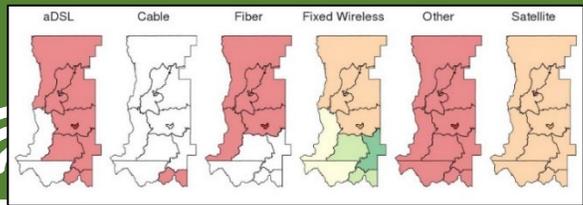


A Broadband Issue: Mapping



Broadband access is not equally available across the country. Barriers to ubiquitous broadband availability in Stevens County include areas with small, dispersed populations, rugged terrain, inclement weather, distance from urban centers, high poverty and unemployment. Due to many of these reasons, broadband may be more needed in this county and other rural areas of Washington than in the more metropolitan areas. **The Stevens County and Spokane Tribe Broadband Action Team (BAT) supports the declaration of broadband as a critical infrastructure. SC/ST BAT recommends deployment following the Rural Electrification Act (REA) model used to build out electricity across the US.** Reliable data is needed to ensure those areas with the greatest need are not left behind. Accurate broadband mapping is critically important to residents, businesses, and communities where robust broadband is unavailable.

Our lessons learned:

In 2017, SC/ST BAT was one of fifteen teams in the country that served as a co-designer and beta tester of a new National Telecommunications and Information Administration (NTIA) broadband planning resource: BroadbandUSA Connectivity Assessment Tool (BCAT). This project provided the team with FCC and other publicly available broadband data for review and analysis. A key finding was that the current national broadband map is telling the wrong story, it does not match Stevens County broadband availability. According to the FCC data available at the time (Dec. 2016), Stevens County was considered 100% covered AND at speeds that our research indicates may not be available anywhere in the county. This is unchanged on the June 2017 data set. Further investigation led to these discoveries:

- The maps are based on inaccurate and unverified data from FCC Form 477 submissions by providers.
- Wireline and wireless providers file the Form 477 every six months but the lag time between submittal and public availability is significant, sometimes taking almost a year.
- Based on current reporting requirements, providers indicate service areas, even where service could be available without an extraordinary commitment of resources.
- A provider that reaches one address in a census block can report coverage of the entire block. This is especially challenging in rural areas where census blocks can be greater than two square miles.
- Provider advertised speeds are reported at the census block level but may not be available anywhere in the block. Some of the indicated service does not meet the FCC's own definition of broadband speed.
- Inaccuracies in FCC and other federal broadband data can negatively impact the ability to apply for funds. Once funding is provided for an area it is considered covered, regardless if the provider completes the project.

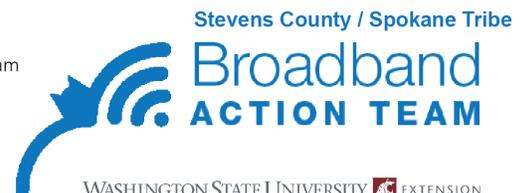
Our recommendations:

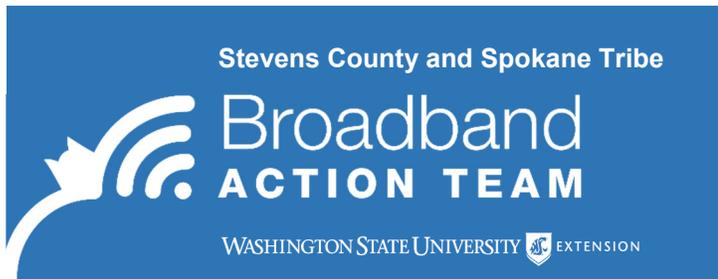
- 1. Bolster the accuracy of the national broadband map and data collection.**
 - a. Standardize collection methodologies to avoid provider interpretation of reporting instructions.
 - b. Require more granular data than current census block reporting (zip code+4, number or percentage of addresses covered, lowest and highest advertised speeds, etc.)
 - c. Implement a data validation process.
 - d. Create a streamlined process for the public to report possible inaccuracies
- 2. Make the data and information available and more easily usable by a wider audience (local, state and federal policymakers, researchers, community members, etc.)**
 - a. Release data sooner (December 2016 data was not released until November 2017.)
 - b. Release data files county-by-county instead of state-by-state. Datasets are HUGE downloads even as compressed files; one set of downloaded Stevens County dataset was 36,399 lines.
 - c. Provide sample codes, tools, training and other resources to help broadband stakeholders turn raw datasets into usable formats to better understand the wealth of data gathered in order to analyze and make data-driven informed decisions about broadband investments.
- 3. Federal funding should be provided to unserved and underserved areas based on accurate maps.**
- 4. Collaborate with other jurisdictions to challenge or improve the map.**

