“Embracing the public value of Extension education means repositioning the way we describe our work from what clients learn and do to what economic, environmental, and social conditions change.” (Franz, 2011)

Extension professionals working in community and economic development around the United States have been rapidly adapting and responding to the COVID-19 crisis in rural and metropolitan communities. The pandemic has illustrated the vulnerability in almost every aspect in which we live and work. In contrast to the traditional Extension model of delivering direct education, Extension community development professionals are adapting their approach to address complex issues facing communities with a focus not on individual behaviors, but rather by addressing the policies, systems, and physical environments (PSE) that shape communities and influence individual behaviors and access to resources.
For example, broadband access is a national issue for rural and Tribal communities that requires an approach which builds organizational and agency relationships to coordinate and change policy and removes barriers to funding opportunities at the local level, which can later impact state and federal policy, opening up resources that were previously out of reach. Changes in policy can lead to changes in financial investment to the built environment, such as establishing new Wi-Fi hotspots.

What is PSE?
The Policy, Systems, and Environmental (PSE) change framework emerged from the work of the National Expert Panel on Community Health Promotion, convened by the Centers for Disease Control and Prevention in 2007, as a method to address difficult and layered public health problems such as obesity, diabetes, and cancer. The Panel’s recommendations included a renewed emphasis on health interventions not just at the individual level, but public health work that addressed social, family, and community networks. This meant focusing on living and working conditions, as well as addressing broad social, economic, cultural, health, and environmental conditions (Navarro et al., 2006).

As public health practitioners began to address the broader environmental and social factors that influence personal behavior, what emerged was a method that changes the policies, systems, and environments shaping those individual behaviors (Leeman et al., 2015). Rather than focusing solely on individual choices, the PSE approach acknowledges the “interrelated, dynamic, and adaptive factors” (Lyn, 2013) influencing an individual’s health.

The purpose of PSE is to create population-level change based on shared goals between organizations, agencies, and Tribal partners. The approach can be thought of as a framework to create long-term change while moving from programs to projects, or, for example, from offering direct education to coalition building that lead to PSE changes.

The complex issues community development Extension professionals work on requires a framework that utilizes the University’s strength to conduct applied research for data-driven solutions at the local level, without the pressure to fund ongoing programs that are costly to administer. PSE builds on the University’s ability and reputation for applied research while continuing in Extension’s role as facilitator of coalitions, evaluator for projects, and administrative backbone to many different public initiatives.

Utilizing the PSE Concept In Extension Community Development Work
The authors propose that, beyond the public health sector, the PSE approach is a useful framework for resilient adaptations by aligning shared goals between organizations and agencies. PSE builds on Extension’s ability and reputation for applied research, while supporting the role as facilitator, convener, evaluator, and administrative backbone to many different initiatives. The approach can be thought of as a framework to move Extension work from programs to projects, or from direct education to larger systemic change.

Often playing a critical role in facilitating the process for desirable PSE change outcomes for community development, the following six key activities are intrinsic to the PSE change framework:
1. Assessing the social and political environment
2. Engaging, educating, and collaborating with key stakeholders
3. Identifying and framing the problem
4. Utilizing available evidence
5. Conducting research to identify needed data
6. Identifying PSE solutions
7. Building support and political will (Lyn et al., 2013)

PSE activities often take place within coalitions and councils made up of many agencies, organizations and stakeholders who are committed to addressing root causes of community-level issues. As these coalitions work through this process, projects are identified and workgroups are formed. Planning for data-driven activities, mapping a community’s assets, and creating vision and goal statements with stakeholders are at the foundation for PSE work, a strength that Extension community development professionals bring to the table.

Implementing a PSE Approach through a Broadband Initiative
In 2015, WSU Stevens County Extension led the formation of the Stevens County/Spokane Tribe Broadband Action Team (BAT). The BAT is a working group of public and private stakeholders organized around bringing high-speed internet connectivity to unserved and underserved areas of Stevens County and ensuring all residents possess the skills and supports needed to fully benefit from that connectivity. The BAT successfully brought together
elected officials and information technology experts to connect unserved areas with telecommunications providers, provided workshops for Stevens County residents with limited digital skills, and improved the region’s maps of broadband availability.

The BAT’s success emerged as a nationally recognized model for community collaboration and a key influencer of federal broadband policy. The National Telecommunication and Information Administration’s Broadband USA initiative selected the BAT as a pilot user of its Broadband Community Assessment Tool, and frequently recruits BAT members as speakers for its national training and outreach efforts. This work of WSU Stevens County Extension directly influenced the Digital Equity Act of 2019 — providing over $1 billion in grants over five years to stand-up and support BAT-like organizations across the country.

