NEXT CENTURY CITIES | Connecting Communities

Testimony of Deb Socia

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Before the

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Energy and Commerce Committee

House of Representatives

on

"Promoting Broadband Infrastructure Investment"

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Good afternoon, members of the Subcommittee. My name is Deb Socia, and I am the Executive Director of Next Century Cities, a bipartisan city-to-city initiative with over 100 members dedicated to ensuring access to fast, affordable, and reliable broadband Internet for all.

High-speed Internet access is essential. It is as simple as that. What is genuinely complicated is making it happen at the ground level. Due to the lack of robust competition in this space, local governments around the country are taking proactive steps to ensure their communities have universal, fast, affordable, and reliable Internet access. Providing this critical need has emerged as a core responsibility of local governments, transcending traditional partisan divisions and requiring cooperation across the community. When it comes to providing access to high-quality Internet, everybody has a role to play.

Communities across the country – including the 103 members of Next Century Cities – have taken divergent approaches to bringing broadband Internet access to residents, from municipal networks to partnerships with private providers. These approaches and others, such as open access networks in which cities provide fiber infrastructure and lease access to competing independent providers, show that there are nearly as many successful models for communities to deploy, as there are communities in the country. Our organization is committed to helping all communities succeed in ensuring access to high-quality Internet, which is why we recently developed a comprehensive policy agenda that provides guidance to different stakeholder groups on how to contribute to making a community's broadband dreams reality.

Several of the most innovative and interesting solutions have emerged in unexpected places:

- The small towns of **Ammon, ID** and **Mount Vernon, WA** have each developed gigabit open access networks. In this innovative model, local governments are directly involved in building the physical fiber infrastructure and lease access to this network to private providers, who compete to provide low-cost, high-quality service to residents and businesses. In Mount Vernon, this network has revolutionized the community's healthcare system, creating a 'telehealth' system in which information can easily be shared across medical facilities, leading to more efficient services for patients.

- Outside of Baltimore, the town of **Westminster, MD** has initiated a new public-private partnership with Ting, a private provider of fiber Internet service. The recently-launched network will give this small community access to next-generation Internet.

- In the South, the cities of **Chattanooga, TN, Wilson, NC**, and **Lafayette, LA** have some of the fastest, globally competitive Internet access available.

- In Connecticut, a state-convened coalition of communities, with **New Haven, CT** at the forefront, is developing a unique regional approach to establishing broadband Internet access. The CTgig project, now featuring 46 partner towns representing half the state's population, has issued a joint Request for Qualifications that encourages private providers to work with the group to transform Connecticut into a gigabit state through public-private partnerships.

Next Century Cities is dedicated to helping all communities achieve access to high-quality Internet, regardless of the path they choose to pursue. Our organization's membership represents

an inclusive cross-section of America, from small rural communities such as **Winthrop, MN** to large metropolises such as **Los Angeles** and **Boston**, and from traditionally conservative communities such as **Lafayette, LA** to progressive cities such as **Boulder, CO**. What unites these communities is a commitment to the imperative of broadband Internet access for continued growth, and an understanding that local governments, freed from federal and state constraints, are best situated to provide for the needs of their residents.

To help advance these goals and support communities on the path to achieving fast, affordable, and reliable Internet access, Next Century Cities has developed a range of tools to empower local leaders and equip local governments with the knowledge needed to effectively develop this critical infrastructure. Some of our activities to provide a platform for city voices in this important conversation include:

- **NCC Launch Event:** in October, NCC launched with 32 inaugural members at an event held in Santa Monica, CA. The event featured keynote speakers and panels with mayors and city technologists from inaugural member cities, a welcome address from the FCC Chair, and attracted over 100 attendees.

- **Envisioning a Gigabit Future Field Hearing:** NCC partnered with the Southeast Tennessee Development District to produce "Envisioning a Gigabit Future," a field hearing held in Chattanooga, TN. At the event, municipal leaders spoke to the importance of broadband Internet access to community well-being.

- **US Conference of Mayors Panel:** NCC hosted a Best Practices panel at the US Conference of Mayors annual meeting, entitled "Building Out Broadband and Creating the Fiber Future." The panel was moderated by Chattanooga Mayor Andy Berke and featured other NCC mayors speaking to their colleagues nationwide about the need to build out high quality broadband and the benefits of NCC.

- **NCC Featured at Major Events:** NCC has also featured prominently with Deb Socia and Chris Mitchell speaking, moderating, or sitting on panels at other events hosted by third parties, including MountainConnect, Gigabit Cities Live, the Schools, Hospitals, and Libraries Broadband Coalition (SHLB) Conference, and the Coalition for Local Internet Choice (CLIC) Conference. NCC is also working with Broadband Communities on an upcoming event in Lexington this September.

