



WASHINGTON STATE
UNIVERSITY

BROADBAND DATA FOR ALL

Who am I?

- Assistant Director of the Digital Equity and Broadband program at Washington State University
- Recovering IT person, no I will not help you fix your printer
- Curler, yes like with the stones and ice



How did we get here?



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Broadband DATA Act

- Fully known as the “Broadband Deployment Accuracy and Technological Availability Act”
- Required the FCC to collect data about the availability of broadband services at the individual location level
- Collect that data at least twice a year
- Be compatible with common GIS software – Literally in the text of the act!!!
- It’s actually small enough to read: [Text - S.1822 - 116th Congress \(2019-2020\): Broadband DATA Act | Congress.gov | Library of Congress](#)

What is it?



Hint: It's two things



It's two things



- Fabric – Released twice a year
 - It's a super fancy point layer
 - What is in it?
 - Unique Location ID
 - Address
 - Unit Count
 - Is it a BSL
 - Building/Land Use Code
 - Confidence Score
 - Census Block
 - H3 Res 9 Hexagon ID
 - Lat/Long
- Availability – Released every 2 weeks
 - It's an attribute table for Location IDs
 - What is in it?
 - Provider FRN and Unique Provider ID
 - Brand Name
 - Location ID
 - Technology providing service
 - Upload/Download Speed
 - Low latency
 - Residential/Business Service offering
 - USPS State Code
 - Census Block
 - H3 Res8 Hexagon ID

What does it look like?



I heard it's really bad



What does it look like?



This is a BSL



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So are these



This too?



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WV SU

**POBODY'S
NERFECT**



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I want the Fabric, how do I get it?

Hint: It takes a few steps



How do I get it?

- Obtain a FCC Registration Number (FRN)
 - Mine is 0033104902
 - It isn't that hard to get one. It only takes about 15 minutes.
- CostQuest Process
 - Fill out the form
 - Wait for them to get back to you (couple of days)
 - Work through your legal team (if you have one) to review the license
 - Download the CSV and process it
 - Do fun stuff!

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How would I use it?



Hint: Pay attention to your license



Licenses



- For ISPs – Tier 2
 - Use for filings
 - Correct BDC data
- For Government Entities – Tier 2 Government
 - Use for challenges
 - Correct BDC data
 - Designated Entity may use fabric for planning
- For Others – Tier 4
 - Standard Agreement – Generating challenges
 - Research Agreement – Public policy/Academic research

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Process

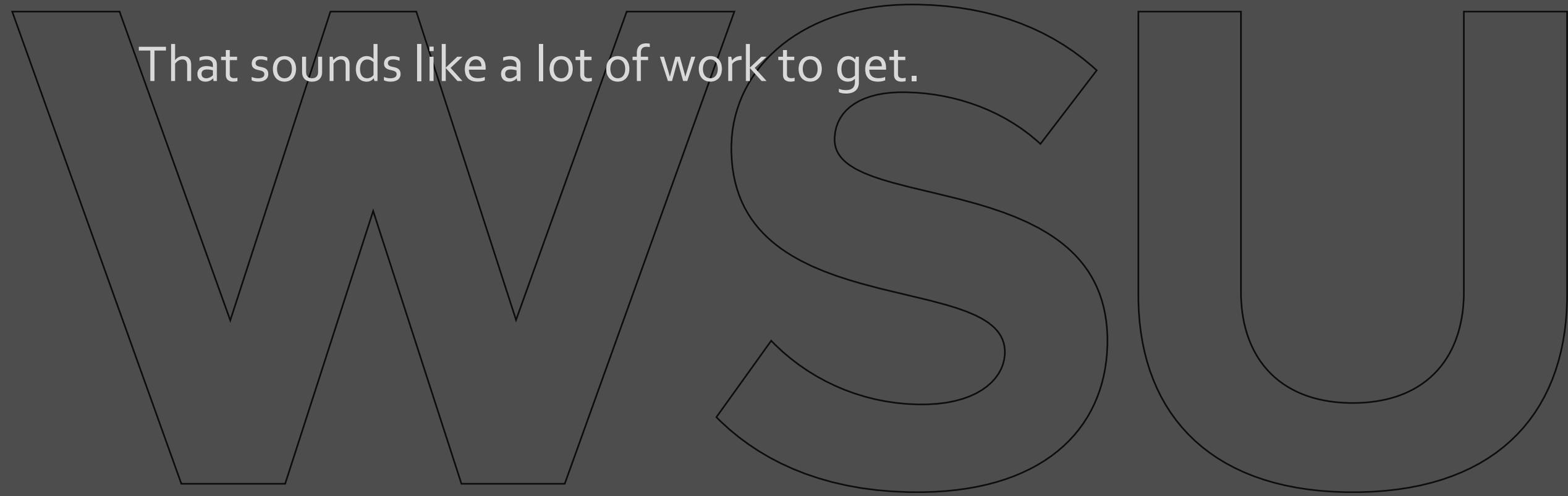
- Download and enrich the CSVs
- Relate public data from the FCC to the licensed data points
- Do the analysis that you are looking to do
 - Remember your license limitations

