

# Broadband Deployment Advisory Committee

*Increasing Broadband Investment in Low-Income Communities  
Working Group*

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A PROGRESS REPORT  
JULY 29, 2020 – WASHINGTON, DC

# Working Group Spotlight:

## *Why Broadband to Low-Income Communities Matters*

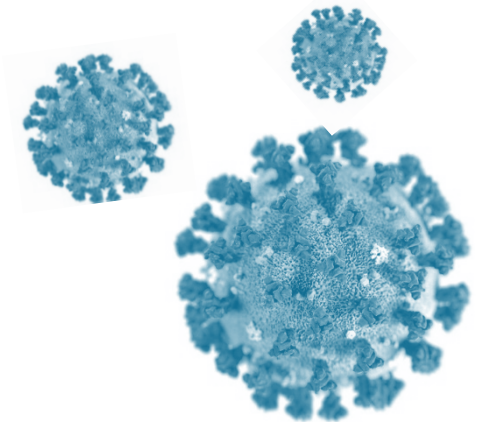
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### ➤ America's Digital Divide

- More than 17 million Americans lack access to fixed terrestrial broadband at speeds of 25/3 Mbps as of June 2019: <https://broadbandmap.fcc.gov/#/>
- 44% of adults earning less than \$30,000 do not subscribe to broadband at home: <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>
- Nearly 12 million school-aged children lack a broadband subscription at home: [https://www.jec.senate.gov/public/\\_cache/files/ff7b3d0b-bc00-4498-9f9d-3e56ef95088f/the-digital-divide-.pdf](https://www.jec.senate.gov/public/_cache/files/ff7b3d0b-bc00-4498-9f9d-3e56ef95088f/the-digital-divide-.pdf)

### ➤ COVID-19 (Novel Coronavirus) Impact and Response

- Social distancing ≠ social isolation
- Low-cost programs awareness & special considerations
- Medicare expanded Telehealth benefit
- E-rate gift rules suspension



# Increasing Broadband Investment in Low-Income Communities: *Working Group Charges*

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- Identify regulatory and other barriers that deter the development of high-speed broadband infrastructure and services to low-income communities.
- Recommend actions to increase incentives to invest in deployment of high-speed broadband to low-income communities.
- Identify barriers to adoption and use of high-speed broadband services in low-income communities.
- Recommend actions to increase broadband adoption and use among low-income Americans. Examine whether greater broadband adoption rates among low-income Americans would give providers strong incentives to deploy more broadband infrastructure to low-income communities.
- Recommend best practices for states and localities to encourage deployment of high-speed broadband to low-income communities and to encourage broadband adoption within such communities.
- Examine and explain how the Commission should identify low-income areas where additional action or reform would most increase broadband deployment.

# Increasing Broadband Investment in Low-Income Communities

## *Working Group Progress 2Q20*

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### Bi-weekly meetings:

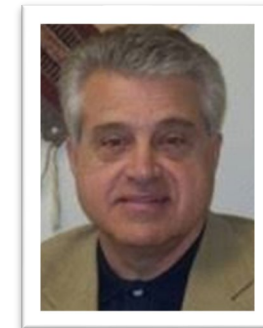
- Review available data and develop initial recommendations
- New member: Mike Jacobs, VP Regulatory Affairs, ACA (*designated alternate to Ross Lieberman*)

### Guest speakers:

- Angela Siefer, Executive Director, NDIA
- John Badal, CEO, Sacred Wind Communications
- Richard Lukas, Legislative Director, Economic Development & Commerce, NGA

### Reports:

- American Indian Policy Institute at Arizona State University, [\*Tribal Technology Assessment\*](#), 2019
- Federal Reserve Bank of Philadelphia: [\*Toward Digital Inclusion\*](#), March 2020
- [\*Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion\*](#), 2020  
Broadband Deployment Report, GN Docket No. 19-285, FCC 20-50 (2020)
- USC Annenberg Research Network on International Communication, [\*COVID-19 and the Distance Learning Gap\*](#), April 2020



# Increasing Broadband Investment in Low-Income Communities

## *Working Group Progress 2Q20 (continued)*

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### Legislative/Policy:

- Rural Digital Opportunity Fund (RDOF) Launch, February 2020
- ReConnect Round 2 Applications, March 2020
- Passage of Broadband DATA Act (S.1822), March 2020
- FCC 2020 Broadband Deployment Report (Sec. 706), April 2020
- Digital Opportunity Data Collection (DODC), Second Report and Order and Third Further Notice of Proposed Rulemaking, July 2020
- COVID-19 Relief Packages & Impact Studies, Ongoing

# Framing The Report:

## *A DRAFT Preamble*

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- The Working Group is charged with developing recommendations for the Commission on new ways to encourage deployment of high-speed broadband infrastructure and services (including at least 25 Mbps download/3 Mbps upload fixed and high-quality mobile broadband service) to low-income communities.
- While recognizing continuous investment in broadband deployment and a number of innovative programs by a variety of broadband providers aimed at broadband adoption, the Working Group finds that there are opportunities for enhancing both deployment and adoption of broadband connectivity in low-income areas. Therefore, the WG has bifurcated the analysis into 2 sections: Deployment and Adoption.
- There is evidence that broadband infrastructure and adoption in low-income areas may lag behind connectivity in higher income areas. However, the WG finds that more evidence is needed to establish the relationship of income, deployment, and adoption.
- The WG therefore identifies a number of recommendations, many of which are based on existing resources. The recommendations represent a severable collection of independent proposals that address various aspects of deployment and adoption in low-income areas.
- The WG recognizes that this is a work in progress. The recommendations herein are intended to be considered holistically. They should be considered in the context of existing programs, resources, and efforts so as to avoid unintended consequences that could discourage, rather than promote, broadband investment in low-income areas.

# Working Definitions

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## Low-Income Area

- 75% of national median family income (Source: Chairman Pai's Digital Empowerment Agenda)
- Census blocks for rural/non-metro areas
- Census tracts for urban/metro areas

## Broadband

- 25/3 minimum (Source: BDAC Report, 2018)
- Evolving standard; pegged to Sec. 706
- Additional criteria: latency, data caps, quality of service—not to mention affordability
- Functional definition: access to broadband sufficient to conduct a telehealth session, online learning, and working are critical

## Broadband Deployment or Availability

- “Broadband Services available for purchase by at least 90% of the residents and business of a particular area.” (Source: BDAC Model State Code, 2018)
- Need to distinguish between minimum standards, expectations and demands of business vs. residential market

# Adoption

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BDAC LOW-INCOME COMMUNITIES WORKING GROUP  
JULY 29, 2020 – WASHINGTON, DC



# Adoption Subgroup Members

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Scott Rudd, *Office of Lt. Governor Suzanne Crouch, State of Indiana* (**Chair**)

Jordan Goldstein, *Comcast* (**Vice-Chair**)

Kevin Donnelly, *National Multifamily Housing Council*

Tom Ferree, *Connected Nation*

Marc Ganzi and Anthony Lehv, *Digital Bridge Holdings, LLC*

Carlos Gutierrez, *LGBT Tech Partnership*

Paul Mitchell, *Microsoft*

Kimball Sekaquaptewa, *Santa Fe Indian School*

Tim Schneider, *Tilson Technology Management, Inc.*

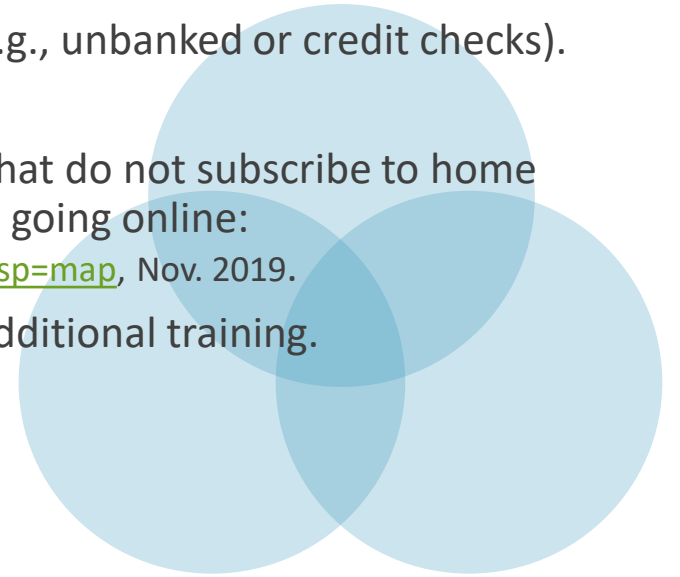
Christopher Yoo, *University of Pennsylvania*

