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March 29, 2021

Mr. Brad Hendrickson, Secretary of the Senate
Legislative Building 312
PO Box 40600
Olympia, WA 98504-0600

Mr. Bernard Dean, Chief Clerk of the House of Representatives
Legislative Building 338B
PO Box 40600
Olympia, WA 98504-0600

Dear Mr. Hendrickson and Mr. Dean,

The effort to build out our state's broadband infrastructure is not new. Since dial-up internet entered our homes in 1992, technology has evolved to a point where we now carry palm-sized wireless computers that can almost instantly download, stream or share huge amounts of information with just a light tap on the screen. Utilities and telecom companies have been laying down cable and fiber optics to improve speed and reliability. People living outside the reach of cable and fiber are looking to satellites to beam their Zoom calls and homework assignments.

As fast as that technology has been coming, the pandemic showed us it hasn't reached everyone fast enough. As the world went virtual, too many households and businesses were unable to connect to classrooms, meet with their doctors or serve their clients and customers in the digital spaces of the internet. For many in rural areas, the infrastructure simply isn't there. And for many others throughout the state, the costs of internet and the devices we use are too expensive.

This past year has revealed the digital divide in stark terms. State legislators in 2019 established a goal of universal broadband access to all Washingtonians, and that work is more urgent than ever.

The Washington State Broadband Office at the state Department of Commerce has been deeply engaged with local communities and Tribes to make sure Washington state is positioned to attract significant amounts of federal funding that will be made available in the next year.

Foundational to that effort has been mapping where the gaps are. Federal maps are woefully misleading and inaccurate, so our state's survey work is an essential and ongoing effort that helps us make the case for building out our cable and fiber networks. At the same time, access to affordable technology gets to the heart of equity. This is not an either/or situation. We need strong, reliable internet and devices and service that people can afford.

This report shows how much work remains and comes at a time when we've seen the consequences of being digitally cutoff from the world. It's time for our state – and our country – to institutionalize affordable, quality access to broadband for all.

Sincerely,

Lisa Brown
Director

Enclosures (1)

State Broadband Office 2020 Report

Washington State Department of Commerce

Biennial Report per RCW 43.330.538

STATE BROADBAND OFFICE

January 2021

REPORT TO THE LEGISLATURE

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Executive Summary

Without equal access to quality, affordable broadband, Washington cannot continue to build an equitable economic recovery that strengthens every community throughout the state. Washingtonians need to have universal broadband infrastructure to continue to attract global investments, to encourage innovation and research and especially now given the COVID-19 pandemic, broadband will be critical to support strong economic recovery and prosperity.

The Washington State Broadband Office was created by 2019 Second Substitute Senate Bill 5511 (2SSB 5511), which established our key mandate: to have high-speed internet access for all by 2024, and 150 Megabits per second (Mbps) symmetrical (upload and download speeds) services by 2028. This first year we have built key partnerships, helped projects launch, and most importantly, established a foundation for action at a larger scale. This initial biennial report is a living document intended to serve as a broadband dashboard for the state of Washington. Data acquisition has been a challenge this last year given the COVID-19 pandemic and extended closure of many of our state anchor institutions such as libraries, schools, government buildings and much of our commercial businesses. This has made it difficult to gather the required information for this report.

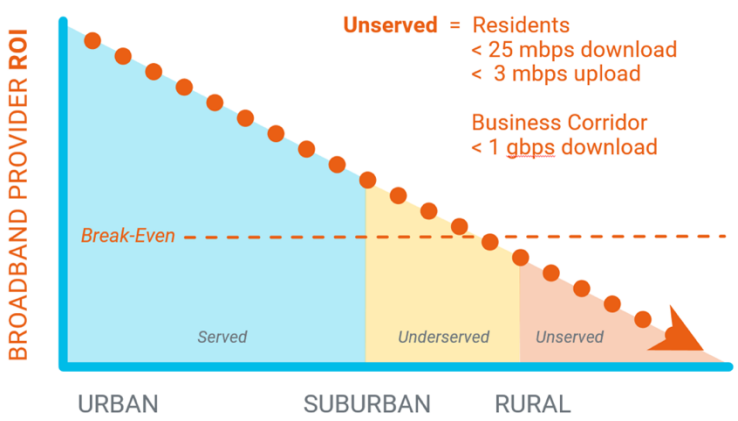
However, the Office was successful in launching a statewide survey and results map to track speeds and availability at the home giving us the most detailed data in the country. This was timely given the amount of pressure we are putting on our home connectivity. The survey results map found online at broadband.wa.gov provides a level of detail that allows the state, local communities and interested providers to pinpoint areas of need and to determine best fit for funding opportunities and technologies. As we acquire new data, this map will continue to add layers of information that will be useful in expanding broadband across the state, including public/state assets, provider infrastructure, federal and state funds awarded by census block, federal infrastructure, and incumbent provider infrastructure. Centralizing this data and making it public will empower communities to be engaged and informed. Broadband Action Teams at the community level will leverage this data and use it to focus their decision-making and priorities, as this discussion must be a ground-up community conversation unique to each region.

Key Findings

In our first year, the Office has engaged in ongoing identification of unserved and underserved areas. Now that we have begun to identify and quantify the need, we can build partnerships and leverage funding to overcome the barriers that have prevented access and adoption. An additional finding coming out of this pandemic is that standards for how broadband is defined, locally and nationally, were not created for the historical moment that we find our country facing. We have uncovered the deficiencies in this standard given the home has become the medical office, the classroom, the workplace, the place where commerce happens, and, more than ever, the place we find entertainment. Much of the time, all of these are happening concurrently. Thus, networks are facing unprecedented demand, which is exposing vulnerabilities in scalability. Existing copper infrastructure is not capable of scaling to the state goals of 150Mbps symmetrical and will need to be replaced with more scalable infrastructure. This will require significant capital investment. Moving forward, it will be critical to establish measures of accountability as federal and state funds are disbursed, ensuring networks are built to their awarded specifications, the identified target population is being served, and networks are built at speed and capacity commensurate to the activities – health care, education, work, social services – essential to thriving communities.

Where infrastructure does not exist or is not adequate there will need to be a focus on funding for both building and servicing those networks. We know that urban availability and rural availability to scalable broadband will differ given the economics of delivery and servicing of the networks. Being technology-agnostic but staying committed to state goals will be important.

During the COVID-19 pandemic, we have seen a hyper-acceleration of interest in the topic of universal broadband and digital equity and inclusion. A spike in urban residential demand collides with unprecedented economic challenges, spotlighting the need for affordable broadband programs and subsidies focused to those in need. Ubiquitous and inclusive connectivity will not be achieved without significant investment at the state, federal, local and private levels.



Major national providers operate under return-on-investment models that require rapid payback, or they will not build. These providers can choose where to make investment across the country that will yield significant net income, and this model will not result in achieving universal infrastructure that extends to rural and hard-to-serve areas. It should be said that this model is also responsible for many very robust/scalable networks in our more urban areas making Washington state a leader in connectivity.

Washington also boasts active Independent carriers who can be more flexible and patient in reaping returns on their investment. These carriers tend to be more amenable to serving rural regions as they have a narrower market to focus on and serve. We should continue to work with these successful providers, incentivizing these players to continue to expand and operate. Washington, being one of two states in the country with public utility districts, and home as well to ports and rural cooperatives, has significant opportunities for public network expansion. If they can leverage the existing service relationships they have with their rural members, they can help us make progress in achieving ubiquitous and inclusive connectivity. All of these networks, formed for different purposes and operating under different models, will need to collaborate to reach our aggressive state goals. We must establish policy frameworks that allow all resources to be brought to bear in solving what has been an intractable problem.

Given the scale of this ongoing effort and the anticipated requirement of funds, the Office will make it a priority to ensure this state, its providers, and communities are active in all federal funding opportunities, most of which require a match. As communities and tribal reservations identify areas of need and projects for consideration, the state should establish a matching funds account for those projects brought forward by partnerships that will require support in meeting the federal match requirements.

The Office will play a major part in bringing these diverse interests and strengths together to serve the needs of the citizens of this state. As you will see outlined in this report, the path to success established by this office embraces a five-phase broadband project support model: partner, plan, fund, build, adopt. This model has been tested during the past year and is delivering results, including a USDA ReConnect award to a local state provider, and a record number of USDA Community Connect applications during the 2020 open cycle. Washington State has partnered with a firm that has established an affordable and effective tool that determines probability of a successful USDA funds application and will focus on areas more likely to be

funded. At the same time, the Office supports all projects that show promise by offering up technical assistance and introducing funding opportunities as they arise.

Washington is a significant player on the global economy and to maintain and build on that, we should follow the advice of the great hockey player and coach Wayne Gretzky. Successful players skate to where the puck is going to be, not where it has been. By maintaining the country's most aggressive broadband goals, we are focused on the future and not stuck in today's needs that will not be relevant tomorrow, thus ensuring success for decades to come.

As we move into the 2021 legislative session, we must expand our focus beyond getting infrastructure built, to also driving adoption and meaningful access by low-income communities and those with economic, cultural, and linguistic barriers. The Governor's budget includes funding that would enable the Office to hire a digital equity manager as a central convener and implementer who can help drive digital equity priorities across state institutions. The digital equity manager would help cultivate broadband action teams serving every region. Such teams can help communities develop digital implementation plans and once developed, these plans must be funded.

The Governor's budget funding can be seen as allowing the state to revive and update the work of the Community Technology Opportunity Program already in statute, in RCW 43.330.412, which has been unfunded for a decade. However, the need and focus of this funding was also informed and transformed by two intensive efforts this interim. In the executive branch, the Human-centered Design Team, an unprecedented collaboration of seven state agencies, is working to implement the recommendations of the Poverty Reduction Workgroup and identified digital equity as a top priority in ensuring people experiencing poverty have access to resources they need to survive and thrive. The second effort that paved the way for this request was led by a legislator and advocates, the inclusive Internet Access Crisis Team (I-ACT).

The digital equity manager will also work beyond state government connect resources to emerging statewide coalitions and community-based organizations. With the executive and legislative branches aligned on the priority of digital equity, we will be able to make significant progress in ensuring that low-income individuals and those experiencing poverty or cultural barriers have meaningful access to the broadband infrastructure that may be in the ground or the air outside their doors, but cannot be accessed without devices, subscriptions, and skills training.

Recommendations

To meet the Washington State 2024-2028 broadband goals will require substantial federal funding, future-proof infrastructure, effective last mile solutions, and community leadership supporting digital equity and inclusion. Below are suggested initiatives the Office will drive to accomplish these goals.

Partner: Foster Broadband Stakeholder Collaboration to Increase Project Planning

- Staff the Office to support proactive Broadband Action Team (BAT) leadership, training, outreach, engagement and sharing of best practice to ensure economies of scale
- Resource local BAT formation and initiatives

Plan: Identify Service Gaps and Develop Proposals for Shovel-Ready Projects

- Identify predevelopment funding for Tribal and Community Feasibility and Grant Writing programs
- Continue to build on the dashboard and county mapping presented in Appendix B to give local partners the information they need to guide local decisions
- Unlock better proprietary data by ensuring data privacy for providers – in order for the state to have the most comprehensive provider information, a data privacy policy must be in place to protect sensitive proprietary provider data from public disclosure

Fund: Maximize Access to All Funding Opportunities

- Establish a Federal Match Funds Account, for example, to win $200M in federal funding, provide $25M in state funds to assist local partners in 25% match requirement (state funds 50% of match)
- Direct matching funds to any applications that meet federal funding program application scoring requirements, and administer so they are available just in time
- Maintain technology-neutral to last-mile solutions to ensure fiscal responsibility in high-cost build areas

Build: Ensure Scalable, Sustainable, Future-Proof Networks

- Work collaboratively to identify an ongoing state funding mechanism for infrastructure and service in high-cost areas to ensure sustainability of last mile delivery
- Resource the Office capacity to research, support and maintain accountability of federally mandated build requirements

Adopt: Support Digital Equity and Inclusion Initiatives

- Resource the Office to coordinate Digital Equity and Inclusion initiatives across state partners and develop planning grants for locally led efforts
- Work with Commerce to administer pass-through funding to partners who can build the capacity of community-based organizations and develop a workforce of digital navigators
- Require recipients of state infrastructure funding to demonstrate they have made available affordable, low-income service options
- While digital implementation plans proceed, resource the Office to expand Drive-in WiFi hotspots
- Support legislative efforts to identify an ongoing state funding mechanism to subsidize affordability programs, devices, and digital literacy skills training

Future Policy Opportunities

Investigate and build consensus around the following policies to enhance rural broadband deployment:

- "Dig Once" policies at the state and local level to reduce capital costs of deployment
- Make-ready cost subsidy program to offset high cost to providers
- Anchor +1 policy to leverage anchor institution buying power

Overview

In 2019, the Washington State Legislature enacted Second Substitute Senate Bill 5511 (2SSB 5511), establishing the Governor's Statewide Broadband Office housed in the Department of Commerce. The legislation established access and download/upload speed goals for residences, businesses and communities.

It further directed the Office to biennially report on activities during the previous two years, starting January 1, 2021. In late 2019 the Office was launched under the leadership of Director Russ Elliott. This report is the first report to the legislature and provides an update of the work of the past year.

The statute directs the report to contain an analysis of the current availability and use of broadband, including average broadband speeds within the state, as well as information gathered from schools, libraries, hospitals, and public safety facilities across the state. The Office addressed this directive by conducting a survey, for which we present top-level results in Section 1. Due to the pandemic, certain methods of conducting outreach were compromised. For example, hospital representatives indicated they were too overwhelmed with the demands caused by the pandemic and related health surveys and requested their participation be postponed into 2021 or further notice. Even with these constraints, we received over 42,000 survey responses from nearly 32,000 unique locations, showing that 6.4 percent of respondents reported having no broadband service, and 57 percent reported service at download speeds under 25 Mbps, the minimum speed required to support multiple individuals using the internet in a single home.

Section 2 of the report presents data on digital adoption disparities, determined by analyzing federal census data obtained through the American Community Survey.

Section 3 presents the Partner-Plan-Fund-Build-Adopt model that guides the Office's work and recommendations that emerge in each of these areas.

Section 4 presents Success Stories.

Section 5 concludes with a policy discussion.

This report also provides County Broadband Dashboard snapshots in Appendix B presenting state broadband survey results and 2019-2020 state and federal broadband funding awards.

The results reported here only were possible through significant coordination and collaboration across the key entities engaged in broadband infrastructure, delivery, and adoption. Within state government, these include the Washington State University Extension, WaTech, Washington State Library a department of the Secretary of State, the K-20 network and more. In terms of broadband infrastructure funding specifically as directed by 2SSB 5511, here are key partners and the role they play:

Governor's Statewide Broadband Office

- Serves as the central broadband planning body for the state, responsible for overarching policy vision
- Develops strategies and plans for the deployment of broadband infrastructure and access
- Collaborates with the public and broadband providers
- Develops, recommends, and implements a statewide plan to encourage cost-effective broadband access
- Troubleshoots barriers to effective collaboration around broadband service delivery

Public Works Board (PWB)

- Administers a competitive grant and loan program to assist in funding acquisition, installation, and construction of middle mile and last mile infrastructure and promotes expansion of access to broadband service in unserved areas of the state
- In collaboration with the Office, may develop additional rules for eligibility, project applications, the associated objection process, and funding priority
- Ensures publicly funded assets or infrastructure are maintained for public use for at least 15 years
- Provides technical assistance to communities for project development and implementation

Utilities and Transportation Commission (UTC)

- Works with the Public Works Board to determine technical feasibility of construction proposals.

In addition, the Community Economic Revitalization Board (CERB) has provided low-interest loan/grant packages to local governments and federally recognized Tribes, financing the cost to build infrastructure to provide high-speed, open-access broadband service to rural underserved communities, for the purpose of community economic development.

Section 1. State Broadband Survey

State Broadband Data Acquisition

In April 2020, the State Broadband Office and Stevens County-Spokane Tribe Broadband Action Team (BAT) initiated a comprehensive beta broadband survey and mapping program to identify and understand gaps in broadband access, affordability, and quality. In July, the survey expanded statewide and provides detailed, accurate data to offset federal broadband maps which currently incorrectly exclude some Washington communities from applying for federal funding. This ongoing mapping initiative will provide the necessary data to monitor and track progress toward state broadband access and speed goals outlined in 2SSB 5511.

Total state households	2,885,677
Total state population	6,724,540
Broadband.wa.gov survey	32,622
Percent participation	1.13%
2021 goal (10%)	288,568

Download

● No service	2,075	6.4%
● 0-10 Mbps	12,691	38.9%
● 10-25 Mbps	5,969	18.3%
● 25-150 Mbps	9,935	30.5%
● 150+ Mbps	1,952	6.0%

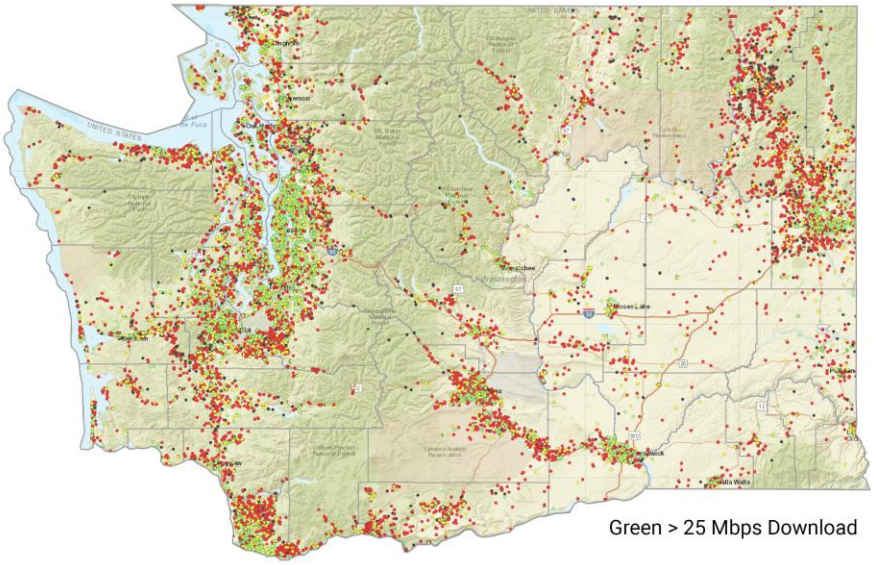
Upload

No service	2,075	6.4%
< 3 Mbps	13,408	41.1%
3-10 Mbps	10,048	30.8%
10-25 Mbps	5,205	16.0%
25-150 Mbps	1,619	5.0%
> 150 Mbps	268	0.8%

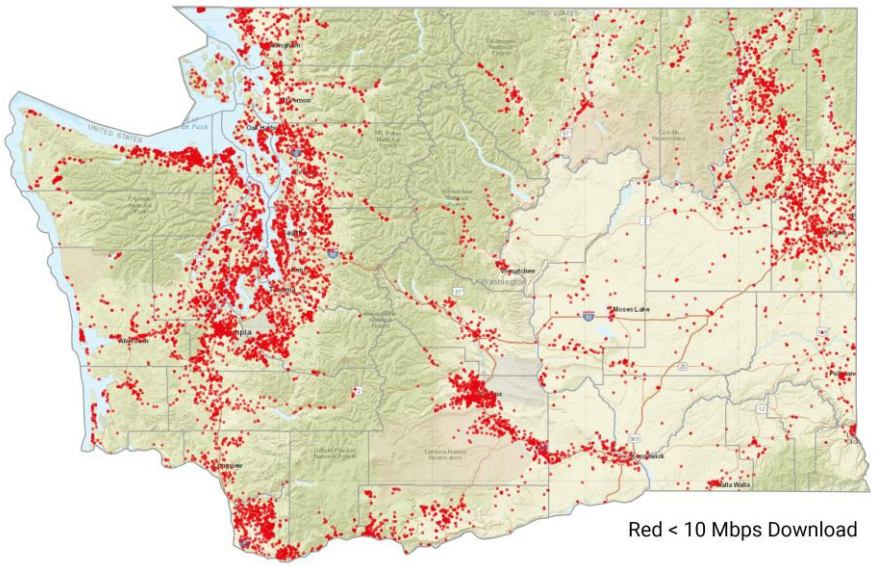
Min. / Max. / Avg. Mbps

Download 0.01 / 2691.9 / 40.7

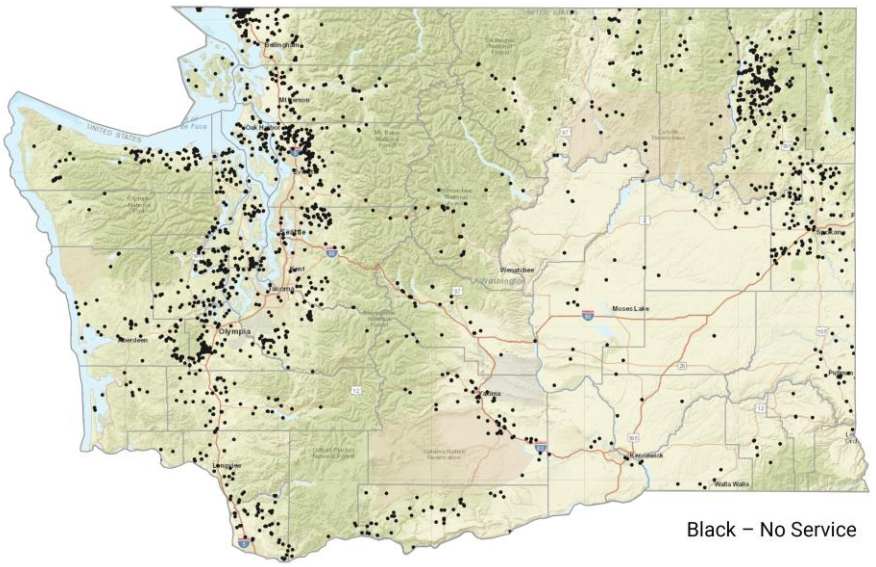
Upload 0.001 / 4003.5 / 10.2



Green > 25 Mbps Download



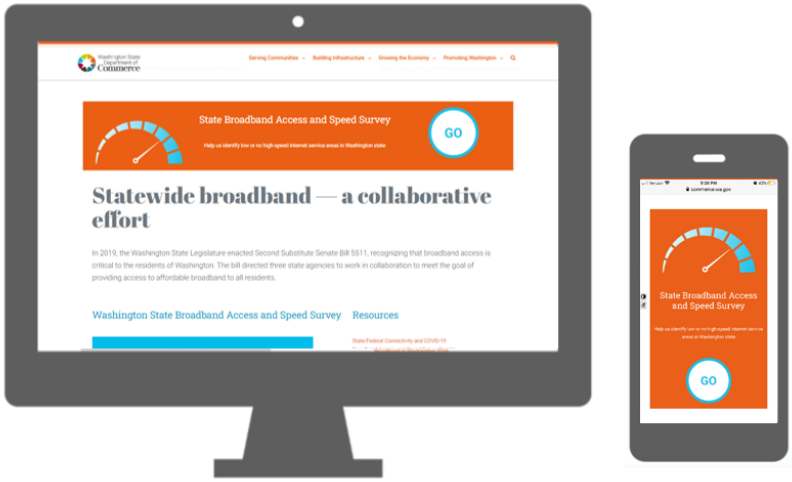
Red < 10 Mbps Download



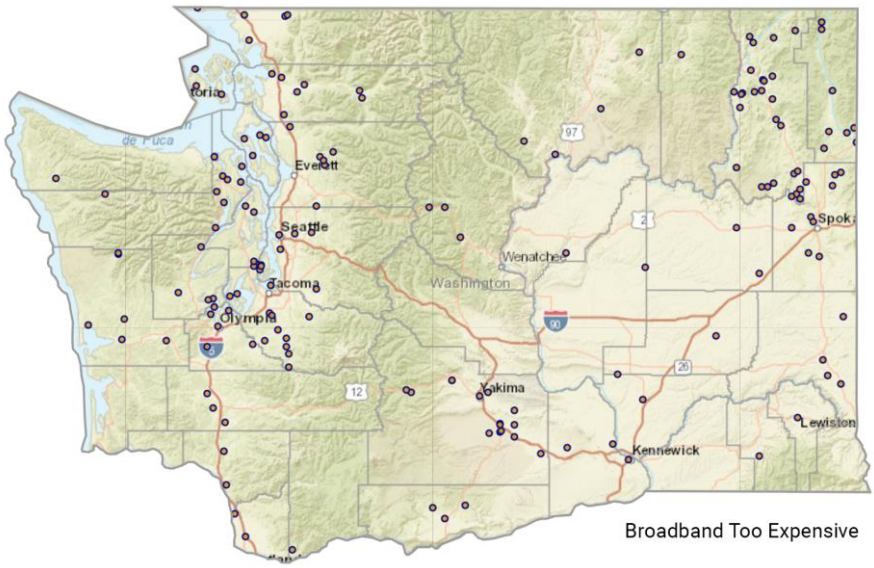
Black – No Service

Fixed Broadband Locations	**27,887**	
Download		
No service	1,470	5.3%
0-10 Mbps	10,812	38.8%
10-25 Mbps	5,062	18.2%
25-150 Mbps	8,761	31.4%
150+ Mbps	1,782	6.4%
Upload		
No service	1,470	5.3%
< 3 Mbps	11,177	40.1%
3-10 Mbps	8,912	32.0%
10-25 Mbps	4,674	16.8%
25-150 Mbps	1,448	5.2%
> 150 Mbps	206	0.7%

Cellular Locations	**2,937**	
Download		
0-10 Mbps	1,506	51.3%
10-25 Mbps	700	23.8%
25-150 Mbps	713	24.3%
150+ Mbps	17	0.6%
Upload		
< 3 Mbps	1,806	61.5%
3-10 Mbps	750	25.5%
10-25 Mbps	308	10.5%
25-150 Mbps	68	2.3%
> 150 Mbps	5	0.2%



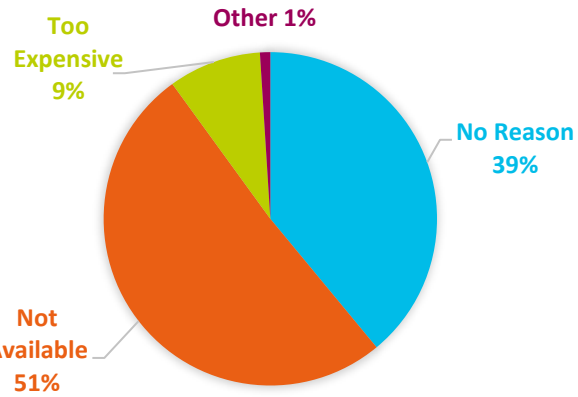
State Broadband Survey: www.broadband.wa.gov



Broadband Too Expensive

Common Reasons for No Access

- "Available at every property but not ours."
- "Available at asphalt, house is 500 feet away."
- "Been requesting service for five years."
- "$37,399 to bring quarter mile of service."
- "Only one provider, bandwidth exhausted."
- "Not reliable/usable speeds available."



Other: No device/Privacy concerns/ No skills/Not interested/Physical challenges/ Use public wifi instead

See Appendix B for detailed 2020 survey results in Washington State County Broadband Dashboards being developed to empower communities to plan for broadband expansion via access to detailed, accurate data revealing service gaps and progress toward speed goals.

Average speeds reflected will be skewed as participants most likely to take speed test will be those with poor connectivity.

County household and population data (2019) www.census.gov

Section 2: Digital Equity and Inclusion

Over the past year, the internet has become the safest and often only option to stay connected to loved ones, work and school, and to meet basic needs while we stay home to slow the spread of COVID-19. For families and individuals who do not have adequate internet access, access to devices and/or do not have the digital skills to effectively use them, this transition has been painful and has exposed major inequities that put many people's stability, health and futures at risk.

Deployment of coordinated, statewide digital inclusion initiatives will help ensure all Washingtonians are included in the economic recovery from COVID-19 and can access the activities and services they need right now to stay safe and healthy. Digital Inclusion means all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies. According to the National Digital Inclusion Alliance, this includes five elements:

1) Access to affordable, robust broadband internet service;

2) Access to internet-enabled devices that meet the needs of the user;

3) Access to digital literacy training;

4) Quality technical support; and

5) Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

The available data tells us that a significant number of Washington State residents do not have broadband internet or working desktop or laptop computers in their household. Those much less likely to have these resources include those over 65, households with extremely low incomes, and American Indian and Alaska Native residents. Of those who do have access to broadband internet and a broadband-enabled device, a significant number lack the skills and knowledge to use the internet and internet-enabled devices safely and effectively. The number of households who lack digital navigation and safety skills is not ascertainable because there is no statewide digital literacy data source.

Seattle and King County have resourced digital equity initiatives that include more granular information about broadband access and availability.[1] For example, King County presents for each council district a story map with information about the district's geography, served areas, and underserved population. These resources are good examples of inclusive and comprehensive digital equity data sets. In comparison, the best source of information we have currently about broadband adoption statewide is collected by United States Census Bureau through the American Community Survey (ACS). The ACS survey has two significant limitations as a resource for digital equity and inclusion data. It is only available for geographic areas with a total population of at least 65,000, so rural and remote areas are largely unrepresented**.** The second limitation is that the ACS survey does not inquire about digital literacy.

Despite its limitations as a resource for digital equity and inclusion data, the ACS does tell a statistically significant story about disparities in broadband adoption in larger towns and cities across the state. Commerce's Research Services division analyzed 2019 ACS data and found that 6.3% of all Washington residents (481,950 individuals) reporting stated they do not have broadband internet subscription at home. On

[1] "Broadband Access and Availability in King County," July 27, 2020

average only 3.2% of households with incomes above $75,000 report not having a broadband internet subscription. In contrast, those with extremely low incomes, seniors and Native American households lack internet access at a much higher rate. The following data tables detail disproportionate lack of computer and internet access within certain household types in Washington State.

Access to Internet

Household Types with Disproportionate Lack of Internet Access

Household Type	Percentage Without Internet Access
Extremely low income	28.2%
Seniors	15.5%
American Indian and Alaska Native	12.2%
Black/African American	7.7%
Hispanic	7%

Source: 2017-2019 American Community Survey one-year PUMS Pooled

Other Data Points of Interest

- 6.4% of Washington resident who use public/government benefits (SNAP, Public Assistance (including SSI), or Medicaid) do not have at-home wireline broadband access.
- 8.4% of Washington residents over the age of 18, whose household uses public benefits, do not have at-home wireline broadband access.
- 12.1% of Washington residents over the age of 18 with a disability do not have at-home wireline broadband access.[2]

Households with minor children

Most children up to age 17 have access to the internet in their household. However, households who identify as Hispanic, American Indian/Alaska Native, and those who indicated “some other race” were significantly less likely to have access to the internet compared to Whites. While 2.3% of households with white children reported no internet access at home, disparities are reported as follows:

- 4.5% of nonwhite children do not have internet access in their home.
- 2.9% of Black/African American children do not have internet access in their home.
- 5.7% of Hispanic children do not have internet access in their home.
- 8.3% of Native American/Alaska Native children do not have internet access in their home
- 8.6% of children identifying as some other race alone other than white, do not have internet access in their homes.

Households with children are more likely to have internet access than households without, but nearly 15% of households with children with some internet access still report not having a broadband internet service.

[2] 2017-2019 American Community Survey one-year PUMS Pooled

Access to an In-Home Computer or Other Internet-Enabled Device

While only 2.4% of all Washington residents do not have a computer, there are variations across demographic groups.

