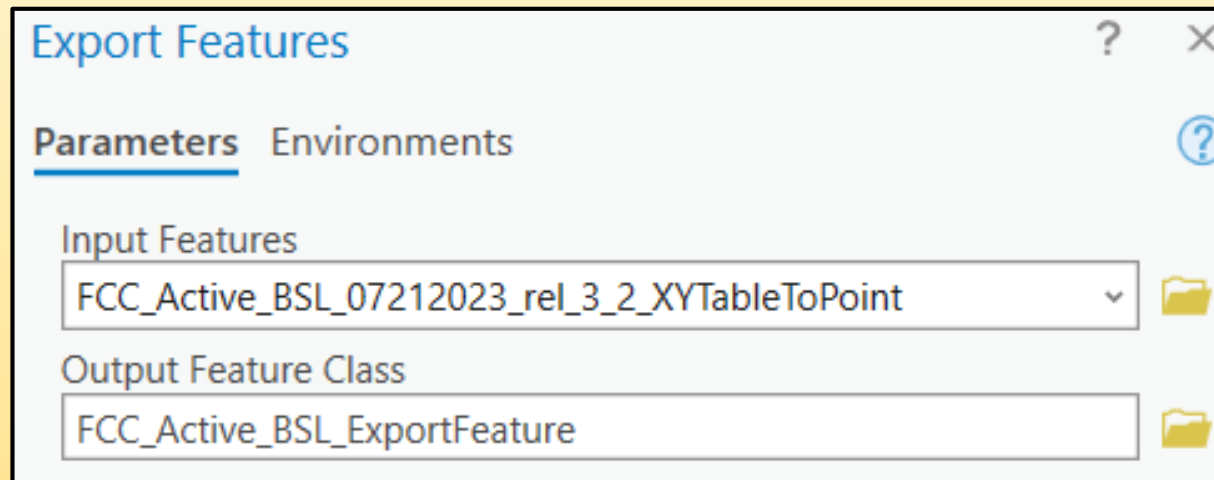
The screenshot shows the 'Display XY Data' dialog box with the following settings:

- Input Table:** FCC_Active_BSL_07212023_rel_3_2
- Output Feature Class:** FCC_Active_BSL_07212023_rel_3_2_XYTableToPoint
- X Field:** longitude
- Y Field:** latitude
- Z Field:** (empty)
- Coordinate System:** GCS_WGS_1984

The dialog box has tabs for 'Parameters' and 'Environments'. The 'Parameters' tab is selected. There are also icons for help, close, and a question mark.

