Research proposal for the Broadband Opportunity Council

Submitted by
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A Kansas City-based non-profit working to bridge the digital divide since 2011

In our five-year efforts to eliminate barriers to meaningful broadband adoption in underserved population segments, Connecting For Good (CFG), as well as its partner organizations comprising the KC Coalition for Digital Inclusion, has consistently come up short on robust data required to sustain funding purposes tied to demonstrating the social and economic impact of digital inclusion—not just the broadband access at home, but the training and education that goes with it. While research about the user experience of broadband and existing support is fairly straightforward, the challenges remain in the area of socioeconomic impacts, namely how we get useable data on those who are excluded and how we measure potential negative impacts. Without guided and funded research, there is only speculation about these potential negative impacts. Because funding is dependent upon such data, non-profit organizations that are called out as the necessary players to partner with technology providers in bridging the digital divide, keep falling short of demonstrating what is missing and so far has not been measured.

We are proposing the following areas of research:

A. Broadband technology

1. Identify factors affecting the cost of broadband adoption in underserved populations;
   Identify factors affecting broadband adoption among the underserved populations. Use existing data collected by federal agency, such as HUD, to identify who the broadband adopters are; the "captive audience" of tenants in public housing can serve as population for research purposes.

2. Prioritize research proposals that focus on broadband technology that enables deployment and adoption among the most underprivileged sectors of our society. Commercial providers and privileged consumers should not be the main emphasis of this research funding.

3. The socioeconomic impact on population without broadband can be measured by comparison between two populations, one with and one without access. For example, a school district in neighborhood with high broadband penetration and a district in a neighborhood with low or no broadband access at home.

   For example, this is an illustration of the issue:

   Tamara Butler is one of our first ConnectedNeighbors from the West Bluff community. She said he was "so excited about having Google Fiber in my home," especially for her son, Willie. "When I was in Texas I did have a computer in my house," she said. "We had internet in the classrooms and kids had to do homework on the internet but now here with my son growing up he'll have internet at home." Since the launch on February 3, with the access of discounted device, Tamara purchase a new car and started a new job.

B. Broadband access and adoption

4. Data that demonstrates significant improvement in social and economic status as a direct result of broadband access. For example, employment rates, high school graduation rates, and small business ownership.

5. Prioritize research proposals that are submitted by organizations, mostly non-profits, that actually have delivered broadband and digital inclusion services to the underserved population segments and have gathered some of the data over the years (Connecting for Good is such an organization). Aim for meaningful and informed research, not so much research for the research's sake.

6. There is great need for research related to market trends that impact broadband deployment and private-public partnerships and sustainability drivers because most of the existing so-called research is informal and relies almost solely on case studies or hearsay and is reported by foundations. We need more measurable data especially on private-public partnership, as these are the only ones that actually lead efforts in broadband deployment and digital inclusion in underserved segments.

7. Critical data and research in the area of broadband adoption and utilization should be solicited from captive populations, such as public housing that received broadband services, such Juniper Gardens with 500 residents in Kansas City. Funding for such research is most effective because the sample is large and representative of the population.

8. We need to prioritize proposals that focus on factors affecting broadband adoption and the methodology of gathering data in a systematic way from samples and comparing results. Case studies should be downplayed as they tell stories instead of data analysis.

9. This area is most challenging is it requires gathering data from a non-existent segment of population—those who do not have broadband. This type of research may include factors affecting adoption; comparisons between early adopters and non-adopters by location, age, gender, income, etc., (again, non-profits, such as connecting For Good, are uniquely positioned to have most of such data already); small business ownership and other aspects.

C. Socioeconomic impacts

10. Critical data needs under economic and social impact of broadband should demonstrate significant, if applicable, difference between skills, opportunities, and activities of those with broadband access and those without such access.

11. Prioritize proposals that advance research in the field of broadband adoption impact on education and employment rates. Systematic research employing Census Bureau data and statistical analysis should be preferred to case studies. Additionally, proposals to research differences between entrepreneurial activity/small business growth, as indicators of economic growth, in the two populations, those with broadband access and those without such access. Again, a statistical analysis of data from Census Bureau against local landscape would be most beneficial. The one category that stands out as very significant in the broadband adoption area is gender as many "captive audiences" include large female populations, so priority should be given to proposal including gender impact research.

    For example, this is an illustration of the youngest female participation:
    Sabina is intensely focused on the monitor, her small hand clasped tightly around a mouse. She sits still, no fidgeting, no emotion, no distraction. Even her breathing is hardly detectible. She could be a sculpture…and then suddenly her hand starts moving very slowly dragging the mouse to the side just enough to stop and pause again. Her eyes never leave the monitor. Broadband, hardware and software, safe environment, education. At the age of 5, Sabina is an empowered woman, even if she doesn't know it yet.

12. Specific socioeconomic areas that would help measure the effectiveness of federal programs fostering broadband adoption should include research on impact by gender, age, education level,

employment rates and civic engagement. The effectiveness of federal programs and public-private partnerships, such as ConnectHome, could be evaluated by such criteria. Kansas City is home to five ConnectHome projects to date and three more to be completed in the next month, which would provide ample data for socioeconomic research.

D. Opportunities for federal leadership in data collection and research

13. See #15. Under the Department of Digital Inclusion, create a research depository that is open and available to all. This would include academic, industry, non-profit research and all other under the umbrella of broadband, digital inclusion and socioeconomic impact.

14. Interdisciplinary funding should be enhanced for research projects that combine broadband access and its impact on all aspects of our lives. How does access to fast Internet improve the quality of our life, education, work, health, leisure, etc. Research can be collaborated on between nonprofits and universities in the social sciences area, for example, with funding equitably distributed. Non-profits, such as Connecting for Good, have a unique experience and data on combining broadband infrastructure with hardware and education services.

15. The federal government should create a **Department of Digital Inclusion** under which broadband would feature prominently as the infrastructure, or highway, base for a series of other services in cooperation with other federal agencies, such as aging, education, health, housing, labor, veteran affairs, and others.