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What can I do without doing that?

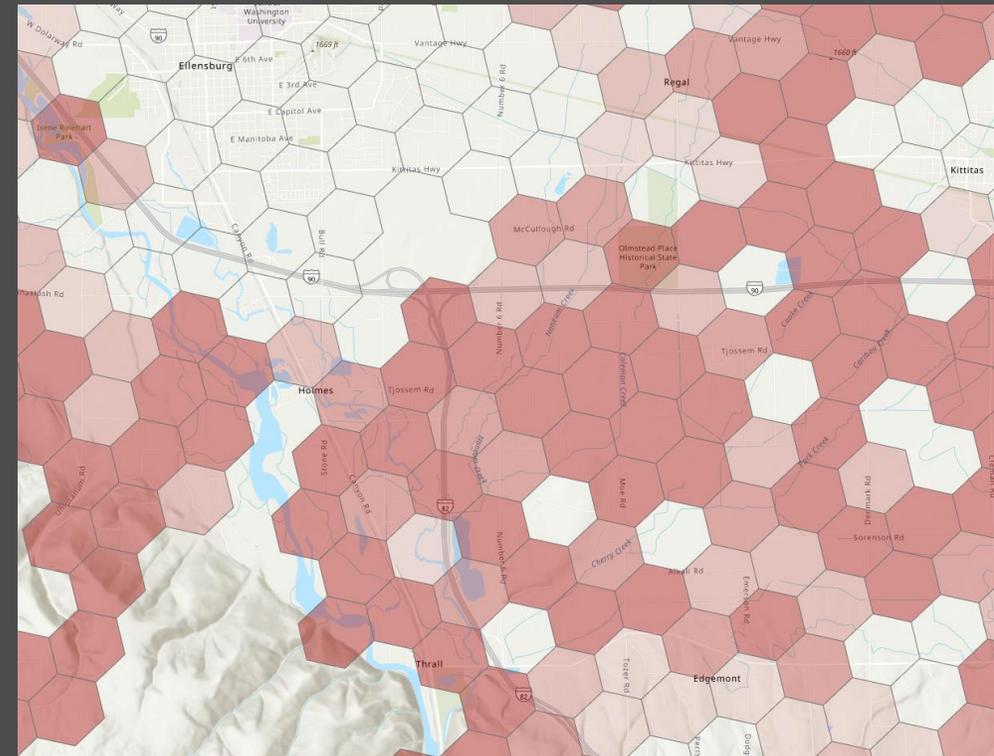


That sounds like a lot of work to get.