Steps To Load The Data

4. Export the features to a point feature class in your Geodatabase



Steps To Load The Data

REPEAT STEPS FOR UNDERSERVED LOCATIONS

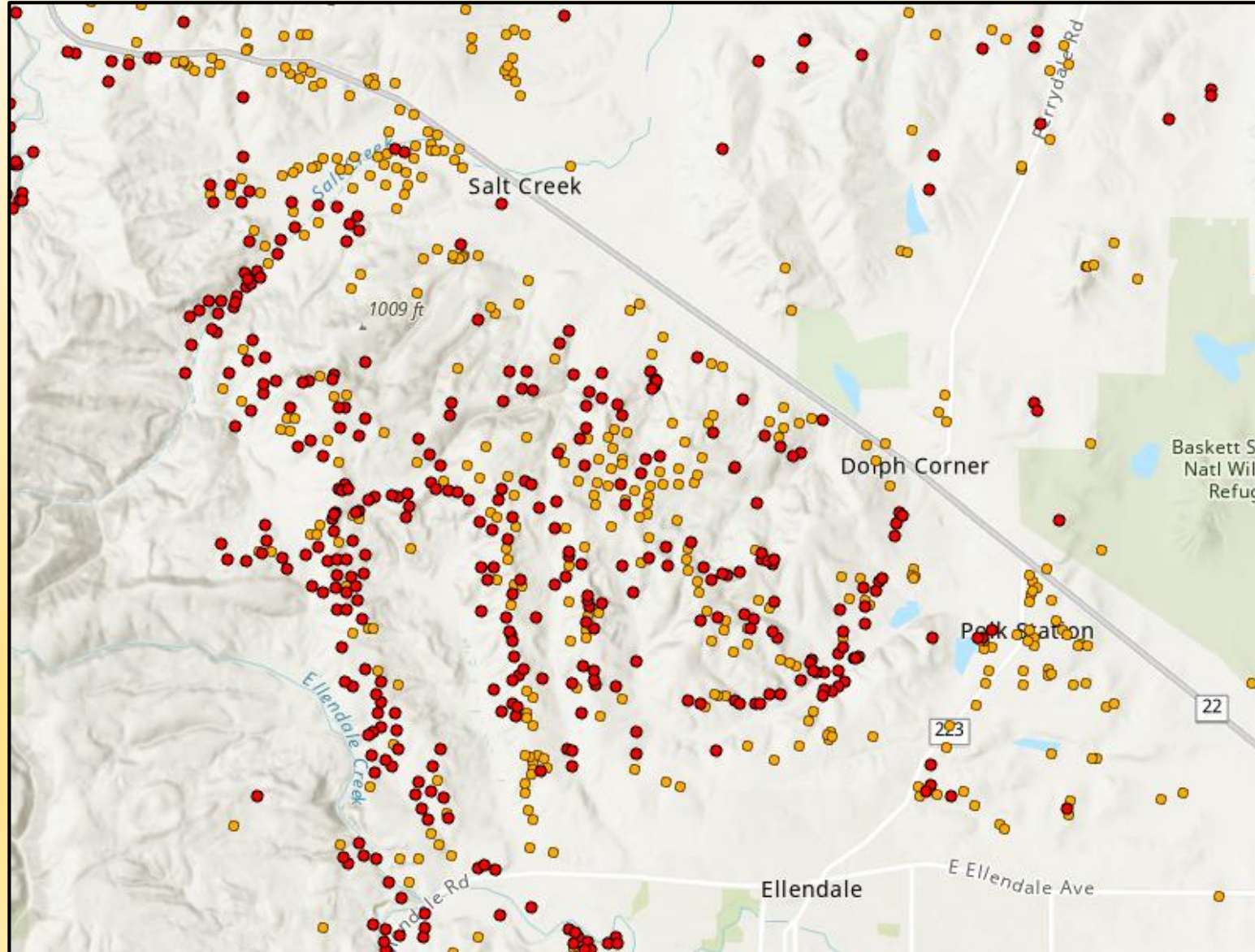
THEN....

Get Fancy and Download ISP Information !
(use the same process)