Household Types with Disproportionate Lack of Access to an In-Home Computer

Household Type	Percentage Without an In-Home Computer
Seniors	9.2%
American Indian and Alaska Native	4.9%
Black/African American	3.6%

Source: 2017-2019 American Community Survey one-year PUMS Pooled

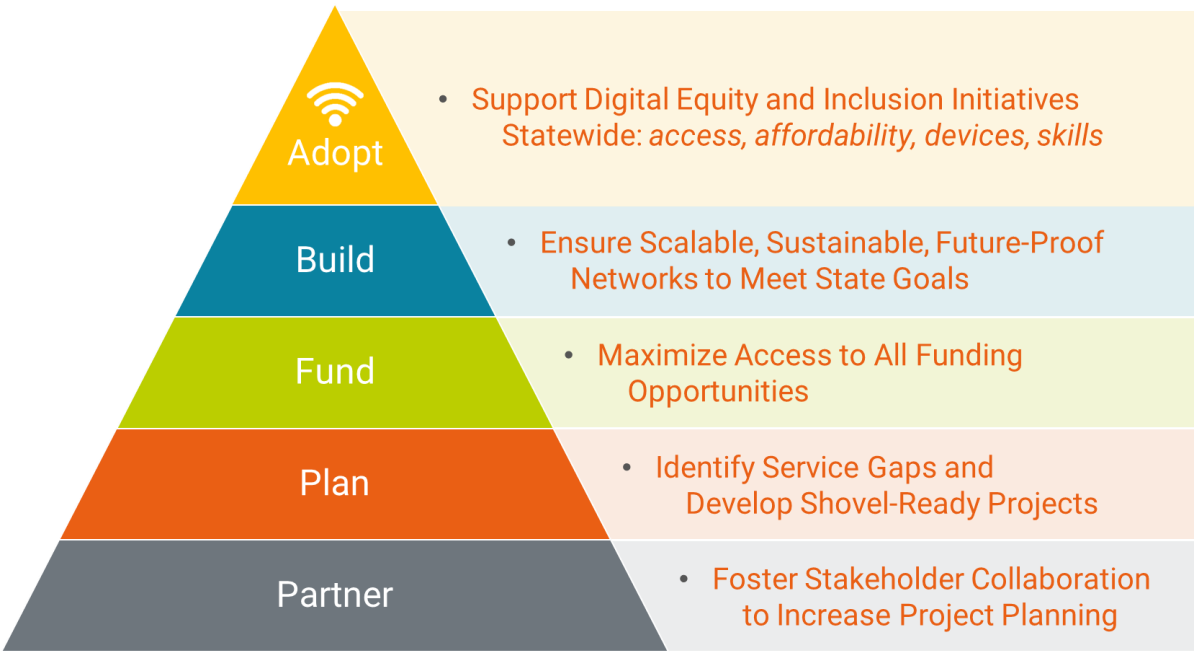
Households with minor children are more likely to have a device to access the internet in their homes, but significant gaps still exist

- 82.7% of households without children own a desktop or laptop compared with 88.8% of households with children
- 11.2% of households with children do not own a desktop or laptop
- 19.1% of households with children do not own a tablet or other portable wireless computer
- 2.1% of households with children do not own a smartphone[3]

While the data shown above paints a compelling picture of disproportionality, it is incomplete. Local and state investments in a more comprehensive, detailed uniform digital equity data source would help highlight other populations without adequate access and help policy makers make targeted investments to address disproportionality in digital literacy skills. Other recommendations for investments in digital inclusion can be found on pages 22-24 of this report.

[3] 2017-2019 American Community Survey one-year PUMS Pooled

Section 3. Broadband Project Support Model



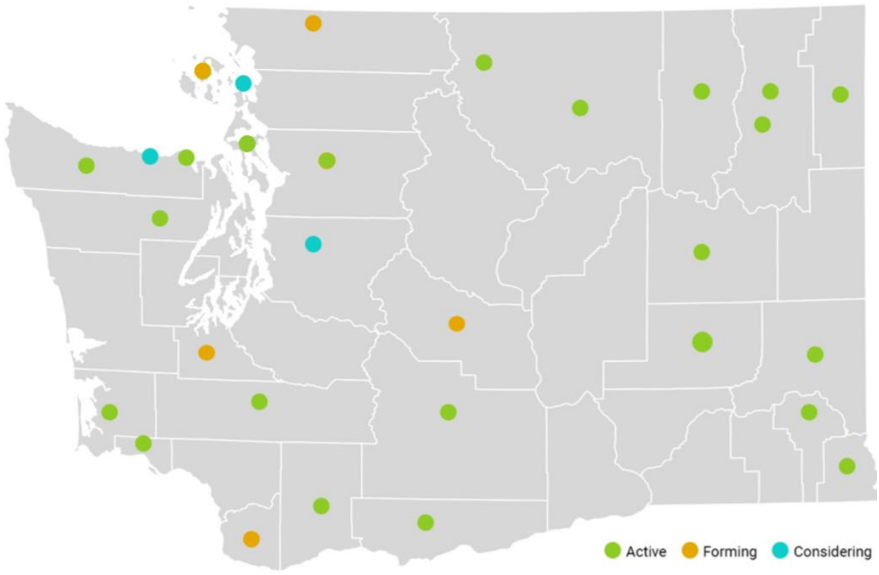
Broadband Project Support Model Proposed Programs and Success Metrics

	Partner	Plan	Fund	Build	Adopt
Purpose	Support Washington State Communities to Achieve Digital Equity and Inclusive Access to Broadband Services for Communications, Remote Learning, Remote Work, Telehealth, Public Safety, and Economic Development.				
Proposed Support Programs	Community and Tribal Planning Grants	State Broadband Survey and Map Resources Feasibility Grants	Grant Writing Grants Federal Match Grants	Promote State Speed Goals	Digital Equity Planning Grants Drive-In WiFi Hotspots
Success Metrics - Measurable Increase in Number of:	Active Broadband Action Teams Broadband Projects Initiated Public-Private Partnerships Established	State Broadband Survey Responses Projects in Feasibility Planning Shovel-Ready Projects Identified Funding Applications Produced	Funding Applications Submitted Projects Awarded Funding Match Funds Distributed	Projects in Construction Projects Complete Funded Projects Accountable to Speed Goals	Dots on State Broadband Map Representing State Speed Goals: Min. 25/3 Mbps by 2024 and Min. 150/150 Mbps by 2028 BAT/County DEI Plans Developed

Partner: Foster Broadband Stakeholder Collaboration to Increase Project Planning

Success Metrics - Measurable Increase in Number of:

- Active Broadband Action Teams
- Broadband Projects Initiated
- Public-Private Partnerships Established



Broadband Action Team Program Development

The Broadband Action Team (BAT) model was founded by Washington State University Extension (WSUE). The State Broadband Office and WSUE partnered in 2020 to formalize and expand the use of the WSUE BAT model across the state as a best practice for local community broadband engagement. Expanding the BAT program statewide requires partnership. Current collaborators include WSUE, Stevens County-Spokane Tribe BAT, Washington State Library - a division of the Secretary of State, with development input from the State Public Works Board (PWB), and the Community Economic Revitalization Board (CERB).

BAT Leadership Directives

- Assist Washington Tribes and communities in taking specific, efficient actions to leverage time, resources and funding to achieve identified broadband goals
- Create a central hub and point of contact for information and support
- Receive maximum amount of infrastructure funding available to the state of Washington by identifying shovel-ready/application-ready projects (missed potential $30M+ for WA in USDA ReConnect I and II - 2019-2020)
- Expand resources and share community leadership and services facilitated by Washington State Libraries and WSUE offices

Benefits of BAT Facilitated Local Collaboration

- Centralize the conversation
- Digital equity and inclusion efforts
- Connect participants to collaborative project goals
- Early awareness and connection of projects to funding opportunities
- Direct connection to, and communication with, the State Broadband Office
- Develop relationships with providers to support solutions and mitigate duplication of effort
- Community and anchor institution relationships established early in preparation for funding applications
- Statewide best practice and knowledge sharing
- Expose barriers to access and adoption
- Promote awareness of broadband survey/utilize survey resources and results
- Funding application best practice and debriefs

Broadband Action Team Participants

- Elected Officials and Staff from City, County, State, and Federal and Government
- Tribal representatives
- Healthcare - Hospitals, Clinics, Community
- Education - K-12, Higher Ed, Technical Training, etc.
- Libraries
- Businesses - Retail, Farms, Utilities, Manufacturing, Real Estate, IT, etc.
- Workforce Development
- Economic Development
- Internet Service Providers
- Nonprofits
- Planning Organizations
- Public Safety/Emergency Management
- Social Services
- Faith-based Organizations
- Chambers of Commerce
- Transportation Planners
- Arts and Culture
- Funding Entities
- Grant Writing
- Other Community Organizations
- Community Members - Civic Leaders, Youth, Senior Citizens

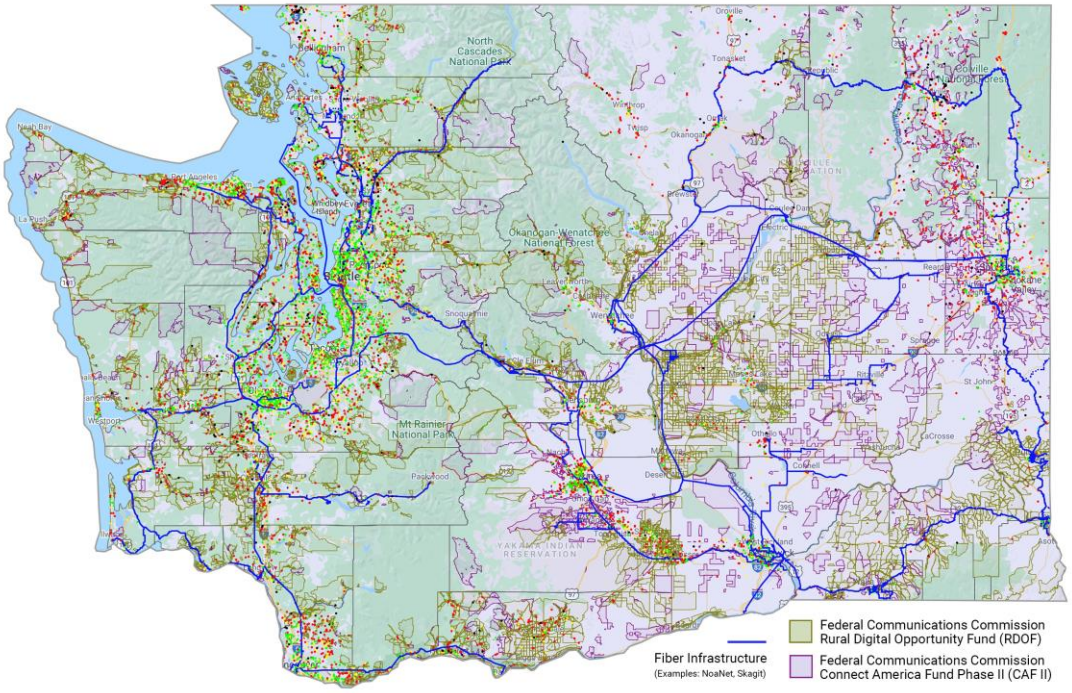
Memorandum of Understanding with Washington State University Extension

The Washington State Broadband Office (WSBO) within the Washington State Department of Commerce and the Washington State University Extension's (WSUE) Division of Governmental Studies and Services (DGSS) will pursue opportunities to collaborate on projects of interest and benefit to those engaged in broadband expansion in Washington State and across the country. WSBO and DGSS will jointly explore grant, promotion, research, technical assistance and training opportunities. In order to expand the partnership WSBO and DGSS will work to take advantage of complementary expertise, experience, and statewide reach; the parties agree to, and cooperate in, the development and provision of services as mutually beneficial.

Recommendations

- Staff the State Broadband Office to support proactive Broadband Action Team (BAT) leadership, training, outreach, engagement and sharing of best practice to ensure economies of scale
- Resource local BAT formation and initiatives

Plan: Identify Service Gaps and Develop Shovel-Ready Projects



Success Metrics - Measurable Increase in Number of:

- State Broadband Survey Responses
- Projects in Feasibility Planning
- Shovel-Ready Projects Identified
- Funding Applications Produced

State Broadband Survey

- Promote awareness to achieve minimum annual participation goal of 10% of households and businesses and 80% participation from state anchor institutions
- Update survey user experience performance as required to maximize effective participation
- Upgrade and maintain state broadband map to support community project planning

County Broadband Dashboards

- Create and maintain County Broadband Dashboards (see current snapshot examples in Appendix B)
- Coordinate with the Public Works Board (PWB), the Community Economic Development Revitalization Board (CERB), and statewide Broadband Action Teams (BATs) to update county project dashboards
- Dashboards will ensure awareness of existing infrastructure and service providers.

Feasibility Study and Grant Writing Assistance

- Provide assistance to support Tribal and Community Feasibility and Grant Writing grants
- Identify areas of need utilizing the State broadband mapping system and input from BATs to identify potential grant opportunities. Utilizing access to grant filtering tools, each project will be evaluated for federal funding application points and given a ranking for comparison with all other potential opportunities. Regional Internet Service Providers that may wish to participate in projects will be identified based on their proximity and nearby service capabilities.

Recommendations

- Identify predevelopment funding for the State Broadband Office to provide Tribal and Community Feasibility and Grant Writing assistance programs
- Continue to build on the dashboard and county mapping presented in Appendix B to give local partners the information they need to guide local decisions
- Unlock better proprietary data by ensuring data privacy for providers – in order for the state to have the most comprehensive provider information, a data privacy policy must be in place to protect sensitive proprietary provider data from public disclosure

Fund: Maximize Access to All Funding Opportunities

Success Metrics: Measurable Increase in Number of:

- Funding Applications Submitted
- Projects Awarded Funding
- Federal Match Funds Distributed

2019-2020 Washington State Federal Program Awards Summary

- 2019 USDA ReConnect $2,400,000
- 2020 USDA ReConnect $596,000
- 2018-2028 FCC Connect America Fund Phase II $19,943,507 allocated over 10 years
- Announced 2020: 2021-2031 FCC Rural Digital Opportunity Fund $222,768,532 allocated over 10 years

FCC Rural Digital Opportunity Fund Phase 1 (RDOF)

The $20.4 billion Rural Digital Opportunity Fund is a reverse auction in two phases. The Phase I auction, Auction 904, allocated $9.2 billion in national support, with $222,768,532.70 winning bids for 100,422 locations in Washington State. The $6.8 billion in potential Phase I support that was not allocated will be rolled over into the future Phase II auction, which will now draw upon a budget of up to $11.2 billion in targeting partially-served areas and the few unserved areas that did not receive funding through Phase I.

2020 FCC Rural Digital Opportunity Fund Phase I Results (Auction 904)

Winning Bidders - Washington	Total Assigned Support	Number of Locations
St. John Telco	$711,687.60	1,057
Commnet Wireless, LLC	$777,600.57	5,639
Computer 5, Inc. d/b/a LocalTel Communications	$4,881,817.13	12,530
CCO Holdings, LLC	$1,164,344.72	4,625
NRTC Phase I RDOF Consortium	$112,515.11	236
CenturyLink, Inc.	$4,583,863.38	14,875
Space Exploration Technologies Corp.	$8,037,911.99	52,086
Wisper-CABO 904 Consortium	$511.80	4
Frontier Communications Northwest, LLC	$2,006,600.97	9,370
Total Assigned Support - Annual	$22,276,853.27	100,422
Total Assigned Support - 10 Years	$222,768,532.70	100,422

Source: https://auctiondata.fcc.gov/public/projects/auction904/reports/winning_bidders See Appendix B for detailed allocations by county.

FCC Connect America Fund Phase II (CAF II)

In high-cost areas served by larger telephone providers (called price cap carriers), the Connect America Phase II auction (Auction 903) employs competitive bidding to allocate up to $1.98 billion of support over 10 years. Auction 903 is the first Commission auction to award ongoing high-cost universal service support through competitive bidding. The Commission made eligible for Auction 903 high-cost census blocks in states where the price cap carriers declined an earlier offer of model-based support and other unserved areas that are not served by an unsubsidized service provider. Authorized winning bidders are required to offer voice and broadband service at or above specific performance levels, and file annual reports on deployment progress.

2018 FCC Connect America Fund Phase II Results (Auction 903)

Winning Bidders - Washington	Total Assigned Support	Number of Locations
Declaration Networks Group, Inc.	$390,410.02	2,929
Newmax, LLC dba Intermax Networks	$216,045.06	823
Viasat, Inc.	$703,186.40	10,982
Computer 5 Inc. d/b/a LocalTel Communications	$684,709.24	1,910
Total Assigned Support - Annual	$1,994,350.72	16,644
Total Assigned Support - 10 Years	$19,943,507.20	16,644

Source: https://auctiondata.fcc.gov/public/projects/auction903/reports/winning_bidders See Appendix B for detailed allocations by county.

USDA Rural Development Broadband ReConnect Program

The Broadband ReConnect Program furnishes loans and grants to provide funds for the costs of construction, improvement, or acquisition of facilities and equipment needed to provide broadband service in eligible rural areas. Only two ReConnect awards were received in Washington State during 2019-2020. The State Broadband Office Partner-Plan-Fund-Build-Adopt strategy will facilitate an increase in applications submitted, already evidenced by the submittal of 6 USDA Community Connect broadband funding applications in December 2020, an increase from one or no applications submitted during previous years.

2019-2020 USDA ReConnect Awards

Award Recipients - Washington	Location	County	Grant Award	Area	Households
Mason PUD 3	Grapeview	Mason	$2,476,279	1.47 sq m	163
Whidbey Telecom	Point Roberts	Whatcom	$596,781	0.16 sq m	144
Total			$3,073,060	1.63 sq m	307

Source: https://auctiondata.fcc.gov/public/projects/auction903/reports/winning_bidders See Appendix B for detailed allocations by county.

2018-2020 State Programs Awards Summary

- Public Works Board (PWB) Planning and Construction awards total $18,278,760: Planning Grants $450,000, Construction Grants $8,689,380; Construction Loans $9,139,380
- Community Economic Revitalization Board (CERB) Rural Broadband Construction and Planning Program total $12,737,000: Planning Grants $943,000, Construction Grant/Loans $11,794,000
- State Universal Service Fund - $4,000,000
- Better Health Together Eastern Washington Feasibility and Grant Writing Grants private funding - $207,000

Detailed state funding award results are presented in Appendix B: 2020 County Broadband Dashboards

Role of the Public Works Board

The Public Works Board (PWB) is the fiscal agent for Washington's statewide broadband policy. In collaboration with the State Broadband Office, the Board is directed by the passage of 2SSB 5511 to establish a competitive grant and loan program to award funding in order to promote the expansion of access to broadband service in unserved areas of the state.

Allowable uses of the associated funding include the acquisition, installation, and construction of middle-mile and last-mile infrastructure, and strategic planning for deployment of broadband service. The program has wide eligibility, an objection process for incumbent providers in order to preserve resources, and clear direction regarding funding priority.

Eligible applicants include:

- Local governments
- Tribes
- Nonprofit organizations
- Cooperative associations
- Special purpose districts
- Quasi-municipal corporations
- Limited liability corporations organized for the purpose of expanding broadband access
- Incorporated businesses or partnerships

The PWB may fund up to 50% of the total project cost in non-distressed and non-Indian country areas. In distressed or Indian-country areas, the PWB may fund up to 90% of the total project cost. All assets or infrastructure created utilizing PWB funding must be maintained for public use for a period of at least 15 years.

Planning-Feasibility Study Grants

Establishing equitable access to broadband service requires dedicated planning that accounts for local geography and topography, weather conditions, and distance between connection sites. Installation and maintenance costs and affordability versus financial return on investment further complicate efforts to connect the state.

With these factors in mind, the PWB Broadband Program opened an application cycle in October of 2019 for communities to request planning-feasibility study grants up to $50,000. Through this program, local communities and technical experts are able to right-size projects that utilize the correct technology for the region, and prepare for the deployment of sustainable broadband services at affordable rates to unserved areas.

Sixteen jurisdictions applied for funding, and nine applicants who passed the minimum scoring requirement received full award of funds.

Public Works Board 2019 Broadband Planning Feasibility Grant Awards

Jurisdiction	County	Project Name	Grant
Jefferson County PUD	Jefferson	Phase 2 – Business Plan Development	$50,000
Port of Ilwaco	Pacific	Pacific County Broadband Feasibility Planning	$50,000
Town of Skykomish	King	Broadband Feasibility Planning Study	$50,000
Grays Harbor PUD	Grays Harbor	Cedarville/Oakville	$50,000
Pend Oreille County PUD	Pend Oreille	North Pend Oreille County Feasibility Study	$50,000
Port of Ridgefield	Clark	Port of Ridgefield	$50,000
Ellensburg Business Development Authority	Kittitas	Centerfuse Broadband Expansion	$50,000
Northwest Open Access Network	Yakima	Grandview Broadband Feasibility Study	$50,000
Port of Skagit	Skagit	Sauk-Suiattle Tribe Dark Fiber Optic Needs Assessment and Feasibility	$50,000
Total			$450,00

Source: https://deptofcommerce.app.box.com/s/73g8b5wt15qvirp8vx6ag2fftedifhcd

Construction Grants and Loans

On July 13, 2020, the PWB Broadband Construction program opened its first funding cycle with $17.7 million in available funds—$8.6 million in grants and $9.1 million in low interest loans. The program received 30 applications for funding. All but two of these applications were from areas considered distressed (eligible for up to $5 million in grants or loans). There were four applications from federally recognized Tribes, nine from private entities, one homeowners association, and sixteen from local governments.

At their October 23, 2020 meeting, the PWB awarded over $17 million in grants and loans for broadband construction activities to seven projects in unserved areas across the state. Applicants requested more than $73 million dollars for 29 different projects, and the Board approved qualified projects from a rated and ranked list until all available program funds were exhausted. Demand exceeded funding availability by 310%.

Public Works Board 2020 Broadband Construction Cycle Awards

Jurisdiction	County	Project Name	Locations	Grant	Loan	Total
Makah Tribe	Clallam	Makah Communication Access Project	617	$382,796	--	$382,796
Kalispel Tribe of Indians	Pend Oreille	Kalispel Tribe Broadband Expansion	119	$5,000,000	--	$5,000,000
Public Utility District No.2 of Grant County	Grant	Area 15: Gloyd to Stratford	153	$810,000	$810,000	$1,620,000
Port of Skagit	Skagit	Sauk-Suiattle Construction Grant	28	$1,687,500	$1,687,500	$3,375,000
Hood Canal Communications	Mason	Mason County Line Broadband Expansion	36	$196,202	--	$196,202
Port of Ilwaco	Pacific	Pacific County Broadband Rural Infrastructure Buildout	2600	$612,882	$2,715,570	$3,328,452
Lewis County PUD	Lewis	West County Backbone and FTTH Extension Project	975	--	$3,926,310	$3,926,310
Total			4,528	$8,689,380	$9,139,380	$17,828,760

Source: https://deptofcommerce.app.box.com/v/FY21BBConstructionMatrix

Federal Program Funding Programs

- FCC: Rural Digital Opportunity Fund $20B, Connected Care $100M, COVID Telehealth $200M, E-Rate $4.15B, Connect America Fund (Phase II) $1.49B, Rural Healthcare $571M, Lifeline Program $2.385B
- USDA: ReConnect $600M, Community Connect $35M, Distance Learning and Telemedicine Grants $43.6M, Rural Broadband Program $29.851M, Rural Telecommunications Infrastructure Loans $690M
- USDOT BUILD Grant $1B
- National Telecommunications and Information Administration (NTIA) $300M, Tribal Broadband $1B
- Institute of Museum and Library Services Library and Tribal Grants
- Department of Interior National Tribal Broadband Grant (NTBG) $1M
- Economic Development Administration $1.5B

Recommendations

- Establish a Federal Match Funds Account, for example, to win $200M in federal funding, provide $25M in state funds to assist local partners in 25% match requirement (state funds 50% of match)
- Direct matching funds to any applications that meet federal funding program application scoring requirements, and administer so they are available just in time
- Maintain technology-neutral approach to last-mile solutions to ensure fiscal responsibility in high-cost build areas

Build: Ensure Scalable, Sustainable, Future-Proof Networks

Success Metrics - Measurable Increase in Number of:

- Projects in Construction
- Projects Complete
- Funded Projects Accountable to State Speed Goals

Future-Proof Infrastructure Accountability

- Ensure compliance to broadband legislative broadband speed goals and deliverables
- State funds only allocated to projects that will meet or exceed state goals

Emerging Technologies

The State Broadband Office is working to ensure that Washington State is a friendly environment for technologically agnostic, affordable last mile solutions. The Office is currently in discussions with:

- 5G Cellular – Urban high-speed technology with potential rural applications in the 600MHz band
- Microsoft TV White Space/Airband – State trials in process, Connect America Fund Phase II winners in Eastern Washington
- SpaceX Starlink – Low-earth orbit satellite technology, successful beta tests within the state, Rural Development Opportunity Fund winners for statewide deployment
- Amazon Kuiper – In development, low-earth orbit satellite, no tests currently underway
- Avista – Intellectual property around connectivity at the home
- 2.5GHz EBS Educational Broadband Spectrum – Multiple tribal reservations currently obligated to build

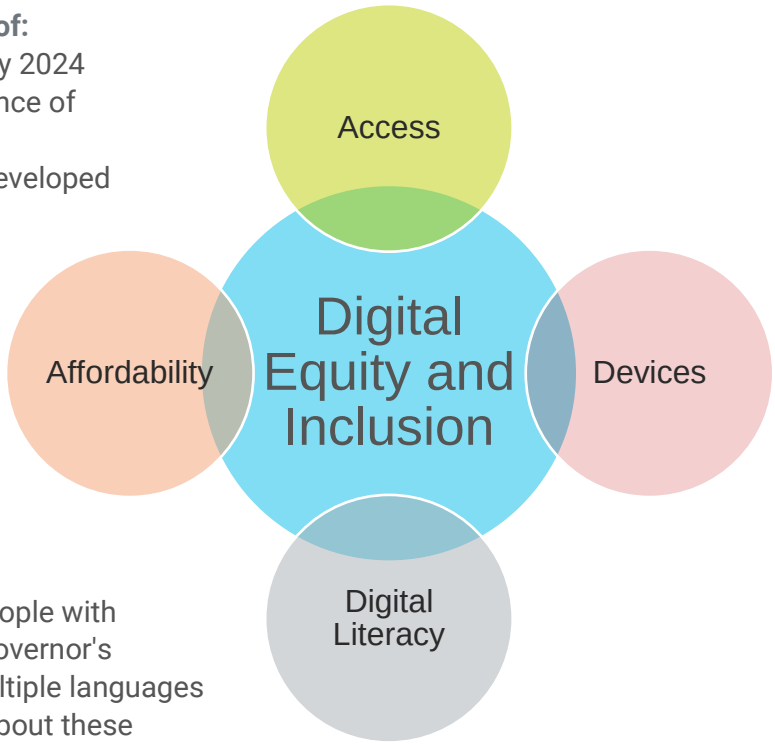
Recommendations

- Work collaboratively to identify an ongoing state funding mechanism for infrastructure and service in high-cost areas to ensure sustainability of last mile delivery
- Resource the State Broadband Office capacity to research, support and maintain accountability of federally mandated build requirements

Adopt: Support Digital Equity and Inclusion Initiatives

Success Metrics - Measurable Increase in Number of:

- Dots on State Broadband Map Min. 25/3 Mbps by 2024 and Min.150/150 Mbps by 2028, providing evidence of equitable access to quality broadband service
- BAT/County Digital Equity and Inclusion Plans Developed



Community Digital Equity and Inclusion Program

The State Broadband Office digital equity and inclusion program will ensure local buy-in and equal access to the technology and training needed to take advantage of improved internet access and will ensure expert planning and leveraging of any additional federal relief funds.

The State Broadband Office website will provide information for customers about special broadband offerings and assistance by the private sector for people with low incomes. The Office requested $25,000 in the Governor's 2021-23 budget to pay for translated outreach in multiple languages to more inclusively inform individuals and families about these programs. The Department of Commerce will also ask partners on the Human Centered Poverty Reduction Design Team (comprised of seven state agencies: the Department of Children, Youth and Families, Department of Social and Health Services, Department of Health, State Board of Community and Technical Colleges, Health Care Authority, Employment Security Department, and Department of Commerce) and the Office of Superintendent of Public Instruction to disseminate this information to customers who are likely to need these services.

Digital equity and inclusiveness initiatives must be planned and implemented at the local level with expert policy guidance from the state. Another $25,000 in requested funding could be used to develop a template for local Broadband Action Teams (BATs) to use to assess and address local access needs for equipment (including adequate system requirements for broadband), internet access, and digital literacy training for people experiencing poverty or other access barriers. The template will be developed in coordination with stakeholders and state partners including the Poverty Reduction Workgroup.

Local plans will be developed and implemented by BATs with the assistance of the State Broadband Office digital equity manager and program staff. Local action teams will include stakeholders from healthcare, education, economic development, social services, internet providers and individuals having lived experience with access barriers to technology and skills training. $22,250 proposed funding for the Office to convene a workgroup to recommend reforms to current universal service mechanisms to ensure that service remains affordable for rural and urban customers alike.

Drive-In WiFi Hotspots Program

The Office requested $500,000 to support the addition and maintenance of 100 Drive-In WiFi Hotspot sites statewide in identified areas of need, providing free access to remote learning, telehealth, telework, social and other services.

Stakeholder Collaboration

The Office will provide policy guidance and centralized coordination with statewide Digital Equity and Inclusion partners and initiatives. Current state partners include:

- Equity in Education Coalition
- Human Centered Design Committee
- Poverty Reduction Work Group (PRWG)
- Department of Social and Health Services (DSHS)
- Department of Health (DOH)
- Employment Security Department (ESD)
- Department of Children, Youth, and Families (DCYF)
- State Board of Community and Technical Colleges
- Health Care Authority (HCA)
- Digital Equity Taskforce
- Remote Learning Taskforce
- Office of Superintendent of Public Instruction (OSPI)
- Seattle Digital Equity
- All In Washington
- Washington State University Extension
- Washington State Library | SOS
- Digital Navigators
- National Digital Inclusion Alliance (NDIA)

Recommendations

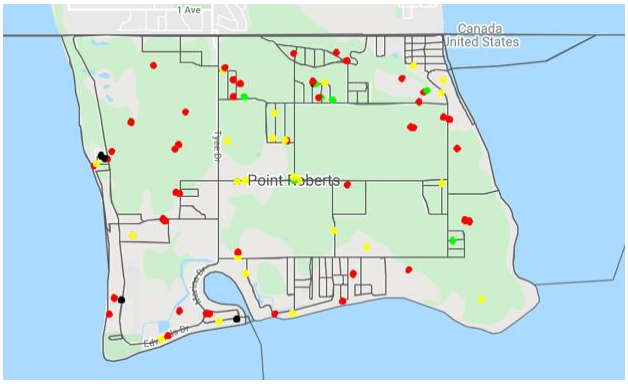
- Resource the State Broadband Office to coordinate Digital Equity and Inclusion initiatives across state partners and develop planning grants for locally led efforts
- Work with Commerce to administer pass-through funding to partners who can build the capacity of community-based organizations and develop a workforce of digital navigators
- Require recipients of state infrastructure funding to demonstrate they have made available affordable, low-income service options
- While digital implementation plans get off the ground, resource the Office and partners to expand Drive-in WiFi hotspots
- Support legislative efforts to identify an ongoing state funding mechanism to subsidize affordability programs, devices, and digital literacy training

Section 4. Success Stories

Whidbey Telecom USDA ReConnect Award

October 2020 - Point Roberts, WA

Partner	Plan	Fund	Build	Adopt
• Whidbey Telecom • Washington Independent Telecommunication Association (WITA) • United States Department of Agriculture (USDA) • Point Roberts Community • State Broadband Office (WSBO) • Technical Assistance and Grant Writing Partners	• WSBO introduced USDA funding opportunity and resources for feasibility study and grant writing • State broadband survey and map resource provided critical proof of unserved rural area	• USDA Broadband ReConnect Program • $596,781 Grant Awarded to Whidbey Telecom	• Fiber-to-the-premise broadband 2021 project • Service to 144 households • 0.16 square miles	• Whidbey Telecom promotes and participates in Federal Lifeline and Tribal Link-Up programs



"Thank you for your part in making this happen! Without your broadband speed map to prove that Pt. Roberts is unserved this would not have been possible.

To prove that an area has less than 10/1, and therefore qualifies for funding through this program, staff from the USDA makes a site visit to confirm local speeds. Getting to Pt. Roberts, which would have required a trip through Canada, was not possible. But enough residents of Pt. Roberts had taken the broadband speed test through our state's Broadband Office to meet that requirement.

Thank you also to John Holman, staff at USDA, for thinking out of the box and allowing for an innovative approach to meeting the USDA's requirements."

– Betty Buckley, Executive Director, Washington Independent Telecommunications Association (WITA)

Pictured left to right: Andrew Henshaw, Consultant; Gary Ricketts, Whidbey Telecom; John Gevaer, Whidbey Telecom; Kirk Pearson, USDA; George Henny, Co-CEO Whidbey Telecom; Moanalei McManus, Whidbey Telecom, Regulatory Specialist

Hoh Indian Tribe SpaceX Starlink Beta Project

September 2020 - Hoh Indian Reservation

Partner	Plan	Fund	Build	Adopt
• Hoh Indian Tribe and Partners • SpaceX Starlink • State Broadband Office (WSBO)	• WSBO reached out to Starlink team to present Washington State as beta test sandbox	• Project met CARES Act requirements for funding operational infrastructure by December 2020	• Low-earth orbit satellite broadband • 100% community served with 100/50 Mbps	• Access to service provided by Hoh Tribe resources

The State Broadband Office facilitated a low-earth orbit satellite beta test program with the Hoh Tribe, located on rural Olympic Peninsula, and high-tech company SpaceX. The new relationship allowed the Tribe to access high-speed internet and created new opportunities for telemedicine, mental health services, new opportunities for remote learning, online business, and much more.

"What a difference high-speed internet can make. Our children can participate in remote learning, residents can access healthcare. We felt like we'd been paddling up-river with a spoon... SpaceX Starlink made it happen overnight," said Melvinjohn Ashue, Vice Chairman of the Hoh Tribe.

