

# CONNECTIVITY ROADMAP

March 20, 2023

County Commissioners Association of Pennsylvania-  
Spring Legislative Conference

# AGENDA



Current Status of Region

Our Approach

Public Engagement & Feedback

Proposed Solutions

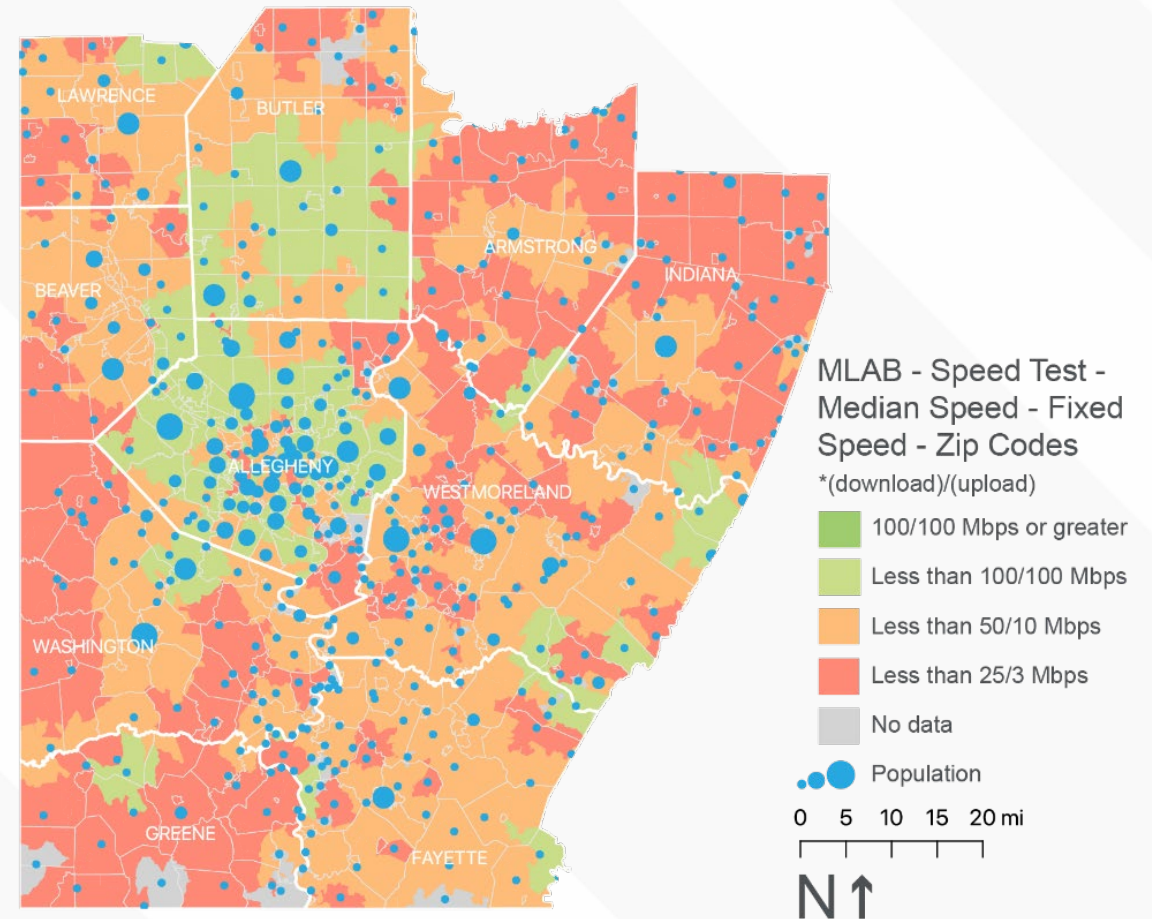
Governance Recommendations

Implementation Activities and Next Steps

# Current Status of Region

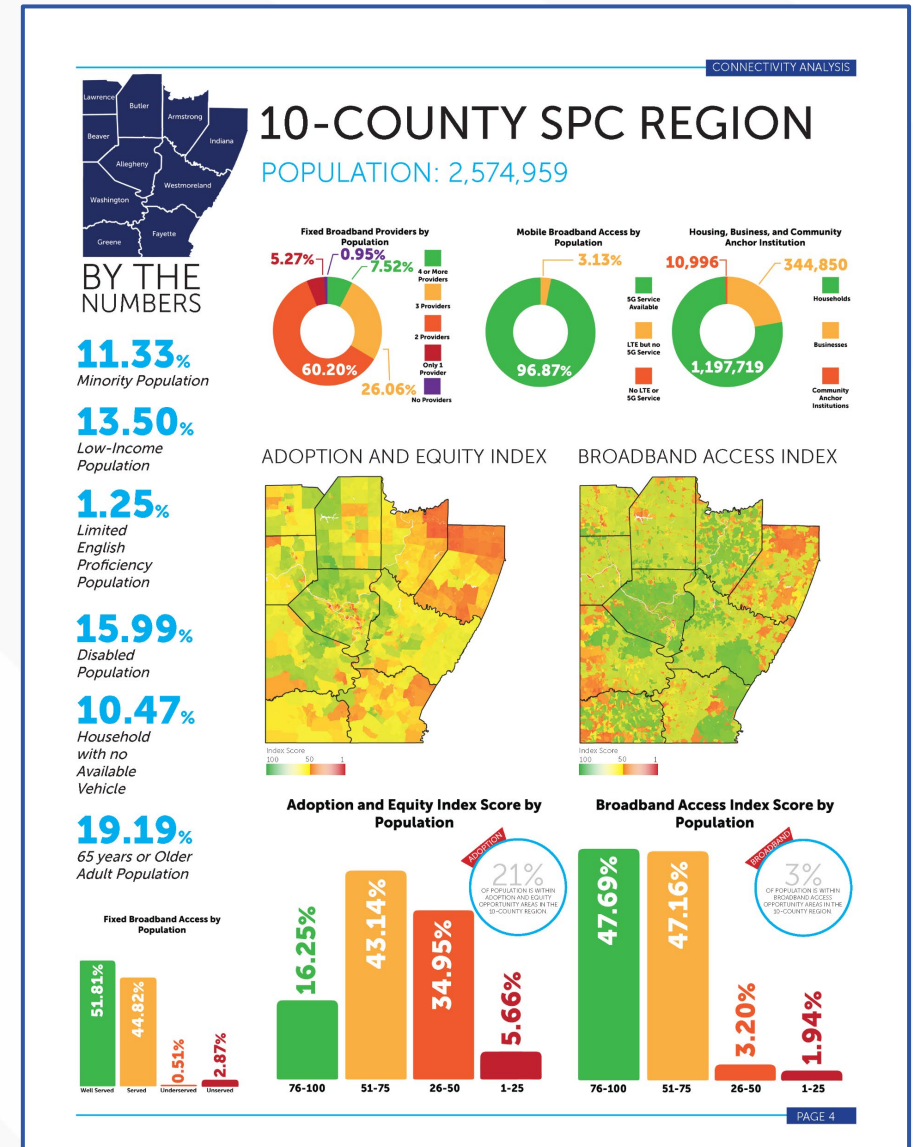
**Most of the region has download speeds less than 50 Mbps (underserved) or less than 25 Mbps (unserved).**

- To correct for the overstated conditions found in the Form 477 data, the actual measured speeds were mapped for the 10-county region.
- The areas of the region that have access to speeds meeting the 100 Mbps download/100 Mbps upload threshold are too small to be visible on the map.
- Download speeds between 50 and 99 Mbps are more common in Allegheny and Butler counties but are found only in small areas throughout the remaining eight counties.