# Subgroup Spotlight:

## *Principal Barriers to Adoption*

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- Cost of service and other financial issues
  - Individuals may not be aware of broadband adoption programs available to them that offer low-cost service, whether sponsored by governments, providers, community organizations, or partnerships among them.
  - Individuals may also face barriers related to their financial status (e.g., unbanked or credit checks).
- Digital literacy and inclusion issues
  - NTIA data show that, pre-COVID, nearly 60 percent of households that do not subscribe to home broadband cite lack of need or interest as their main reason for not going online:  
<https://www.ntia.doc.gov/data/digital-nation-data-explorer#sel=internetUser&disp=map>, Nov. 2019.
  - Individuals and institutions (e.g., schools and teachers) may need additional training.
- Cost of equipment/lack of proper equipment
- Access to a broadband connection (see slides by Deployment Subgroup)



# Subgroup Spotlight:

## *Key Topics Being Explored*

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- Reviewing broadband adoption data and identifying relevant gaps that are in need of attention to help the government, private sector, and non-profit community address adoption barriers, and highlighting opportunities to increase public-private data sharing and cooperation.
- Developing effective adoption strategies for various groups (e.g. seniors, veterans, families with school-age kids, LGBTQ individuals) accounting for different priorities and needs and engaging relevant community organizations.
- Examining the COVID-19 crisis as a case study in both the importance of adoption and the types of public and private rapid response efforts that are most effective in getting people online.
- Examining ways to keep first-time adopters during the pandemic connected post-pandemic.
- Analyzing the differences between rural and urban low-income communities which may require different adoption strategies.
- Simplifying/automating enrollment in adoption programs.
- Determining how to incentivize people to encourage family/friends to adopt.
- Examining the extent to which consumers rely solely on mobile data plans for their home broadband connections.
  - A study by the American Indian Policy Institute at Arizona State University regarding broadband access and use on Tribal lands show that, in 2018, 29% of respondents accessed the Internet at home through a mobile wireless provider via smart phone or mobile Wi-Fi hotspot ([https://aipi.asu.edu/sites/default/files/tribal\\_tech\\_assessment\\_compressed.pdf](https://aipi.asu.edu/sites/default/files/tribal_tech_assessment_compressed.pdf), p.29-30)

# Relevant Points to Consider

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- A study (first published in 2013) funded by the National Agricultural and Rural Development Policy Center found that nonmetropolitan counties that had high levels of broadband adoption (greater than 60%) in 2010 had higher growth in median household income—23.4% versus just over 22%—between 2001 and 2010 when compared to counties that had similar characteristics in the 1990s but were not as successful at adopting broadband.
- According to Census data from the 2018 American Community Survey, 85.1% of American households have a broadband internet subscription. Recent survey data from the Pew Research Center show that populations that continue to have lower rates of internet adoption include people with low incomes, seniors, the less-educated, and households in rural areas.
- Home broadband adoption gaps still remain – particularly among low-income populations and communities of color. Data from the 2018 American Community Survey show that:
  - Income: 62.3% of households with annual incomes below \$20,000 had a broadband subscription, compared with 95.3% with annual incomes at or greater than \$75,000.
  - Race/Ethnicity: Black/African American: 82.2%; Latino/Hispanic: 85.6 %; Native American and Alaska Native: 76.0%; White: 89.0%.
- Two-thirds of veteran households that do not use the Internet indicate the primary reason is lack of interest or necessity.