Contact Information

Debra Hansen, Director
WSU Stevens County Extension
(509) 684-2588
debra.hansen@wsu.edu

Bert Klimas, Coordinator
SC/ST Broadband Action Team
(509) 738-6876
bertinrice@hughes.net





A small but MIGHTY force for Rural Broadband.

In 2015, the Carpenter Road fire destroyed 63,972 acres in Stevens County and on the Spokane Indian Tribe of Indians Reservation. The fire camp serving that wild fire was without any access to the internet for two weeks and had to drive GIS maps on a zip drive from the county office.

To respond to these challenges, the Broadband Action Team (BAT) was formed in 2016. Members and partners meet monthly to address broadband needs in the area. Economic development, public safety preparedness and response, access to healthcare and education rely on a strong broadband internet connection for rural communities across the US. Increasing quality of, and access to, broadband is a widespread community goal for Stevens County and the Spokane Tribe of Indians.

Our BAT Goals

1. **Create a shared language** to describe broadband access, develop a website to help others understand the issues.
2. **Decide on metrics** for measuring increased broadband access.
3. **Respond to policy issues (state, federal and local)** that affect our ability to increase access and use.
4. **Prepositioned Fire Camps.** Work with four identified site teams to seek funding and develop a “field guide” for replication.
5. **Boots on the Ground.** Encourage local champions to help us find solutions. Develop a “field guide” for replication.
6. **Map existing broadband infrastructure and levels of service with Stevens County and Spokane Tribe GIS.** This may involve use of publicly available data (FCC, etc.), interviews with service providers, data gathering from residents and businesses.
7. **Compile best practices in rural broadband solutions,** i.e., infrastructure types, investment models, business models and financing tools to record progress and share with broadband stakeholders, and other communities.

Contact Information

Debra Hansen, Director
 WSU Stevens County Extension
 (509) 684-2588
debra.hansen@wsu.edu

Bert Klimas, Coordinator
 Broadband Action Team
 (509) 738-6876
bertinrice@hughes.net

extension.wsu.edu/stevens/broadband-action-team
 WSU Extension programs and employment are available to all without discrimination.

BAT Members and Partners

- WSU Extension:* Debra Hansen, Stevens County Director, Monica Babine, Digital Initiatives Senior Associate and Bert Klimas, *BAT Coordinator*
- City of Chewelah:* Dorothy Knauss, Mayor
- Colville School District:* Pete Lewis, Superintendent
- Department of Natural Resources:* Steve Harris, NE Wildfire & Forest Practices Assistant Manager
- Employment Security Department:* Bryan Raines, Customer First Manager
- Libraries of Stevens County:* Amanda Six, Director, Jessica Varang, IT Manager, and Bryan Tidwell, Chewelah Manager
- NE WA Health Programs:* Desiree Sweeney, Chief Executive Officer, Clint Hagan, IT
- Rural Resources Community Action:* Kelly Charlton, Director of Employment and Training
- Providence Health Care:* Theron DePaulo, IS-Site Director
- Spokane Tribe of Indians:* Frank Metlow, Planning & Economic Development Director and Randy Bowen, IT Director
- Stevens County Emergency Management:* Jim Caruso, Director and Adena Sabins, *WSU Extension*, Communications Coordinator
- Stevens County Information Services:* Mark Curtis, Director, & Trevor Sellars, Communications Specialist
- Stevens County Fire District #9:* Jeff Pltts
- Stevens County Fire District #12:* Dave Klimas and Jason Edwards
- Tri County Economic Development District (TEDD):* Silas Rappe, Interim District Planner

Stevens County Commissioners:
 Wes McCart, Don Dashiell and Steve Parker

US Congressional Staff:
 Senator Cantwell: Alex Scott & Narda Jones
 Senator Murray: John Culton & Ben Merkel
 Congresswoman McMorris Rodgers: Andrew Engell & Michael Taggart

WA Legislators
 Senator Shelly Short
 Representative Jacquelin Maycumber