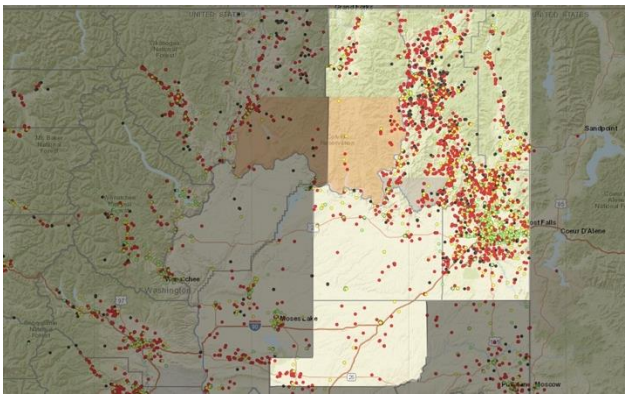
Starlink is an ongoing SpaceX project creating a global network of satellites capable of beaming broadband internet to areas with unreliable or unavailable access.

State Broadband Office director Russ Elliott introduced the Hoh Tribe to SpaceX after limited internet access issues were elevated due to COVID-19 restrictions. Seeking out emerging technologies is just one of the statewide strategies aimed at bridging the digital divide for rural and underserved communities.

Better Health Together Broadband Feasibility Grants

September 2020 - Eastern Washington

Partner	Plan	Fund	Build	Adopt
• Better Health Together • Eastern Washington Broadband Action Teams (BAT) and community partners • State Broadband Office (WSBO) • Feasibility Study and Grant Writing Partners	• WSBO Grant Maximization Feasibility Initiative • Identify areas of need • Identify projects and prepare federal funding applications	• Better Health Together Grant Program $207,000 • 18 Feasibility and Grant Writing application assistance grants	• Grants support funding opportunities for broadband expansion in six counties and three tribal reservations in Eastern Washington	• BHT funding supported the Spokane Tribe of the Spokane Reservation application to the USDA Community Connect 2020 funding cycle



At their September meeting, the Better Health Together (BHT) Board of Directors approved an allocation of up to $207,000 in funding from Integrated Managed Care (IMC) dollars to support the Washington State Broadband Office's Feasibility and Grant Maximization Initiative.

These funds will support 18 broadband grant applications: two projects in Eastern Washington counties (Spokane, Adams, Lincoln, Stevens, Ferry, and Pend Oreille) and two projects each for the Spokane Tribe of Indians Reservation, Kalispel Tribe of Indians Reservation, and Confederated Tribes of the Colville Reservation.

The IMC funds were set aside in 2019 for telehealth strategies, but COVID expedited this work. Since then, behavioral health partners have reported there are many positives to the telehealth appointments. However, patients lacking access to internet remains a massive barrier to delivering services.

This Feasibility and Grant Maximization Initiative aims to maximize Federal Grant funding that flows into the State's rural broadband communities. This will be done by funding the creation of grant applications targeted to areas with high-scoring application criteria, produced with uniform quality, and managed by expertise familiar with the technical details of broadband networks and Federal grant applications.

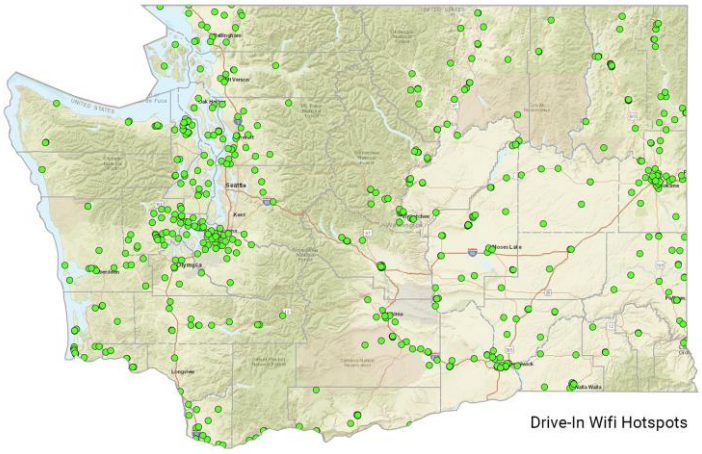
This work will be accomplished through the joint forces of the Washington State Broadband Office, GEO Partners LLC (unique rapid network and financial modeling), and Learn Design Apply Inc. (demonstrated success in grant consulting and proposal writing). This initiative will empower multiple communities to apply for critical funding to support broadband deployments.

State Drive-In WiFi Hotspots Project

April 2020 - Statewide

Partner	Plan	Fund	Build	Adopt
• Multiple public and private partners came together to collaborate and support this initiative (see below)	• Phase I: 15 new sites • Phase II: 30 new sites • Phase III: 230 new and 321 pre-existing sites	• Microsoft $45,000 • State $60,000 • Avista Foundation $45,000 • Installation crew donation from ITDRC, NoaNet, WSUE	• 596 Drive-In WiFi hotspot locations	• 209,525 visits to location finder webpage driveinwifi.wa.gov • Free public wifi access

March 2020: The COVID-19 emergency highlights the need for statewide public access to Drive-In WiFi Hotspots for telehealth, remote learning, telework, unemployment filing, and census participation.



Drive-In Wifi Hotspots

1727 Drive-In WiFi Hotspot Survey Responses

The genesis of this initiative was inspired by André-Denis Wright, Dean, College of Agricultural, Human and Natural Resource Sciences, Washington State University. An initial scope proposed 40 Washington State University Extension offices, which quickly expanded to a three-phase public-private collaboration installing 275 new sites and 321 pre-existing sites.

Partners: Washington State University Extension (WSUE) - Phase I-II installation, Washington State Library, a division of the Washington Secretary of State, Department of Commerce, NoaNet - Phase III Project Management Lead volunteer, Information Technology Disaster Resource Center (ITDRC) - Phase III equipment and installation donations, Internet Service Providers, Washington Independent Telephone Association, Public Utility Districts, Port Districts, Office of Public Instruction and School Districts, Washington Universities, Washington Community and Technical Colleges, private retail and service businesses, Washington Technology Solutions, Emergency Support Function #2, Microsoft - Phase I funding, State - Phase II funding, Avista Foundation - Phase III funding contribution.

Initiative received 2020 FCC Digital Opportunity Equity Recognition Program (DOER) Honorees award for progress toward making quality affordable broadband service available to unserved and underserved communities.

Section 5. Discussion

RCW 43.330.536 sets ambitious but essential targets for Washington State:

- By 2024, all Washington businesses and residences should have access to high-speed broadband that provides minimum download speeds of at least 25 Megabits per second (Mbps) and minimum upload speeds of at least three Mbps.

- By 2026, all Washington communities should have access to at least one gigabit per second (Gbps) symmetrical broadband service at anchor institutions like schools, hospitals, libraries, and government buildings.

- By 2028, all Washington businesses and residences have access to at least one provider of broadband with download speeds of at least one 150 Mbps and upload speeds of at least one hundred fifty megabits per second.

Broadband Access Varies by Demographics and Geography

While the statewide goals set by statute do not discriminate by demographics or geography, the current state is that access to reliable broadband differs dramatically across Washington depending on location. Every county has pockets in which high-speed broadband is accessible. But as the maps in Appendix B demonstrate, rural counties -- and rural areas within urban counties -- show the highest areas of need.

Tribal Broadband

According to a report issued by the Federal Communications Commission (FCC) in May 2019, less than half of households in Indian Country have access to high-speed broadband service. This represents a nearly 27-point gap compared to non-Tribal rural areas. According to the same report, this gap only widens when compared to the countrywide average; 31 percent of households on Tribal lands lack access to high-speed broadband service compared to seven percent of Americans in non-Tribal areas. It goes on to say rural Tribal lands continue to lag behind urban Tribal lands, with only 45.4% of all Tribal lands in rural areas having deployment of both fixed and LTE services, as compared to 91.6% of Tribal lands in urban areas.

Washington State has 29 federally recognized Tribes located on reservations throughout the state and broadband is a key focus. The State Broadband Office has made the support of Tribal broadband initiatives a priority and will continue to partner with tribal organizations as needed.

FCC 2.5 GHz Rural Tribal Window

The federal government is making Tribal broadband a priority in many of its funding opportunities and policies. A key initiative of the State Broadband Office is to stay up to date on these opportunities and share them with our state Tribal partners and support their pursuit of those funds or initiatives. An example of this was the recent release of the 2.5 GHz spectrum to tribal reservations where the spectrum was not already being utilized.

This window is a unique opportunity for Tribes in rural areas to directly access unassigned spectrum over their Tribal lands, subject to buildout requirements. The 2.5 GHz band is suitable for both mobile coverage and fixed point-to-point uses and is currently used to provide broadband service by legacy educational licensees and commercial providers that lease the spectrum. Depending on needs, it can play an important role in the deployment of broadband and other advanced communications services on Tribal lands.

A federally mandated build timeline requires 50% of the applied for region to access to the spectrum within two years and by year five, the build must reach 80% of the successfully awarded region. The Office will support Washington Tribes in meeting those requirements so that the spectrum will remain in Washington state tribal control.

The Office collaborated with local tribal leaders and national partners in an effort to maximize request for the 2.5 GHz spectrum for Tribal regions within Washington State ensuring successful applications were filed on time with the FCC. This resulted in the majority of open spectrum on reservations across the state, now in control of Tribal communities. Successful bidders included:

- Confederated Tribes of the Colville Reservation
- Hoh Indian Tribe
- Kalispel Tribe of Indians
- Makah Tribe
- Nisqually Indian Tribe
- Quinault Indian Nation
- Sauk-Suiattle Indian Tribe
- SITE, Inc. (Skokomish Indian Tribe)
- Spokane Tribe of Indians
- Yakama Power (Yakama Nation)

For too long tribal regions have lacked scalable broadband infrastructure due to perceived costs and low adoption assumptions. Given the critical nature of this infrastructure in today's economy, it is important we restructure the question from "how much will it cost to build?" to "what will it cost if we do not build out to these citizens?" The Office, when working to support a tribe seeking to build broadband infrastructure, first works to quantify the actual costs of building fiber to all tribal members across the 29 federally recognized Tribes in Washington State. We cannot start this important conversation without understanding the actual costs. If achieving 100% ubiquitous coverage of a reservation proves to be too costly, a tribe may seek to prioritize covering a majority of the membership, resulting in a cost that can be achieved, with the right partnership and funding opportunities. When majority coverage would drive a cost that is considered unreasonable, then a tribe may choose to look for alternatives to a fiber buildout for the harder to reach areas. For example, the Office supported the Hoh Tribe community in their pursuit of connectivity in their very rural tribal region. This resulted in a partnership between the Hoh Tribe and Starlink, and robust connectivity to the entire Hoh tribal membership located on the reservation. This was the first of its kind in the country and brought a vital resource to citizens addressing critical needs. We will continue these collaborative efforts until all of our tribal reservations are satisfied with their level of connectivity.

Access by Students and Low-Income Individuals

The digital equity data in section 2 documents disparities in broadband adoption across demographic groups. With children stranded at home and many schools closed to in-person learning due to the pandemic, there has been much attention to the dire need to get broadband subscriptions and devices to households with school children. On October 30, 2020 Governor Inslee announced the allocation of $24 million in Coronavirus Relief Funds to purchase approximately 64,000 computing devices for students across the state to enable students to receive their education in the new COVID-19 remote learning environment. The Governor's proposed 2021-23 budget would provide an additional $9 million to expand broadband access for licensed child-care businesses serving around 20,500 school-age children and $79 million to support residential broadband connections so that more families can engage in online learning.

There has been perhaps less attention to the needs of low-income households with no child in the home. However, for individuals experiencing poverty, their ability to access critical social services and funding during the pandemic has been much curtailed. The Poverty Reduction Work Group's implementation team, the Human Centered Poverty Reduction Design Team, estimates 170,000 low-income households may lack a mobile device and internet subscription. Some programs serving people experiencing poverty, such as Work First coordinated by the Department of Social and Health Services and the Department of Commerce, have had small subsidies available for a limited number of participants to access devices and subscriptions. However, there is no program scaled to meet the needs of low-income individuals. The Governor's budget includes $3.19 million for the Office to launch its digital equity and access programs and $6 million for Commerce to pass through to an entity who can provide Digital Navigators to increase access by helping to improve digital literacy in Washington communities. Over the next year, it will be important to build on these first steps to develop a plan that ensures all low-income individuals can effectively participate in the economy and social services online.

Return on Investment is a Barrier for Telecommunications Providers

The primary challenge facing broadband expansion is the diminishing return on investment encountered by telecommunications providers in rural and underserved areas. Demand drives investment in infrastructure, and lower population densities make it challenging for broadband providers to justify the economics of expansion. The following policy considerations have the potential to remove barriers to rural broadband deployment.

"Dig Once" Policies at the State and Local Level to Reduce Capital Costs of Broadband Deployment

Up to 90% of broadband deployment requires digging trenches or climbing poles to extend infrastructure to the furthest reaches of the state. Encouraging cities, counties and state entities engaged in infrastructure improvement to include consideration for conduit/fiber will promote broadband provider engagement.

Make-Ready Cost Barriers and Opportunities

One of the biggest barriers to rural and suburban broadband deployment is aerial infrastructure make-ready costs. Make-ready costs can amount to $8,000-$10,000 per pole, and with an average of thirty poles per mile this can drive costs exponentially higher for carriers. If there are unserved areas that can be served by aerial infrastructure and a provider agrees to deliver service, there is a high likelihood that high make-ready costs will prohibit the feasibility of construction. A creative opportunity for future encouragement of broadband infrastructure deployment is to develop a make-ready cost subsidy program to offset this cost for providers to participate in building rural broadband.

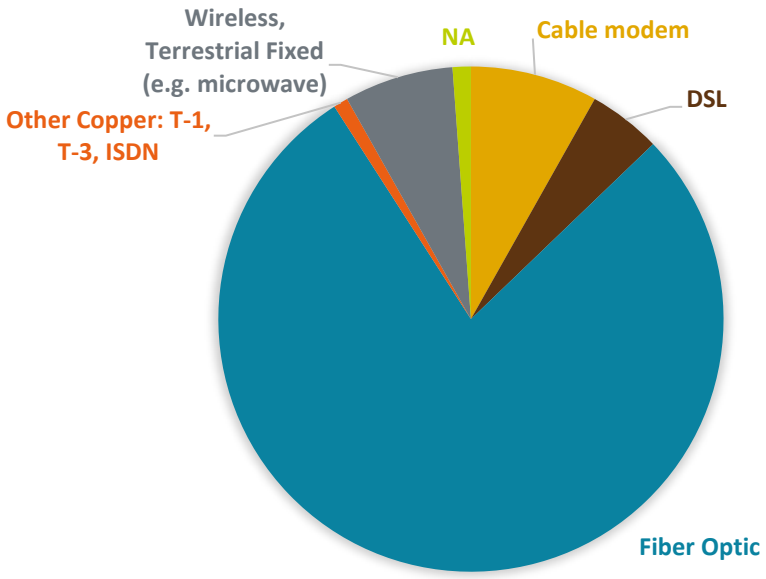
Anchor Institutions

A common policy for states is to ensure anchor institutions - schools, hospitals, libraries, and government buildings - receive high level, robust broadband service. The philosophy behind states encouraging deployment and funding this service for institutions is to encourage providers to build to these institutions and, in doing so, upgrade their facilities in the area for the benefit of the surrounding community. What we are finding is more often than not, providers are taking advantage of the state investment and not delivering beyond the target institution. Given that these significant state contracts are guaranteed for multiple years, communities would benefit from state leverage to encourage service providers to share a plan to deliver beyond the awarded institution. The "Anchor +1" concept provides consideration for service to be provided beyond the Anchor Institution to ensure the initial intention of the investment is realized.

Appendix A: Washington Libraries Broadband

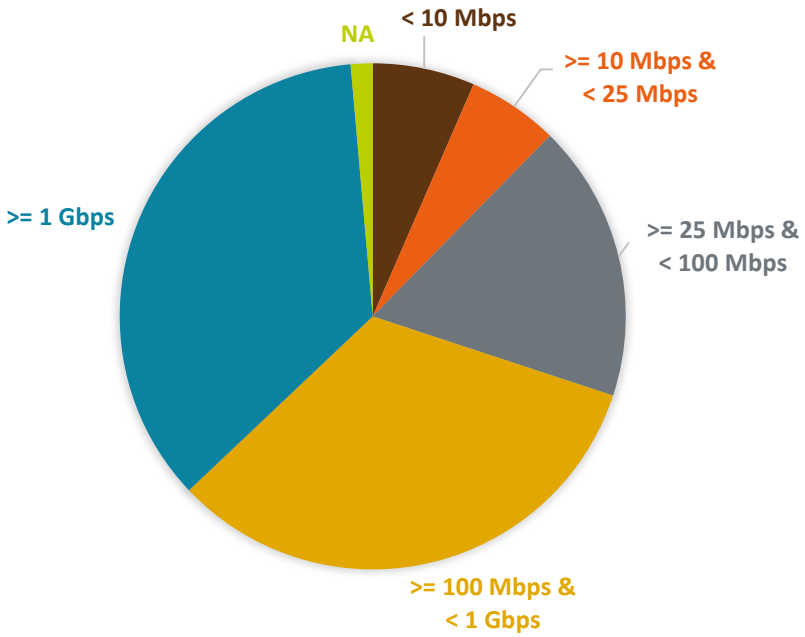
Washington has 429 public library branches. The majority - 78% - are connected by fiber optic infrastructure.

Technology Used to Connect Each Branch



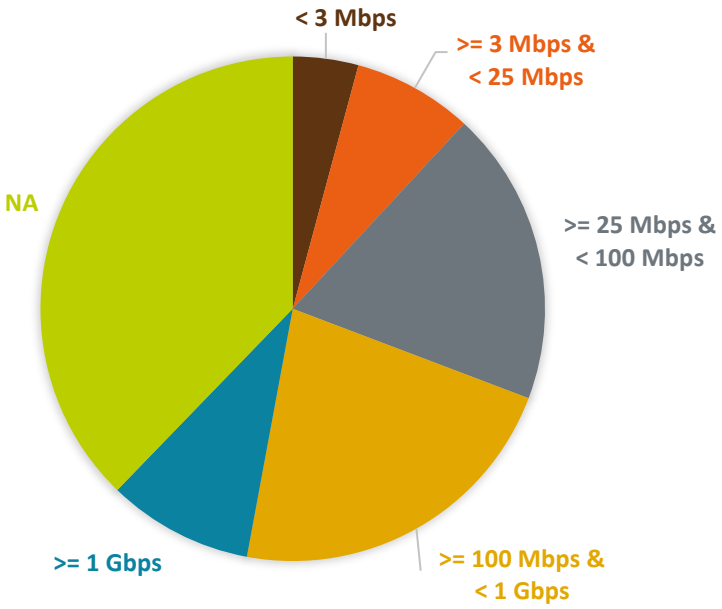
More than two-thirds (69%) of libraries boast download speeds greater than 100 Mbps. However, 7% of branches report less than 10 Mbps. 36% meet the state 2026 goal of 1 Gbps.

Download Speeds at Each Branch



In general, upload speeds at libraries lag behind download speeds. The goal by 2026 is also 1 Gbps for uploading data, currently 9% (40 libraries) meet this speed target. 12% report upload speeds under 25 Mbps.

Upload Speeds at Each Branch



Source: Washington State Library, a division of the Office of Secretary of State, 2019 Washington Public Libraries Internet Service Survey

Appendix B: 2020 County Broadband Dashboards

The following County Broadband Dashboards represent 2020 snapshot examples of the Washington State Broadband Survey results by county, including current awareness of federal and state funding awards.

Initial State Broadband Office review of the county broadband dashboards reveals the challenges of equitable distribution of service and funds across the state of Washington. The Federal Communications Commission (FCC) Connect America Fund Phase II (CAF II) and the FCC Rural Digital Opportunity Fund (RDOF) are both reverse auction programs with awards presented to the lowest bidder, which has resulted in Washington State being left with service areas that will never be capable of meeting our state identified speed goals. Additionally, many areas are now excluded from the intended local infrastructure investment federal programs encourage.

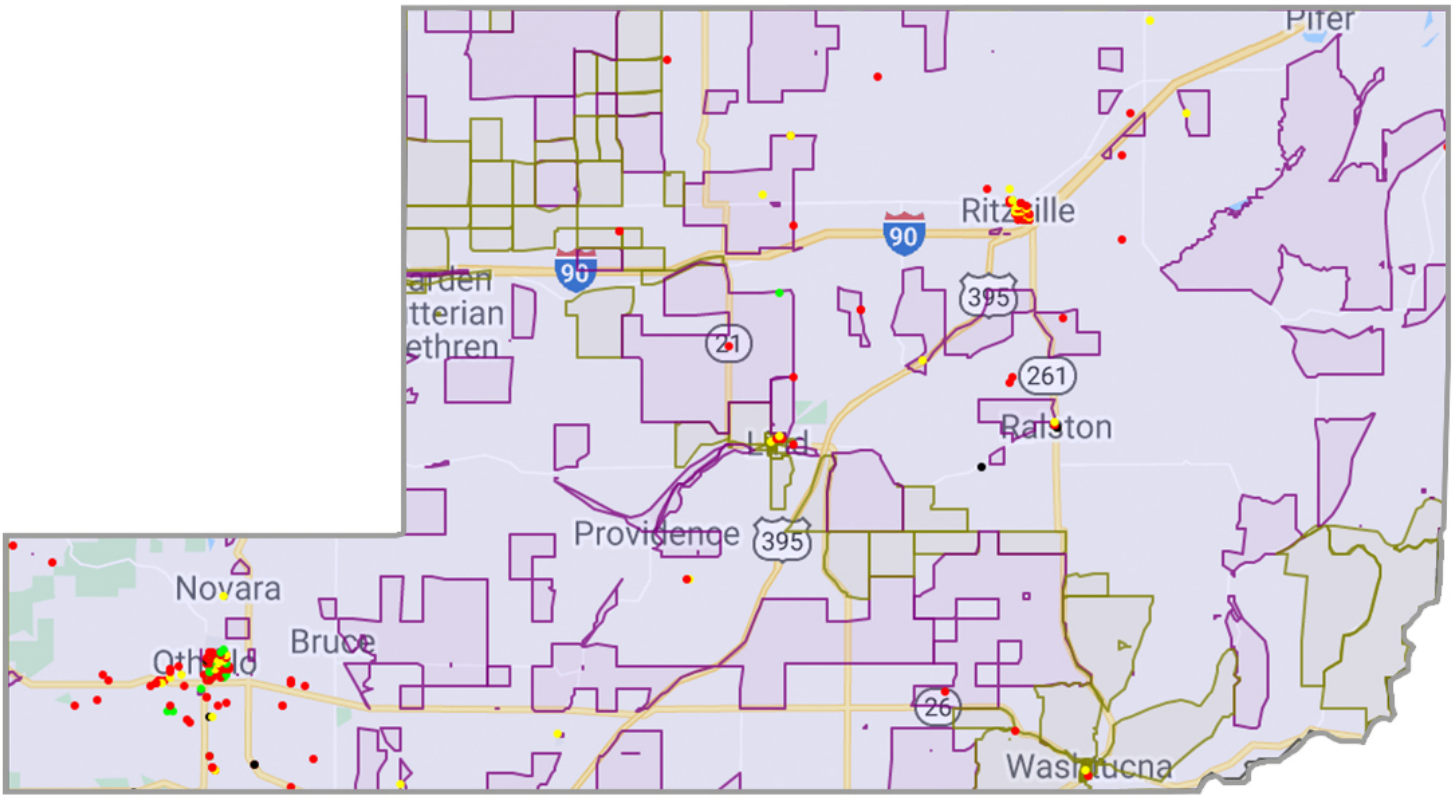
Providing these county dashboards as a resource for communities facilitates at-a-glance identification of areas of opportunity with unparalleled accurate detail, thus empowering community stakeholders to own the planning and solutions for their regions.

At the time of this publication, county dashboards have been developed for each of the 39 counties within Washington State, with Tribal Broadband Dashboards being developed and due to go live in March 2021.

County Broadband Dashboard Map Images Key

- Survey results are represented by colored dots with explanations defined within county data
- Pink areas represent 2018 FCC Connect America Fund Phase II 10-year winning bidders
- Olive areas represent 2020 FCC Rural Digital Opportunity Fund Phase II 10-year winning bidders

It should be noted the State Broadband Office map producing these dashboards exists in electronic form, with real-time results, extreme zoom-in capabilities and detailed on-off layer views to inform gap analysis and project planning.



Area: 1,930 mi²

Adams County

Households	6,242
Population	19,983
Broadband.wa.gov survey	105
Percent participation	1.7%
Participation goal (10%)	624

Download

● No service	3	2.9%
● 0-10 Mbps	69	65.7%
● 10-25 Mbps	22	21%
● 25-150 Mbps	11	10.5%
● 150+ Mbps	0	0%

Min. / Max. / Avg. Mbps
Download 0.13 / 122.97 / 12.69
Upload 0.03 / 93.61 / 4.32

Upload

No service	3	2.9%
< 3 Mbps	74	70.5%
3-10 Mbps	20	19%
10-25 Mbps	4	3.8%
25-150 Mbps	4	3.8%
> 150 Mbps	0	0%

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
639 locations, $1,315,183.50

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Computer 5 Inc. d/b/a LocalTel Communications
358 locations, $1,527,349.20

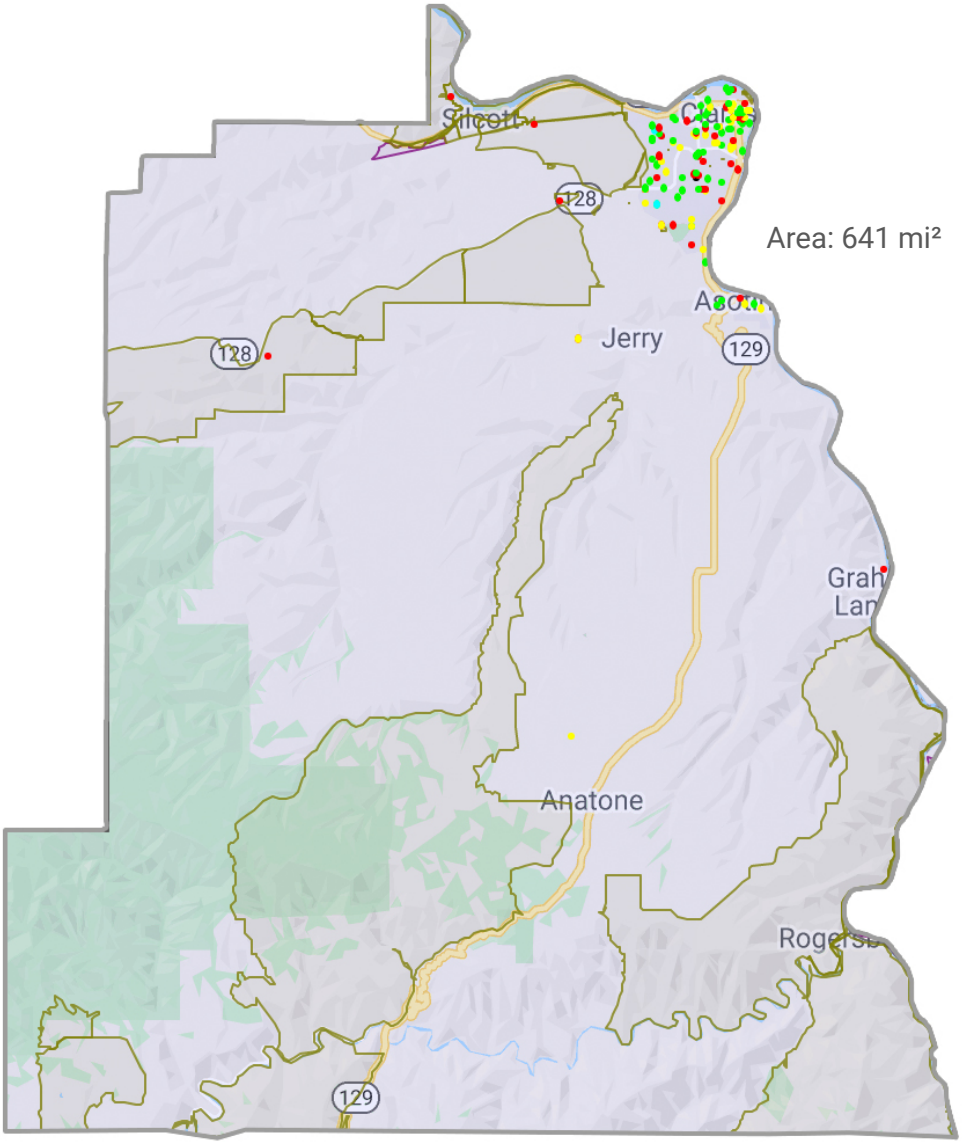
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A

Asotin County



Households		9,872
Population		22,582
Broadband.wa.gov survey		112
Percent participation		1.1%
Participation goal (10%)		987

Download

No service	1	.9%
< 10 Mbps	33	29.5%
10-25 Mbps	27	24.1%
25-150 Mbps	45	40.2%
> 150 Mbps	6	5.4%

Upload

No service	1	0.9%
< 3 Mbps	40	35.7%
3-10 Mbps	39	34.8%
10-25 Mbps	25	22.3%
25-150 Mbps	5	4.5%
> 150 Mbps	2	1.8%

Min. / Max. / Avg. Mbps
Download 0.01 / 613.04 / 54.83
Upload 0.01 / 443.8 / 15.75

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
195 locations, $1,469,647.50

Wisper-CABO 904 Consortium
4 locations, $5,118

Total RDOF
199 locations, $1,474,765.50

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
4 locations, $5,855.90

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Port of Clarkston to City of Asotin+ Fiber Expansion Project
345 Connections, 11 ISPs
Loan/Grant $207,285/$207,285
Match $157,200, Total $571,770
Completed 08/2020

Benton County

Households		68,618
Population		204,390
Broadband.wa.gov survey		549
Percent participation		0.8%
Participation goal (10%)		6,862

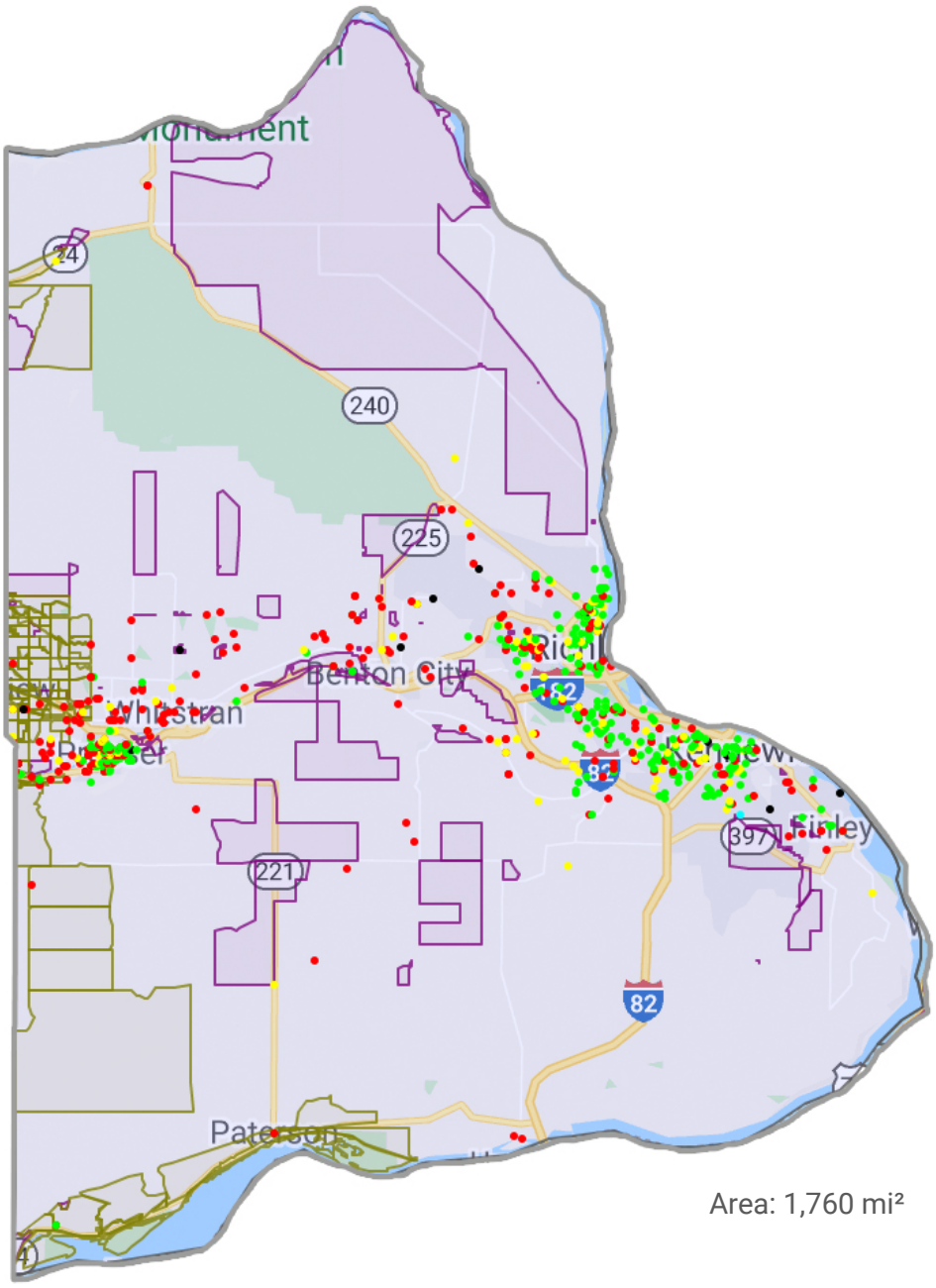
Download

No service	10	1.8%
0-10 Mbps	204	37.2%
10-25 Mbps	88	16%
25-150 Mbps	221	40.3%
150+ Mbps	26	4.7%