# COVID-19: A Case Study in Adoption Barriers

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- The pandemic has made broadband more relevant than ever, allowing Americans to conduct all aspects of their lives from home amid shelter-in-place orders and social distancing mandates.
  - Remote learning
  - Telemedicine
  - Remote work (including bandwidth-intensive video conferencing)
  - Online retail
  - Other typically in-person services delivered via video
- The vast majority of Americans stated that Internet has been essential or important to them during the coronavirus outbreak: <https://www.pewresearch.org/internet/2020/04/30/53-of-americans-say-the-internet-has-been-essential-during-the-covid-19-outbreak/>
- COVID-19 has presented challenges to address cost-related barriers to adoption and digital literacy.
- The current crisis thus provides a unique opportunity to examine broadband adoption programs to inform future, post-COVID efforts to expand adoption.

# COVID-19: A Case Study in Rapid Response

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- The public and private sectors have developed new and forward-thinking initiatives (and updated existing initiatives) to ensure broadband adoption during the COVID-19 crisis, with an emphasis on low-income communities and individuals.
  - **Keep Americans Connected Pledge:** At the FCC, Chairman Pai announced the Keep Americans Connected Pledge: (1) no service terminations; (2) no late fees; (3) open Wi-Fi hotspots to the public. Also urged companies to expand and improve low-income adoption programs. Further called on broadband providers to relax their data usage limits in appropriate circumstances and take steps to promote remote learning and telehealth. The private sector response has been robust and unprecedented – more than 750 companies have signed.
  - **Lifeline & E-Rate Requirements:** The FCC has modified several Lifeline and E-rate rules to address concerns during the pandemic.
  - **CARES Act:** Congress' coronavirus response allocated \$200 million for FCC telehealth programs, and the FCC acted quickly to put these funds to work. Also allocated billions to the Department of Education that could be used for remote learning. Other initiatives also funded (e.g., VA, HHS).
    - Continuing Congressional discussions related to further broadband adoption support (e.g., HEROES Act).
  - **Internet Service Providers** took other significant steps to maintain and expand connectivity for households (e.g., low-cost or no-cost access, opening Wi-Fi hotspots, equipment subsidies, expanded eligibility and/or increased speeds for existing low-income programs, waived installation costs and/or other fees, etc.).
    - <https://www.benton.org/blog/what-are-isps-doing-get-more-people-online-home-during-pandemic>
    - <https://www.fcc.gov/companies-pledging-keep-americans-connected-during-pandemic-go-above-and-beyond-call>

# Initial Recommendations

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- (1) Address Issue Holistically.** The pandemic has highlighted that effectively addressing adoption gaps requires addressing all three barriers to adoption: cost of service, cost of equipment, and digital literacy and inclusion.
- (2) Improve Data.** There is a lack of data sources and data validation. To better target adoption efforts, there is a need for data that:
  - Are as localized as possible.
  - Include utilization data, longitudinal studies, and adoption trend data.
  - Focus on both fixed and mobile broadband.
  - Are broken down geographically and demographically.
- (3) Improve Data Sharing.** The pandemic has put the importance of good data front and center. To better enable data collection, drawing conclusions, and targeting adoption efforts, we should improve data sharing among relevant groups in a manner that protects confidentiality of the information.
  - Sharing of data collected at the federal, state, and local levels.
  - Sharing of data between the public and private sectors.

# Initial Recommendations (*cont'd*)

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- (4) **Engagement and Coordination.** Closing the adoption gap necessarily must involve efforts by all stakeholders in the public and private sectors working together.
- It is more important now than ever to ensure that public sector efforts, including Lifeline and other programs, complement one another and are coordinated – including among different levels of government (federal, state, local) and among different departments and agencies at each level.
  - COVID-19 rapid response successes have highlighted the value in broadly engaging community organizations, the nonprofit sector, and the business community (e.g., from communications and technology to health care, education, and financial services).
- (5) **Address Geographic and Demographic Strategies.** While the working group is considering different strategies based on geographic issues such as rural versus urban, it is also important to consider adoption strategies and data from a demographic standpoint.
- Different uses of the Internet. For example, seniors may use the Internet to find health care information or connect with family and friends; families with school-aged children may use the Internet to complete school assignments; and veterans may use the Internet to seek jobs or access VA benefits.
  - In some ways, COVID-19 has brought these distinctions in to sharper focus, underscoring the need for thoughtful, targeted action.
  - Which government agencies and community organizations are involved in adoption efforts and what training is necessary may depend on particular group demographics.
- (6) **Improve Outreach.** The pandemic has made it critical to improve outreach efforts to ensure that individuals and communities are aware of the adoption programs currently available to them from the public (federal, state, and local) and private sectors.



