Testimony of Elin Swanson Katz, Connecticut Consumer Counsel

before the

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Committee on Energy & Commerce
Subcommittee on Communications and Technology

hearing entitled

"Closing the Digital Divide: Broadband Infrastructure Solutions"

Good morning, Chairman Blackburn, Ranking Member Doyle, and distinguished members of the Subcommittee on Communications and Technology. Thank you for the opportunity to testify on the important topic of closing the digital divide.

Since 2011, I have served as the Consumer Counsel for the State of Connecticut. I head the Office of Consumer Counsel (OCC), a small, independent, and nonpartisan state agency that serves as the public advocate on matters relating to electricity, water, natural gas, and telecommunications. Within the OCC is the Connecticut State Broadband Office. I also serve as Connecticut Governor Dannel P. Malloy's designee to the Federal Communications Commission's (FCC) Intergovernmental Advisory Committee (IAC), and serve as its Chair. I am also the President of the National Association of State Utility Consumer Advocates (NASUCA), an association of 44 consumer advocates in 40 states and the District of Columbia. I also represent

NASUCA on the FCC's Joint Board for Universal Service. Except as noted, my remarks here today are in my capacity as Connecticut's Consumer Counsel.

I am grateful for the Committee's attention to the disparities in access, availability, speed, and cost that we see across our nation with respect to broadband internet services. As noted in the Committee's background memo, "The importance of broadband in modern American life and the economy cannot be overstated." Broadband has revolutionized how we communicate, conduct commerce, educate our children, engage with health care providers, and participate in government. Unfortunately, as you know, there are millions of Americans who do not have broadband internet access in their homes, and tens of thousands of businesses (or more) – typically small businesses – that also do not have access to broadband internet services. According to the Pew Research Center, 25% of Americans still do not have broadband internet access service in their homes.[1] Approximately 5 million households with school-age children, equating to 17.5% of such households, do not have a broadband internet connection at home[2], with low-income households accounting for a disproportionate share.[3] The problem is also particularly acute in rural America, as 39% of rural Americans lack access to broadband internet access service.[4]

[1] Pew Research Center, *Internet/Broadband Fact Sheet*, January 12, 2017.
[2] Pew Research Center, "The numbers behind the broadband homework gap," April 20, 2015.
[3] Pew Research Center, "Digital divide persists even as lower-income Americans make gains in tech adoption," March 22, 2017.
[4] Federal Communications Commission, *2016 Broadband Progress Report,* January 29, 2016.

But these statistics are just numbers, and as members of this Committee, I am sure you have heard them or similar numbers before. Today, I'd like to tell you a little about the people; that is, the stories behind the numbers. Let me start with what we have found in Connecticut as part of our effort to study and address the "Homework Gap," the households with school-age children that do not have a broadband connection.

It is perhaps surprising to think about Connecticut as a focus of the Digital Divide, as overall, we are generally an affluent state with sound broadband infrastructure. Nonetheless, like every state, we have underserved and unserved pockets, particularly in urban and rural communities. In particular, we found that many legislators and policymakers were not aware of the fact that there are large numbers of children in our cities who do not have broadband access at home. We therefore commissioned a report with a community-based communications company in Hartford, Connecticut, Strategic Outreach Services (SOS), to assess the affordability and accessibility of broadband internet service for students in the North End of Hartford, an area of the city predominantly low-income, demographically made up entirely of ethnic minorities, and also one known for its community pride and commitment to ensuring its students reach their full potential. SOS was founded by Janice Flemming-Butler, who is also founder and CEO of The Voices of Women of Color, a social justice organization that teaches leadership skills to women of color. Ms. Flemming-Butler is in the audience today, along with her colleague Andrea Comer.

In order to collect first-hand accounts and data, over the course of many months in 2017, we met with community groups in Hartford, attended Neighborhood

Revitalization Zone (NRZ) meetings and other stakeholder meetings, and spoke with parents, educators, and students in the North End.