Upload

No service	10	1.8%
< 3 Mbps	216	39.3%
3-10 Mbps	151	27.5%
10-25 Mbps	156	28.4%
25-150 Mbps	12	2.2%
> 150 Mbps	4	0.7%

Min. / Max. / Avg. Mbps
Download 0.08 / 507.76 / 45.93
Upload 0.02 / 728.23 / 9.91



Area: 1,760 mi²

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CCO Holdings, LLC,
573 locations, $1,009,824

CenturyLink, Inc.
243 locations, $1,203,942

Space Exploration Technologies Corp.
170 locations, $306,928.70

Total RDOF
986 locations, $2,520,694.70

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
364 locations, $314,611.50

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A

Chelan County

Households	35,465
Population	77,200
Broadband.wa.gov survey	290
Percent participation	0.8%
Participation goal (10%)	3,547

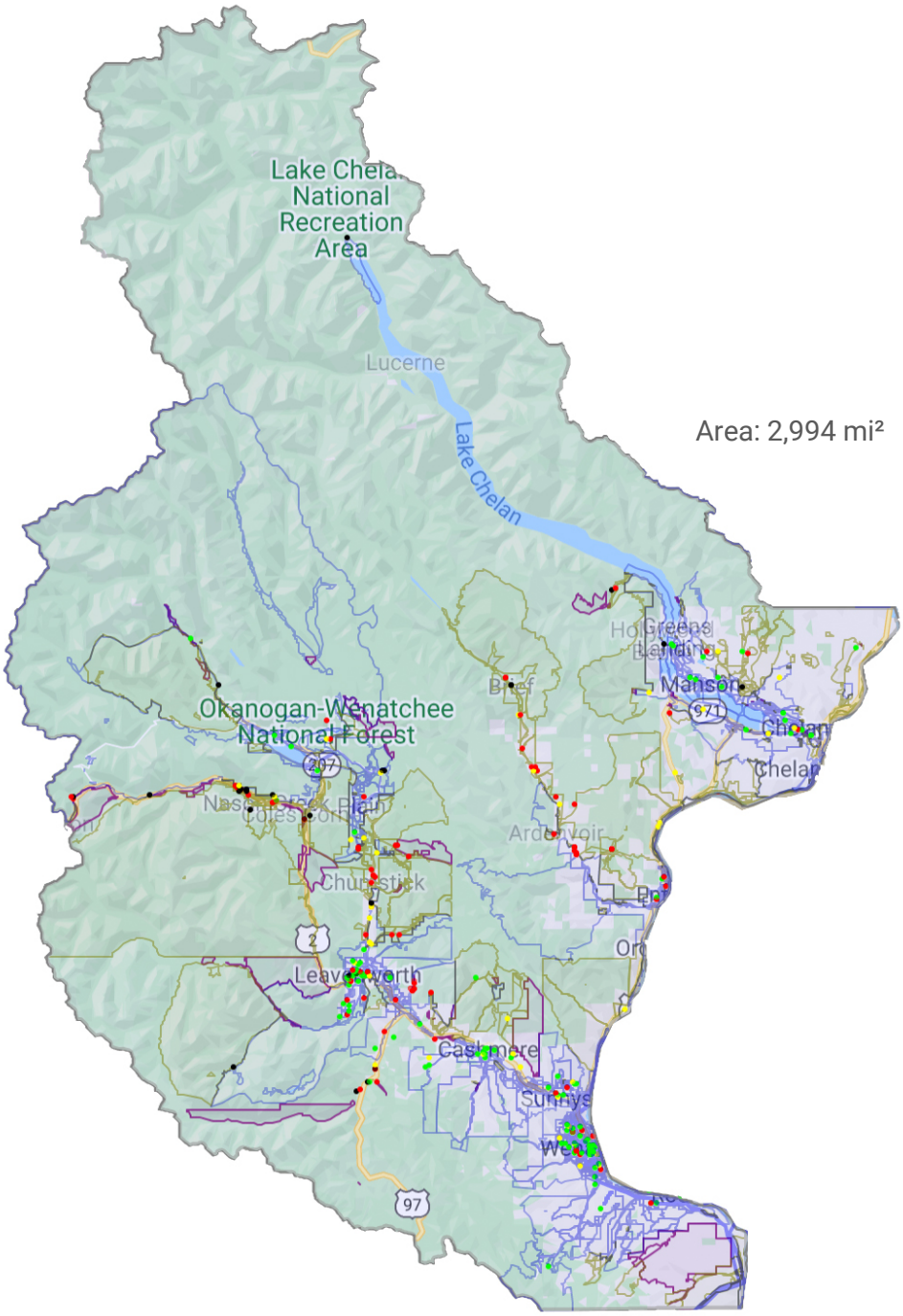
Download

No service	29	10%
0-10 Mbps	95	32.8%
10-25 Mbps	50	17.2%
25-150 Mbps	111	38.3%
150+ Mbps	5	1.7%

Upload

No service	29	10%
< 3 Mbps	100	34.5%
3-10 Mbps	92	31.7%
10-25 Mbps	39	13.4%
25-150 Mbps	29	10%
> 150 Mbps	1	0.3%

Min. / Max. / Avg. Mbps
Download 0.03 / 367.31 / 36.39
Upload 0.01 / 174.26 / 11.79



Area: 2,994 mi²

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Computer 5, Inc. d/b/a LocalTel Communications
75 locations, $185,148

Space Exploration Technologies Corp.
1,989 locations, $5,657,484

Total RDOF
2,064 locations, $5,842,632

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Computer 5 Inc. d/b/a LocalTel Communications,
140 locations, $575,830.40

Viasat, Inc.
100 locations, $115,527.40

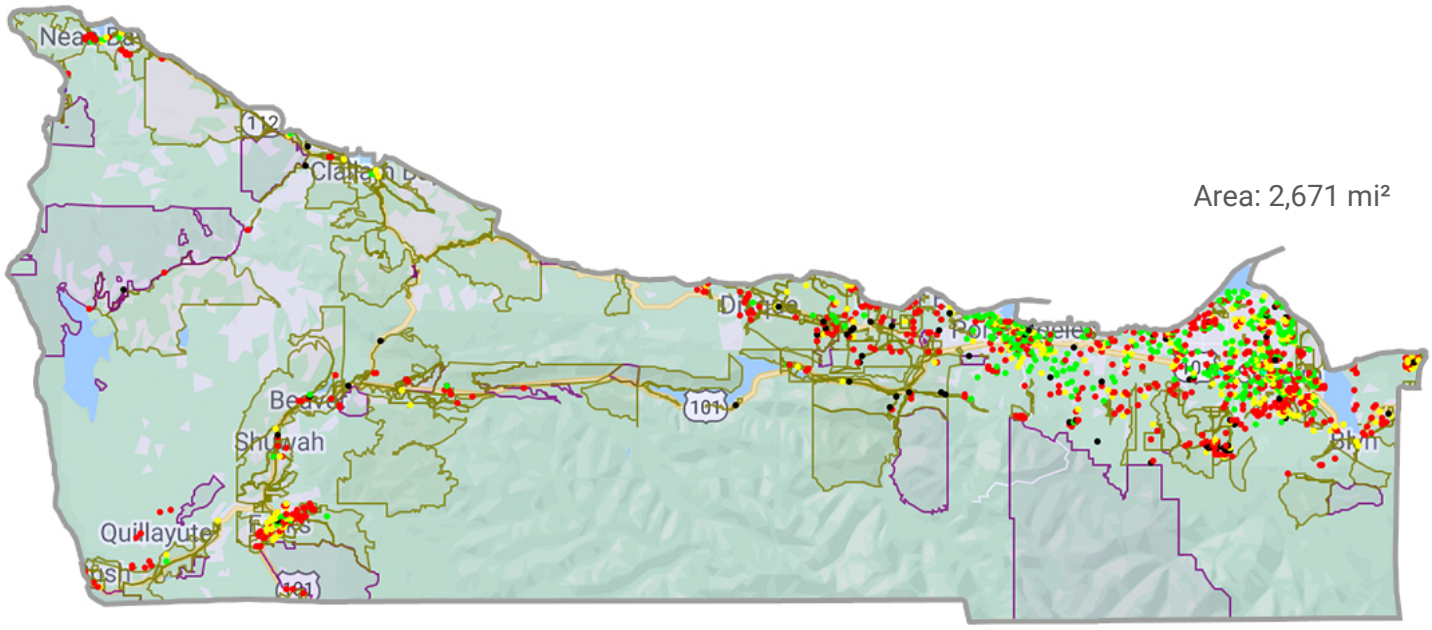
Total CAF II
240 locations, $691,357.80

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A



Clallam County

Households	35,582
Population	77,331
Broadband.wa.gov survey	1,540
Percent participation	4.3%
Participation goal (10%)	3,558

Download

● No service	93	6%
● 0-10 Mbps	723	46.9%
● 10-25 Mbps	283	18.4%
● 25-150 Mbps	397	25.8%
● 150+ Mbps	44	2.9%

Upload

No service	93	6.0%
< 3 Mbps	798	51.8%
3-10 Mbps	444	28.8%
10-25 Mbps	154	10%
25-150 Mbps	41	2.7%
> 150 Mbps	10	0.6%

Min. / Max. / Avg. Mbps
Download 0.01 / 2,691.9 / 30.41
Upload 0.01 / 4,003.5 / 10.51

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
2,631 locations, $8,644,680.20

Commnet Wireless, LLC
487 locations, $779,352.60

Space Exploration Technologies Corp.,
2,580 locations, $2,269,965.30

Total RDOF
5,698 locations, $11,693,998.10

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
167 locations, $194,552.50

USDA ReConnect/Community Connect
N/A

Public Works Board (PWB)
2020 Makah Communication Access Project, 617 locations
Grant $382,796

Community Economic Revitalization Board (CERB)
2019 Makah Tribe Communications Master Plan
Grant/Match $50,000/$16,667
Total $66,667

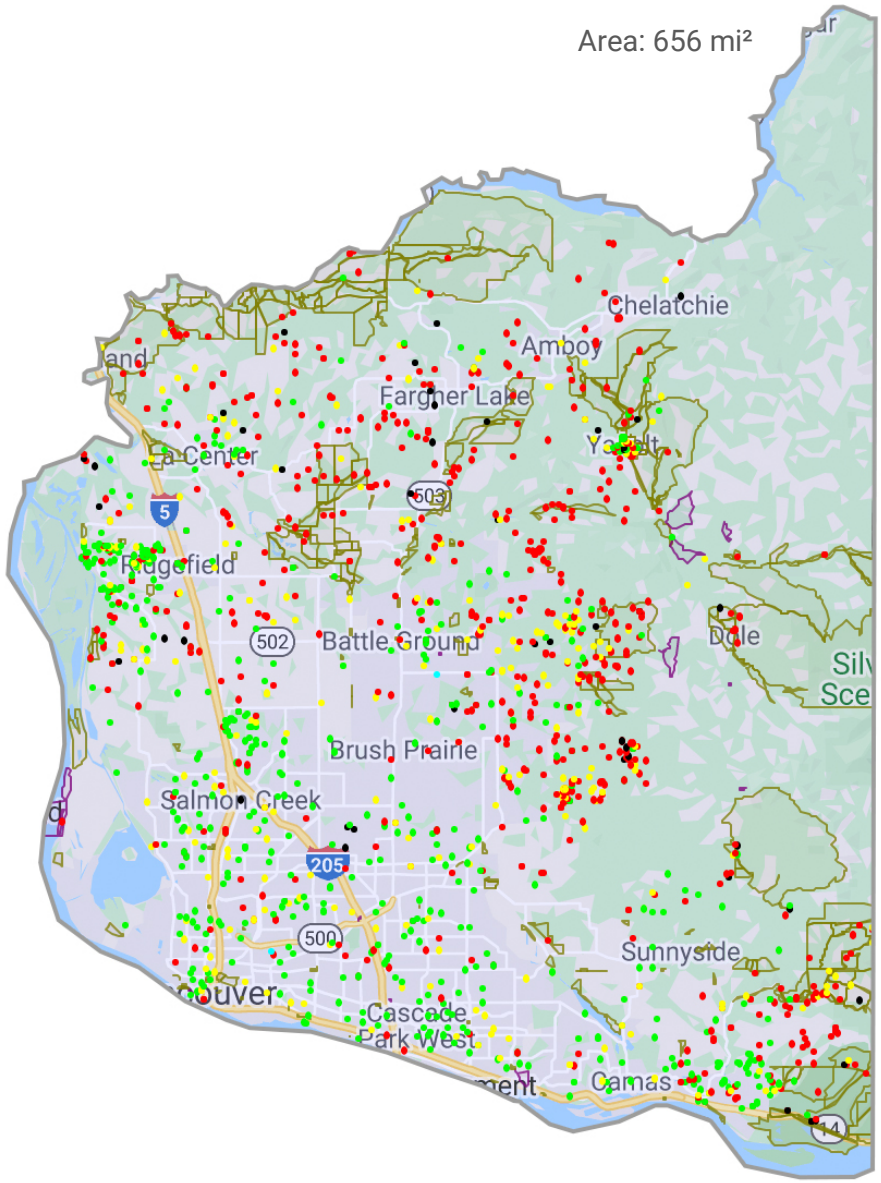
2019 Port of Port Angeles Clallam County Broadband Feasibility Study
Grant/Match $50,000/$16,667
Total $66,667

2019 Jamestown S'Klallam Tribe Jamestown Cell Tower Project
214 Connections, 3 ISPs
Loan/Grant $225,000/$225,000
Match $150,000, Total $600,000
Completed 2020

2015 Quileute Tribal Council Broadband Access Planning
Grant/Match $45,000/$15,000
Total $60,000

2014 Makah Tribe Broadband Project Feasibility Study
Grant/Match $46,875/$18,938
Total $65,813

Clark County



Households	167,413
Population	488,241
Broadband.wa.gov survey	1,441
Percent participation	0.9%
Participation goal (10%)	16,741

Download

No service	46	3.2%
0-10 Mbps	611	42.4%
10-25 Mbps	263	18.3%
25-150 Mbps	426	29.6%
150+ Mbps	95	6.6%

Upload

No service	46	3.2%
< 3 Mbps	690	47.9%
3-10 Mbps	408	28.3%
10-25 Mbps	206	14.3%
25-150 Mbps	86	6%
> 150 Mbps	5	0.3%

Min. / Max. / Avg. Mbps
Download 0.01 / 676.1 / 39.87
Upload 0.01 / 382.16 / 8.28

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
534 locations, $1,741,038

Frontier Communications Northwest, LLC
1,185 locations, $1,276,022.90

Space Exploration Technologies Corp.
1,049 locations, $1,124,693.50

Total RDOF
2,768 locations, $4,141,754.40

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
38 locations, $21,885.50

USDA ReConnect
N/A

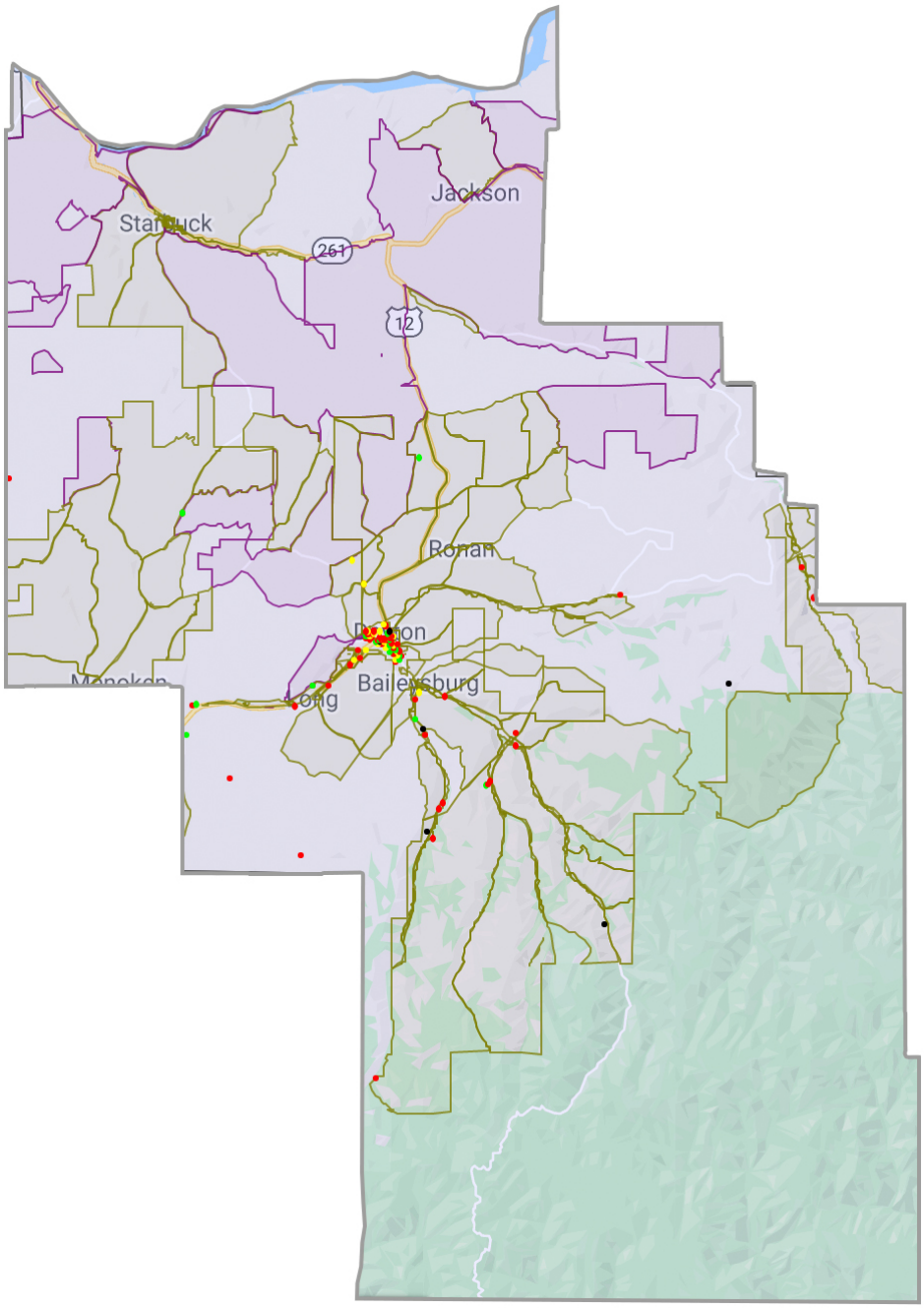
USDA Community Connect
N/A

Public Works Board (PWB)
2020 Port of Ridgefield
Feasibility Study
Grant $50,000

Community Economic Revitalization Board (CERB)
2019 Port of Ridgefield Discovery Corridor Phase 1 Project
6,097 connections, 7 ISPs
Loan/Grant $473,250/$473,250
Match $315,500, Total $1,262,000
Under construction

2016 Port of Ridgefield Dark Fiber Optics Needs Assessment/ Feasibility Study
Grant/Match $50,000/$35,337
Total $85,337

Columbia County



Area: 874 mi²

Households		2,136
Population		4,059
Broadband.wa.gov survey		128
Percent participation		6%
Participation goal (10%)		213

Download

● No service	6	4.7%
● 0-10 Mbps	65	50.8%
● 10-25 Mbps	33	25.8%
● 25-150 Mbps	22	17.2%
● 150+ Mbps	2	1.6%

Upload

No service	6	4.7%
< 3 Mbps	75	58.6%
3-10 Mbps	32	25%
10-25 Mbps	12	9.4%
25-150 Mbps	3	2.3%
> 150 Mbps	0	0%

Min. / Max. / Avg. Mbps
Download 0.08 / 255.51 / 18.59
Upload 0.02 / 71.69 / 4.17

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
817 locations, $3,318,708

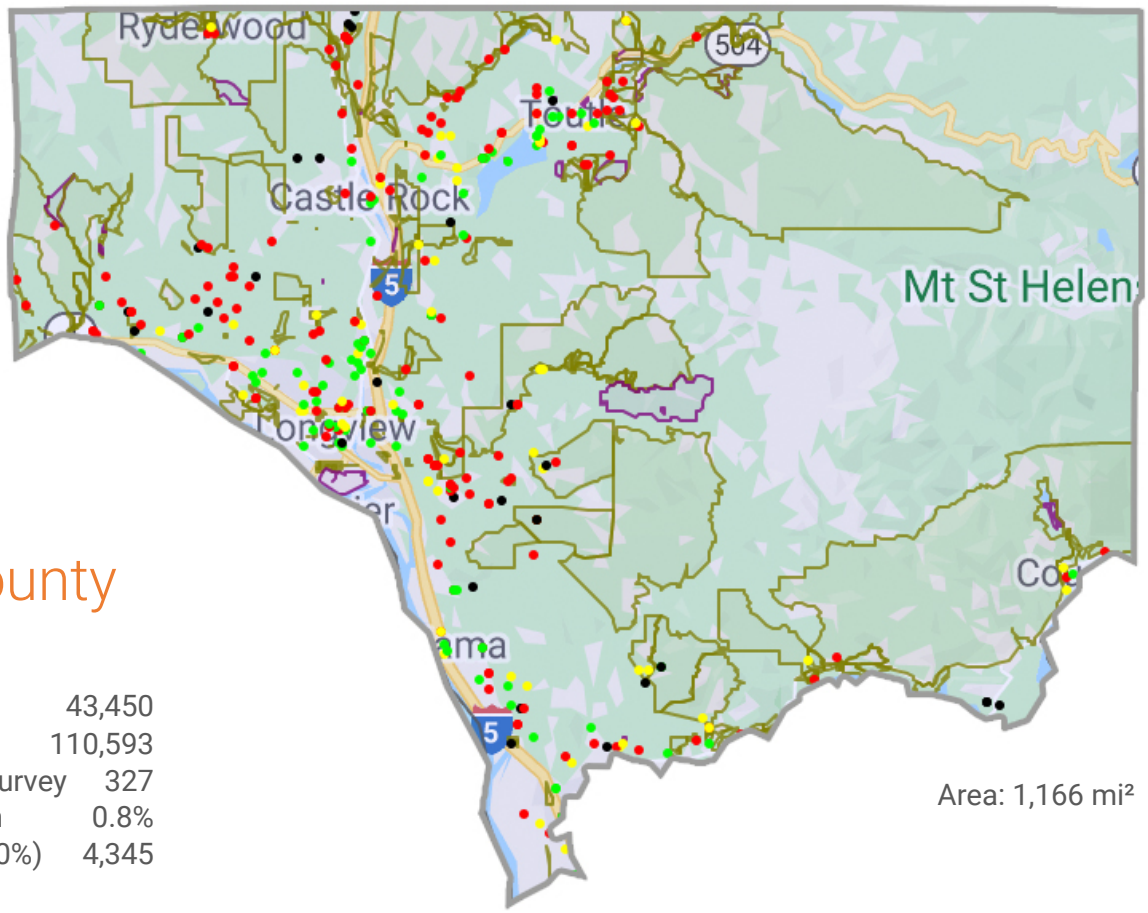
FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
218 locations, $298,162.70

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Port of Columbia Broadband Planning Study
Grant/Match $26,625/8,875
Total $35,500



Cowlitz County

Area: 1,166 mi²

Households	43,450
Population	110,593
Broadband.wa.gov survey	327
Percent participation	0.8%
Participation goal (10%)	4,345

Download

No service	28	8.6%
0-10 Mbps	159	48.6%
10-25 Mbps	59	18%
25-150 Mbps	68	20.8%
150+ Mbps	13	4%

Upload

No service	28	8.6%
< 3 Mbps	160	48.9%
3-10 Mbps	85	26%
10-25 Mbps	44	13.5%
25-150 Mbps	7	2.1%
> 150 Mbps	3	0.9%

Min. / Max. / Avg. Mbps
Download 0.02 / 510.69 / 29.34
Upload 0.01 / 443.47 / 7.71

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CCO Holdings, LLC
147 locations, $649,866

CenturyLink, Inc.
217 locations, $1,306,302.20

Frontier Communications Northwest, LLC
20 locations, $46,746

Space Exploration Technologies Corp.
1,786 locations, $2,499,912

Total RDOF
2,170 locations, $4,502,826.20

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
69 locations, $65,385.60

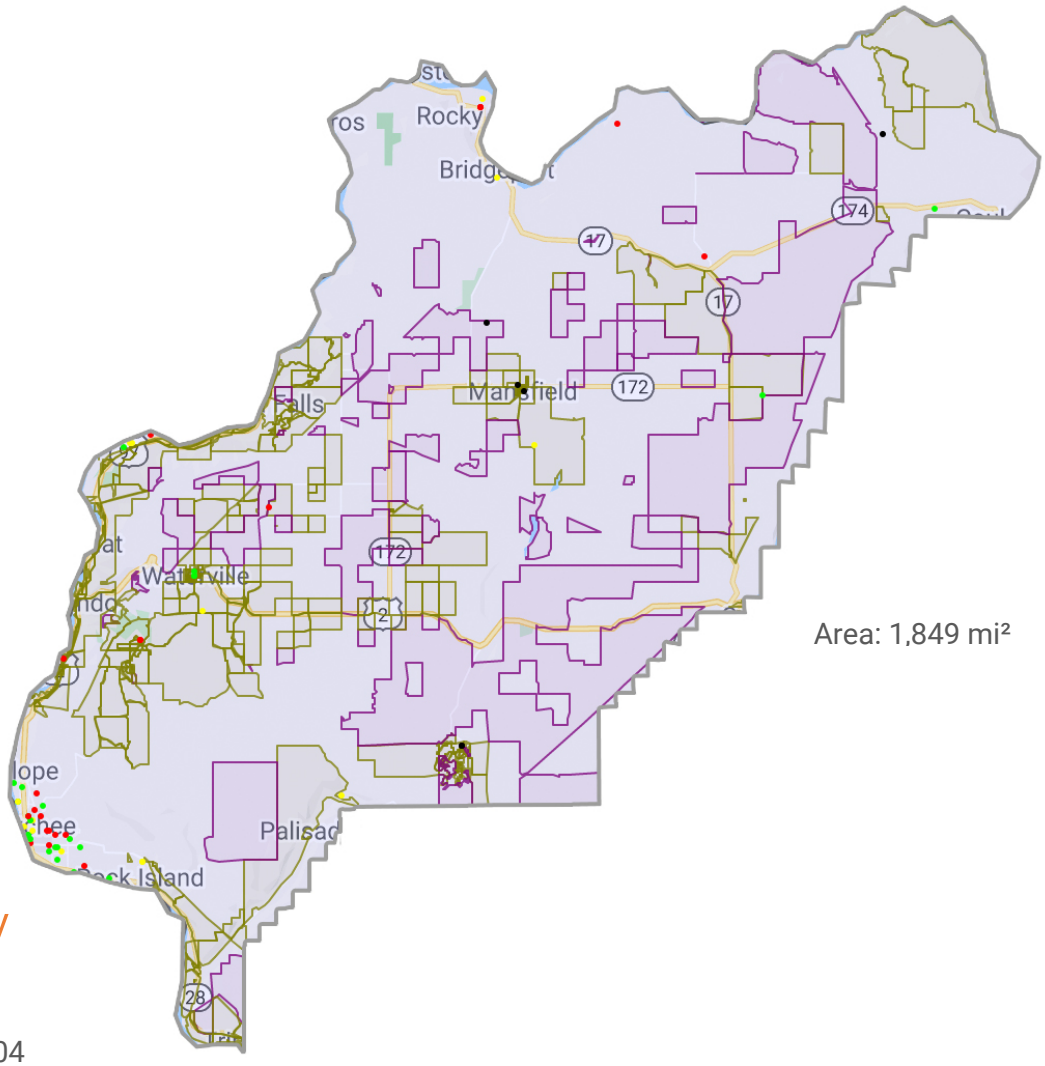
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2020 Port of Woodland Ariel to Cougar Build
115 Connections, 3 ISPs
Loan/Grant $375,000/$375,000
Match $187,500, Total $937,500
Under construction

2017 Port of Woodland Dark Fiber Feasibility and Market Analysis
Grant/Match $30,000/$10,000
Total $40,000



Douglas County

Households	16,004
Population	43,429
Broadband.wa.gov survey	66
Percent participation	0.4%
Participation goal (10%)	1,600

Download

● No service	6	9.1%
● 0-10 Mbps	20	30.3%
● 10-25 Mbps	15	22.7%
● 25-150 Mbps	22	33.3%
● 150+ Mbps	3	4.5%

Upload

No service	6	9.1%
< 3 Mbps	15	22.7%
3-10 Mbps	16	24.2%
10-25 Mbps	5	7.6%
25-150 Mbps	21	31.8%
> 150 Mbps	3	4.5%

Min. / Max. / Avg. Mbps
Download 0.08 / 240.87 / 33.43
Upload 0.03 / 488.75 / 38.61

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Computer 5, Inc. d/b/a LocalTel Communications
1,893 locations, $8,294,491

Space Exploration Technologies Corp.
390 locations, $679,263.80

Total RDOF
2,283 locations, $8,973,754.80

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Computer 5 Inc. d/b/a LocalTel Communications
365 locations, $1,498,938

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A

Ferry County

Households	4,403
Population	7,649
Broadband.wa.gov survey	160
Percent participation	3.6%
Participation goal (10%)	440

Download

● No service	21	13.1%
● 0-10 Mbps	102	63.8%
● 10-25 Mbps	20	12.5%
● 25-150 Mbps	16	10%
● 150+ Mbps	1	0.6%

Upload

No service	21	13.1%
< 3 Mbps	98	61.3%
3-10 Mbps	29	18.1%
10-25 Mbps	6	3.8%
25-150 Mbps	6	3.8%
> 150 Mbps	0	0%

Min. / Max. / Avg. Mbps
Download 0.02 / 225.73 / 11.28
Upload 0.02 / 97.8 / 3.82

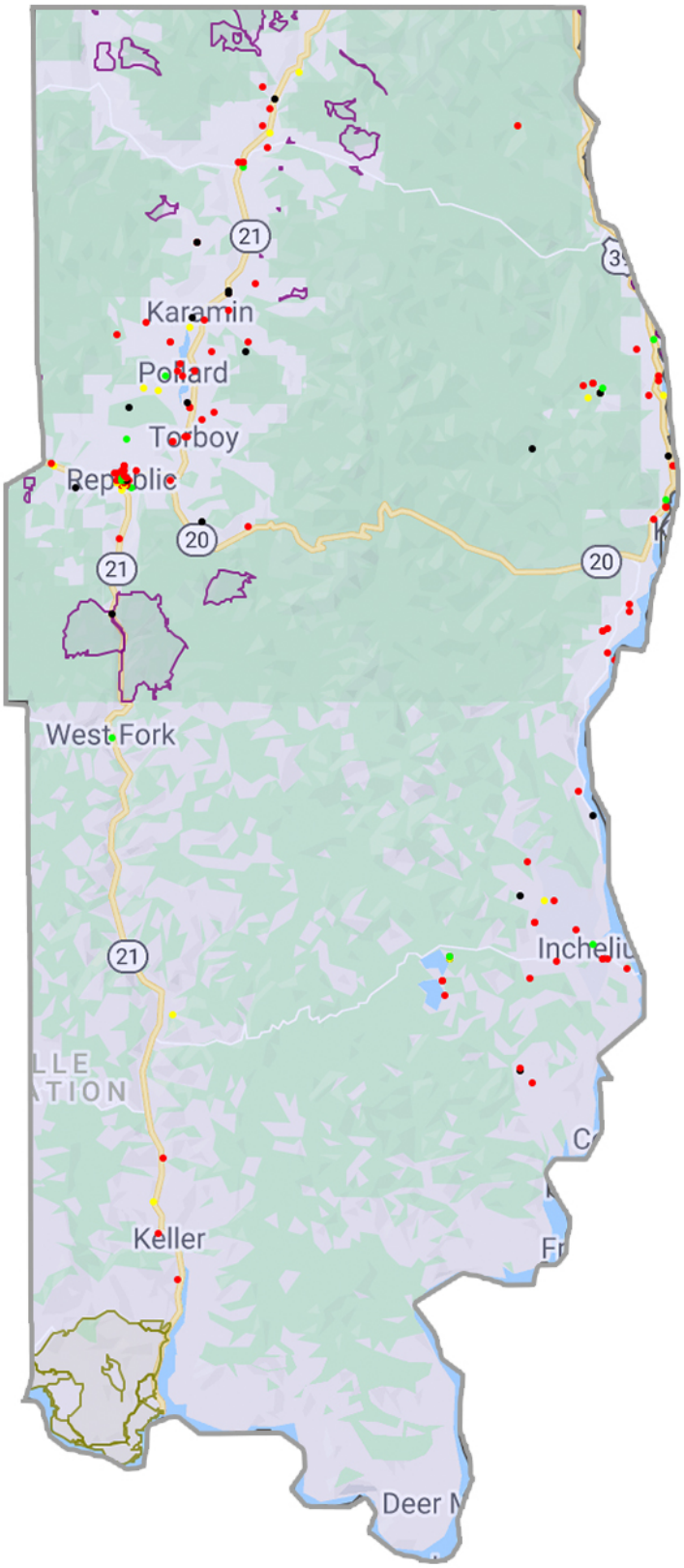
FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
16 locations, $165,115.20