The BAT approach emerged as a nationally recognized model for community collaboration on rural broadband, which led to a meeting with FCC Chairman, Ajit Pai. Pai encouraged a post-meeting follow-up with his staff, putting power behind the BAT’s regional broadband mapping project.

The infographic illustrates the broad impact of the PSE approach on broadband in Stevens County, and because of the PSE approach, Stevens County was positioned to react proactively to the COVID-pandemic specific to rural broadband access.

**Summary**

As the broadband case study illustrates, PSE frames and communicates complex work internally and externally, as shown by the national attention and support garnered in this case. The PSE approach is a framework for transformative Extension in communities. PSE leverages Extension’s skillset and reputation in communities to accelerate data-based decision-making into population-level changes.

Extension is in a unique position to shepherd this work, with its footing in applied University research and expertise, skillsets in community development, and strong community ties at the county level. Just as Franz’s call to action to Extension described in the last decade, Extension is increasingly called into the next decade to reposition the way we work to meet the rapidly changing, high-intensity needs of the communities we serve, “from what clients learn and do to what economic, environmental, and social conditions change” (Franz, 2011).*

---

**About the Authors**

Laura Ryser  
Assistant Professor  
Washington State University  
laura.ryser@wsu.edu

Caroline Backman  
Associate Professor  
Washington State University  
carrie.backman@wsu.edu

Clea Rome  
Assistant Professor  
Washington State University  
clea.rome@wsu.edu

Debra Hansen  
Professor  
Washington State University  
debra.hansen@wsu.edu

Monica Babine  
Senior Associate  
Division of Governmental Studies and Services  
Washington State University  
babinem@wsu.edu

---

15 RURAL CONNECTIONS
Broadband Connects Spokane Tribe and Stevens County
By Frank Metlow, Planning and Economic Development Director, Spokane Tribe of Indians

Roughly 35% of Americans living on tribal lands have no access to broadband internet (FCC, 2018). But this is even difficult to know for sure, because mapping areas with insufficient broadband connectivity is a significant challenge. Being a founding member of the Stevens County/Spokane Tribe Broadband Action Team (SC/ST BAT) has led us to solutions and true mapping of need.

**Policy**
I have been fortunate enough to participate in meetings with Washington State Governor Jay Inslee, FCC Chairman Ajit Pai, and U.S. Representative Cathy McMorris Rodgers (R-WA) to discuss the desperate need to expand broadband access in Washington’s rural and tribal communities. These discussions have helped personalize the challenges that pertain to rulemaking for the marquee federal grants that are the primary funding opportunities of broadband infrastructure.

Federal Agencies and Congress need to consider how effective the programs currently are and adjust rulemaking to reach the rural areas of highest need. The current approach of having the data gathering and planning of the infrastructure being spearheaded by the competitive ISPs across the country is not going to solve the connectivity issues where it is not profitable for a company to do the buildout.

**Systems**
The Spokane Tribe developed a three-phased approach to broadband access in response to the COVID-19 pandemic.

1. Emergency access through Cellular on Wheels (COWs) in strategic geographic and populated areas of the reservation and cellular jetpacks for Tribal member students facing distance education delivery – on and off the reservation.
2. Permanent tower builds at these locations based on a hybrid system of 2.5GHz Wi-Fi and Fiber.
3. A fiber to the home design for the final top-tier access to Tribal members. The final phase will be achieved with a partnership with the Spokane Tribal Housing Authority (SIHA). The Tribe will design and deploy the backbone fiber on the main arterial roads on the reservation while SIHA designs and deploys the last mile buildouts in the housing clusters.

**Environment**
As members of the SC/ST BAT, we launched a combined and concerted effort to have residents respond to the speed test – and have had a combined response of 1800+ residents. This data has guided our decisions to design and engineer the projects above. One of the first Drive-In Wi-Fi projects deployed by WSU Extension was on the Spokane Tribe Reservation and became the third most visited site in the system.

Finally, as a member of the SC/ST BAT, our Tribe has benefitted from the relationships, conversations, and resources of working together with our neighbor here in Northeastern Washington. This network of community leaders, academic minds and technical experts has helped connect the rural communities and technical experts to the local, State and federal decision makers who can make a difference with some informed rulemaking and effective programs that are focused on the true bullseye of the rural broadband issue.

**Resources**

For more information, contact Frank Metlow, Planning and Economic Development Director, Spokane Tribe of Indians via email to frankm@spokanetribe.com