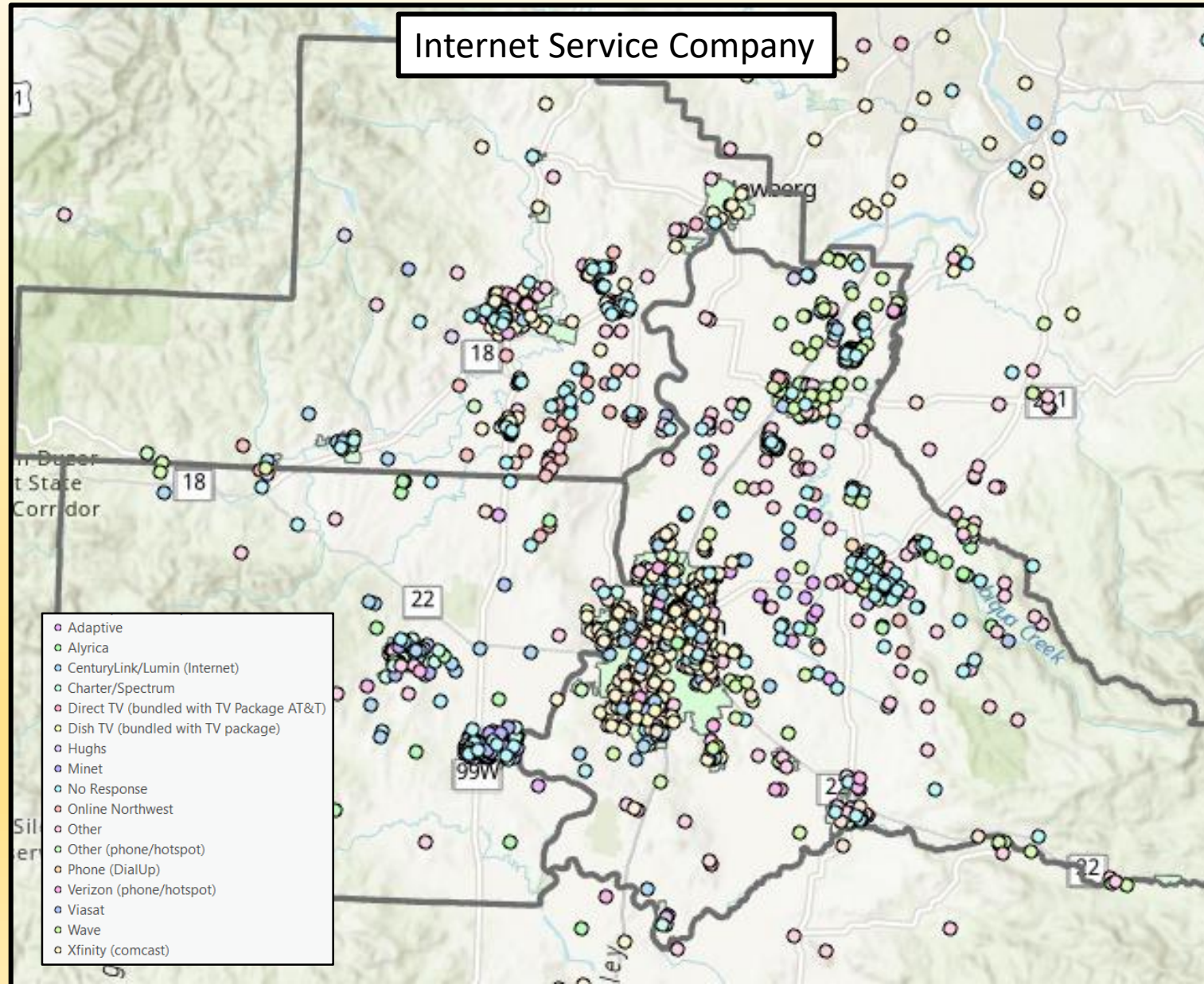
brand_name	location_id ▲	technology	max_ad...	max_a...	low_latency
Xfinity	1298441988	40	1200	35	1
CenturyLink	1298441988	10	40	3	1
T-Mobile US	1298441988	71	100	20	1
Xfinity	1298441989	40	1200	35	1
CenturyLink	1298441989	10	80	40	1
Alyrica	1298441989	71	40	10	1