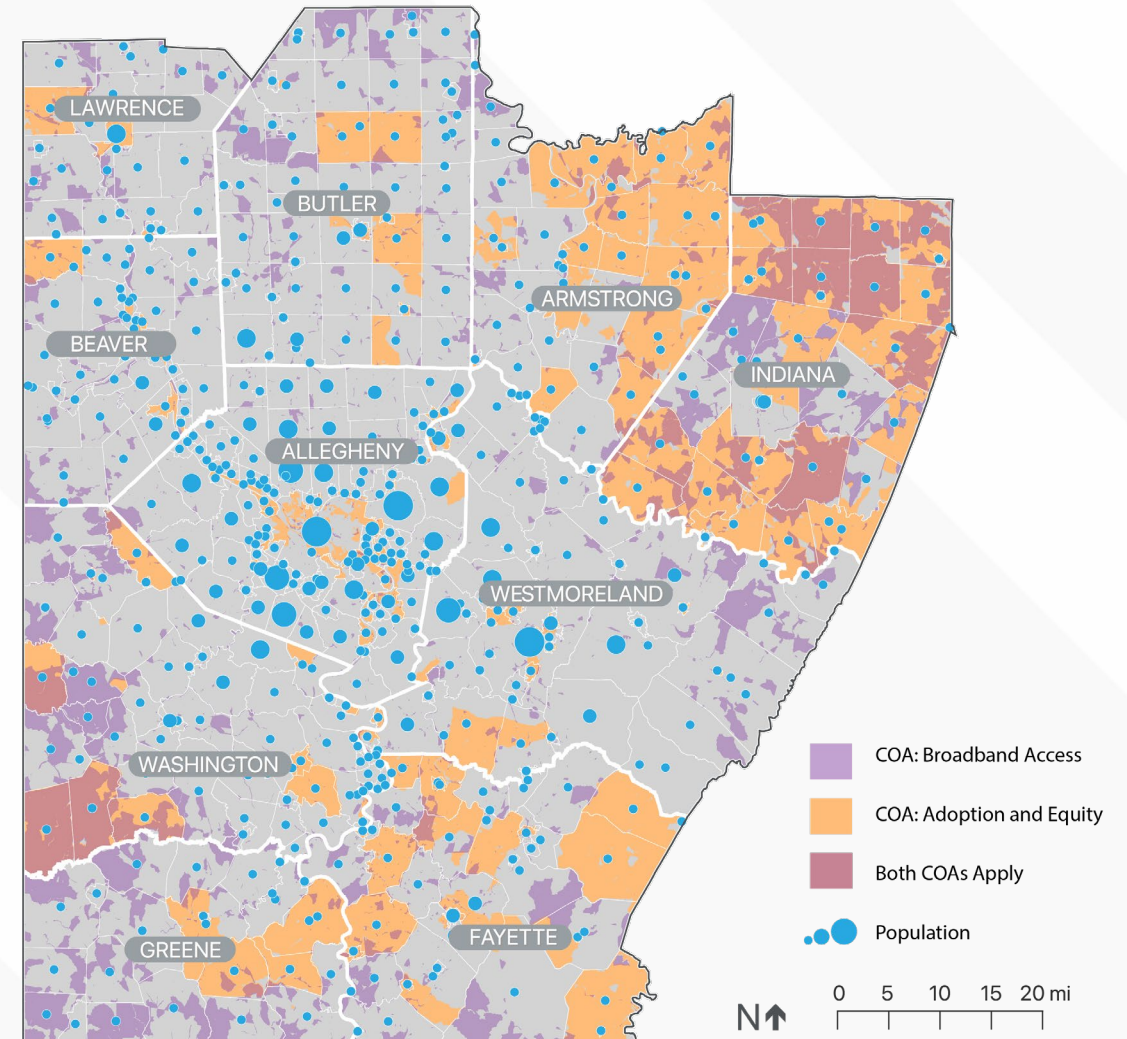
# Current Status of Region

- These areas are primarily rural and reveal a large divide in digital access between urban centers and rural towns.
- At least 5% of locations are served by only one provider, which limits options, services, and affordability.
- Additional broadband buildout is occurring in rural areas and mapping will need to be continually updated to reflect these actions.



# Our Approach

- The Connectivity Roadmap conducted an existing conditions analysis, developed two indices to measure existing coverage through the lenses of access and equity, and then identified areas of greatest need and opportunity.
  - The Broadband Access Index
  - The Adoption and Equity Index
- Through identifying and evaluating access based on coverage, speed, and affordability available to rural, suburban, and urban populations in comparison to demographic and socioeconomic conditions, several key areas were identified.



# Public Engagement & Feedback

- The **CONNECTIVITY ROADMAP** was informed by a public survey, county interviews, ISP interviews, workshops with regional providers, nonprofits, local and state government leaders, industry experts, community organizations, and through best practices.
- The project team engaged residents and stakeholders from across all 10 counties and the City of Pittsburgh to document their experiences with internet connectivity and the impact poor connectivity has in their communities.