What we learned is that many students in North Hartford suffer from the "Homework Gap," in that after school hours, and particularly from 6 p.m. to 10 p.m., they lack the home internet access enjoyed by their suburban peers. In fact, the SOS report found that students in the North End face a "broadband desert," which forces them to continually search for safe, reliable broadband service connections outside of their homes. For example:

- Students used the Wi-Fi access at a local fast food restaurant to do homework (however, the restaurant subsequently changed its policies so as to limit the time a patron to could stay at a table);
- Students venture out at night, regardless of the weather, in an attempt to access Wi-Fi near buildings;
- The public schools shut down Wi-Fi access after-hours, so that students cannot sit nearby and complete homework;
- Many parents recognized that broadband internet access was important to their children, but found it simply unaffordable or unavailable at any price, or that back balances prevented renewals;
- There are long lines of students (and adults) queued up to use the public libraries' computers before their 5 p.m. closure;
- There were also numerous expressions of frustration that a "smart phone" is often viewed by policymakers and the public as a substitute for a home

connection for broadband internet access, when smart phones are typically expensive and difficult to use to complete written schoolwork or write papers.

The report concludes:

> It is clear that broadband internet service plays a significant role in educational progress in North Hartford. The limited access to quality technology impacts the learning experienced by many students who attend Hartford schools. This often results in a lack of equity for North Hartford students, which impacts their ability to leave school with the requisite tools needed to move on to higher education and to contribute to the state's workforce. Families affected by the Homework Gap, the majority of whom are minority and low-income, struggle to find access to affordable broadband internet services in their home, and also may require training and technical support once they obtain access. Surprisingly, such services are not available to many North Hartford residents at any price.[5]

What we learned about and heard from students in North Hartford is deeply troubling to me as a consumer advocate, a former teacher, a parent, and as a human being. No child should have to do their homework at a McDonald's or Dunkin' Donuts, or sit outside, in the dark, trying to finish a school project using someone else's Wi-Fi. The implications for our educational system and the quality of education that we deliver to children in low-income urban communities is profound. We cannot hope to lift children out of poverty, to realize their potential, and to prepare them to participate in our global economy, if we do not provide them with basic educational resources like reliable, affordable access to broadband internet services.

[5] A copy of the report, "Assessment of the Broadband 'Homework Gap' In Hartford, July 13, 2017, is appended to my testimony and also available online at this link: http://www.ct.gov/occ/lib/occ/2017-0711_sos-osb_report_final.pdf.

We have never said to children whose parents cannot afford textbooks, "Sorry, you don't get to learn math or history or science."[6] However, by failing to address the fact that too many students live in neighborhoods with low-quality broadband internet access and families that can't afford even a basic broadband internet connection, we are in effect sending the same message.

This situation is by no means limited to Hartford. I have worked with municipal officials, educators, small businesses, and other stakeholders in other cities and towns as they work to bring attention to the lack of affordable, reliable access to broadband internet services in certain low-income portions of their communities, and to identify solutions, both short-term and long-term.

It is a question not just of affordability, but of access and the quality of access. We heard, as discussed in the Homework Gap report, that residents, schools and business owners experience challenges with connectivity and access. This situation was also documented in a 2016 report from my office, "A Brief Overview of Broadband Deficiencies in Connecticut," prepared by CTC Technologies.[7]

[6] As one student told me, "It's not that my mom doesn't know it's important, but sometimes after she pays the rent and buys food and gets whatever my little brother needs, there just isn't any money left over." This underscored to me one particular difficulty faced by families that live paycheck to paycheck, and sometimes can't afford the monthly bill for internet services: it's not generally a portable commodity; you can't purchase some broadband at the store like a loaf of bread when you have the available funds. This makes providing this essential educational resource even more challenging for low-income families.

[7] A copy of the report, "A Brief Overview of Broadband Deficiencies in Connecticut," March 2016, is appended to this testimony and available online at this link: http://www.ctcnet.us/wp-content/uploads/2016/03/A-Brief-Overview-of-Broadband-Deficiencies-in-Connecticut-20160322.pdf.

That work also focused in part in Hartford, Connecticut. Prior to the Strategic Outreach Services study and report, my office worked in late 2015 and early 2016, with CTC Technology & Energy (CTC), a telecommunications engineering and consulting firm. A CTC engineer conducted site visits at business locations suggested to us by Hartford officials. We visited urban areas of the state on December 14, 2015 and rural areas on January 6, 2016. We met with a range of users and institutions, discussed broadband capabilities and challenges, performed speed tests, and surveyed broadband physical plant.