# Deployment

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BDAC LOW-INCOME COMMUNITIES WORKING GROUP  
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# Deployment Subgroup Members

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Geoff Feiss, *Montana Telecommunications Association* (**Chair**)

Claude Aiken, *WISPA*

Elizabeth Bowles, *Aristotle*

Commissioner Karen Charles Peterson and Mark Merante, *Massachusetts Department of Telecom & Cable*

Courtney Dozier, *Office of Virginia Governor Ralph Northam*

Tom Ellefson and Jane Builder, *T-Mobile*

Ross Lieberman and Mike Jacobs, *ACA Connects*

Tim Walden, *CenturyLink*

Randy Wilson, *Airosmith Development*

David Young, *City of Lincoln, Nebraska*

# The Digital Divide

## haves, have nots, & sort of haves

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- The Digital Divide – according to Census data from the 2018 American Community Survey, 85.1% of American households have a broadband (non-dialup) internet subscription. Recent survey data from the Pew Research Center show that populations that continue to have lower rates of internet adoption include people with low incomes, seniors, the less-educated, and households in rural areas.
- Home broadband adoption gaps still remain – particularly among low-income populations. Data from the 2018 American Community Survey shows that 62.3% of households with annual incomes below \$20,000 had a home broadband subscription, compared with 95.3% of homes with annual incomes at or greater than \$75,000.
- Lessons learned from the Covid-19 Pandemic. Increased demand for bandwidth; access is critical for online education, telemedicine, remote work, government services, and lifestyle.

# Digital Divide (*cont'd*)

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- Testing the Hypothesis - Correlation between Income and Deployment
  - The Need for Accurate, Publicly Available “Open Mapping” Data.
  - The Deployment subgroup continues to explore the correlation between low income and deployment.
  - The Subcommittee used the Philadelphia Federal Reserve, among other sources, to compare broadband deployment with low-income census areas.

# Recommendations & Incentives

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- Establish state and local streamlined broadband deployment-friendly policies
  - Example: The State of Alaska recently replaced annual lease payments for fiber optic cable deployment in state right of way with a one-time fee structure
  - Example: [Arkansas Act 198 of 2019](#) encouraged public-private deployment of broadband
  - Example: [Mississippi Broadband Enabling Act](#) removes barriers for electric companies to provide broadband
- Tax incentives, including job creation tax credits, property tax abatement, etc.
  - Example: The State of Iowa removed telecommunications property from central assessment (which imposed a higher tax rate on telecommunications property). The State now taxes telecommunications property on a par with other commercial property.
  - Example: The Montana Legislature passed legislation to provide a temporary tax abatement on deployment of new fiber (other states have removed discriminatory tax treatment of broadband infrastructure).
  - Encourage the conversion of existing state USF programs to fund broadband upgrades over continued funding of legacy networks.
- Remove regulatory barriers
  - Cite: BDAC Model [State](#) (Article 9 & 10) and [Municipal](#) Codes
  - Cite: [Small Cells Order](#) and [subsequent clarification](#)
  - Example: [“Accessible, Affordable Internet for All Act”](#) The House of Representatives has started a serious conversation about supporting broadband deployment and removed state barriers to broadband deployment
  - Interagency coordination and collaboration on broadband funding options
  - Cite: Interagency Broadband Coordination Report to Congress
  - Cite: Report to the President of the United States from the Task Force on Agriculture and Rural Prosperity, January 8, 2018
  - Cite: American Broadband Initiative, June 2020