**3,445+**  
Survey  
Respondents



**5**  
Workshops



**17**  
Community  
Conversations



**25+**  
Interviews

# CONNECTIVITY ROADMAP



# PROPOSED SOLUTIONS

# SMART Goals



Invest in Expanded Infrastructure and a Fiber Backbone



Provide Assistance to Achieve Affordable Rates



Expand Programs for Digital Literacy and Education



Support Industry Sectors i.e., Transportation & Agriculture



Reframe Internet as a Public Necessity



Foster Digital Inclusion and Access



Expand Broadband in the Public Domain



Facilitate and Lead Regional Partnerships



Prioritize Digital Equity for all Existing and Potential Users



Establish Network Redundancy



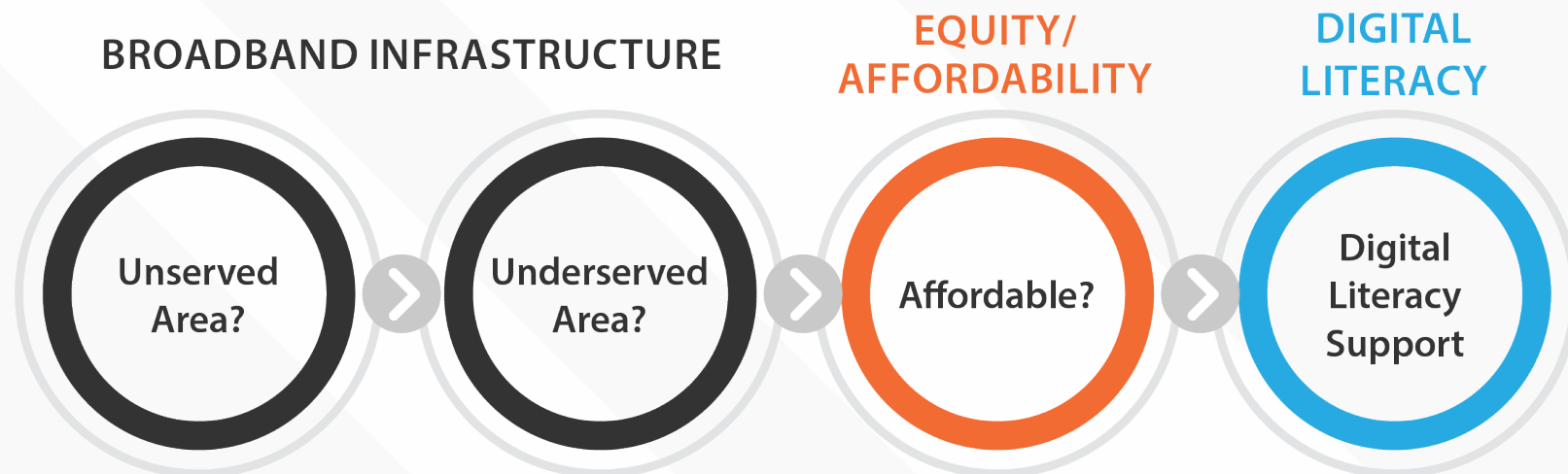
Advance Cross-Jurisdictional Policies and Legislative Change