While Connecticut is lauded by incumbent providers as having access to fiber services in excess of 90% across the state, CTC found a range of broadband challenges in pockets of Connecticut, including:

1) Maximum speeds far less than what businesses need for current operations;

2) Limited or no affordable competitive options for broadband services;

3) Growing needs for broadband that will further exceed the current broadband services; and

4) Long delays in obtaining services.

From our urban surveys we found evidence of high-quality fiber and cable broadband services in proximity to the poorly served locations. However, the individuals at those locations reported that service providers decline to connect users to those services, or will do so only at a prohibitively high cost—approximately $10,000 to $30,000 for a short street crossing. Also, services are costly—from $1,000 to $2,000 per month.

Our survey work found businesses operating at the equivalent of dial-up internet speeds. For example, Scotts' Jamaican Bakery (801 Windsor St., Hartford) is locally famous for its products and operates in a former manufacturing facility. Scotts' has multiple locations in Hartford for food preparation and retail sales. In addition to typical business Internet communications, Scotts' needs broadband for its telephone system, to update its website, and for USDA inspectors to connect. Scott's cannot operate a unified telephone system or an interconnected point-of-sale system across its locations. The owner, Gordon Scott, reports he has had serious problems with broadband since 2008 and needs to do all but the most rudimentary Internet tasks from his house. In fact, he told us that to send an email from this facility, he has to have everyone hang up any phone calls. When we tested his connection, we found a download speed of 1.44 Mbps, the functional equivalent of dial-up speeds. At the time, Scotts' was paying $290 per month for service, and had been quoted a connection cost of $8,000 to connect to a fiber node that was already located on his street.

In addition, we documented challenges faced in rural parts of Connecticut. As discussed in the Deficiencies report, members of the Northwest Hills Council of Governments (NHCOG), which is a coordinating body for chief elected officials from twenty-one rural Connecticut towns,[8] attended a meeting in Caanan, Connecticut. They reported that it is difficult for residents in the surrounding areas to get quality broadband. In rural housing distant from the town center, only dial-up connections are

[8] The Northwest Hills Council of Governments members are Barkhamsted, Burlington, Canaan, Colebrook, Cornwall, Goshen, Hartland, Harwinton, Kent, Litchfield, Morris, New Hartford, Norfolk, North Canaan, Roxbury, Salisbury, Sharon, Torrington, Warren, Washington, and Winchester.

available in some areas, lower speed DSL in others. Individuals have received quotes from incumbent providers as high as $60,000 for fiber connections to their residences.

While this report received significant pushback from some industry representatives and claims that I was “cherry-picking” data to overstate the problem, at the same time, I received a number of inquiries from disgruntled mayors in other Hartford municipalities asking why I hadn’t also profiled the underserved areas in their communities. So these underserved urban pockets are a problem in many, many cities. In preparing my testimony, I also went back and checked on the locations which we tested, and for all but one of them, the situation remains the same. So progress is not coming, or certainly is not coming quickly enough for these small businesses.

There are challenges in identifying a path forward for urban communities like North Hartford and certain rural towns such as those in the NHCOG, but there is also much reason to be hopeful. The fact that legislators such as yourselves are taking notice and looking for options is a very positive sign. Based on the work we have done in Connecticut, as well as the work I have done at the national level through the FCC committees and NASUCA, I suggest the following:

- **Recognize that the Digital Divide exists in urban as well as rural communities.**

  There has been widespread recognition that many rural American communities, whether small towns, isolated hamlets, or Tribal areas, are at a crisis point. A lack of access to, or availability of, affordable, reliable broadband internet

service is crippling the ability of many rural areas to participate in the digital economy; access health care, education, and other essential services; and attract or retain young people. Access to such service is vital to the economic health of our rural communities.

There has been less attention, however, to the problem faced by many low-income urban communities. These urban centers, which often include significant minority populations, are less readily visible, as they are often broadband "deserts" surrounded by or adjacent to wealthier neighborhoods and suburbs with greater options. However, lack of affordable, reliable access in urban communities is just as impactful on its residences as on their rural counterparts. Seemingly intractable problems such as the achievement gap in education and the urban cycle of poverty cannot be solved without the provision of reliable, affordable broadband access.