Just Remember One Location will have MANY ISP's

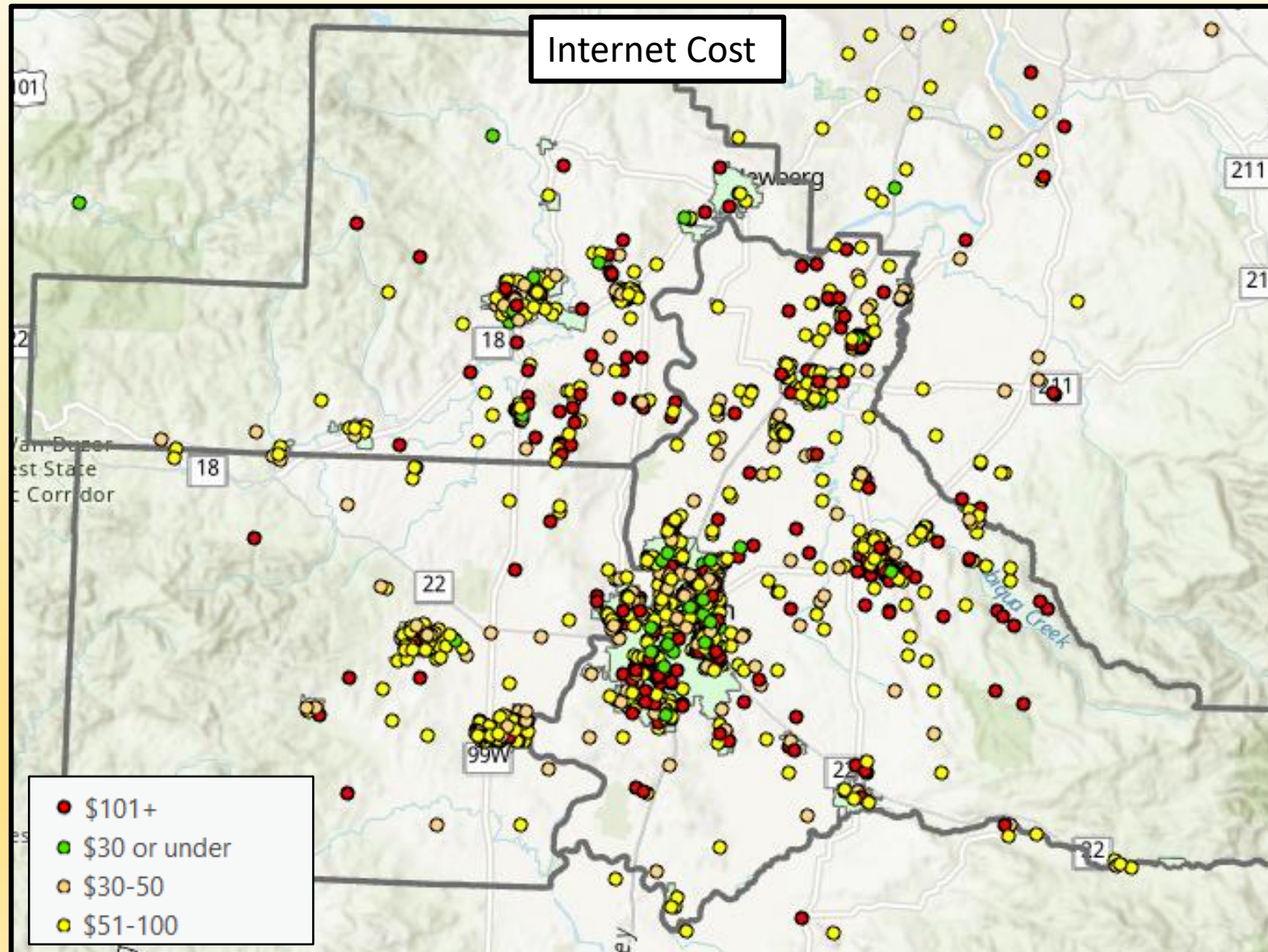
Results



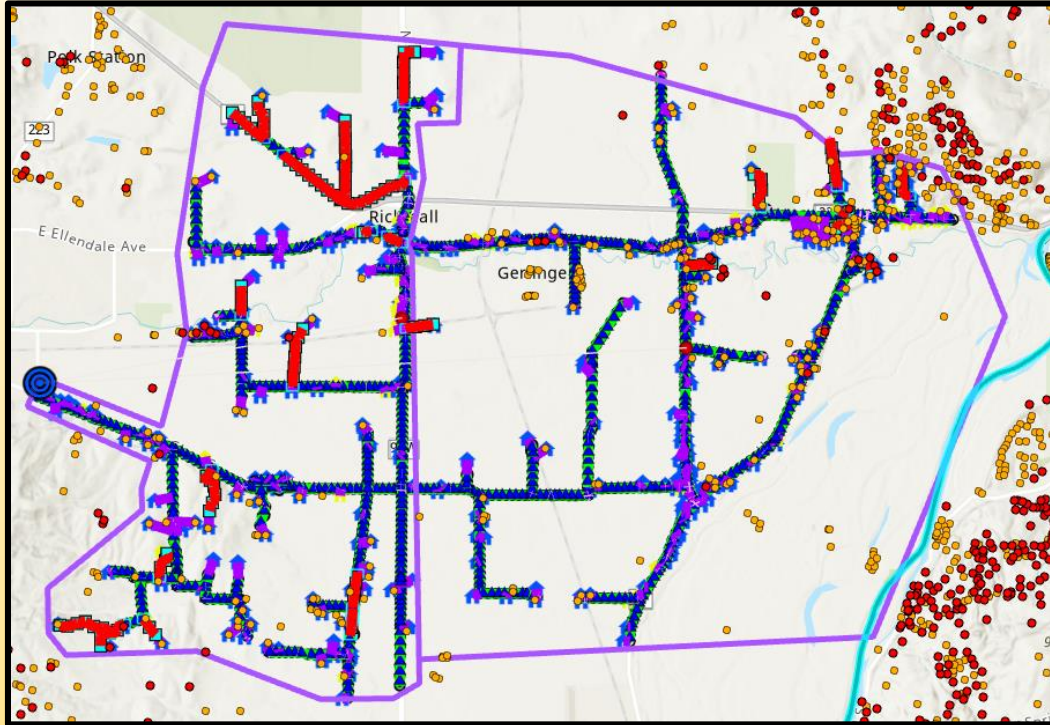
Results



Results