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
320 locations, $363,473.10

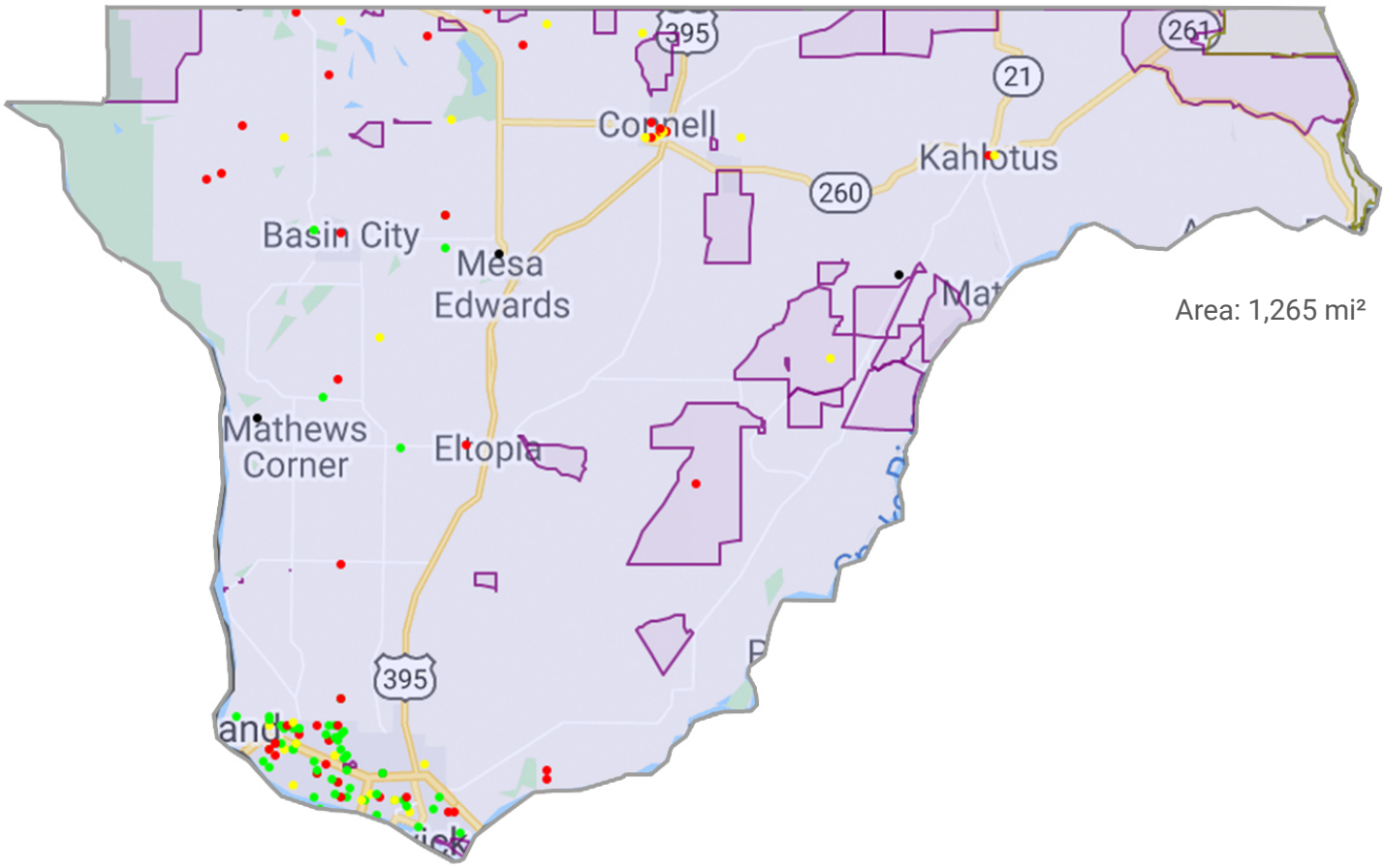
USDA ReConnect/Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Ferry County Broadband Action Team Planning Study
Grant/Match $50,000/$16,667, Total $66,667



Area: 2,257 mi²



Franklin County

Households	24,423
Population	95,222
Broadband.wa.gov survey	124
Percent participation	0.5%
Participation goal (10%)	2,442

Download

● No service	4	3.2%
● 0-10 Mbps	38	30.6%
● 10-25 Mbps	29	23.4%
● 25-150 Mbps	50	40.3%
● 150+ Mbps	3	2.4%

Min. / Max. / Avg. Mbps
Download 0.19 / 244.7 / 39.03
Upload 0.03 / 290.48 / 13.98

Upload

No service	4	3.2%
< 3 Mbps	42	33.9%
3-10 Mbps	35	28.2%
10-25 Mbps	35	28.2%
25-150 Mbps	6	4.8%
> 150 Mbps	2	1.6%

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
4 locations, $43,788

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
145 locations, $190,479.30

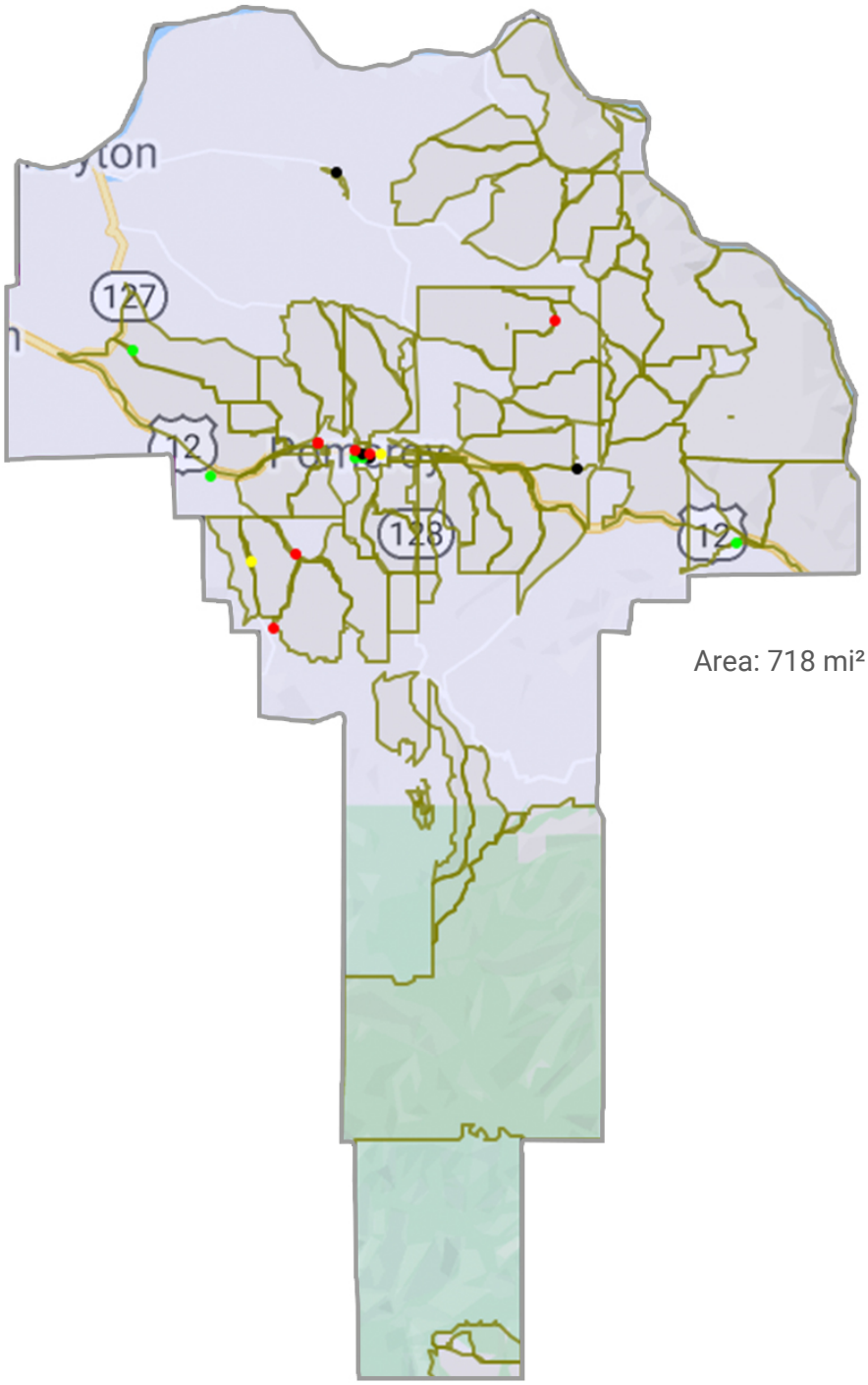
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A

Garfield County



Area: 718 mi²

Households		1,233
Population		2,247
Broadband.wa.gov survey		18
Percent participation		1.5%
Participation goal (10%)		123

Download

No service	4	22.2%
0-10 Mbps	7	38.9%
10-25 Mbps	3	16.7%
25-150 Mbps	3	16.7%
150+ Mbps	1	5.6%

Upload

No service	4	22.2%
< 3 Mbps	6	33.3%
3-10 Mbps	5	27.8%
10-25 Mbps	3	16.7%
25-150 Mbps	0	0%
> 150 Mbps	0	0%

Min. / Max. / Avg. Mbps
Download 0.38 / 219.67 / 25.26
Upload 0.51 / 21.69 / 4.8

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
420 locations, $2,446,608

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
203 locations, $284,352.60

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Port of Garfield Pomeroy Broadband Project
684 Connections, 4 ISPs,
Loan/Grant $412,500/$137,500
Match $300,000, Total $850,000
Under construction

Grant County

Households	35,083
Population	97,733
Broadband.wa.gov survey	366
Percent participation	1%
Participation goal (10%)	3,508

Download

● No service	12	3.3%
● 0-10 Mbps	155	42.3%
● 10-25 Mbps	78	21.3%
● 25-150 Mbps	112	30.6%
● 150+ Mbps	9	2.5%

Upload

No service	12	3.3%
< 3 Mbps	95	26%
3-10 Mbps	115	31.4%
10-25 Mbps	48	13.1%
25-150 Mbps	89	24.3%
> 150 Mbps	7	1.9%

Min. / Max. / Avg. Mbps
Download 0.02 / 697.28 / 30.44
Upload 0.03 / 938.2 / 27.29

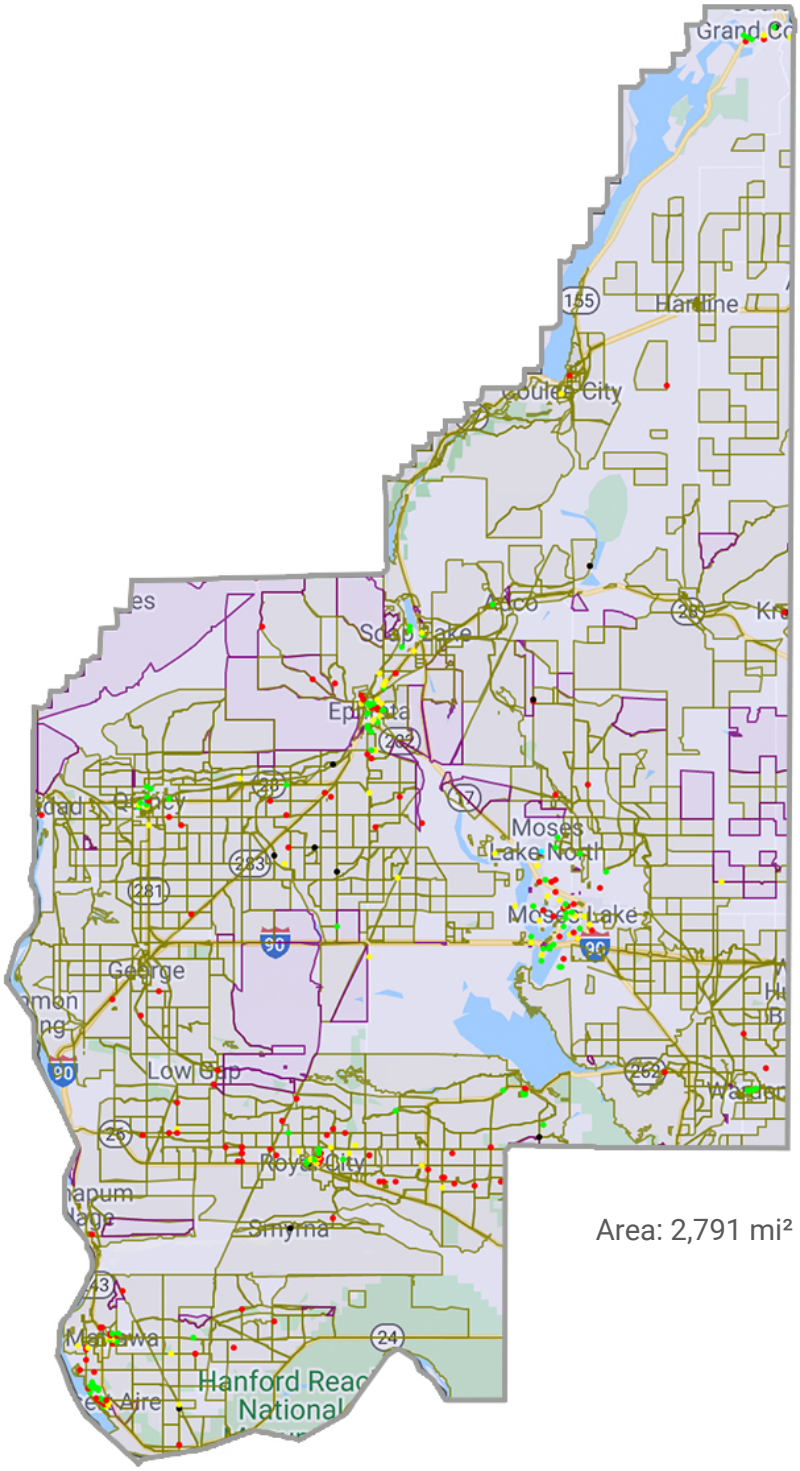
FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
558 locations, $995,976

Computer 5, Inc. d/b/a LocalTel Communications
10,562 locations, $40,338,532.30

Space Exploration Technologies Corp.
68 locations, $16,120

Total RDOF
11,188 locations, $41,350,628.30

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Computer 5 Inc. d/b/a LocalTel Communications
464 locations, $1,519,037.60

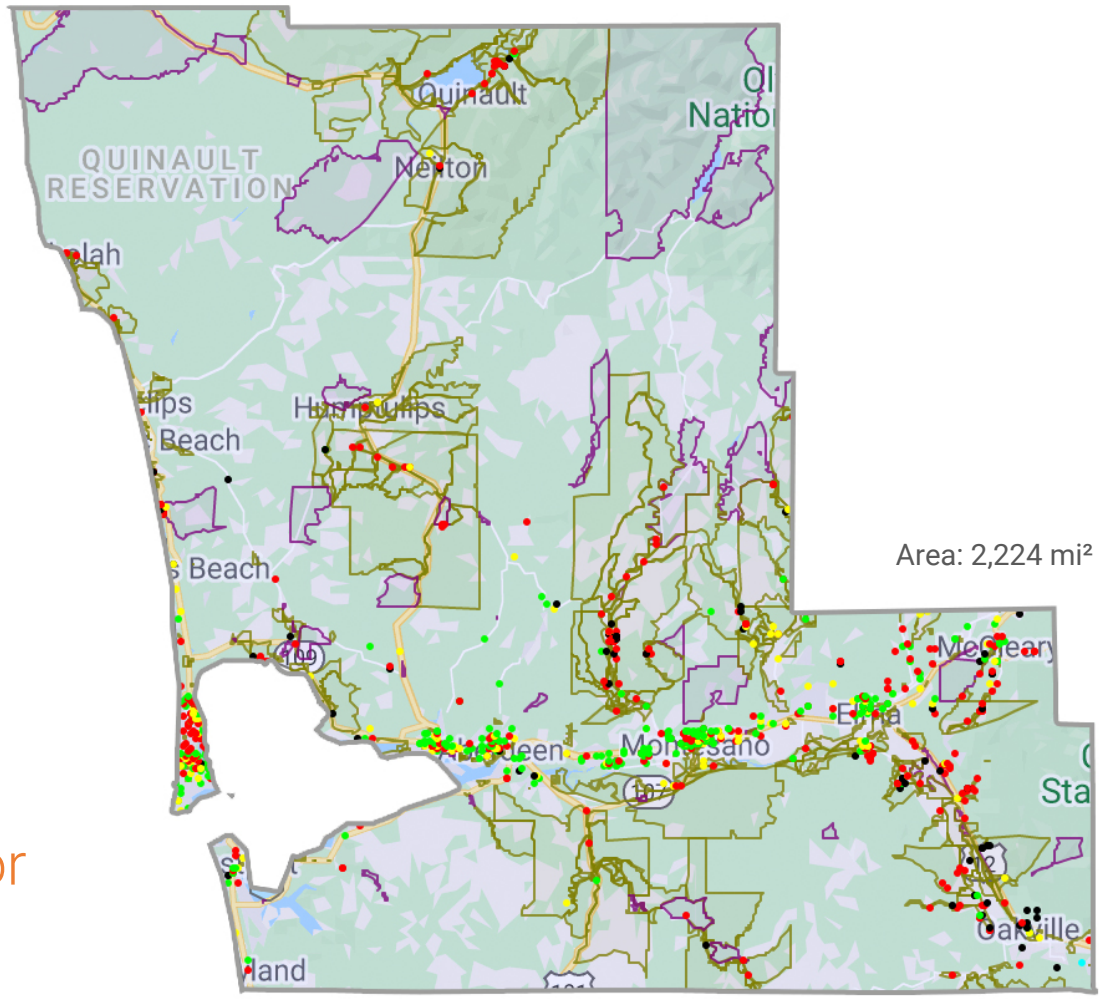


Area: 2,791 mi²

USDA ReConnect/ Community Connect
N/A

Community Economic Revitalization Board (CERB)
N/A

Public Works Board (PWB)
2020 Grant County PUD Area 15
Gloyd to Stratford, 153 locations
Loan/Grant $810,000/$810,000
Total project $1,620,000



Grays Harbor County

Households	35,166
Population	75,061
Broadband.wa.gov survey	744
Percent participation	2.1%
Participation goal (10%)	3,516

Download

No service	73	9.8%
0-10 Mbps	310	41.7%
10-25 Mbps	125	16.8%
25-150 Mbps	196	26.3%
150+ Mbps	40	5.4%

Min. / Max. / Avg. Mbps
Download 0.01 / 881 / 35.32
Upload 0.01 / 698.9 / 8.69

Upload

No service	73	9.8%
< 3 Mbps	315	42.3%
3-10 Mbps	212	28.5%
10-25 Mbps	119	16%
25-150 Mbps	19	2.6%
> 150 Mbps	6	0.8%

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
1,652 locations, $5,423,672.50

Space Exploration Technologies Corp.
1,644 locations, $2,349,929.60

Total RDOF
3,296 locations, $7,773,602.10

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
224 locations, $213,482.10

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
2020 Grays Harbor PUD Cedarville/ Oakville Feasibility Study
Grant $50,000

Community Economic Revitalization Board (CERB)
N/A

Island County

Households	40,234
Population	85,141
Broadband.wa.gov survey	593
Percent participation	1.5%
Participation goal (10%)	4,023

Download

No service	57	9.6%
0-10 Mbps	236	39.8%
10-25 Mbps	89	15%
25-150 Mbps	176	29.7%
150+ Mbps	35	5.9%

Upload

No service	57	9.6%
< 3 Mbps	252	42.5%
3-10 Mbps	196	33.1%
10-25 Mbps	70	11.8%
25-150 Mbps	14	2.4%
> 150 Mbps	4	0.7%

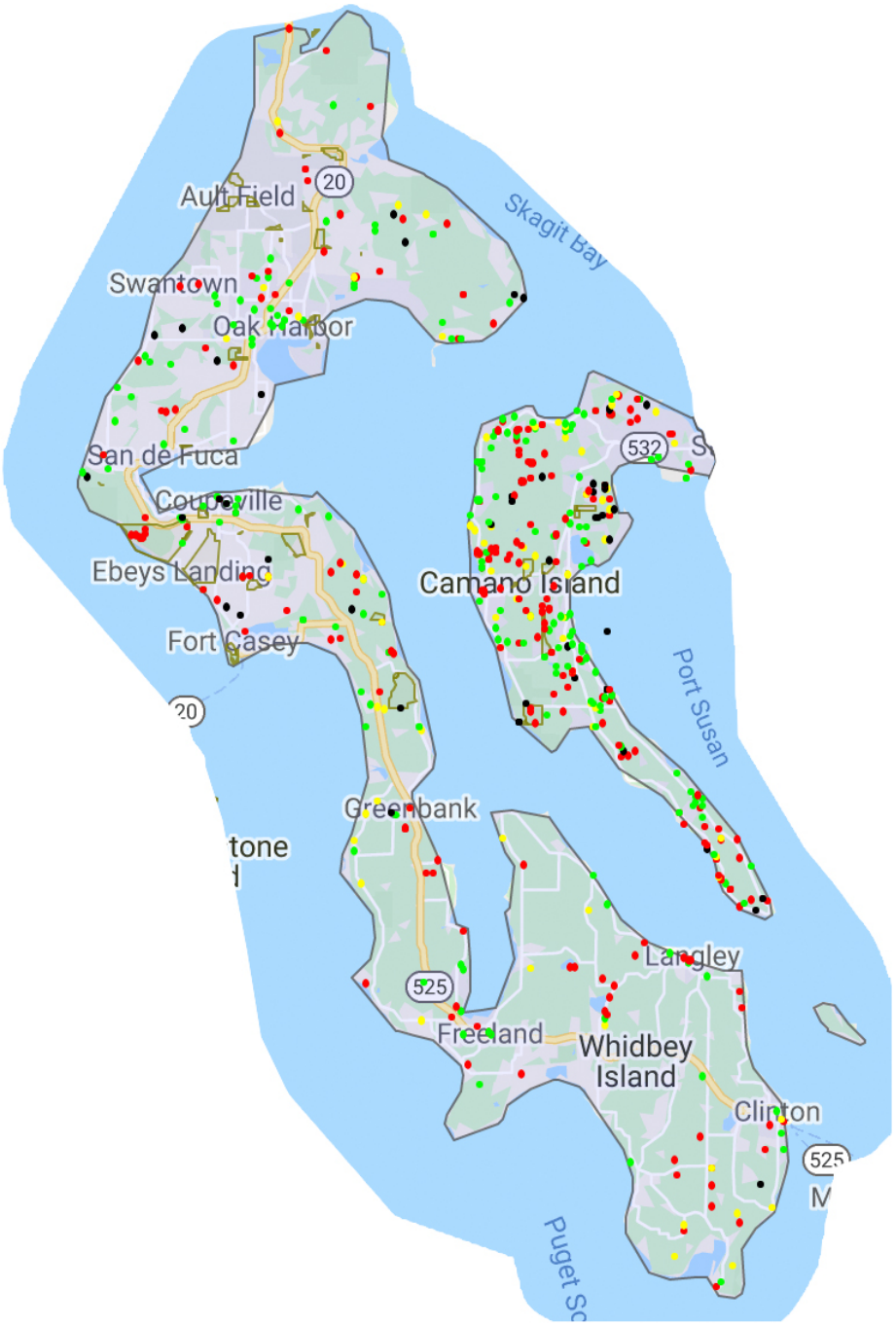
Min. / Max. / Avg. Mbps
Download 0.06 / 409.67 / 36.92
Upload 0.05 / 525.33 / 7.51

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Frontier Communications Northwest, LLC
109 locations, $71,364

Space Exploration Technologies Corp.
160 locations, $144,576.30

Total RDOF
269 locations, $215,940.30

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
N/A



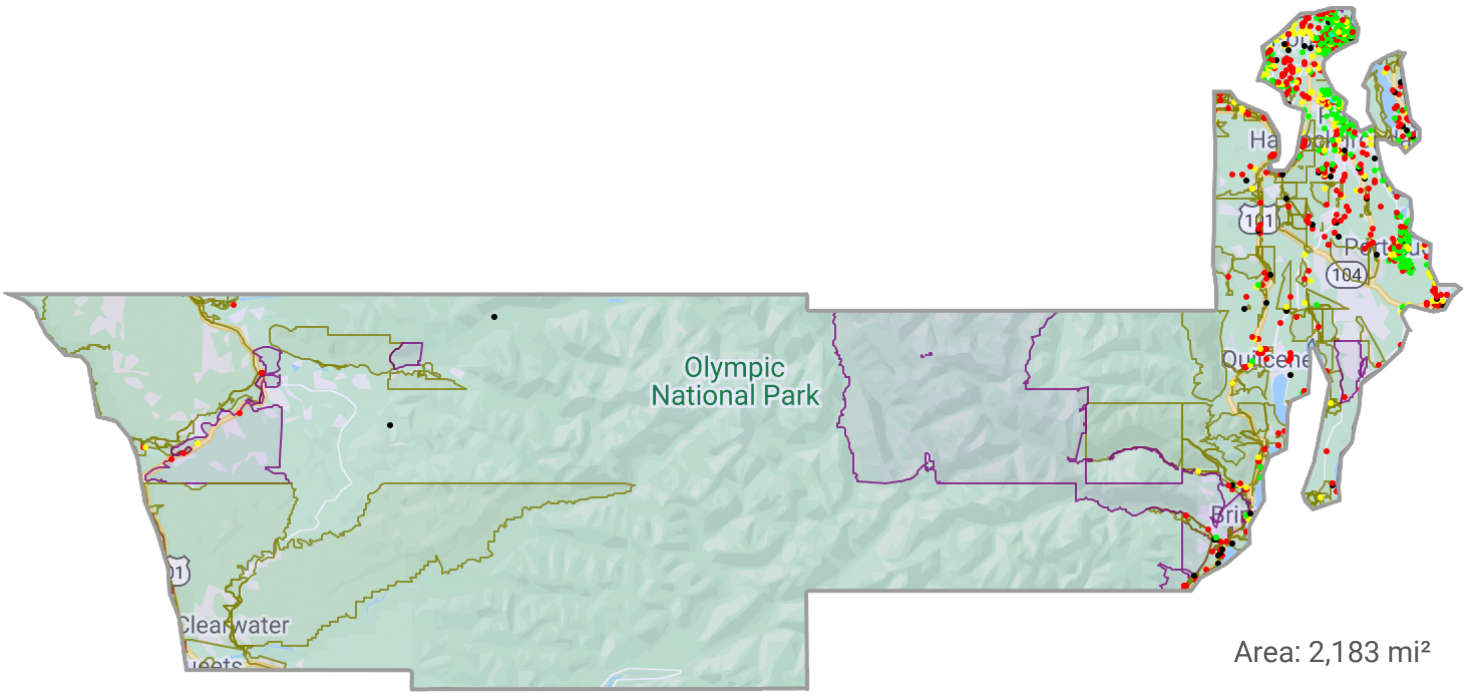
Area: 517 mi²

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Port of Coupeville Broadband Needs Assessment Study
Grant/Match $50,000/$16,667
Total $66,667



Area: 2,183 mi²

Jefferson County

Households	17,767
Population	31,729
Broadband.wa.gov survey	1,099
Percent participation	6.2%
Participation goal (10%)	1,776

Download

● No service	57	5.2%
● 0-10 Mbps	424	38.6%
● 10-25 Mbps	193	17.6%
● 25-150 Mbps	365	33.2%
● 150+ Mbps	60	5.5%

Upload

No service	57	5.2%
< 3 Mbps	521	47.4%
3-10 Mbps	374	34%
10-25 Mbps	129	11.7%
25-150 Mbps	13	1.2%
> 150 Mbps	5	0.5%

Min. / Max. / Avg. Mbps
Download 0.02 / 681.19 / 42.04
Upload 0.01 / 585.14 / 6.34

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
351 locations, $3,732,744

Space Exploration Technologies Corp.
2,073 locations, $2,223,914.70

Total RDOF
2,424 locations, $5,956,658.70

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
239 locations, $180,382.50

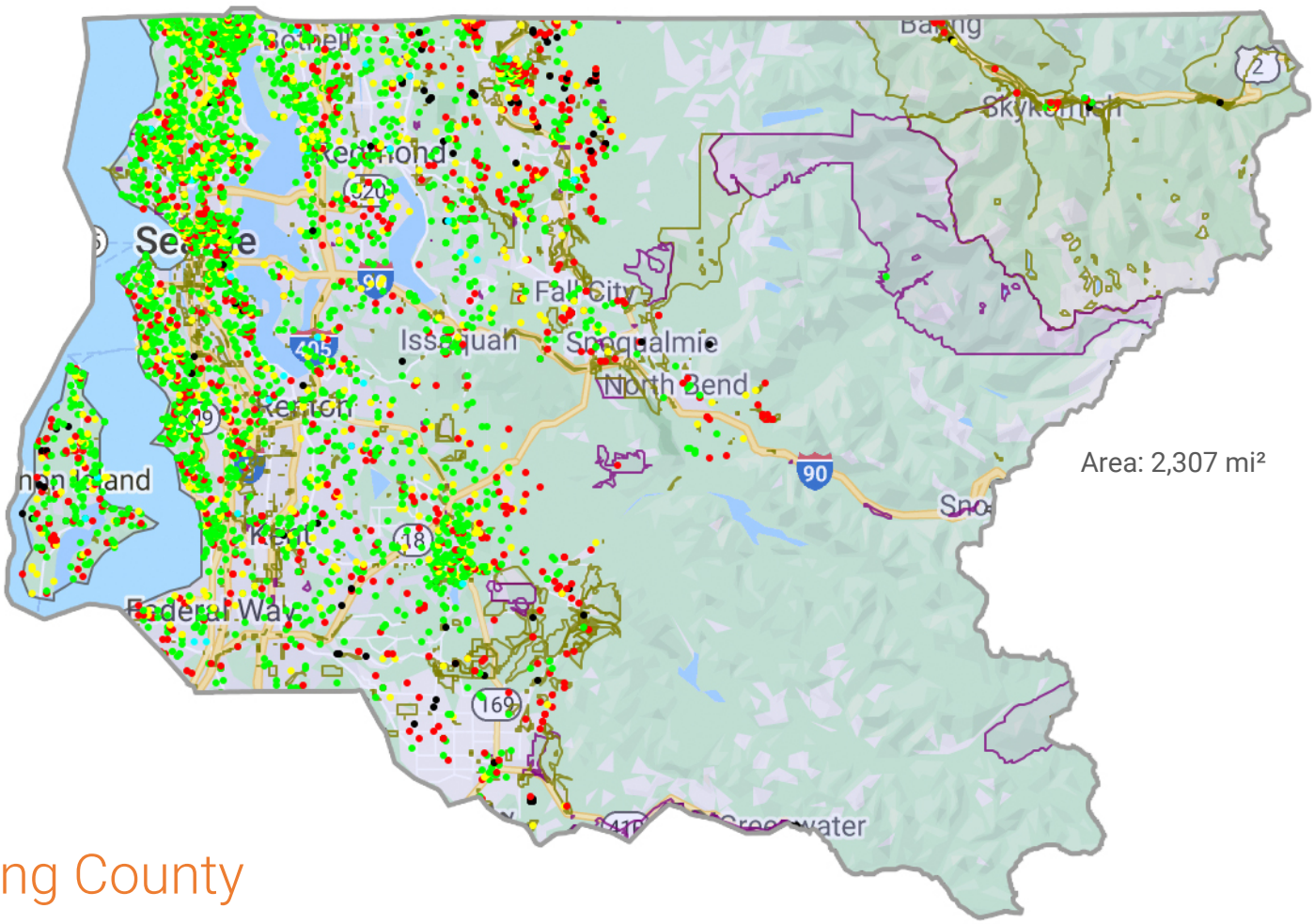
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
2020 Jefferson County PUD Phase II Business Plan Development Grant $50,000

Community Economic Revitalization Board (CERB)
2018 Jefferson County PUD #1 Broadband Infrastructure Expansion Plan Grant/Match $50,000/22,666
Total $72,666

2017 Hoh Indian Tribe Broadband Feasibility Study
Grant/Match $37,350/$12,800
Total $50,150



King County

Households	851,261	
Population	2,253,000	
Broadband.wa.gov survey	4,181	
Percent participation	0.5%	
Participation goal (10%)	85,126	

Download

No service	98	2.3%
0-10 Mbps	939	22.5%
10-25 Mbps	726	17.4%
25-150 Mbps	1,893	45.3%
150+ Mbps	525	12.6%

