

FCC Broadband Deployment Advisory Committee

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

A PROGRESS REPORT

Tom Ferree, Connected Nation, *Chair*

Claude Aiken, WISPA, *Vice-Chair*

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MEMBERS

Tom Ferree*

Connected Nation

Claude Aiken*

WISPA

Elizabeth Bowles*

Aristotle

David Don* (Goldstein)

Comcast

Kevin Donnelly

*Nat'l Multifamily Housing
Council*

Courtney Dozier

Commonwealth of Virginia

Tom Ellefson* (Builder)

T-Mobile

Geoff Feiss

Montana Telecom Assoc.

Marc Ganzi* (Lehv)

Digital Bridge Holdings

Carlos Gutierrez*

LGBT Tech Partnership & Institute

Ross Lieberman

ACA Connects

Paul Mitchell

Microsoft

Karen C. Peterson* (Merante)

*Nat'l Assoc. of Regulatory
Utility Commissioners*

Scott Rudd*

Office of Lt. Governor, Indiana

Timothy Schneider

Tilson Tech Mgmt.

Kimball Sekaquaptewa

Santa Fe Indian School

Tim Walden*

CenturyLink

Randy Wilson

Airosmith Development

David Young*

Nat'l League of Cities

Christopher Yoo*

*Special Government Employee
University of Pennsylvania*

** full BDAC member*

PROGRESS & RESOURCES

Bi-weekly Meetings

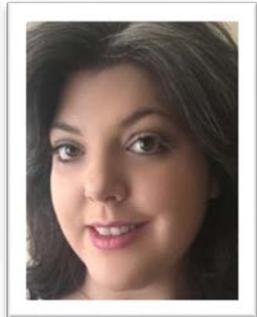
- Weekly progress in alternating WG & Subgroup focus

Guest Speakers

- **Dr. Nicol Turner-Lee**
Fellow, Governance Studies, Brookings Institute
- **Hunter Newby,**
CEO, Newby Ventures
- **Angela Siefer**
Executive Director, NDIA
- **Dr. Roberto Gallardo**
Asst. Director, Purdue Center for Rural Development
- **Jimmy Todd**
CEO & General Manager, Nex-Tech
- **Samantha Schartman-Cycyk**
CEO, Connected Insights

Reference Library

- 40+ articles, reports, web pages, other references collected to inform subgroup deliberation



LOW INCOME WORKING GROUP

Charge

1. Identify regulatory and other barriers that deter the development of high-speed broadband infrastructure and services to low-income communities.
2. Recommend actions to increase incentives to invest in deployment of high-speed broadband to low-income communities.
3. Identify barriers to adoption and use of high-speed broadband services in low-income communities.
4. 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.
5. 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.
6. Examine and explain how the Commission should identify low-income areas where additional action or reform would most increase broadband deployment.

DEPLOYMENT SUBGROUP

Members

- Geoff Feiss, Montana Telecommunications Association (*Chair*)
- Elizabeth Bowles, *Aristotle*
- Courtney Dozier, *Virginia Department of Housing & Community Development*
- Tom Ellefson and Jane Builder, *T-Mobile*
- Ross Lieberman, *ACA Connects*
- The Honorable Karen Charles Peterson and Mark Merante, *Massachusetts Department of Telecommunications and Cable*
- Tim Walden, *CenturyLink*
- Randy Wilson, *Airosmith Development*
- David Young, *National League of Cities, City of Lincoln, NE*

DEPLOYMENT SUBGROUP

Testing the Hypothesis

- Several resources point to a **correlation** between investment & deployment of broadband infrastructure and low income communities. (See reports from NDIA, Pew, others)
 - Some studies assert intentional underinvestment by broadband providers in low income areas (e.g., “digital redlining”)
- However, many factors are involved in broadband deployment decisions. For example:
 - Cost of infrastructure (wireline vs. wireless)
 - Cost of maintaining networks
 - Demand: take rates/Adoption
 - Average revenue per user (ARPU)
 - Churn (cost of acquiring and retaining a customer)
 - Density
 - Cost of service (price--influenced to some extent by all of the above)

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Testing the Hypothesis (*cont'd*)

- More research is needed to establish **causal** relationships between infrastructure, technology, affordability, adoption, and investment in broadband infrastructure
 - In some areas, broadband resources may be available, but adoption remains low. In other cases, adoption drives investment. According to at least one study, availability may be less important than age or relevance.