Integrate Broadband Expansion into Economic Development Policies

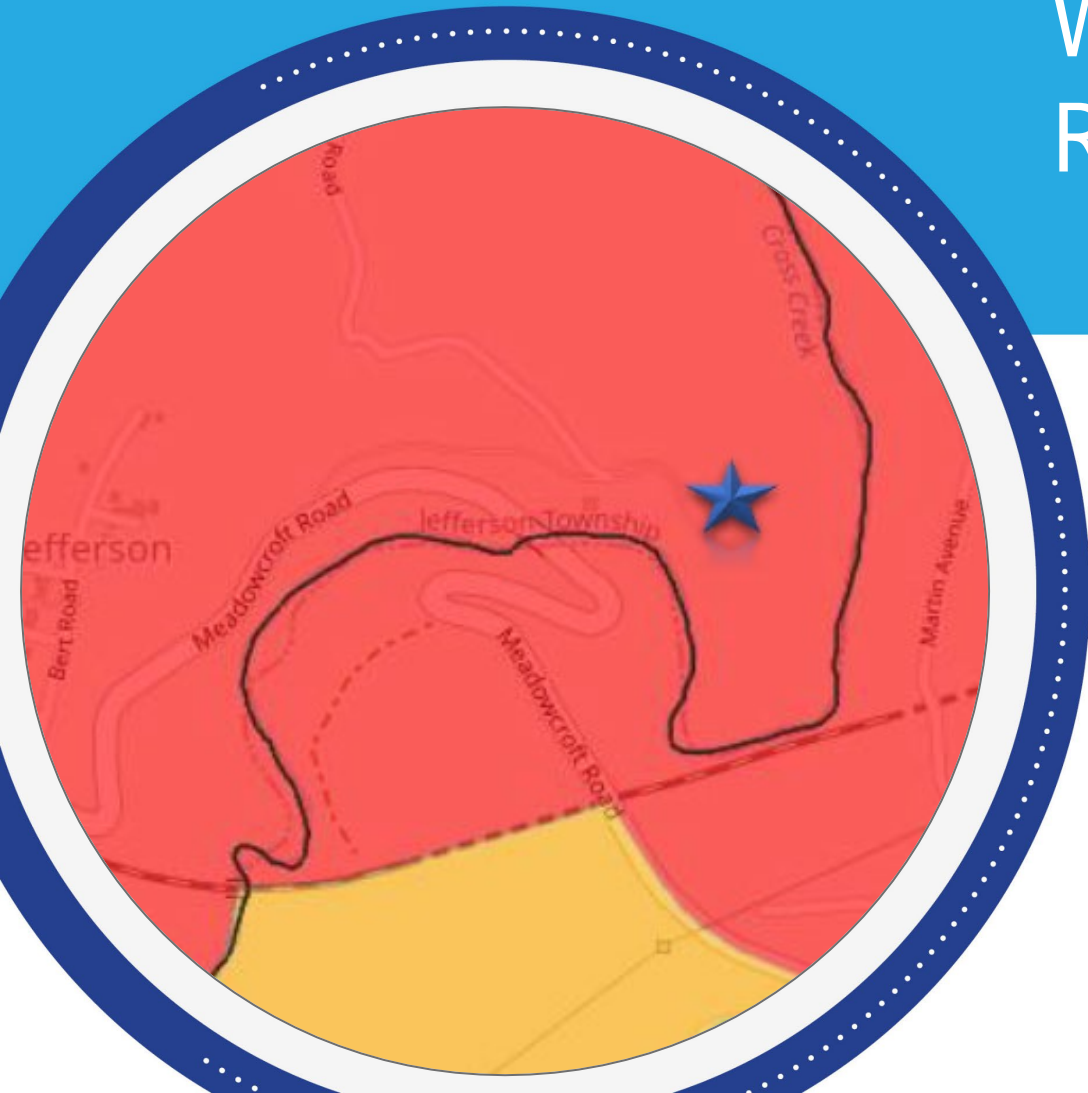
# Identifying Opportunity Areas & Projects

- The **Broadband Access Index** and the **Adoption and Equity Index** helped identify Connectivity Opportunity Areas (COAs).
- The **Project Identification Decision Tree** guides decision-making through the steps needed to meet a given need, according to the existing conditions and type of need.
- The **Measures of Effectiveness** rubric rates and weights projects according to an extensive set of metrics that includes technical and equitable qualifications.



# Project Highlight

## Washington County Rural Broadband Pilot Program



Washington County leveraged the SPC Dashboard Indices to analyze current internet service and will be starting a project to deliver 100 Mbps symmetrical internet to multiple locations, including Meadowcroft Rockshelter, the oldest site of human habitation in North America.