Upload

No service	98	2.3%
< 3 Mbps	1,010	24.2%
3-10 Mbps	1,682	40.2%
10-25 Mbps	915	21.9%
25-150 Mbps	401	9.6%
> 150 Mbps	75	1.8%

Min. / Max. / Avg. Mbps
Download 0.01 / 1,200 / 67.61
Upload 0.01 / 892.7 / 16.73

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
307 locations, $518,742

Frontier Communications Northwest, LLC, 366 locations, $453,144

Space Exploration Technologies Corp., 4,744 locations, $6,286,140

Total RDOF
5,417 locations, $7,258,026

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
217 locations, $212,182.80

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
Town of Skykomish Broadband Feasibility Planning Study
Grant $50,000

Community Economic Revitalization Board (CERB)
N/A

Kitsap County

Households	107,367
Population	271,473
Broadband.wa.gov survey	1,229
Percent participation	1.1%
Participation goal (10%)	10,736

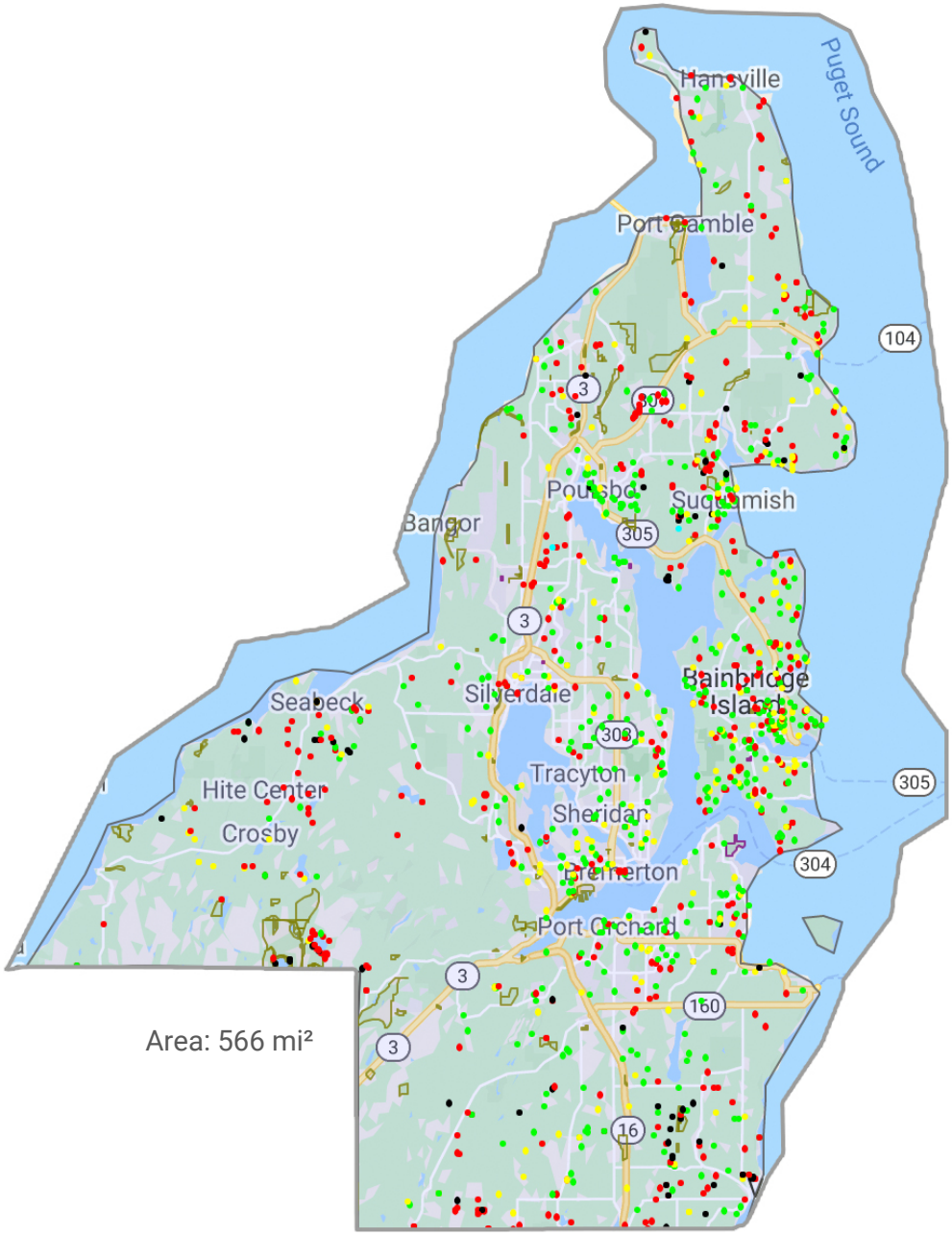
Download

● No service	67	5.5%
● 0-10 Mbps	464	37.8%
● 10-25 Mbps	218	17.7%
● 25-150 Mbps	387	31.5%
● 150+ Mbps	93	7.6%

Upload

No service	67	5.5%
< 3 Mbps	524	42.6%
3-10 Mbps	392	31.9%
10-25 Mbps	179	14.6%
25-150 Mbps	60	4.9%
> 150 Mbps	7	0.6%

Min. / Max. / Avg. Mbps
Download 0.02 / 840.8 / 44.64
Upload 0.01 / 871.18 / 9.02



Area: 566 mi²

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
10 locations, $106,206

Space Exploration Technologies Corp.,
565 locations, $487,788.70

Total RDOF
575 locations, $593,994.70

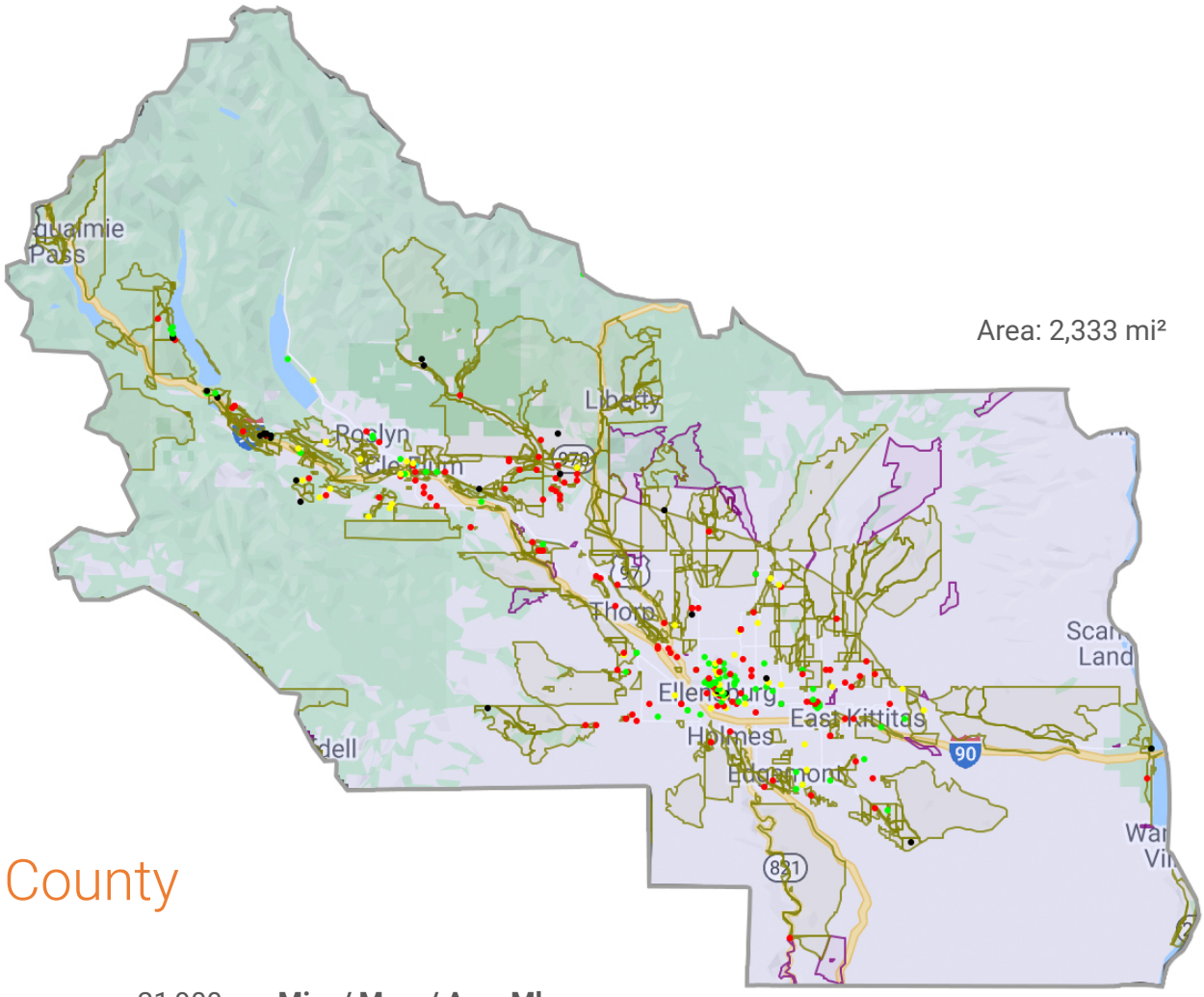
FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
12 locations, $6,178.10

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Kitsap County PUD #1 Last Mile Broadband Big Valley Project
158 Connections, 6 ISPs
Loan/Grant $500,000/$500,000
Match $420,000, Total $1,420,000
Under construction



Kittitas County

Households		21,900
Population		47,935
Broadband.wa.gov survey		305
Percent participation		1.4%
Participation goal (10%)		2,190

Download		
No service	28	9.2%
0-10 Mbps	132	43.3%
10-25 Mbps	53	17.4%
25-150 Mbps	83	27.2%
150+ Mbps	9	3%

Upload		
No service	28	9.2%
< 3 Mbps	131	43%
3-10 Mbps	77	25.2%
10-25 Mbps	45	14.8%
25-150 Mbps	22	7.2%
> 150 Mbps	2	0.7%

Min. / Max. / Avg. Mbps
Download 0.03 / 542.79 / 31.72
Upload 0.01 / 316.39 / 11.38

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Commnet Wireless, LLC
1,391 locations, $4,844,769.10

Space Exploration Technologies Corp.
2,947 locations, $3,732,060.70

Total RDOF
4,338 locations, $8,576,829.80

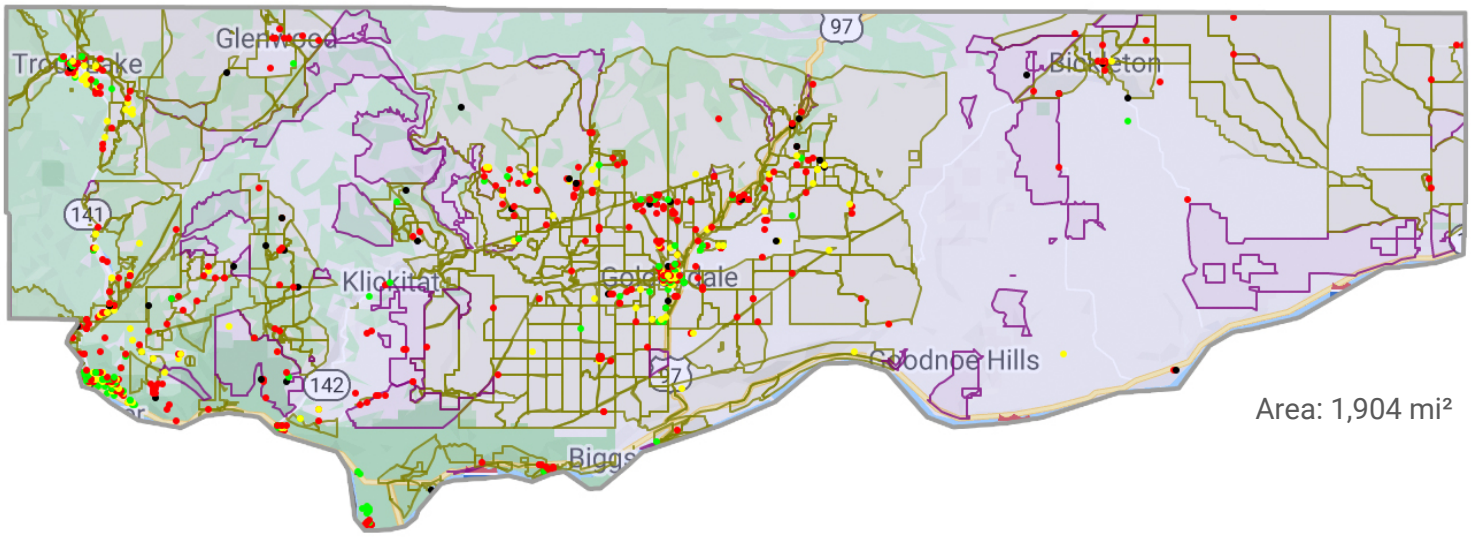
FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
263 locations, $285,076.40

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
2020 Ellensburg Business Development Authority Centerfuse Broadband Expansion Study
Grant $50,000

Community Economic Revitalization Board (CERB)
N/A



Klickitat County

Households		9,786
Population		22,107
Broadband.wa.gov survey		734
Percent participation		7.5%
Participation goal (10%)		978

Download

No service	38	5.2%
0-10 Mbps	401	54.6%
10-25 Mbps	158	21.5%
25-150 Mbps	122	16.6%
150+ Mbps	15	2%

Upload

No service	38	5.2%
< 3 Mbps	455	62%
3-10 Mbps	154	21%
10-25 Mbps	68	9.3%
25-150 Mbps	17	2.3%
> 150 Mbps	2	0.3%

Min. / Max. / Avg. Mbps
Download 0.01 / 422.13 / 21.24
Upload 0.01 / 378.03 / 5.26

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
3,975 locations, $5,291,527.90

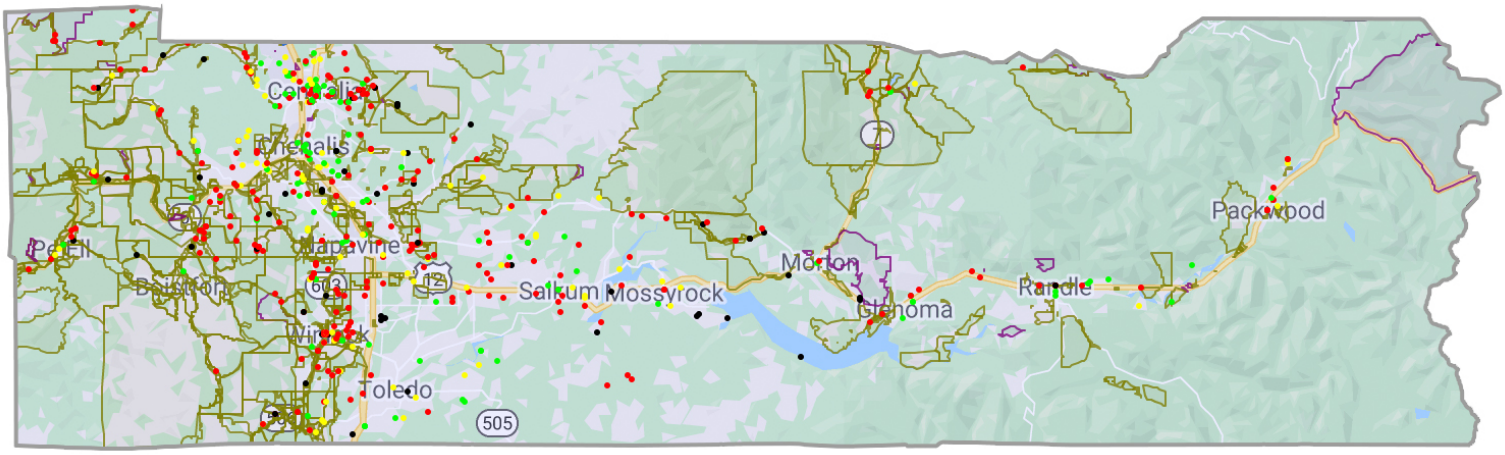
FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
357 locations, $314,240.60

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2018 City of Goldendale Broadband Plan Grant/Match $50,000/$16,440
Total $66,440



Area: 2,436 mi²

Lewis County

Households		34,050
Population		80,707
Broadband.wa.gov survey		519
Percent participation		1.5%
Participation goal (10%)		3,405

Download

No service	52	10%
0-10 Mbps	266	51.3%
10-25 Mbps	92	17.7%
25-150 Mbps	98	18.9%
150+ Mbps	11	2.1%

Upload

No service	52	10%
< 3 Mbps	294	56.6%
3-10 Mbps	112	21.6%
10-25 Mbps	34	6.6%
25-150 Mbps	24	4.6%
> 150 Mbps	3	0.6%

Min. / Max. / Avg. Mbps
Download 0.01 / 374.38 / 21.22
Upload 0.01 / 566.86 / 7.5

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
1,212 locations, $3,957,564

Space Exploration Technologies Corp.
4,383 locations, $5,326,133.30

Total RDOF
5,595 locations, $9,283,697.30

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
101 locations, $87,099.80

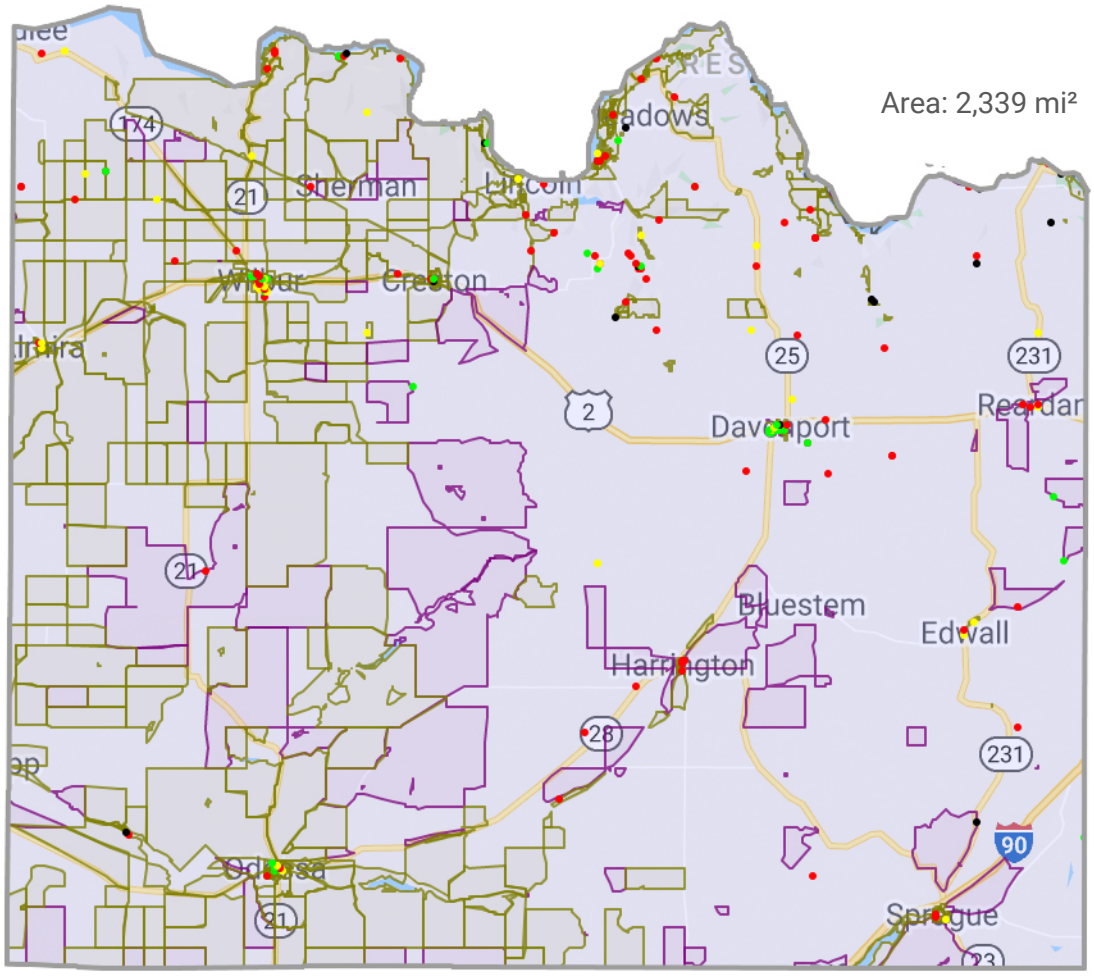
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 PUD #1 of Lewis County Lewis County PUD Broadband Planning Study Grant/Match $50,000/$16,667
Total $66,667

Lincoln County



Households	5,776
Population	10,740
Broadband.wa.gov survey	171
Percent participation	3%
Participation goal (10%)	577

Download

● No service	16	9.4%
● 0-10 Mbps	92	53.8%
● 10-25 Mbps	35	20.5%
● 25-150 Mbps	27	15.8%
● 150+ Mbps	1	0.6%

Upload

No service	16	9.4%
< 3 Mbps	89	52%
3-10 Mbps	41	24%
10-25 Mbps	20	11.7%
25-150 Mbps	5	2.9%
> 150 Mbps	0	0%

Min. / Max. / Avg. Mbps
Download 0.01 / 189.08 / 14.36
Upload 0.01 / 55.16 / 4.68

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
3,127 locations, $4,116,298.50

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Computer 5 Inc. d/b/a LocalTel Communications
583 locations, $1,725,937.20

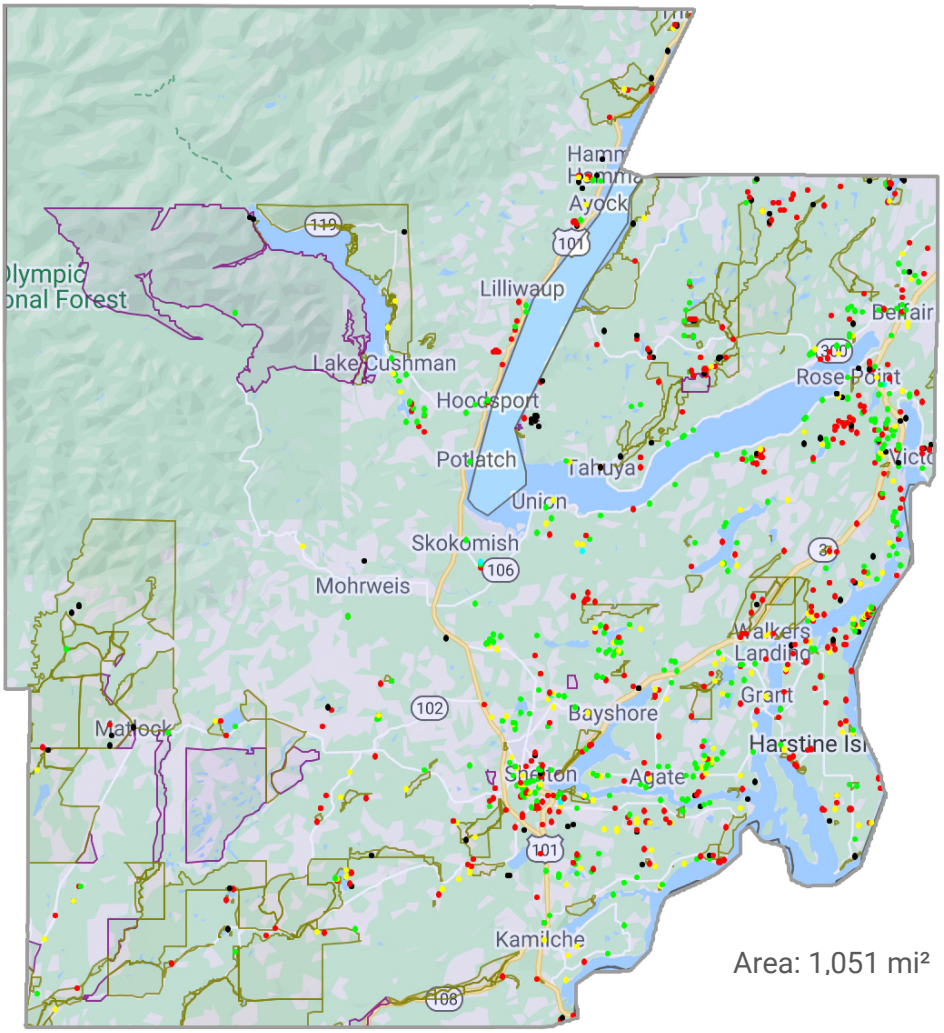
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2020 Lincoln County Broadband Planning Study
Grant/Match $37,500/$12,500
Total $50,000

Mason County



Households		32,518
Population		66,768
Broadband.wa.gov survey		1,070
Percent participation		3.3%
Participation goal (10%)		3,251

Download

● No service	107	10%
● 0-10 Mbps	413	38.6%
● 10-25 Mbps	188	17.6%
● 25-150 Mbps	296	27.7%
● 150+ Mbps	66	6.2%

Upload

No service	107	10%
< 3 Mbps	474	44.3%
3-10 Mbps	277	25.9%
10-25 Mbps	133	12.4%
25-150 Mbps	60	5.6%
> 150 Mbps	19	1.8%

Min. / Max. / Avg. Mbps
Download 0.01 / 926.1 / 39.18
Upload 0.02 / 915.3 / 13.96

☐ **FCC Rural Digital Opportunity Fund (RDOF)** 2020 - 10 yrs
Space Exploration Technologies Corp., 2,374 locations, $2,236,201.60

■ **FCC Connect America Fund Phase II (CAF II)** 2018 – 10 yrs
Viasat, Inc.
150 locations, $153,984.80

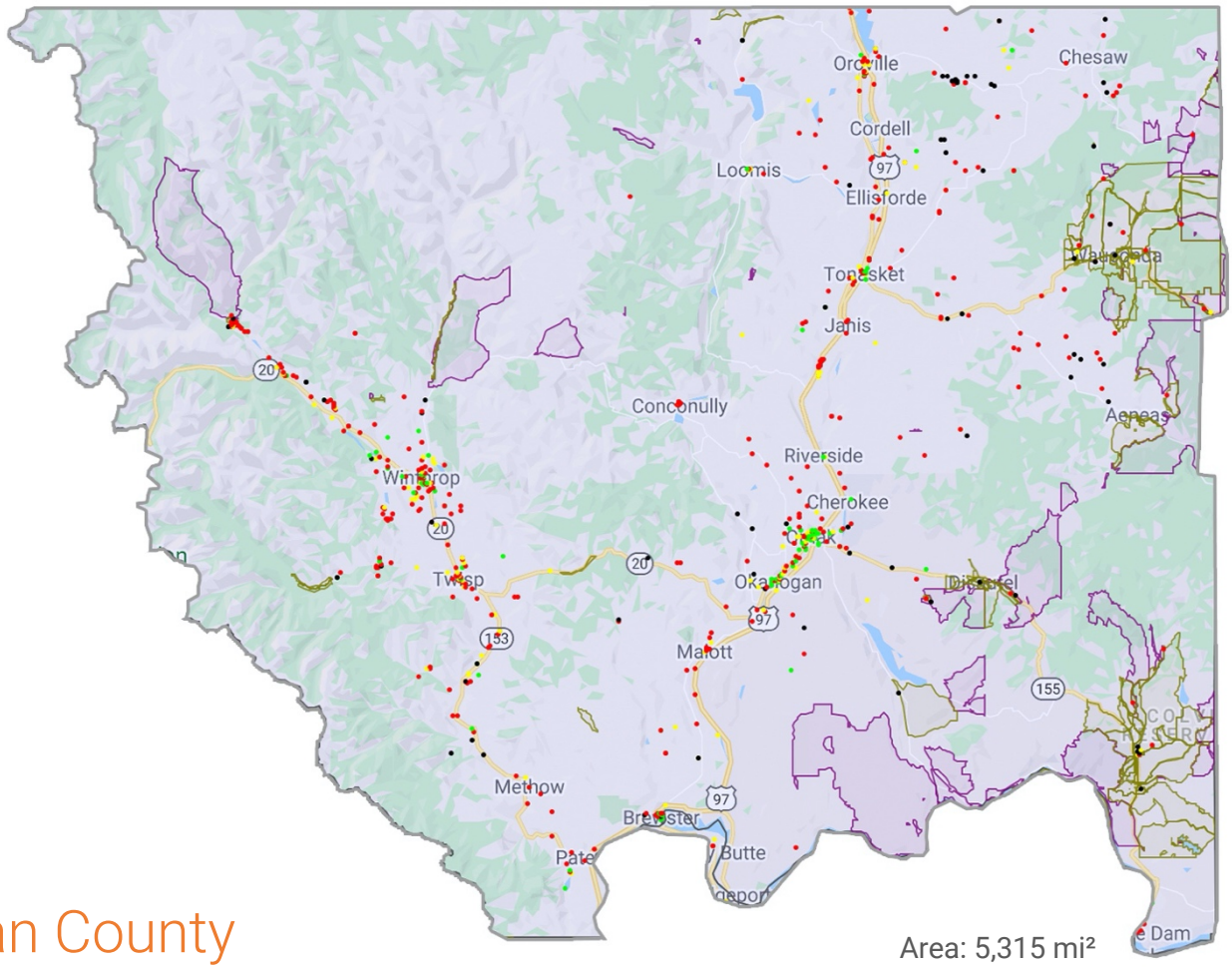
USDA ReConnect
2020 Mason PUD 3 Three Fingers Rural Broadband Fiber Project
163 locations, Grant $2,476,279

USDA Community Connect
N/A

Public Works Board (PWB)
2020 Hood Canal Telephone Mason County Line Broadband Expansion, 36 locations
Loan $196,202

Community Economic Revitalization Board (CERB)
2019 Mason PUD 3 Mason County Rural Broadband Fiber Expansion Phase 2,675 Connections, 6 ISPs
Loan/Grant $1,000,000/$1,000,000
Match $689,260, Total $2,689,260
Under construction

2018 Mason PUD 3 Mason County Rural Broadband Fiber Expansion
523 Connections, 7 ISPs
Loan/Grant $408,325/$408,324
Match $911,324, Total $1,727,973
Under construction



Okanogan County

Area: 5,315 mi²

Households		22,245
Population		42,369
Broadband.wa.gov survey		588
Percent participation		2.6%
Participation goal (10%)		2,224

Download

● No service	74	12.6%
● 0-10 Mbps	330	56.1%
● 10-25 Mbps	98	16.7%
● 25-150 Mbps	78	13.3%
● 150+ Mbps	8	1.4%

Upload

No service	74	12.6%
< 3 Mbps	302	51.4%
3-10 Mbps	135	23%
10-25 Mbps	49	8.3%
25-150 Mbps	24	4.1%
> 150 Mbps	4	0.7%

Min. / Max. / Avg. Mbps
Download 0.01 / 330.4 / 16.90
Upload 0.01 / 520.2 / 7.28

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
284 locations, $1,631,418

Space Exploration Technologies Corp., 841 locations, $2,502,816.20

Total RDOF
1,125 locations, $4,134,234.20

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
284 locations, $385,390.20

USDA ReConnect
N/A

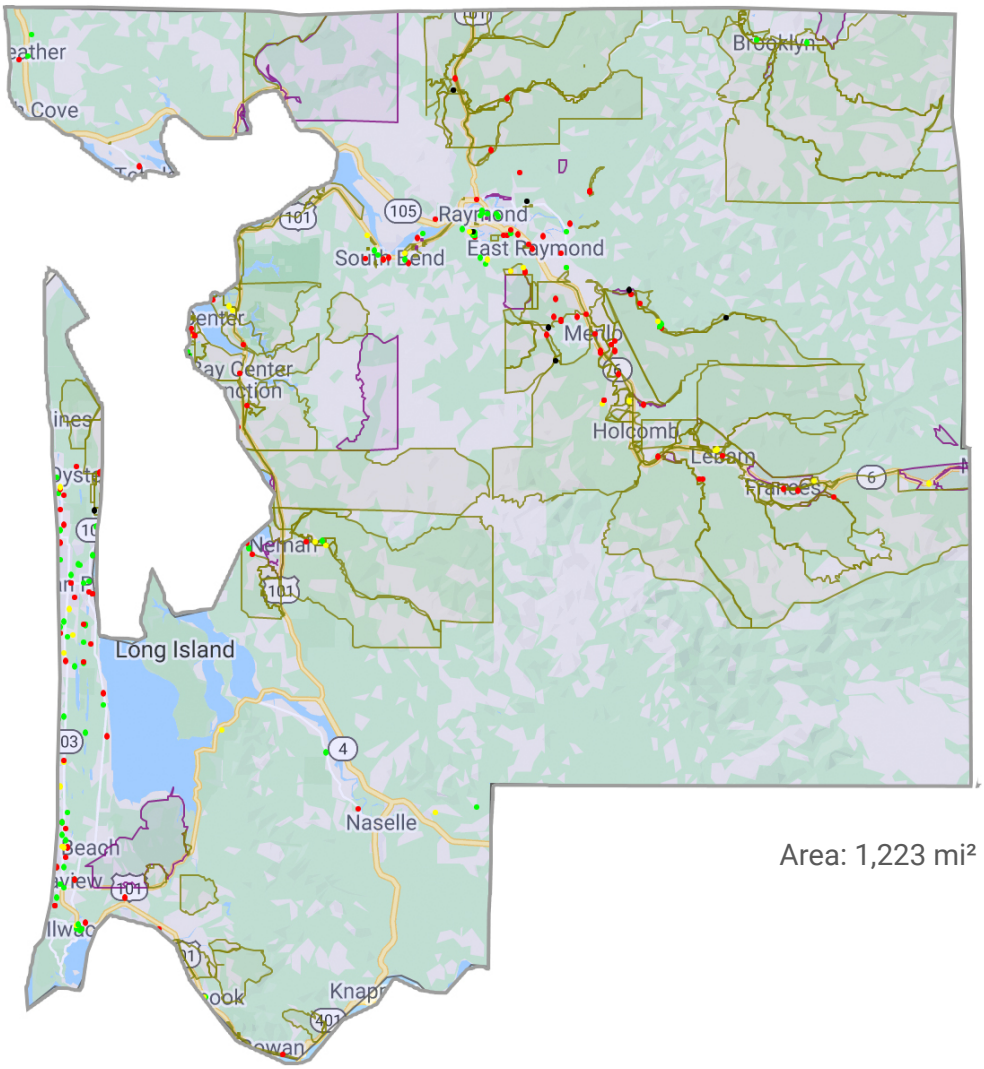
USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Twisp Public Development Authority Methow Valley Broadband Action Team (BAT) Planning Study
Grant/Match $50,000/$16,667
Total $66,667

