The Greenlining Institute (Greenlining) welcomes the opportunity to provide comments on NTIA’s Broadband Research Agenda. Greenlining is a research and advocacy organization dedicated to advancing economic opportunity and empowerment for people of color. We seek to build a nation in which communities of color thrive and race is never a barrier to opportunity. The national commitment to universal service, the idea that all Americans should have access to communications services, regardless of race or ethnicity, is central to our work as well.

Broadband is a key tool for economic empowerment in communities of color and is instrumental for equal access to economic opportunity. Despite nationwide progress in developing broadband infrastructure and the growing essentiality of internet access, the digital divide remains and is wider for communities of color. We need research to determine policy that will bridge this gap.

The NTIA has been a valuable resource for determining how different demographics use and access the internet. Greenlining believes that the NTIA Broadband Research Agenda should build upon that work by analyzing whether demographic factors contribute to the persistence of the digital divide, particularly between different racial groups and ethnicities. This research could be valuable tool for advocates, policymakers and broadband providers in designing tailored solutions to the racial broadband gap.

Greenlining’s proposals for the NTIA agenda focus on the following objectives:

- Analyzing demographic differences in the context of broadband deployment decisions.
- Analyzing demographic differences in the context of broadband adoption and service quality.
- Collecting data and analyzing the impact of provider investment decisions.
- Aggregating pricing data for broadband packages.
- Quantifying the perceived and real economic benefits of broadband access.
- Measuring the effectiveness of Lifeline in outreach and outcomes.

Broadband Deployment, Adoption and Utilization

a. Broadband Deployment Analysis

Data on broadband deployment and access comes from broadband providers through FCC Form 477. The NTIA also provides data through the State Broadband Initiative (SBI) Data and the 2014 National Broadband Map. Through these sources, we can get a nationwide picture of broadband deployment and availability. However, NTIA research can
supplement this data by analyzing and identifying any disparate impacts on communities of color caused by facially-neutral broadband deployment decisions by providers.

If the NTIA undertakes this analysis, Greenlining suggests taking census block demographic data (i.e. race, age, and income) and broadband access (i.e. provider choice, adoption, and maximum advertised speeds) and comparing those measures to other census blocks. This analysis would enable researchers to determine whether there is any correlation between broadband provider deployment decisions and the demographics of an area. Comparison of adoption rates between census blocks could also show regulators or providers how tweaking service offerings and/or competition rules could spur greater adoption of high-speed internet.

b. Broadband Adoption Analysis

Similarly, the NTIA should take a closer look at the demographics of broadband adoption and service quality for communities of color. The NTIA Digital Nation report, the FCC Broadband Progress Report and Measuring Broadband America Report provide research in this area, but a deeper analysis of these datasets with the NTIA’s resources would allow policymakers and advocates to better address the adoption gap.

For example, the 2016 Broadband Progress Report looks at adoption rate and speed tier as compared to income. The NTIA could improve on that research by comparing adoption rates and speed tiers as related to race. Different groups, particularly communities of color, may be disproportionately affected by data caps or subscribe to lower speed tiers. Identifying differences could shed light on how different groups connect to the internet and provide opportunities to spur greater adoption through education and outreach efforts.

The NTIA Digital Nation report analyzes which households have not adopted home internet access and the reasons why. For the groups that do have internet access, the NTIA could expand its data gathering to include questions as to the price paid for access, speed, the numbers of users within the household, the existence of data caps, ratings of service quality, and other relevant consumer assessments of the quality and value of the service they are receiving. For households without home broadband, questions should delve deeper into the reasons for foregoing service, for example, what do these decisionmakers do for work? Do they have kids in school? What is an affordable service?

c. Collecting Data on Provider Market Decisions

Unfortunately, the practice of redlining still exists today, and the persistence of a racial broadband adoption gap shows that our shared universal service goals are not being met. Redlining in the broadband context is the explicit, implicit or unintended diversion of corporate resources, marketing, promotions, outreach and deployment of broadband capability along racial lines. Greenlining believes there is digital redlining where communities of color have different access to broadband and different quality of service because of investment decisions made by broadband providers. The NTIA could take leadership in promoting universal service and ending digital redlining by funding research
and information sharing between agencies aimed at determining whether provider business decisions result in a disparate impact on communities of color.