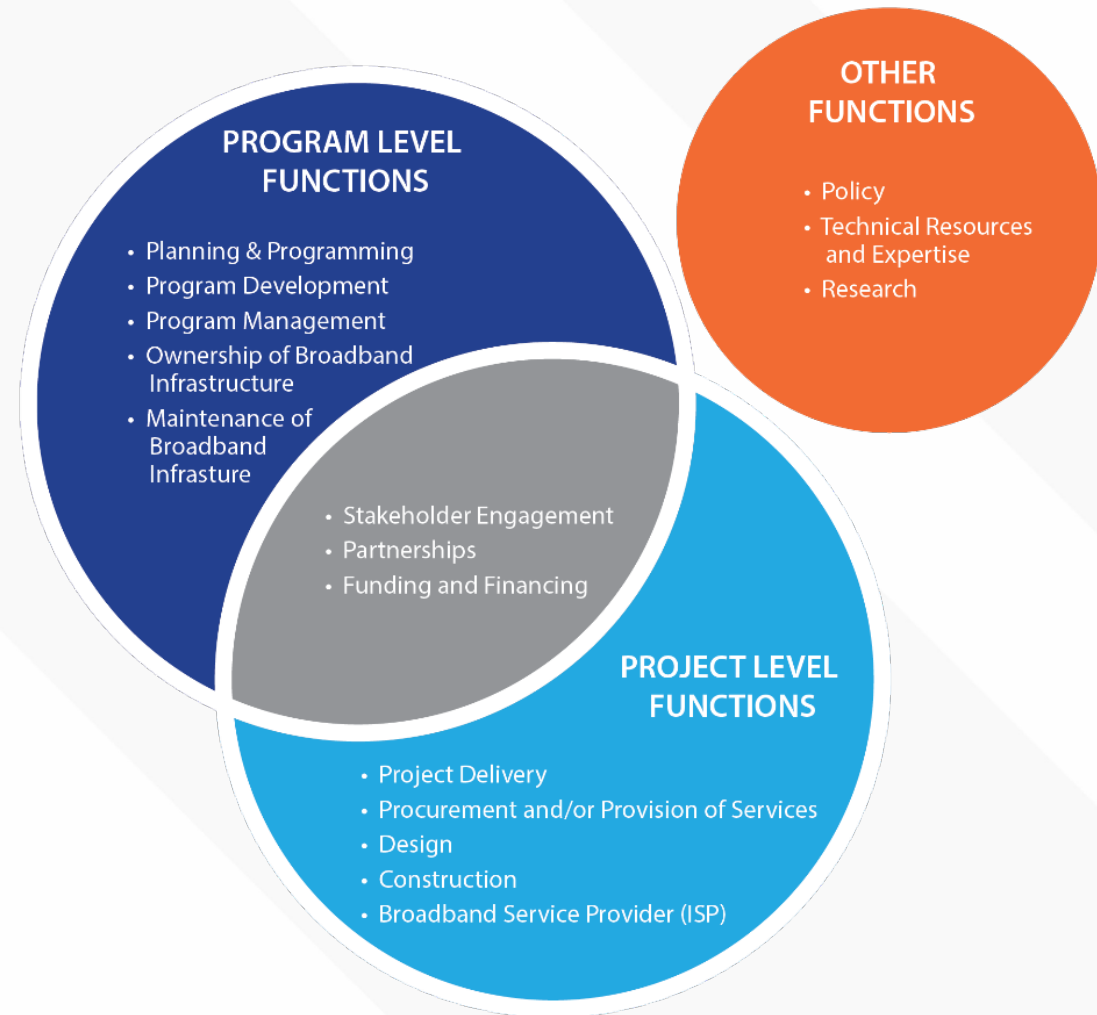
# Governance

**Non-profit** - Non-profit organizations are eligible to apply many of the federal programs that offer broadband funding, and with the exception of policymaking, are positioned to serve many of the same functions as a government entity.

**Government** - Government bodies, including joint bodies such as COGs, are well-situated for many broadband functions. Historically, municipal ventures into providing internet service have received pushback from major telecommunications companies.

**Authority** - As municipal authorities are restricted by law from projects that duplicate or compete with existing enterprises serving substantially the same powers. Thus, a municipal authority likely cannot pursue any projects that may be perceived as competing with an existing ISP.

**Electric Cooperative** - Rural electric co-ops were established by law in Pennsylvania in 1990 to provide electric service to unserved areas. Given the powers provided in Pennsylvania law, electric co-ops are existing entities that are well situated to provide regional broadband services.



# SPC Connectivity Resource Center

## Recommendation:

- Implement a hybrid approach that permits either SPC or its member governments to lead on various endeavors
- Allows the region to maximize its resources and remain flexible and prepared to act as expeditiously as possible as opportunities for funding or partners arise.
- Approach will be institutionalized and implemented by the creation of the SPC Connectivity Resource Center.