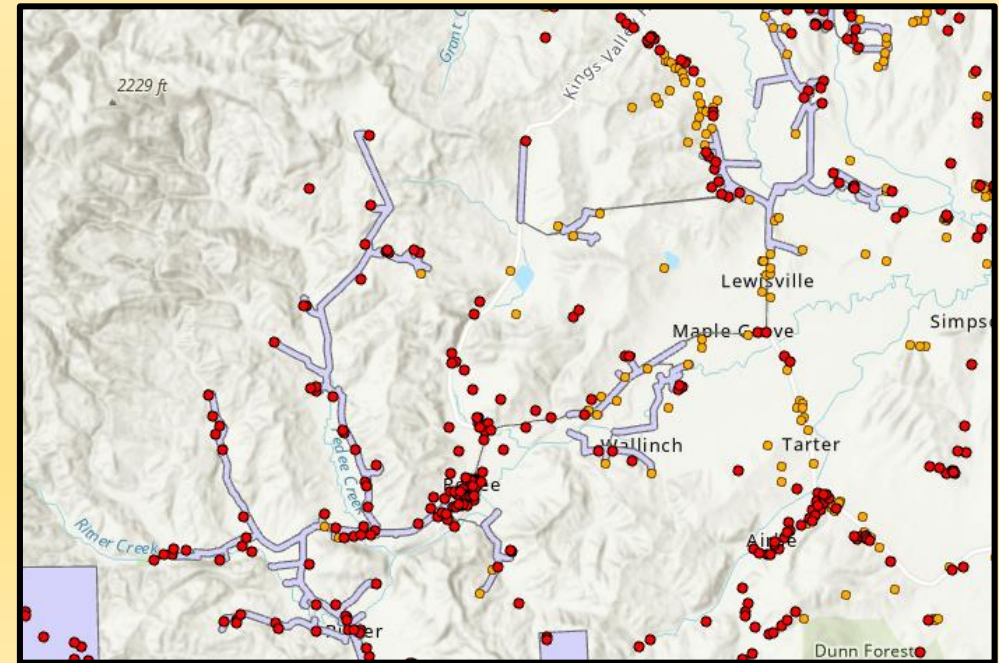


Add Other Data

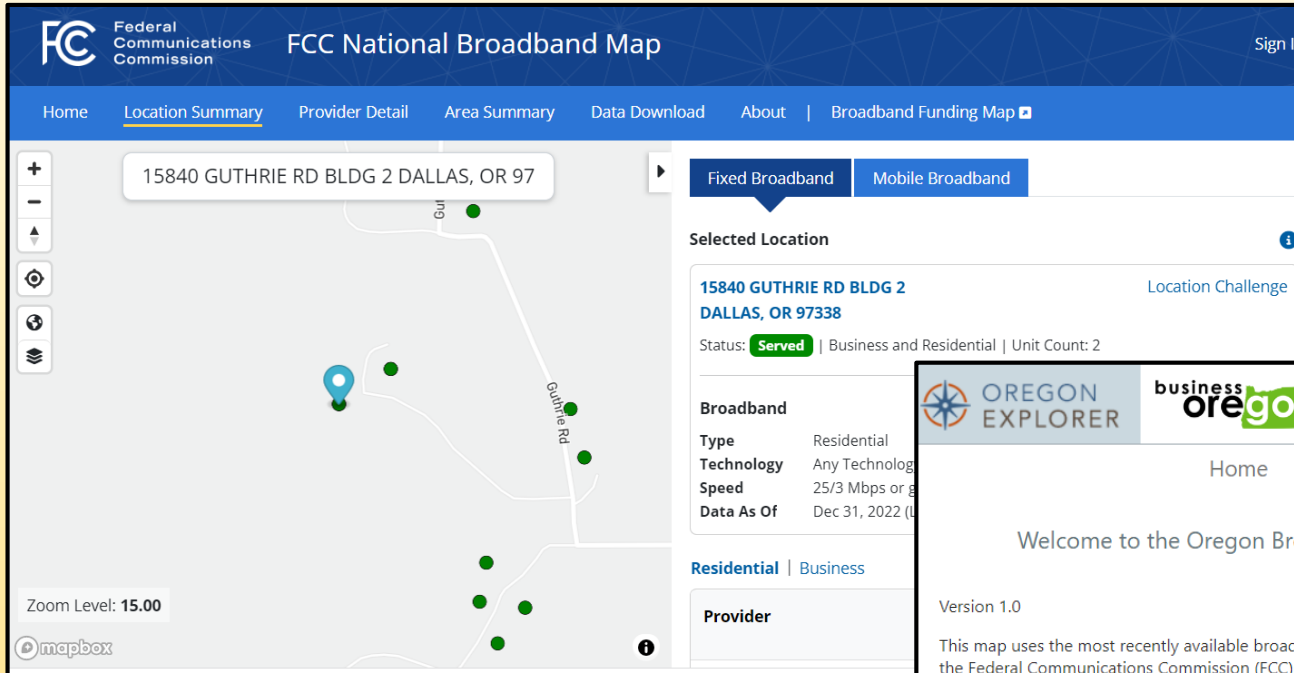


County Right-Of-Way Permit Data (IRIS)
(Often get DWG's of permit area)