- **Elevating City Voices:** NCC has also coordinated opportunities for city leaders to directly share their stories with a range of audiences. This includes assisting communities in telling their own stories and helping draw national and local press attention for their broadband efforts, and highlighting mayors through NCC-hosted events and other panels.

- **Member Letters to FCC:** NCC has supported member engagement with national-level policymakers, facilitating two open letters presented to the Federal Communications Commission.

In addition to providing support and opportunities for city leadership, our organization also assists cities in understanding and implementing best policies and practices to ensure successful

development of broadband projects. Some elements of our learning network, aimed at helping communities to improve broadband practice, include:

- **Members' Calls on Policy and Practice:** NCC hosts regular members' calls for its communities. Monthly calls focus on issues related to practice and implementation, such as 'dig once' policies and working with incumbents. Additional calls offer experts to discuss high-level policy topics, including discussions of proposed changes to the FCC's Lifeline program with a senior counselor at the Commission and a conversation between Next Century Cities members and representatives of the Broadband Opportunity Council.

- **Newsletters and Weekly Updates:** NCC issues a monthly newsletter and a short weekly email on broadband news, known as the "Weekly Download." Both serve to promote awareness of broadband issues and NCC's activities and events. In addition to informing our members, the NCC public monthly newsletter currently reaches over 600 subscribers.

- **Building Connections among Cities:** NCC staff also personally connect city leaders to help them strategize, discuss barriers and solutions, and share knowledge.

Recently, Next Century Cities released a comprehensive policy agenda identifying concrete steps that all broadband stakeholders—government officials, community members, and the "civil society" of nongovernmental organizations and institutions—can take to help achieve fast, reliable and affordable Internet access.

This new resource is intended to both guide broadband practice, and emphasize the importance of community leaders in ensuring access to high-quality broadband. Consistent with our mission,

this new resource provides guidance that will be useful to communities regardless of how they choose to pursue their broadband goals.

The resource seeks to provide guidance on appropriate actions that can be undertaken by five key stakeholder groups:

- **Local Government**
- **State Government**
- **Federal Government**
- **Philanthropy**
- **Community**

Our organization believes that local governments occupy a critical place in the direction and execution of broadband projects, and our policy agenda offers some specific guidance on how to effectively leverage this position. Examples of best practices include:

- **Encourage Knowledge Sharing:** communities across the country can learn a great deal from their peers in other states. Sharing experiences, lessons learned, and best practices among local leaders can improve the overall development of broadband Internet.

- **Improve Local Regulations:** local regulations can either impede broadband development by burdening private providers or promote investment by making the building of broadband as efficient as possible. Regulations that can be adjusted, streamlined, or improved include local permitting processes which govern access to local rights-of-way, building codes that allow communities to construct fiber-ready buildings, and 'dig once' policies which mandate that communities lay down fiber as part of other

infrastructure work. It is worth noting that when utility poles are privately owned, local governments have little power to compel owners to ease access to them.

- **Pursue Local Investment:** in many communities, community members have either built their own networks or partnered with an independent ISP to build new Internet infrastructure. The majority of communities have not used taxpayer dollars in these investments, though some have recently chosen to, not unlike they do in building roads or other essential infrastructure. . The policy agenda offers examples of investments communities can choose to undertake to foster broadband development, including entering into partnerships with private companies, building the physical infrastructure needed for gigabit Internet, and building and operating broadband networks.

State governments, too, have an important role to play in ensuring that all Americans have access to fast, affordable, and reliable broadband Internet. Some of our recommendations for state governments include:

- **Improve State Regulations:** community authority is a function of state regulations that can either empower local governments or restrict their ability to provide truly high-quality Internet access. Many state regulations currently burden communities by proscribing options for ensuring broadband access, which protects large providers from effective competition that can truly drive improved performance.

- **Invest in the 'Middle Mile':** while many communities have been able to improve 'last mile' service, which connects individual homes and businesses to the Internet, larger 'middle mile' infrastructure, which links communities together, can benefit from

resources and coordination at the state level. States are also frequently significant buyers of telecommunications services for their internal functions that they can often self-provision at lower cost and higher quality.

- **Create Representative Task Forces:** state task forces on internet performance and broadband access can be improved upon by better integrating representatives from local businesses and community members. More representative state-level task forces can help to particularly amplify the voices of local communities both urban and rural, for whom broadband Internet can play a critical role in community life.

The federal government can play a central role in helping to empower local communities across the country. Our policy agenda outlines a number of concrete actions that Congress, including Members of the Subcommittee, can undertake:

- **Provide a National Platform:** hearings such as this one help to elevate the broadband discussion and attract national attention to this critical component of continued growth for American communities.