## CRC Mission:

- Support local governments and partners in implementing broadband connectivity programs and projects to equitably and systematically serve the underserved and unserved areas of the region
- Promote regional collaboration on broadband connectivity
- Be a leader in facilitating coordination and education
- Provide a wide variety of technical assistance to its member governments and partners


# Priority Actions and Next Steps


*\*Not listed in order of importance*


# Regional Efforts

- 1 Advance the SPC nonprofit and county governance structure to best support regional needs. ✓
- 2 Develop a regional marketing campaign to promote the benefits of broadband and highlight existing broadband affordability programs.
- 3 Select a regional pilot infrastructure project and identify partners to develop a grant application for broadband deployment. ✓
- 4 Prepare guidance in partnership with Carnegie Mellon University and Allies for Children for partners to utilize the Connectivity Opportunity Areas and available shared resources in seeking grant funding and developing best practices. Guidance should include the identification of potential partners, likely incentives, and actions they can support related to the identified goals and strategies.
- 5 Continue collaboration with the 10 counties and the City of Pittsburgh to ensure the Connectivity Roadmap is utilized and updated while technology, beneficial programs, and additional funding mechanisms evolve. ✓
- 6 Share the Connectivity Roadmap with the PA Broadband Development Authority and relevant state agencies to support the shaping of state-level broadband processes. ✓
- 7 Collect further broadband location data to ensure unserved locations in the region are properly identified in preparation for the FCC's challenge process. This will position the Commonwealth and region to secure additional funding via the IJA's Broadband Equity, Access, and Deployment Program. ✓

# County and Municipal Leaders

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1 Participate in the governance structure that is selected in accordance with this Roadmap to ensure that counties jointly benefit from regional investments and efficiently share resources across boundaries.
- 2 Advocate to local state representatives to ensure that local needs are understood and addressed, including accurate data representation and policy changes from zoning and land use to expanded regulations over service and cost inequality.
- 3 Develop streamlined permit processes for installation and operation of broadband infrastructure.
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4 Utilize the Broadband Connectivity Indices available at [www.spcregion.org/connected](http://www.spcregion.org/connected) to conduct a self-assessment of current conditions within the county or municipality and support locally-led grant applications and planning efforts.
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5 Select a pilot infrastructure project and identify partners to develop a grant application for broadband deployment.

# Private Sector and Nonprofit Partners

1

Identify edge of network unserved areas that are within reach of existing broadband facilities and meet with the ISPs to address constraints. Prioritize near-term expansion opportunities around existing facilities.

2

Identify the goals and strategies that align with your organization's mission and connect with SPC and/or county leadership to seek or become a partner in implementation.

3

Set organization-level goals that commit to your role in implementing connectivity for all. Some examples may be: commit to speed and service thresholds (providers), commit to funding allocations for affordable subsidies (nonprofits), and create digital literacy programs (institutions).

4

Use the Connectivity Roadmap's Engagement Toolkit available at [www.spcregion.org/connected](http://www.spcregion.org/connected) to promote improved broadband and spread awareness about existing resources as well as the goals and strategies for connectivity.



# Butler County/Engaging County Resources

1. Identify a phased strategy for community anchor institutions that lack fast and reliable access (Schools, libraries, municipal buildings, fire/ambulance departments, senior centers, parks), providing **hot-spots/integrating wifi** into these anchors and County assets.
2. Identify redundancy solutions for emergency services and county resources (senior centers, schools, libraries & parks), **installing generators and/or solar charging stations**.
3. Use the maps, data tools, and decision tree to **identify potential pilot/projects** to be ready for funding opportunities.
4. Update the County's **comprehensive plan** to include broadband expansion, adoption, redundancy objectives for each region.

# Butler County/Engaging County resources

5. Establish partnerships with **municipalities** where pilots/projects are identified.
6. Engage **school districts** in a deeper data dive using County's existing GIS capabilities to map family homes needing access.
7. Engage **economic development agencies** (Chamber, Development Corps, Tourism, WIB) in surveying businesses and providing broadband expansion education.
8. Engage local anchors (already mentioned) and **non-profit partners** in affordability and adoption efforts and education including identifying navigators.
9. Engage **agriculture community** (Farm Bureau) in access surveys and education efforts
10. Establish who will lead County's efforts (staff vs. consultant)



**Thank you!**