2019 Okanogan County Broadband Action Team Planning Study
Grant/Match $50,000/$17,000
Total $67,000

Pacific County



Area: 1,223 mi²

Households		15,547
Population		22,036
Broadband.wa.gov survey		235
Percent participation		1.5%
Participation goal (10%)		1,554

Download

No service	10	4.3%
0-10 Mbps	113	48.1%
10-25 Mbps	36	15.3%
25-150 Mbps	71	30.2%
150+ Mbps	5	2.1%

Upload

No service	10	4.3%
< 3 Mbps	121	51.5%
3-10 Mbps	48	20.4%
10-25 Mbps	49	20.9%
25-150 Mbps	5	2.1%
> 150 Mbps	2	0.9%

Min. / Max. / Avg. Mbps
Download 0.04 / 424.7 / 34.09
Upload 0.01 / 639.94 / 9.80

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CCO Holdings, LLC
89 locations, $100,788

CenturyLink, Inc.
566 locations, $3,075,822

Space Exploration Technologies Corp.
610 locations, $1,626,856.90

Total RDOF
1,265 locations, $4,803,466.90

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
65 locations, $69,817.70

USDA ReConnect
N/A

USDA Community Connect
N/A

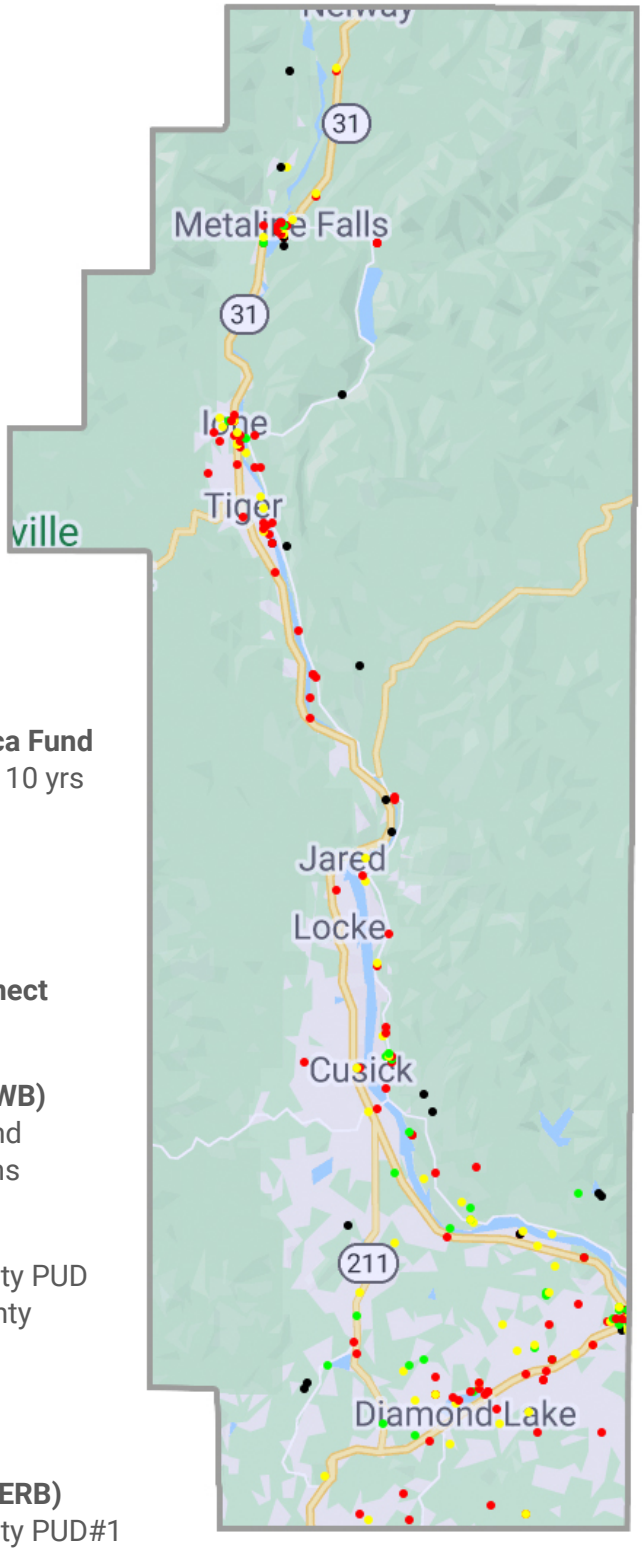
Public Works Board (PWB)
2020 Port of Ilwaco Pacific County Broadband Rural Infrastructure Buildout, 2600 locations
Loan/Grant $2,715,570/$612,882
Total $3,328,452

2020 Port of Ilwaco Pacific County Broadband Feasibility Planning Grant $50,000

Community Economic Revitalization Board (CERB)
2019 Port of Ilwaco Pacific County Broadband Assessment
Grant/Match $50,000/$66,800
Total $116,800

2019 Port of Willapa Harbor Raymond Port Dock Fiber Extension
11 Connections, 2 ISPs
Loan/Grant $48,750/$48,750
Match $32,500, Total $130,000
Completed 2019

Pend Oreille County



Area: 1,425 mi²

Households	7,936
Population	13,602
Broadband.wa.gov survey	238
Percent participation	3%
Participation goal (10%)	793

Download

● No service	20	8.4%
● 0-10 Mbps	111	46.6%
● 10-25 Mbps	70	29.4%
● 25-150 Mbps	36	15.1%
● 150+ Mbps	1	0.4%

Upload

No service	20	8.4%
< 3 Mbps	114	47.9%
3-10 Mbps	45	18.9%
10-25 Mbps	31	13%
25-150 Mbps	28	11.8%
> 150 Mbps	0	0%

Min. / Max. / Avg. Mbps
Download 0.01 / 283.9 / 14.70
Upload 0.01 / 104.86 / 11.28

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
N/A

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
N/A

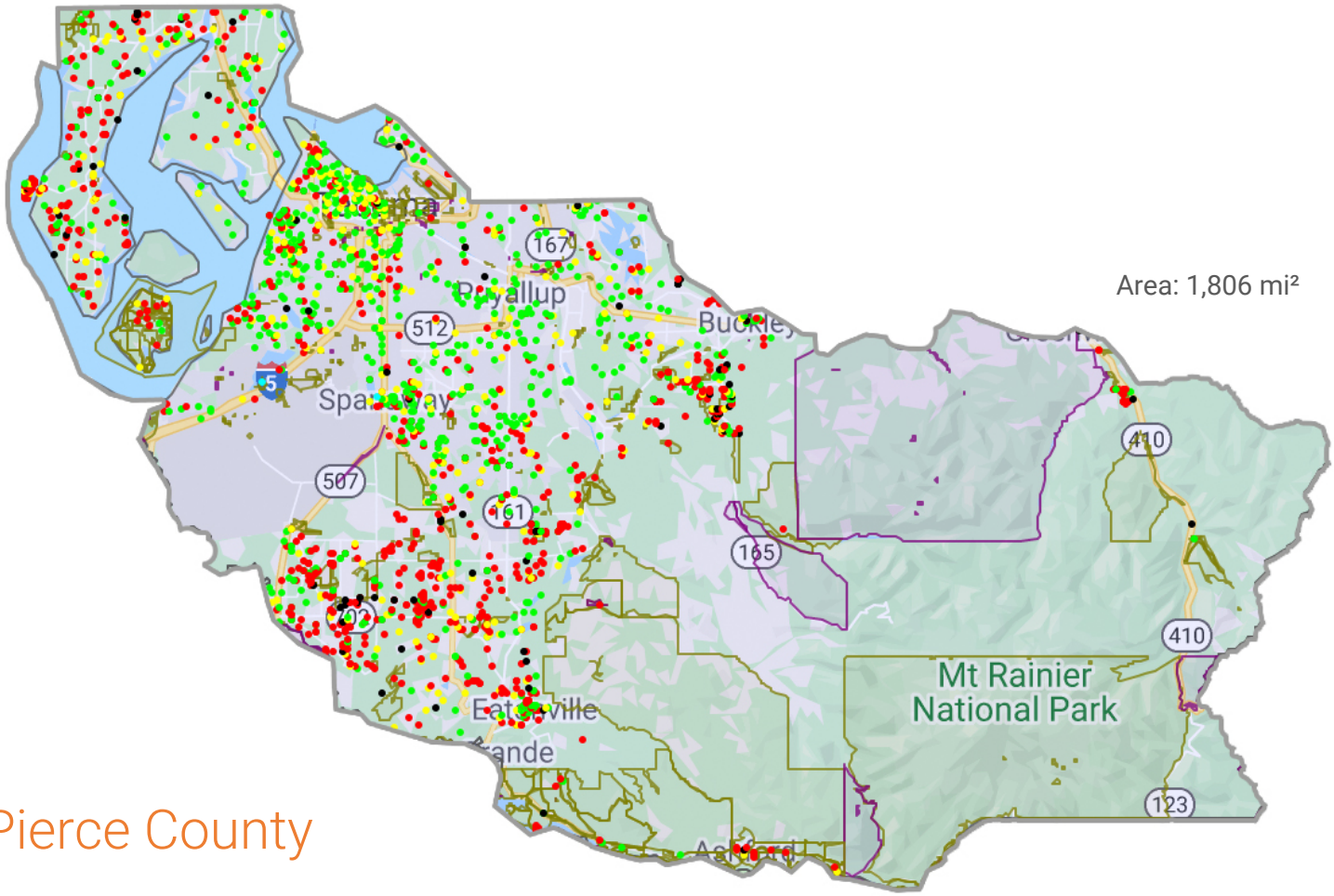
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
Kalispel Tribe Broadband Expansion, 119 locations
Grant $5,000,000

2020 Pend Oreille County PUD North Pend Oreille County Feasibility Study
Grant $50,000

Community Economic Revitalization Board (CERB)
2019 Pend Oreille County PUD#1 North Pend Oreille County Broadband Feasibility Study
Grant/Match $50,000/$50,000
Total $100,000



Pierce County

Households	325,375
Population	904,980
Broadband.wa.gov survey	1,997
Percent participation	0.6%
Participation goal (10%)	32,537

Download

● No service	91	4.6%
● 0-10 Mbps	817	40.9%
● 10-25 Mbps	351	17.6%
● 25-150 Mbps	596	29.8%
● 150+ Mbps	142	7.1%

Upload

No service	91	4.6%
< 3 Mbps	860	43.1%
3-10 Mbps	630	31.5%
10-25 Mbps	316	15.8%
25-150 Mbps	91	4.6%
> 150 Mbps	9	0.5%

Min. / Max. / Avg. Mbps
Download 0.01 / 888.5 / 41.01
Upload 0.01 / 856.7 / 8.07

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
749 locations, $3,166,950

Space Exploration Technologies Corp.
3,171 locations, $2,695,108.60

Total RDOF
3,920 locations, $5,862,058.60

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
174 locations, $190,529

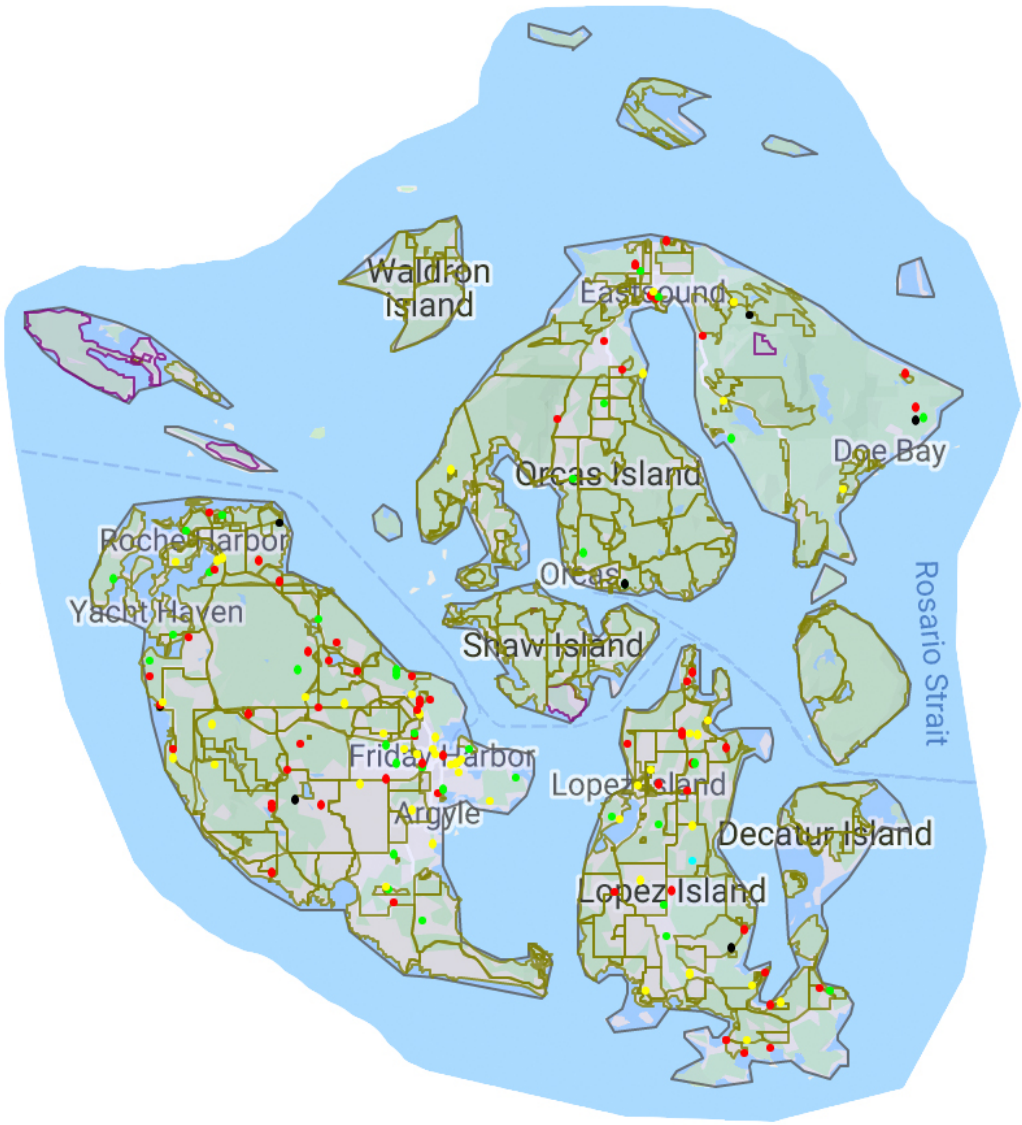
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A

San Juan County



Area: 621 mi²

Households		13,313
Population		17,128
Broadband.wa.gov survey		157
Percent participation		1.2%
Participation goal (10%)		1,331

Download

● No service	7	4.5%
● 0-10 Mbps	63	40.1%
● 10-25 Mbps	51	32.5%
● 25-150 Mbps	32	20.4%
● 150+ Mbps	4	2.5%

Upload

No service	7	4.5%
< 3 Mbps	84	53.5%
3-10 Mbps	23	14.6%
10-25 Mbps	20	12.7%
25-150 Mbps	22	14%
> 150 Mbps	1	0.6%

Min. / Max. / Avg. Mbps
Download 0.5 / 724.49 / 26.48
Upload 0.06 / 223.64 / 13.31

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
4,867 locations, $8,358,226.90

Commnet Wireless, LLC
3,761 locations, $2,151,884

Space Exploration Technologies Corp.
1,639 locations, $805,945.90

Total RDOF
10,267 locations, $11,316,056.80

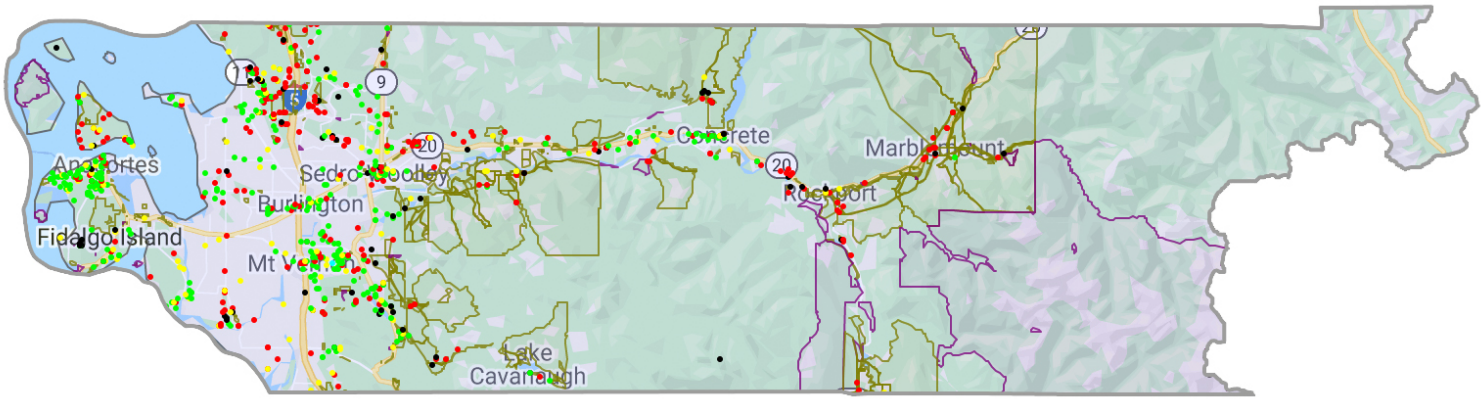
FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
149 locations, $52,549.10

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A



Area: 1,920 mi²

Skagit County

Households	51,473
Population	129,205
Broadband.wa.gov survey	778
Percent participation	1.5%
Participation goal (10%)	5,147

Download

No service	66	8.5%
0-10 Mbps	281	36.1%
10-25 Mbps	117	15%
25-150 Mbps	259	33.3%
150+ Mbps	55	7.1%

Upload

No service	66	8.5%
< 3 Mbps	322	41.4%
3-10 Mbps	242	31.1%
10-25 Mbps	114	14.7%
25-150 Mbps	27	3.5%
> 150 Mbps	7	0.9%

Min. / Max. / Avg. Mbps
Download 0.01 / 551.24 / 42.47
Upload 0.01 / 363.18 / 8.29

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Frontier Communications Northwest, LLC
1,485 locations, $4,523,381

Space Exploration Technologies Corp.
1,260 locations, $2,344,749.60

Total RDOF
2,745 locations, $6,868,130.60

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
102 locations, $84,425.10

USDA ReConnect
N/A

USDA Community Connect
N/A

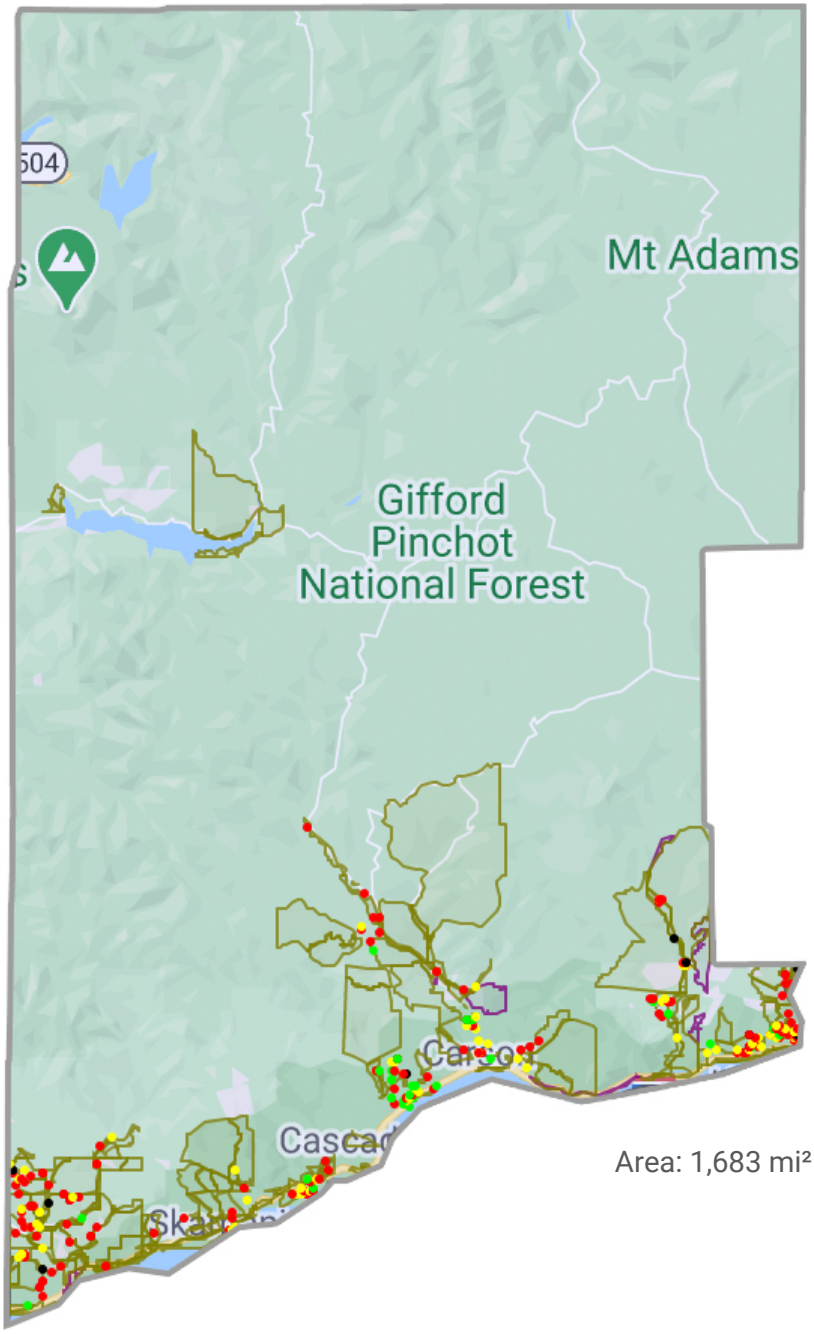
Public Works Board (PWB)
2020 Port of Skagit Sauk-Suiattle Construction Project, 28 locations
Loan/Grant $1,687,500/$1,687,500
Total $3,375,000
(Co-funded with CERB)

2020 Port of Skagit Sauk-Suiattle Tribe Dark Fiber Optic Needs Assessment and Feasibility
Grant $50,000

Community Economic Revitalization Board (CERB)
2018 Port of Skagit County, Skagit Community Fiber Optic Backbone
1,307 locations, 4 ISPs
Loan/Grant $500,000/$500,000
Match $3,696,800, Total $4,696,800
Under construction
(Co-funded with PWB)

2017 Port of Skagit County Dark Fiber Optic Assessment and Feasibility Study
Grant/Match $50,000/$67,125
Total $117,125

Skamania County



Households		5,628
Population		12,083
Broadband.wa.gov survey		273
Percent participation		4.9%
Participation goal (10%)		562

Download

No service	10	3.7%
0-10 Mbps	153	56%
10-25 Mbps	74	27.1%
25-150 Mbps	33	12.1%
150+ Mbps	3	1.1%

Upload

No service	10	3.7%
< 3 Mbps	205	75.1%
3-10 Mbps	40	14.7%
10-25 Mbps	11	4%
25-150 Mbps	5	1.8%
> 150 Mbps	2	0.7%

Min. / Max. / Avg. Mbps
Download 0.01 / 574.38 / 17.75
Upload 0.04 / 415.01 / 5.83

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Frontier Communications Northwest, LLC
1,121 locations, $1,775,850

Space Exploration Technologies Corp.
1,146 locations, $1,203,627.70

Total RDOF
2,267 locations, $2,979,477.70

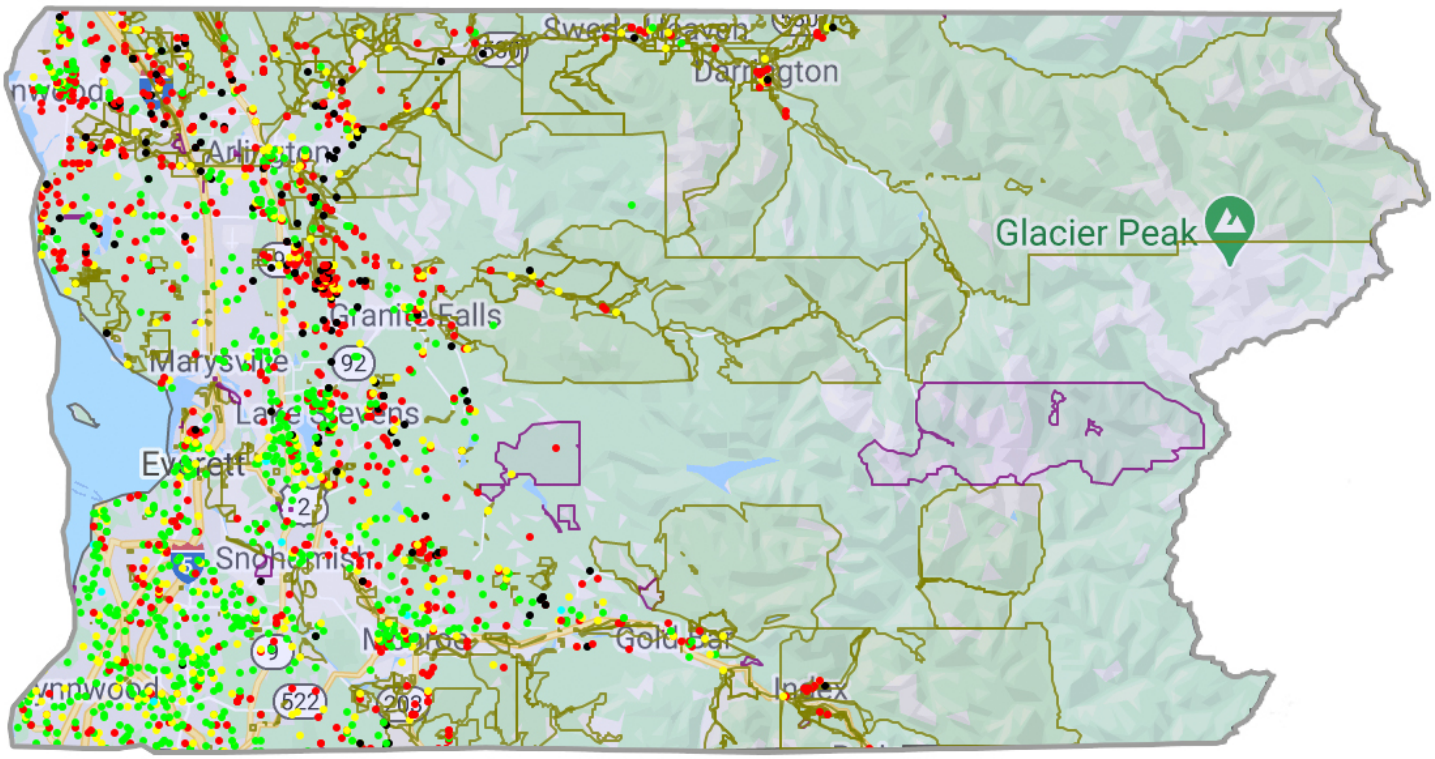
FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
191 locations, $221,930.60

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2020 Skamania PUD #1
Skamania Broadband Needs Assessment and Feasibility Study
Grant/Match $50,000/$16,667
Total $66,667



Area: 2,196 mi²

Snohomish County

Households		286,659
Population		822,083
Broadband.wa.gov survey		1,929
Percent participation		0.7%
Participation goal (10%)		28,665

Download

No service	158	8.2%
0-10 Mbps	667	34.6%
10-25 Mbps	352	18.2%
25-150 Mbps	583	30.2%
150+ Mbps	169	8.8%

Upload

No service	158	8.2%
< 3 Mbps	736	38.2%
3-10 Mbps	524	27.2%
10-25 Mbps	341	17.7%
25-150 Mbps	149	7.7%
> 150 Mbps	21	1.1%

Min. / Max. / Avg. Mbps
Download 0.02 / 940 / 47.72
Upload 0.001 / 900.2 / 12.21

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Frontier Communications Northwest, LLC, 3,876 locations, $7,443,225.80

Space Exploration Technologies Corp., 3,137 locations, $4,036,793.50

Total RDOF
7,013 locations, $11,480,019.30

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Viasat, Inc.
61 locations, $57,131.70

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A

Spokane County

Households	201,434
Population	522,798
Broadband.wa.gov survey	1,400
Percent participation	0.7%
Participation goal (10%)	20,143

Download

No service	94	6.7%
0-10 Mbps	581	41.5%
10-25 Mbps	253	18.1%
25-150 Mbps	397	28.4%
150+ Mbps	75	5.4%

Upload

No service	94	6.7%
< 3 Mbps	613	43.8%
3-10 Mbps	461	32.9%
10-25 Mbps	178	12.7%
25-150 Mbps	40	2.9%
> 150 Mbps	14	1.0%

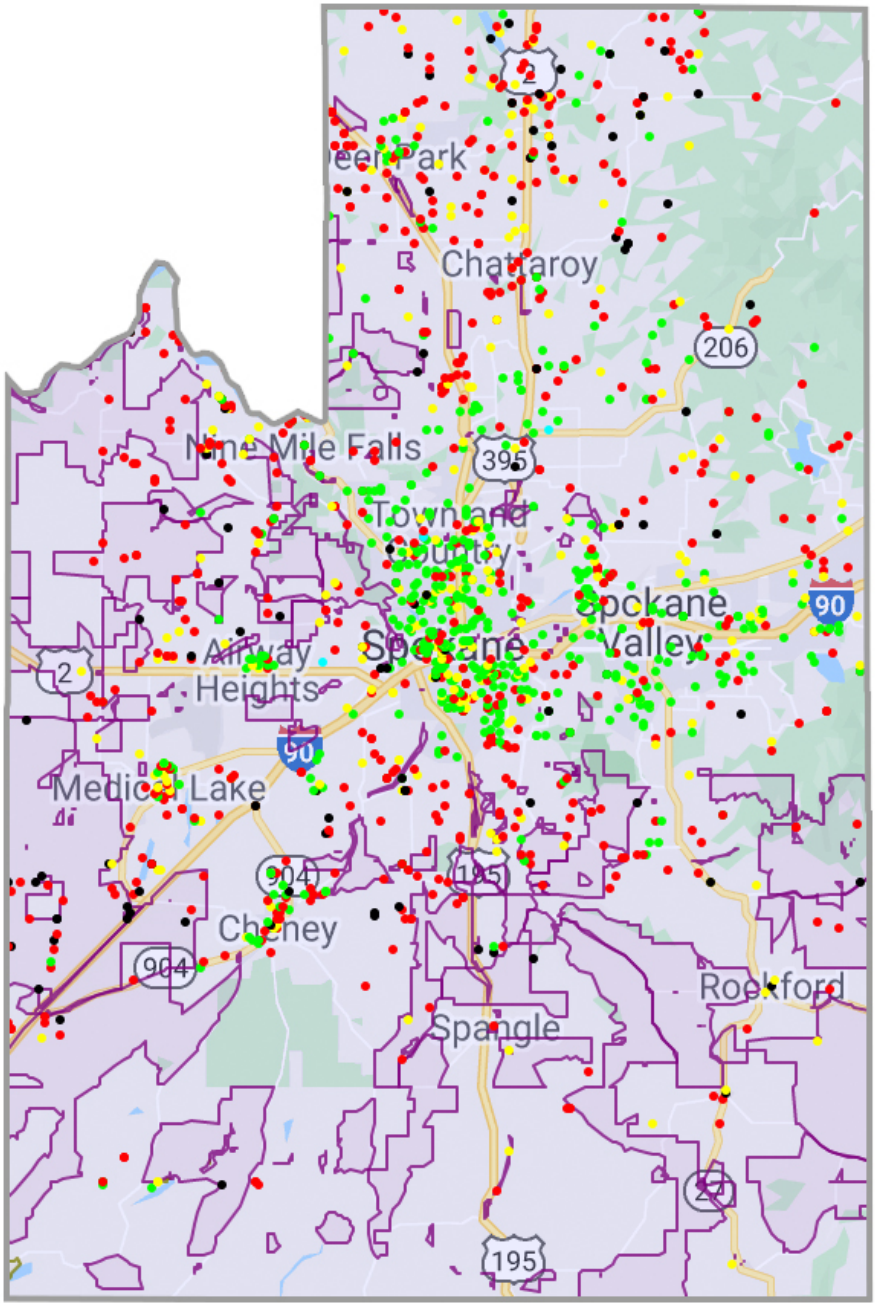
Min. / Max. / Avg. Mbps
Download 0.01 / 938.6 / 36.78
Upload 0.01 / 935.6 / 10.18