- **Acknowledge the role of federal, state, and local governments in ensuring affordable, reliable access to broadband internet services.**

  I again thank the Committee for implicitly acknowledging that government at all levels has a role in ensuring that our citizens have access to broadband internet service. It is also now time to explicitly recognize that role. Ensuring affordable access to essential services is one of the elemental obligations of government, and these are public policy goals that form the center of activities for the two state agencies I manage. Broadband internet service, as noted in the Committee's background memo, is one such essential service. The existence

of the Digital Divide demonstrates that there is much work to be done to provide universal access throughout the country.

As noted in Resolution 2017-04 of the National Organization of State Utility Consumer Advocates (NASUCA), URGING LOCAL, STATE, AND FEDERAL OFFICIALS TO ENSURE RELIABLE BROADBAND INTERNET ACCESS SERVICES ARE ACCESSIBLE AND AFFORDABLE TO ALL CONSUMERS, "universal access to affordable communications service is a bedrock principle of the policies of the United States, including the Communications Act of 1934 and the Telecommunications Act of 1996."[9]

Legacy phone service carries with it a regulatory universal service obligation requiring phone companies to provide service to consumers. Internet service providers (ISPs) have no such regulatory service obligation. They can and will generally choose to serve only areas which serve their economic interest, i.e., where they can make a profit. This does not make ISPs selfish or unreasonable – it makes them businesses. However, as federal, state, and local officials did with electricity, it is incumbent upon government officials to work with ISPs and promote competition to ensure that underserved or unserved areas are able to obtain reliable, affordable broadband internet service.

[9] This NASUCA resolution is available at this link: http://nasuca.org/nwp/wp-content/uploads/2017/01/2017-04-NASUCA-Broadband-Resolution.pdf.

- **Support Ongoing Mapping of the Availability of Broadband Internet Services**

  In order to effectively deploy resources, it is essential that government officials, policymakers, citizens, and industry stakeholders understand the availability of broadband internet services, including speed, reliability, and cost of such services. Mapping of such services is thus necessary. For such maps to be accurate, the data must be independently verifiable and provided to the public in a fair and transparent manner.

- **Support self-help efforts by state and local governments**

  Many government officials and stakeholders in our cities and towns recognize the essential nature of affordable, reliable broadband internet services. They are taking steps to help address the Digital Divide in their communities, including the Mayor's Office in Hartford, for example. These efforts include modeling of public-private partnerships with existing ISPs as well as new entrants; developing grant programs to support deployment to underserved and unserved areas; and developing regulatory mechanisms such as "Dig Once" policies and uniform pole access agreements that help speed the deployment of advanced networks. In another example, stakeholders from the rural towns in Connecticut's NHCOG (listed above) recognized that market forces alone have not brought and will not bring broadband internet access to their rural neighborhoods any time in the near future. They thus formed Northwest ConneCT, a non-profit organization that is analyzing public-private partnership models to build a fiber optic network covering the region, "with unlimited

capacity and an enhancement to our mobile network."[10] As their website states, "We cannot stand still. We either slide down a long and painful slope or we make a change that turns the corner to positive."

Such efforts by state and local governments to ensure access to essential broadband internet services for their communities should be supported and applauded. Efforts to prohibit or curtail such actions by state and local governments will only harm these underserved and unserved communities, and delay or prevent the deployment of next-generation networks.

- **Provide financing, grants, matching funds, and other support for build-out of broadband infrastructure**

  It is clear that it will take action beyond reliance on traditional market forces to build out broadband infrastructure to these underserved and unserved urban and rural areas. The proof is that, despite an ever-increasing demand for affordable broadband internet service, there has been little improvement in these areas, except where there have been government-sponsored efforts to support infrastructure development. If market forces do not support build-out of infrastructure for this essential service, government has an obligation to step in. This is how we ensured every citizen has access to affordable electrical, how we ensured they had access to affordable telephone service, and this is how we will ensure that they have access to affordable broadband internet service.

[10] The Northwest ConneCT website can be found at this link: http://northwest-connect.org/.

CONCLUSION

I thank you for your time and attention to this issue. I am heartened by your interest, as evidenced by the plethora of legislative proposals before you. If we move away from a regulatory scheme that provides a guarantee of universal telephone service, it is vital that we look at new roles for government and new models for partnerships with industry to ensure we do not lose the promise of access to essential communication networks for every citizen and in every community.