An analysis or report of provider business decisions should look at data regarding where providers direct their marketing funds. These expenditures include non-English marketing efforts, advertising in predominantly ethnic areas, or whether certain communities are targeted by “secondary” providers instead of primary ones. Similarly, the NTIA should examine whether a provider participates in State and Federal programs intended to increase broadband adoption. Additionally, without adequate representation at the executive level and in the provider’s workforce generally, broadband providers often fail to understand the needs of the communities they serve. Therefore, the NTIA should examine workplace and executive diversity. Finally, the NTIA should examine how and where providers are deploying their resources, for example looking at where providers plan to develop new products, impose higher pricing, or what areas are served first in repairing outages to create a better picture of broadband equity.

The NTIA has an opportunity to work with providers, other agencies such as the FCC and state-level governing bodies to obtain his data – either from SBI reports, Form 477 reporting or through a new data collection measure. Creating a set of data that incorporates the above factors along would allow researchers to conduct an analysis of the racial dimensions of broadband deployment and adoption. This analysis could provide invaluable data in reaching the goals of universal service and removing the barriers that communities of color face in broadband access.

**Socioeconomic Impacts**

a. Collecting Data on the Cost of Broadband

The FCC’s *2016 Broadband Progress Report* notes that it lacks “reliable data as to the actual prices consumers pay for [broadband] services and information about the extent that consumers subscribe to or whose on-line activities are affected by usage allowances.” The NTIA’s broadband research agenda should address this gap by collecting and aggregating pricing data.

Gathering pricing data along with demographic, service quality and/or geographic data can show which areas and demographics in the United States have the best access to advanced telecommunications capabilities. Advocates and policymakers can then compare the regulations and demographics between regions to determine what policies and programs are working in driving down broadband prices and increasing broadband access, particularly among communities of color. The NTIA could collect this pricing data as a new project or by supplementing existing data collection practices such as CPS questionnaires.

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b. Collecting Data on the Value of Broadband

One of the drivers of broadband adoption is its value, i.e. what benefits a household is getting relative to its cost. The *Digital Nation* reports include questions on whether households use internet access for e-commerce, financial services, health services, job searches, education and telecommuting but does not quantify the economic benefit of those uses. The persistence of a “homework gap” among students without access home broadband means many children fall behind in school and face lowered job prospects down the line, however these economic costs are not measured. Therefore, the NTIA has an opportunity to shape policy by calculating both the perceived and real economic benefits of broadband.

Future NTIA research efforts should follow the economics of broadband access to determine how much value internet access has to a family. This value will likely differ based on digital literacy, socioeconomic status and race. Quantifying these numbers and determining the economic benefit of high-speed internet access can be an important tool for policymakers in creating legislation and funding broadband access programs.

c. Measure the Effectiveness of Lifeline in Outreach and Outcomes

The NTIA agenda should include research initiatives to quantify the effectiveness of federal broadband access programs such as Lifeline. The Federal Lifeline program provides subsidies to low-income families so that they can obtain telephone, wireless, and most recently, broadband access. Millions of American households are eligible for the program but many do not apply. Comparing the demographics of households participating in Lifeline to households eligible to participate in Lifeline can show whether there is a demographic gap in outreach for the program. Additionally, the NTIA could research the economic benefit of a Lifeline subscription in terms of additional savings to the household through online comparison shopping, job searches, healthcare research or education. NTIA research could also follow up with former Lifeline subscribers to find out whether these households still subscribe to wireless, telephone or broadband even in the absence of subsidies and the reasons for leaving the program. For example, the NTIA could look at how many subscribers have left Lifeline because of economic opportunities enabled by the program. Such research could improve the efficacy of Lifeline, improve adoption and help achieve universal service.

**Conclusion**

Greenlining’s research proposals will benefit all Americans but will be particularly important for communities of color in getting equitable access to broadband. Access to broadband is inextricably tied to economic empowerment. Therefore, achieving universal service will uplift communities of color and provide economic opportunity for our nation as a whole. With the proper research and data around these issues, policymakers can make decisions based on comprehensive view of the broadband landscape. Better research into the circumstances and decisions affecting groups of different ethnicities can provide
perspectives and solutions necessary for broadband equity. Therefore, Greenlining urges the NTIA to adopt an agenda that is forward-looking and cognizant of the effects of digital redlining in broadband deployment, adoption and access.

Greenlining appreciates this opportunity to comment and looks forward to engaging further on this critical issue.

Respectfully submitted,

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