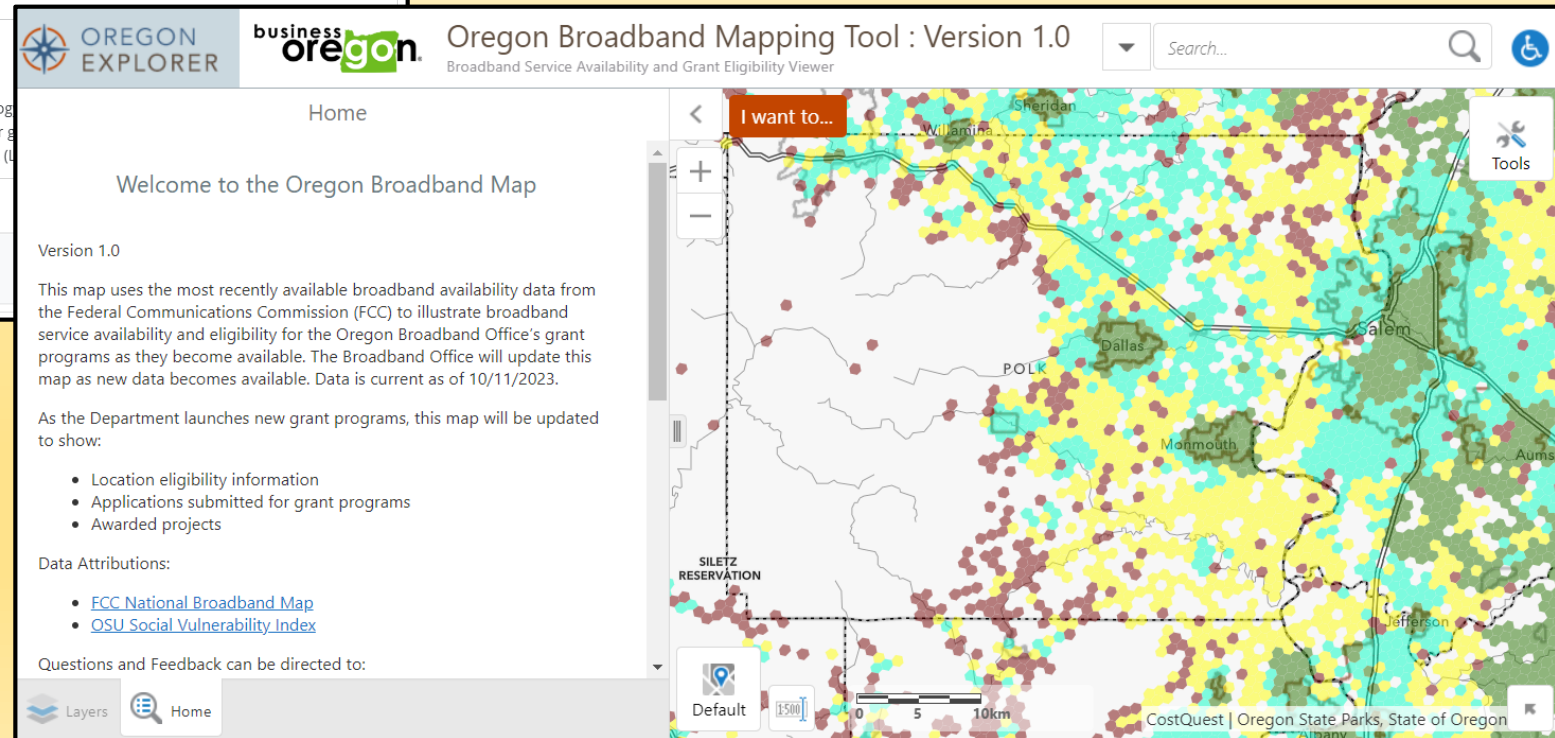
FCC Reconnect Data



There Other Broadband Maps



The Source: Only lets you look at details when zoomed in....



Why?

1. Ensure ALL locations are included in the location fabric (We compared the fabric to 911 data and got 600+ sites added for Polk County)
2. Challenge the speeds reported by the ISP's if they are NOT accurate
3. Identify priority areas in your area (County/City) and engage the Broadband Office and the ISP's so the ISP's serving your area get money!