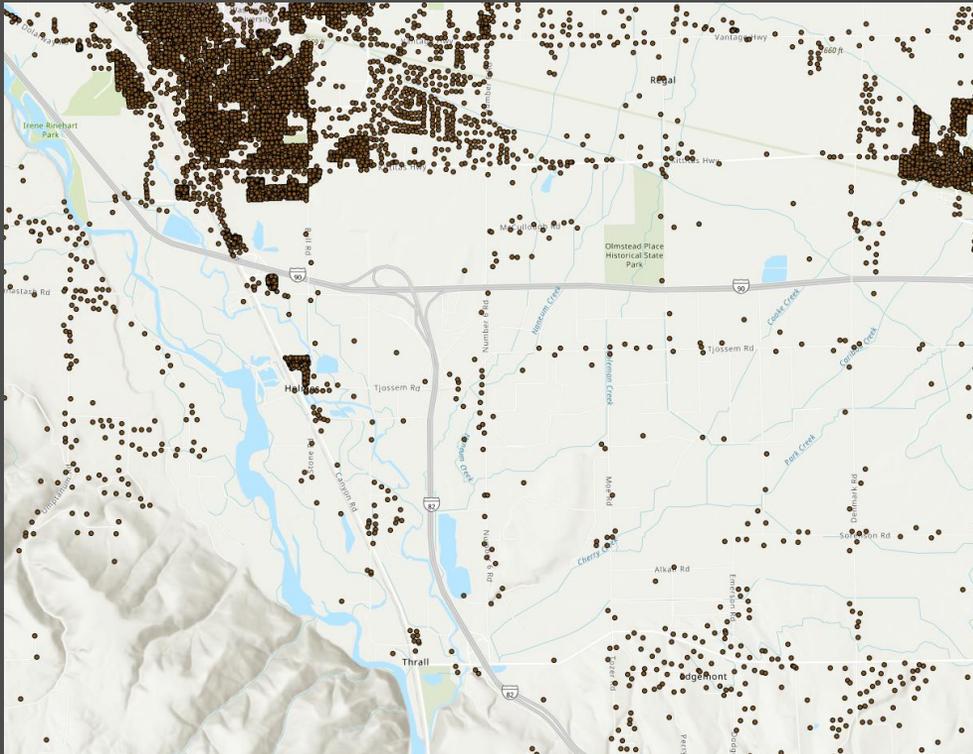


Pat Ryan's Living Atlas

- Fantastic data set from ESRI
- Has State, County, Tract, Block Group, Block, and H3R8 levels of geography
- [FCC Broadband Data Collection December 2022 - Overview \(arcgis.com\)](https://arcgis.com)



Site Address Point



- SAP Layer from the OCIO office
- State level dataset
- Pretty good
- Missing some counties
 - Looking at you Stevens and Columbia



REMIX!

- Using the Site Address Point layer you can create a very accurate understanding of availability
- Great tool for creating service areas, more on this in a bit

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But what else could I do?



Lots of stuff!



But what else could I do?

- Provider footprint analysis
- Growth area analysis
- Public engagement

- Many other ideas!

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But why should I care now?



I mean it is a cool dataset and all



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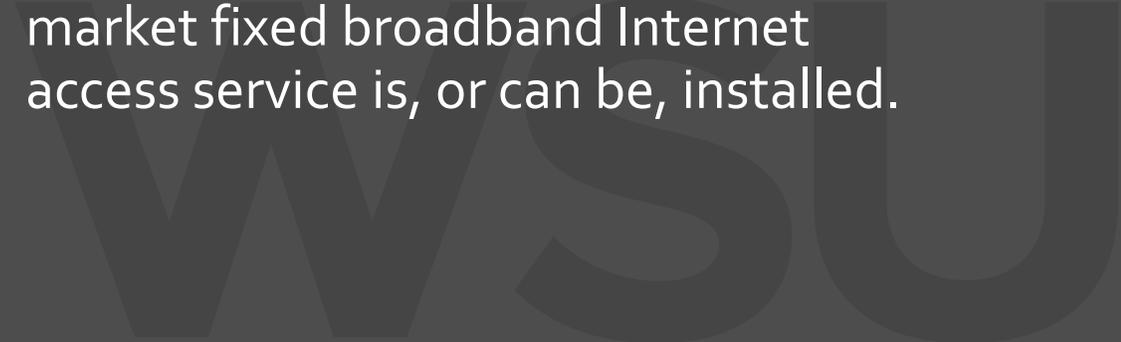