DEPLOYMENT SUBGROUP

Key Topics Being Explored

In general, actions that reduce cost of deployment or increase demand will make investment in broadband deployment more attractive. The subgroup continues to explore various assumptions regarding investment/deployment incentives and/or barriers, including:

- Statutory and Regulatory Barriers
 - See barriers reports from BDAC, 2018 re: adoption, permitting, fees, subsidized competition, etc.
 - Other regulations or statutes that negatively affect investment
- Tax and other policies that increase cost of investment or discriminate among providers of similar services
 - Sales, income, or property taxes that apply unevenly among taxpayers
 - Other assessments that apply only to some providers and not others
- Spectrum Policy
- Competition incentives/barriers
- Rural and Urban challenges: similarities and differences
 - Urban/rural divide, Rural/rural divide, Urban/urban divide

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Where Additional Action is Needed

The subgroup has found this charge particularly challenging. There are data (for example, from the US Census Bureau's American Community Survey) that report poverty rates among Americans. And there are data that indicate to some extent where broadband is deployed. But there are no data, to the subgroup's knowledge to date, that "overlay" deployment and income datasets. Additionally, the subgroup has yet to settle on criteria, such as:

- How to determine "*low income*"? (e.g., equal to, greater or less than Census poverty rate)
- What is a low income "*area*"? (e.g., census block, census tract, county, other)
- How to define "*Broadband*"?
 - The subgroup has tentatively agreed to 25/3 Mbps as the definition)
- How to define broadband "*deployment*"
 - e.g., what percentage of an "area" is "served" (*available vs. adopted*) by what technology/infrastructure?
- There is some guidance in the tax code, but the subgroup is evaluating whether this is optimal for our purposes

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Best Practices

- For example: financial barriers are one of the most-discussed deployment issues.
- “the underlying deployment problem [consists] of finding a way to jumpstart private financing in areas that do not provide private companies a return on their investment.”
 - Letter to BDAC, 6/14/18 from The National Association of Telecommunications Officers and Advisors (“NATOA”), the National League of Cities (“NLC”), the National Association of Regional Councils (“NARC”), the National Association of Counties (“NACo”), and the National Association of Towns and Townships (“NATaT”)
- The Deployment subgroup intends to examine current research (e.g., Pew Charitable Trusts, Benton Foundation, others) on various public policy options that are being considered and/or adopted across the nation by states and municipalities. Options are:
 - Tax incentives (including tax abatement, tax moratoria, reclassification, etc.)
 - Grants (and related funding sources, i.e., general fund, infrastructure programs, state USF, other governmental & non-governmental resources)
 - Loans (including loan forgiveness)
 - Public-private partnerships

ADOPTION SUBGROUP

Members

- Scott Rudd, *Office of Lt. Governor Suzanne Crouch, State of Indiana (Chair)*
- Jordan Goldstein, *Comcast (Vice-Chair)*
- Kevin Donnelly, *National Multifamily Housing Council*
- Carlos Gutierrez, *LGBT Technology Partnership & Institute*
- Kimball Sekaquaptewa, *Santa Fe Indian School*
- Tim Schneider, *Tilson Technology Management, Inc.*
- Christopher Yoo, *University of Pennsylvania*
- Paul Mitchell, *Microsoft*
- Anthony Lehv and Marc Ganzi, *Digital Bridge Holdings, LLC*

ADOPTION SUBGROUP

Why Broadband Adoption Matters

- A broadband connection is critical in a world that is increasingly connected. Examples:
 - 70 percent of teachers assign homework that requires the Internet.
 - Telemedicine can make medical care and medical information more accessible, particularly in rural areas, improving patient outcomes at lower costs.
 - A broadband connection provides access to career-building resources and a more efficient way to locate and apply for jobs.
 - For LGBTQ individuals, particularly in rural communities, the Internet can help find support from LGBTQ networks outside their communities, health information, counselors, and legal assistance.
- Those without a broadband connection are at a distinct disadvantage and this disadvantage will only worsen as essential services and information increasingly migrate online.
- While lack of access to broadband is important and is being considered by the Deployment Subgroup, a greater number of people have access but nonetheless do not adopt.
 - While 6% of the U.S. population lacks access to fixed terrestrial broadband at 25/3 Mbps, approximately 15% of households do not subscribe to Internet service.
- The Subgroup is exploring ways to close this adoption gap.

ADOPTION SUBGROUP

Principal Barriers to Broadband Adoption

- Cost of Service
 - 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.
- Cost of equipment/lack of proper equipment
- Digital literacy and relevance issues
 - NTIA data show that 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.
- Access to reliable broadband connections, particularly in rural areas (being considered by Deployment Subgroup)

ADOPTION SUBGROUP

Key Topics Being Explored

- 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.
- Differences between rural and urban low-income communities which may require different adoption strategies.
- Simplifying/automating enrollment in adoption programs.
- How to incentivize people to encourage family/friends to adopt.

Comments & Discussion