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Space Exploration Technologies Corp.
27 locations, $15,485

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Newmax, LLC dba Intermax Networks
823 locations, $2,160,450.60

Viasat Carrier Services, Inc.
2,920 locations, $816,503.70

Total CAF II
3,743 locations, $2,976,954.30



Area: 1,781 mi²

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A

Stevens County

Households		21,156
Population		45,723
Broadband.wa.gov survey		1924
Percent participation		9.1%
Participation goal (10%)		2,115

Download

No service	303	15.7%
0-10 Mbps	1,018	52.9%
10-25 Mbps	289	15%
25-150 Mbps	250	13%
150+ Mbps	64	3.3%

Upload

No service	303	15.7%
< 3 Mbps	1,035	53.8%
3-10 Mbps	356	18.5%
10-25 Mbps	196	10.2%
25-150 Mbps	30	1.6%
> 150 Mbps	4	0.2%

Min. / Max. / Avg. Mbps
Download 0.01 / 744.72 / 19.93
Upload 0.01 / 432.1 / 4.43

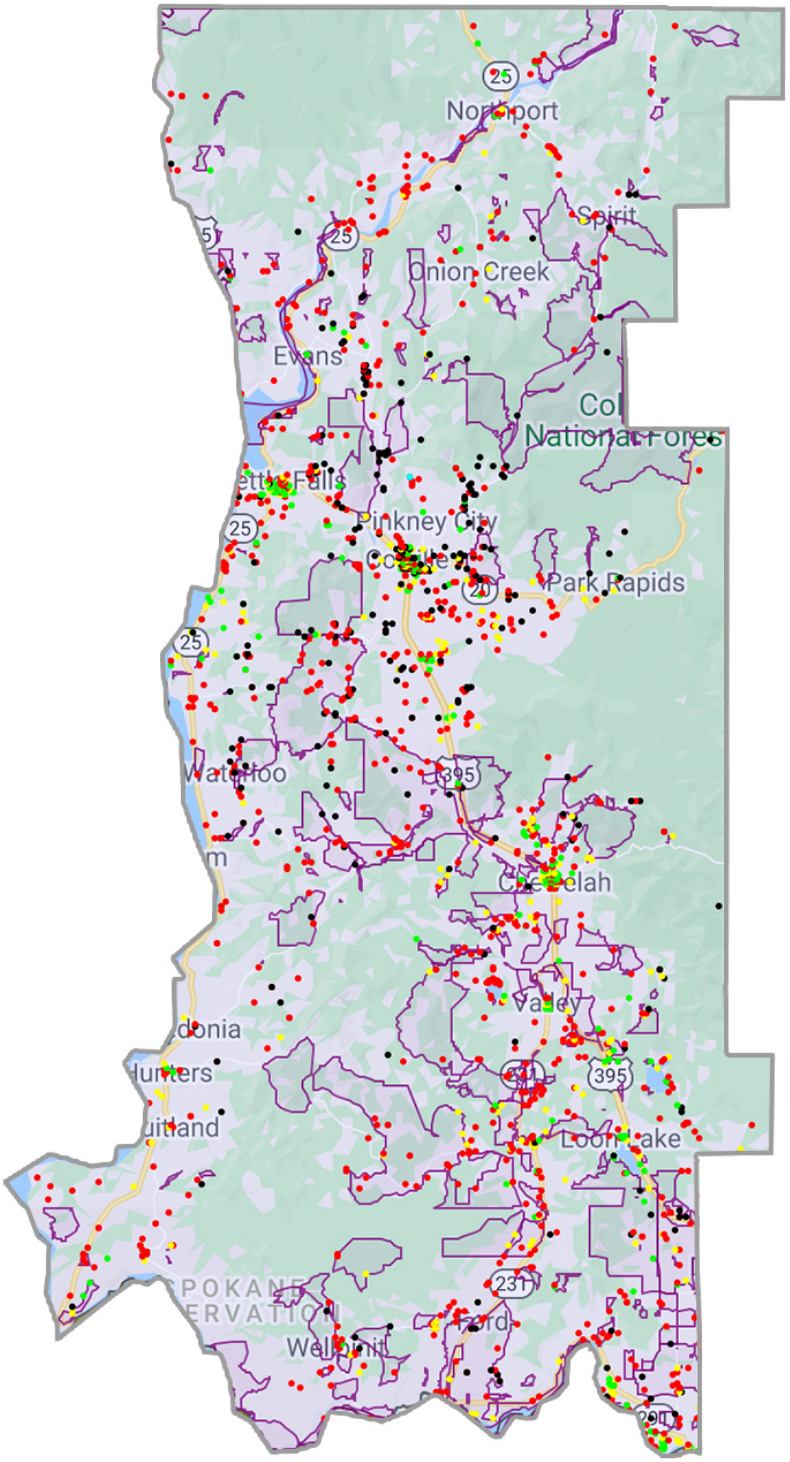
FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
N/A

FCC Connect America Fund Phase II (CAF II) 2018 – 10 yrs
Declaration Networks Group, Inc
2,929 locations, $3,904,100.20

Viasat, Inc.
156 locations, $98,574.30

Total CAF II
3,085 locations, $4,002,674.50

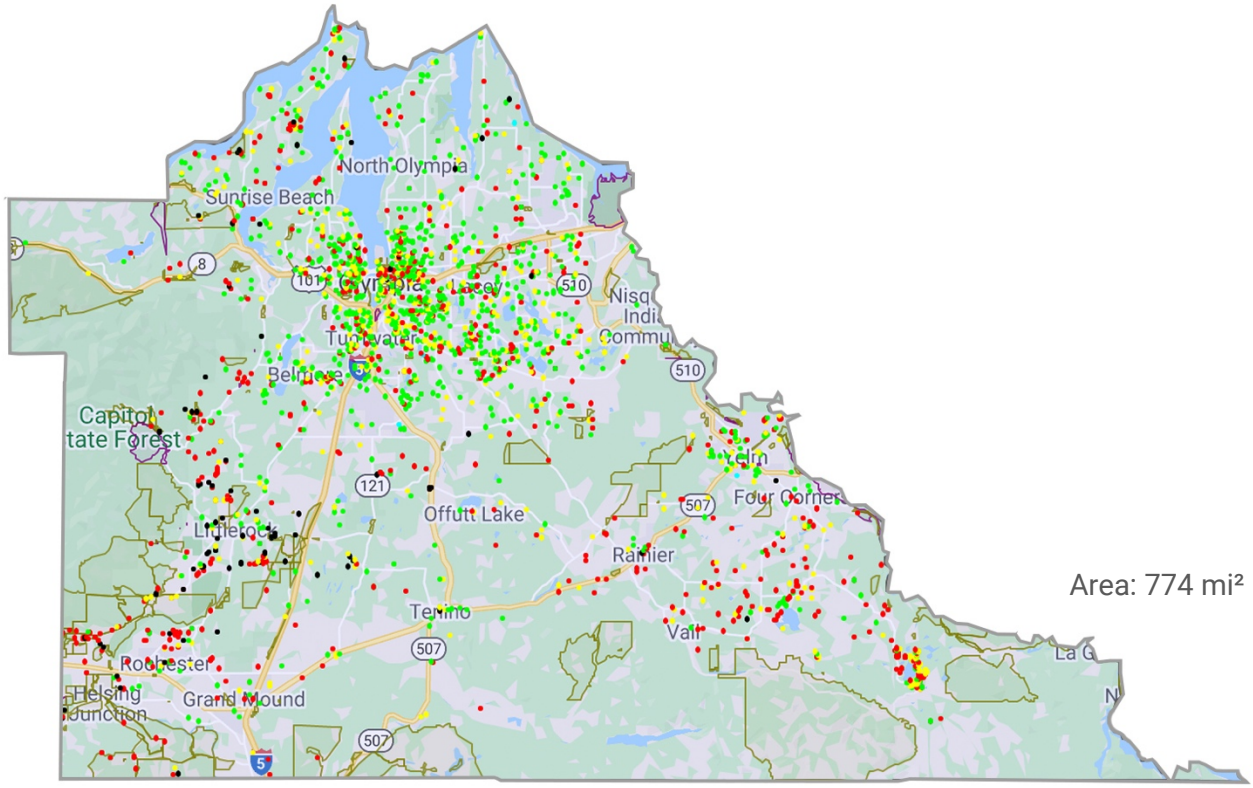
USDA ReConnect/Community Connect
N/A



Area: 2,541 mi²

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
N/A



Thurston County

Households	108,182
Population	290,536
Broadband.wa.gov survey	2,236
Percent participation	2.1%
Participation goal (10%)	10,818

Download

● No service	96	4.3%
● 0-10 Mbps	666	29.8%
● 10-25 Mbps	528	23.6%
● 25-150 Mbps	781	34.9%
● 150+ Mbps	165	7.4%

Upload

No service	96	4.3%
< 3 Mbps	647	28.9%
3-10 Mbps	1,053	47.1%
10-25 Mbps	369	16.5%
25-150 Mbps	69	3.1%
> 150 Mbps	2	0.1%

Min. / Max. / Avg. Mbps
Download 0.02 / 854.3 / 46.13
Upload 0.01 / 658.59 / 7.46

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CenturyLink, Inc.
377 locations, $1,027,992

Space Exploration Technologies Corp.
852 locations, $2,032,827.60

Total RDOF
1,229 locations, $3,060,819.60

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
31 locations, $29,465.50

USDA ReConnect/Community Connect
N/A

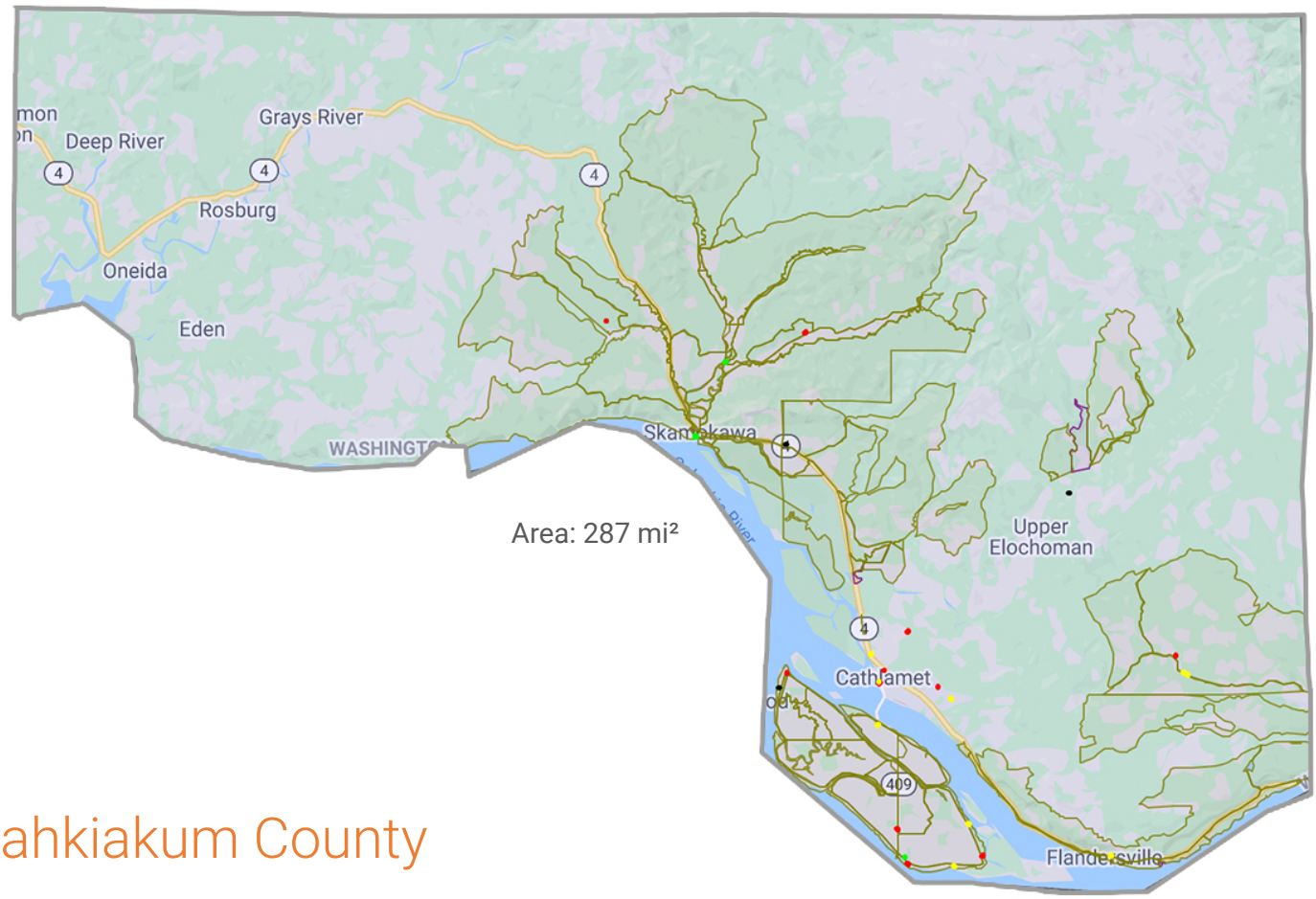
Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Nisqually Indian Tribe
Community Broadband Project
111 Connections, 1 ISP
Loan/Grant $450,000/$150,000
Match $200,000, Total $800,000
Under construction

2020 Nisqually Broadband Regional Feasibility Study - Proposal 3
Grant/Match $50,000/$16,667
Total $66,667

2019 Nisqually Broadband Regional Feasibility Project - Proposal 2
Grant/Match $50,000/$16,667
Total $66,667

2019 Nisqually Broadband Regional Feasibility Project - Proposal 1
Grant/Match $50,000/$16,667
Total $66,667



Area: 287 mi²

Wahkiakum County

Households		2,067
Population		4,426
Broadband.wa.gov survey		30
Percent participation		1.5%
Participation goal (10%)		206

Download

No service	3	10%
0-10 Mbps	12	40%
10-25 Mbps	8	26.7%
25-150 Mbps	6	20%
150+ Mbps	1	3.3%

Upload

No service	3	10%
< 3 Mbps	13	43.3%
3-10 Mbps	7	23.3%
10-25 Mbps	3	10%
25-150 Mbps	3	10%
> 150 Mbps	1	3.3%

Min. / Max. / Avg. Mbps
Download 0.33 / 167 / 22.42
Upload 0.15 / 212 / 20.48

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CCO Holdings, LLC
970 locations, $3,099,696

Space Exploration Technologies Corp., 7 locations, $28,066.20

Total RDOF
977 locations, $3,127,762.20

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
5 locations, $4,667.70

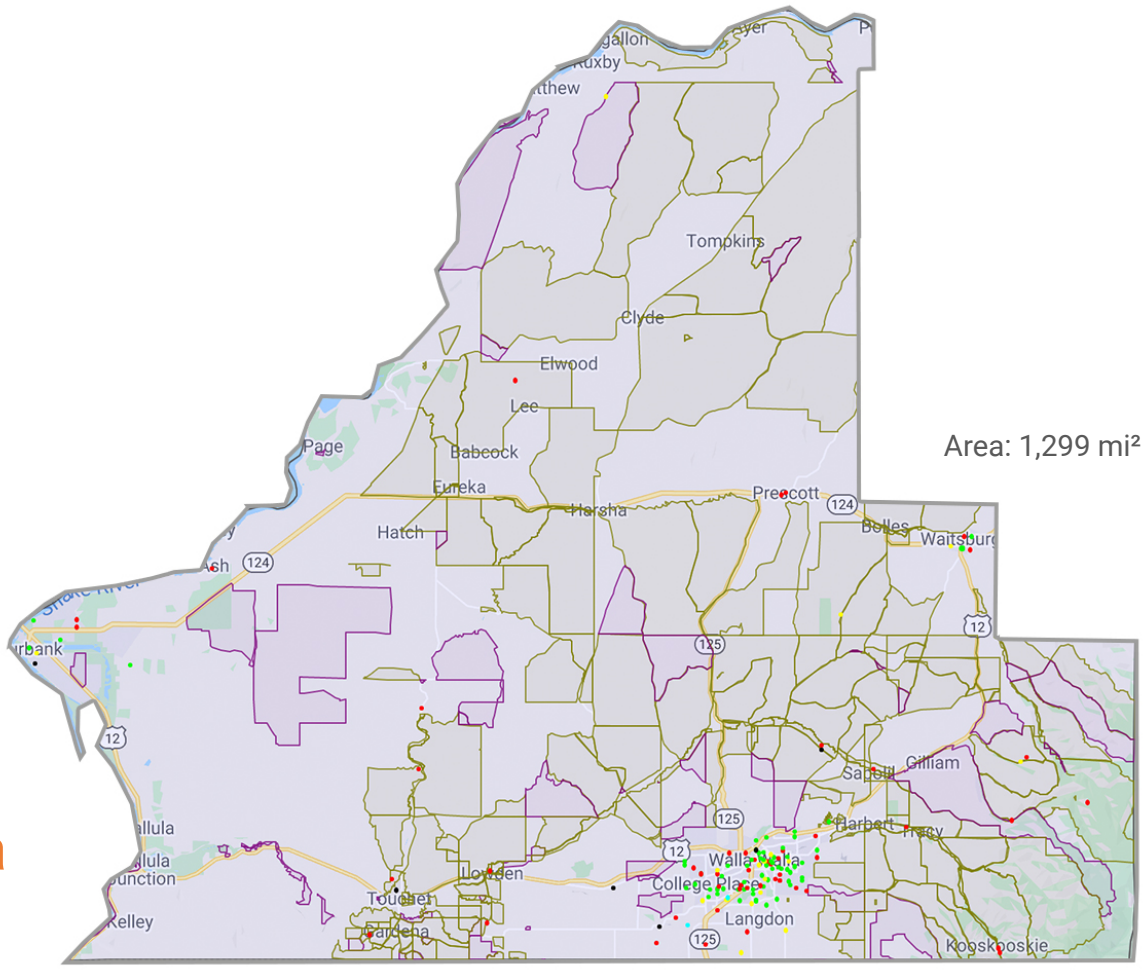
USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Wahkiakum PUD #1
Wahkiakum Broadband Needs Assessment and Feasibility Study
Grant/Match $50,000/$16,667
Total $66,667

Walla Walla County



Households		23,451
Population		60,760
Broadband.wa.gov survey		155
Percent participation		0.7%
Participation goal (10%)		2,345
Download		
No service	6	3.9%
0-10 Mbps	56	36.1%
10-25 Mbps	20	12.9%
25-150 Mbps	64	41.3%
150+ Mbps	9	5.8%
Upload		
No service	6	3.9%
< 3 Mbps	42	27.1%
3-10 Mbps	44	28.4%
10-25 Mbps	46	29.7%
25-150 Mbps	15	9.7%
> 150 Mbps	2	1.3%

Min. / Max. / Avg. Mbps
Download 0.1 / 537.13 / 55.63
Upload 0.06 / 305.8 / 15.60

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
NRTC Phase I RDOF Consortium
236 locations, $1,125,151.10

Space Exploration Technologies Corp.
921 locations, $4,583,255

Total RDOF
1,157 locations, $5,708,406.10

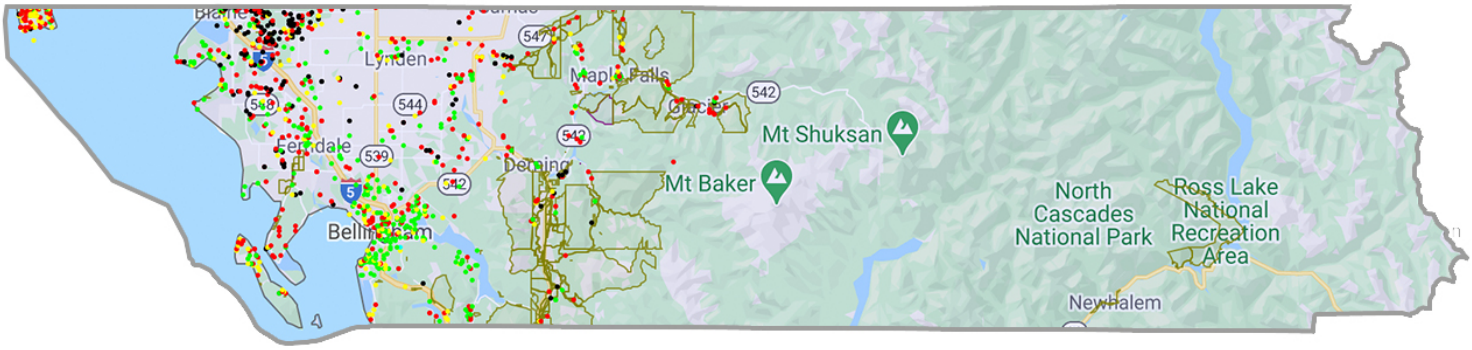
FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
207 locations, $186,893.10

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2020 Port of Walla Walla County Broadband Feasibility Study
Grant/Match $35,000/$15,000
Total $50,000



Area: 2,503 mi²

Whatcom County

Households		90,665
Population		229,247
Broadband.wa.gov survey		1,095
Percent participation		1.2%
Participation goal (10%)		9,066

Download

No service	170	15.5%
0-10 Mbps	399	36.4%
10-25 Mbps	197	18%
25-150 Mbps	287	26.2%
150+ Mbps	42	3.8%

Upload

No service	170	15.5%
< 3 Mbps	398	36.3%
3-10 Mbps	376	34.3%
10-25 Mbps	114	10.4%
25-150 Mbps	31	2.8%
> 150 Mbps	6	0.5%

Min. / Max. / Avg. Mbps
Download 0.01 / 703.51 / 30.89
Upload 0.01 / 526.54 / 6.95

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
Frontier Communications Northwest, LLC,
1,134 locations, $4,411,290

Space Exploration Technologies Corp.,
569 locations, $1,484,796.80

Total RDOF
1,703 locations, $5,896,086.80

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
40 locations, $52,925.70

USDA ReConnect
2020 Whidbey Telecom Point Roberts Fiber To The Home Project,
144 locations, Grant $596,781

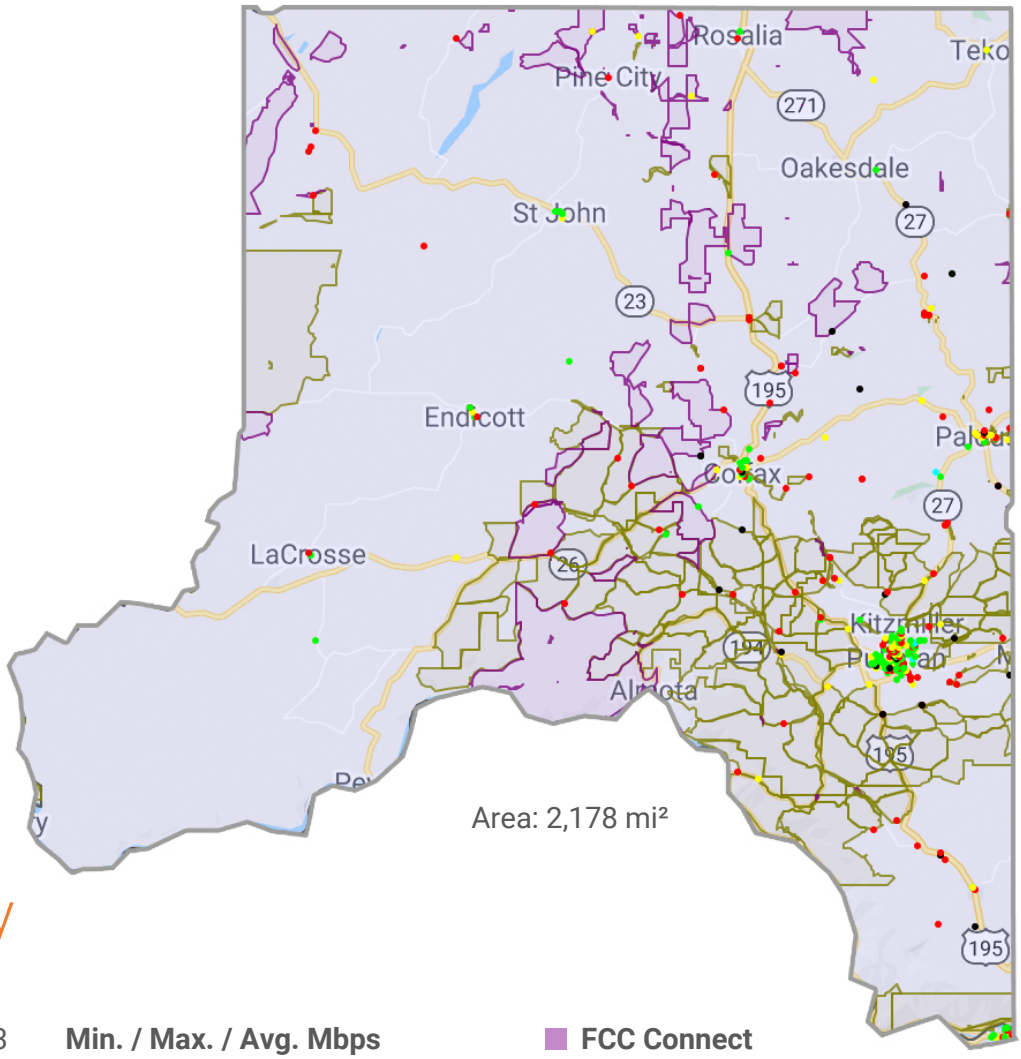
USDA Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2019 Port of Bellingham Whatcom County Rural Broadband Construction Project,
751 Connections, 6 ISPs
Loan/Grant $584,390/$584,391
Match $869,415, Total $2,038,196
Under construction

2018 Lummi Nation Community Broadband Roadmap Plan
Grant/Match $50,000/$16,625
Total $66,625

2018 Port of Bellingham Rural Broadband Feasibility Study
Grant/Match $43,875/$14,625
Total $58,500



Whitman County

Households		19,323
Population		50,104
Broadband.wa.gov survey		362
Percent participation		1.9%
Participation goal (10%)		1,932

Download

● No service	25	6.9%
● 0-10 Mbps	130	35.9%
● 10-25 Mbps	72	19.9%
● 25-150 Mbps	93	25.7%
● 150+ Mbps	42	11.6%

Upload

No service	25	6.9%
< 3 Mbps	148	40.9%
3-10 Mbps	78	21.5%
10-25 Mbps	82	22.7%
25-150 Mbps	18	5.0%
> 150 Mbps	11	3.0%

Min. / Max. / Avg. Mbps
Download 0.07 / 909.9 / 57.24
Upload 0.01 / 773.12 / 21.34

☐ **FCC Rural Digital Opportunity Fund (RDOF)** 2020 - 10 yrs
Frontier Communications Northwest, LLC
74 locations, $64,986

Space Exploration Technologies Corp.
32 locations, $160,361.30

St. John Telco
1,057 locations, $7,116,876

Total RDOF
1,163 locations, $7,342,223.30

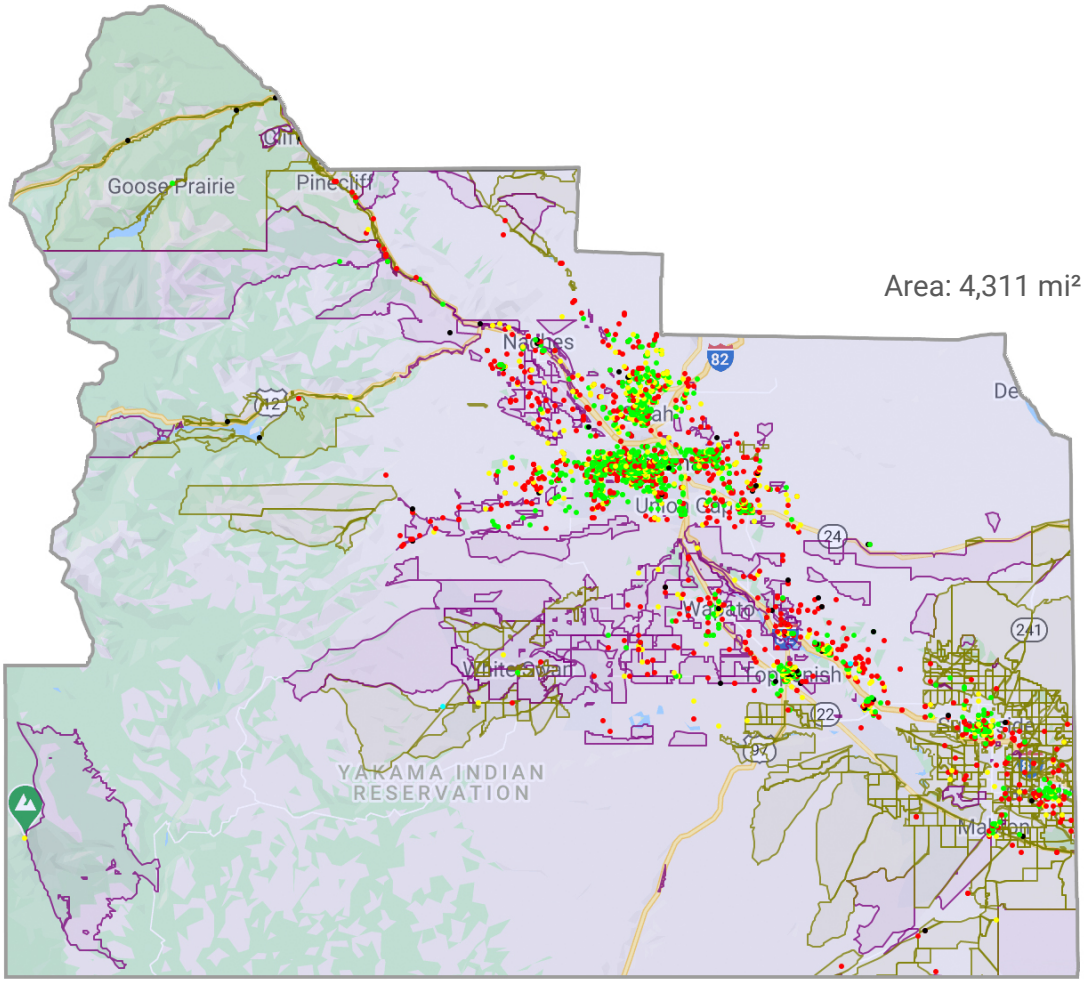
■ **FCC Connect America Fund Phase II (CAF II)** 2018 - 10 yrs
Viasat, Inc.
358 locations, $383,259.20

USDA ReConnect/ Community Connect
N/A

Public Works Board (PWB)
N/A

Community Economic Revitalization Board (CERB)
2018 Port of Whitman County Last Mile Fiber Construction Project
2,975 Connections, 6 ISPs
Loan/Grant $1,000,000/$1,000,000
Match $2,043,800, Total $4,043,800
Under construction

Yakima County



Households		85,474
Population		250,873
Broadband.wa.gov survey		2,685
Percent participation		3.1%
Participation goal (10%)		8,547

Download		
● No service	61	2.3%
● 0-10 Mbps	985	36.7%
● 10-25 Mbps	483	18%
● 25-150 Mbps	1,065	39.7%
● 150+ Mbps	91	3.4%

Upload		
No service	61	2.3%
< 3 Mbps	983	36.6%
3-10 Mbps	812	30.2%
10-25 Mbps	731	27.2%
25-150 Mbps	85	3.2%
> 150 Mbps	13	0.5%

Min. / Max. / Avg. Mbps
Download 0.01 / 916.5 / 42.21
Upload 0.01 / 885.43 / 9.71

FCC Rural Digital Opportunity Fund (RDOF) 2020 - 10 yrs
CCO Holdings, LLC
2,846 locations, $6,783,273.20

CenturyLink, Inc.
317 locations, $947,358

Space Exploration Technologies Corp.
1,759 locations, $3,350,440.80

Total RDOF
4,922 locations, $11,081,072

FCC Connect America Fund Phase II (CAF II) 2018 - 10 yrs
Viasat, Inc.
3,048 locations, $1,090,888.20

USDA ReConnect
N/A

USDA Community Connect
N/A

Public Works Board (PWB)
2020 Northwest Open Access Network Grandview Broadband Feasibility Study Grant $50,000

Community Economic Revitalization Board (CERB)
N/A