# Recommendations & Incentives (*cont'd*)

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- Expand use of Community Reinvestment Act for broadband infrastructure projects
  - U.S. Department of the Treasury, December 2019 (<https://home.treasury.gov/news/press-releases/sm864>)
- Facilitate middle-mile and last-mile broadband deployment to facilitate access to un- and under-served areas
  - Investing in broadband infrastructure means more than deploying “last-mile” facilities to end-users. It also requires investment in “middle-mile and last-mile” infrastructure sufficient to deliver broadband from the Internet backbone to rural consumers.
- Establish/expand state programs
  - Example: State universal service, grants, loans (*See Pew’s survey of state broadband policies*)
  - Include broadband in infrastructure investment policy. “Infrastructure” projects often are focused on roads, bridges, water, and sewer projects. “Infrastructure” should include broadband Infrastructure projects.
- Consider expansion of advanced broadband connectivity for rural health care, online learning, and telecommuting (particularly in light of COVID-19 crisis)
  - The effectiveness of the temporary coronavirus response initiatives implemented by the FCC and private providers should be evaluated and the effectiveness measured; and where demonstrated to be effective, these measures should be considered for permanent implementation.
  - States and state government subdivisions can augment federal programs and pandemic related initiatives. For example, as discussed above, the FCC has *temporarily* waived gift rules for the Schools and Libraries Program and the Rural Health Care Program. If these initiatives expire, states and/or localities could implement similar programs.

# Recommendations & Incentives (*cont'd*)

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## ➤ Data Resources

- The Broadband DATA Act should be funded to provide for more granular broadband availability and adoption data
- Publicly available open datasets will enable identification of discrepancies in broadband availability and produce reports and analyses that can be used for developing broadband policy, planning, and investment decision-making. Users could compare broadband availability with population density or socioeconomic data to prioritize the planning or funding of broadband projects to meet policy objectives.

## ➤ Wireless Infrastructure Deployment Incentives

- Facilitate tower siting. Cite: Small Cell Order and [NTIA Broadband report for DIA towers](#).
- Access to spectrum, especially in rural areas. The FCC should consider extending its Special Temporary Authority access to spectrum.
- Further, the Commission should require buildout measurements for spectrum license holders that require coverage throughout a wireless license area, based on geographic coverage—not just population served.
- The Commission should adopt a “use it or share it” policy. If wireless carriers are unable to extend service throughout their service areas for an extended period of time, they should make unused spectrum available to allow other carriers to serve underserved areas.

# Specific Deployment Incentives for Low-Income Areas

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The previous subsection scanned policy options that can be adopted on a wider scale by local, state, or federal entities to encourage broadband deployment in the economy. The following recommendations are more narrowly tailored to speak to low-income communities specifically. As above, these incentives are designed to: 1) reduce the cost of investment or increase consumer demand in an effort to increase return on broadband infrastructure investment; 2) increase competition to increase consumer choice and reduce consumer costs; and/or 3) enhance workforce development.

- Create gigabit opportunity zones with preference for low-income communities lacking sufficient broadband availability
  - Include streamlined broadband deployment-friendly policies (Cite: Pai, Capito, other Congressional proposals)
- Establish set-asides (RUS, FCC) for investment specifically in low-income areas
  - Examples: Tribal set-aside, C-band set aside proposal (Thune)
- Tax (e.g., expensing, capital gains, property tax abatement) preference for qualified investment in low-income areas
  - Provide incentives for entities, including the low-income communities themselves to invest in broadband through non-profit corporations or public-private partnerships
  - Additional funding for rural broadband - [BDAC State Model Code – Article 9: Rural Broadband Deployment Assistance Fund](#)



# Specific Deployment Incentives for Low Income Areas *(cont'd)*

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- Strategic planning
  - Create community-based organizations (e.g., cooperatives, partnerships) that may identify public and private funding sources, and other broadband investment options
  - Identify deployment obstacles and activities necessary to ensure access to affordable broadband
  - Develop locally-based strategic plans (including adoption) for broadband deployment and adoption
- Focus Community Reinvestment Act resources on broadband infrastructure projects in low-income areas
  - U.S. Department of the Treasury final guidance, December 2019 (<https://home.treasury.gov/news/press-releases/sm864>)

# Comments & Discussion

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