You have 42.5 Billion reasons to care

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Definitions



- Unserved: Under 25mbit down/3mbit up
 - Underserved: Under 100 down/20 up equal to or above 25 down/3 up
 - Served: Equal to or faster than 100 down/20 up
 - 95th percentile latency less than 100ms for all definitions
 - Able to be installed within 10 days
 - Technologies: Wireline or Licensed Fixed Wireless
 - Washington specifics:
 - 25/3 for every resident by 2024
 - 1g/1g for every CAI by 2026
 - 150/150 for every resident by 2028
 - What is a BSL?
 - A business or residential location in the United States at which mass-market fixed broadband Internet access service is, or can be, installed.
- 

Washington Timeline



- Five-Year Plan: August 15th, 2023
- Digital Equity Plan: September 1st, 2023
- Initial Proposal – Volume 1: Mid-September, 2023
- Initial Proposal – Volume 2: Late December, 2023
- Challenge Process: Mid February, 2024
- Final Proposal: Late December, 2024
- Projects Start: 2024
- Projects Finish: 2028

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Idaho Timeline



- Five-Year Plan: June 28th, 2023
- Digital Equity Plan: Due November 14th, 2023
- Initial Proposal – Volume 1: Comment October 2023, Due December 27, 2023
- Initial Proposal – Volume 2: Comment October 2023, Due December 27, 2023
- Challenge Process: Q2-Q3 2024
- Final Proposal: TBD
- Projects Start: TBD
- Projects Finish: TBD

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Correcting the Map



- Won't help with Federal allocations
- Will help with state allocations of funding
- Will help with making accurate Service Areas – More on this in a minute
- Will help with follow on programs

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Community Anchor Institutions

What are they?



Community Anchor Institutions



- K-12 Schools public or private (FCC E-rate or National Center for Education Statistics [NCES] ID Required)
- Higher Education (NCES ID Required)
- Libraries (FCC E-rate or American Library Association [ALA] member libraries and their branches)
- Health care facilities that have a Centers for Medicare and Medicaid Services (CMS) identifier
 - Health clinic
 - Hospitals
 - Mental health facilities
 - In/Out-patient treatment centers

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Community Anchor Institutions

- Government Organizations
 - Tribal government buildings (TBD after further conversations with tribes and further reviews of the Community Action Plans)
 - State
 - WorkSource
 - DSHS - Community Services Offices
 - Community corrections
 - County
 - County Courthouse
 - Local
 - City/town hall
- Public Housing Organizations
 - Public housing as determined by state Public Housing Agencies (PHA) and enumerated by the US Department of Housing and Urban Development (HUD).
 - Housing listed on the National Housing Preservation Database

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Community Anchor Institutions



- Community Support Organizations that facilitate greater use of broadband service by vulnerable pop, including, but not limited to, low-income individuals, the unemployed, children, incarcerated and aged individuals.
 - Youth Centers
 - Senior Centers
 - Job Training Centers
- Public Safety
 - Fire houses
 - Emergency medical service stations
 - Police stations
 - 911 PSAPs
 - Detention centers and correctional facilities

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Upcoming Challenge Process



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Challenge Process

- The next big milestone that will engage the public is the challenge process
- This will determine who is served, underserved and who is unserved
- Communities that engage are likely to get more funding allocated to them

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Speed challenge

- End user based process
- Capture speed over three different days
- Can't be done more that 60 days to the start of the challenge process

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MDU/Area challenge

- Actual tested available speeds
- 6 in an area, or 10%/3units
- Flips the burden of proof to the ISP

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Service areas



Now is a



Service Areas

- Are going to be developed as a part of BEAD Proposals
- Currently being worked on by WSBO and they are hiring a contractor
- Not sure about other states

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Beyond BEAD



There will be another

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There will be another



And this data will guide the investments.

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Thank you for your time today

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