- **Mandate National Data Collection:** currently, information about broadband Internet access – including speed of connection, price for consumers, and areas of operation for service providers – is either piecemeal, of questionable accuracy, or missing altogether. This represents a tremendous knowledge gap that hinders our ability to understand the most pressing challenges facing communities across the country – be it insufficient speeds, high prices, or a lack of competition and choice for consumers. Congress can address this need by requiring more robust data collection, particularly from the largest

providers. In our experience, smaller providers are more transparent with potential subscribers and require less oversight.

- **Encourage Competitive Local Markets:** our organization believes that competition among Internet service providers drives improved network performance and better outcomes for consumers. Congress can assist this aim through national legislation that would remove barriers to local Internet choice at the federal and state level.

Day by day, the need for access to fast, affordable, and reliable broadband Internet becomes more and more evident. Communities across the country are recognizing this urgent need and developing the critical broadband infrastructure their residents demand. I am encouraged that this Committee has chosen to hold this conversation today; as our policy agenda makes clear, the federal government can play a central role in assisting communities in the development of broadband infrastructure. Hearings such as today's can provide a critical platform for communities to share their experiences and develop opportunities for collaboration with federal policymakers.

I look forward to continuing to work with Members of the Committee and your colleagues to ensure that communities across the country can continue to enjoy world-class Internet. Thank you.

Connecting 21st Century Communities

A Policy Agenda for Broadband Stakeholders | July 2015

NEXT CENTURY CITIES

In the 21st century,

broadband Internet access has emerged as more than just an information superhighway—it has become critical infrastructure to connect citizens, businesses, and communities alike to new opportunities. Yet for too many communities, the promise of fast, affordable, and reliable Internet access remains unrealized.

That is why over 100 cities and towns have formed Next Century Cities, a nonpartisan, city-to-city collaborative. Next Century Cities (NCC) is dedicated to elevating the voices of communities in the broadband policy discussion and sharing resources and knowledge among members. Our members know that universal, high-speed Internet access is necessary infrastructure for their communities.

But communities face real hurdles in achieving universal, high speed access, and once that is achieved, taking full advantage of the promises of broadband Internet can be a daunting task. From bringing fiber connections to homes and business, to building 'middle mile' networks that serve as the backbone of the Internet, to bridging the 'digital divide' and ensuring access for advantaged and disadvantaged communities alike, communities are often left with no map to guide their way and no real sense of how they can leverage all levels of government and civil society to support their efforts.

This Policy Agenda offers policies that will move communities in the direction of fast, affordable, and reliable Internet access available to all. Expanding high quality Internet access in a community, whether large or small, can yield a multitude of benefits for residents—from improved health services, to new opportunities for small businesses, to higher property values, to a stronger local economy.

High-quality Internet access is not only necessary infrastructure for the 21st century, but the collaborative process of expanding that access itself has civic benefits. Whether communities choose to work with independent service providers or build and/or operate their own network, government and civil society can play a critical role in assisting the larger push for broadband access. Creating a diverse group of stakeholders to guide the development of broadband infrastructure ensures an end result that serves all citizens of a town or city.

Key stakeholder groups addressed in the NCC Policy Agenda include:

- **Local Government**
- **State Government**
- **Federal Government**
- **Philanthropy**
- **Community**

The development of fast, affordable, and reliable broadband Internet for communities often requires a wide range of stakeholders contributing in a variety of ways, from providing a broadband-friendly regulatory climate, to demonstrating the value of networks, to empowering key voices. NCC's Policy Agenda identifies the roles each ally can play to develop broadband at each level of government, offers guidance on how policymakers and community members can fulfill these roles with examples of what's working, and proposes concrete actions government and civil society can take to lay the groundwork for a broadband-ready future.

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Local Government

Local governments occupy a critical role in the success of broadband projects and are ideally equipped to identify and address a community's specific Internet access needs. Local governments are better equipped than any other level of government to decide if the community is well served and the needs of residents, businesses, and anchor institutions are being met.

They are also best poised to understand the challenges and assets present in the community that will impact the success of any project. Some policies for effective local government engagement include:

Lay the Groundwork through Municipal Codes

Local policies can have a direct impact on how many Internet providers can operate in a community. For instance, requiring every provider to bury fiber to connect their subscribers reduces the number of service providers able to compete. That is why many communities have created "dig once" policies to ensure conduit and fiber are available for lease on reasonable terms. A number of local governments have revised their permitting requirements to lessen the burden on ISPs. However, simply taking these actions has little impact without a committed partner willing to invest. Areas that municipalities can address include:

Dig once for efficient building

This is a collection of approaches that collectively aim to get conduit, fiber, and other assets, placed at a very low cost as part of other projects. For instance, installing conduit underground as part of a sewer main replacement—or requiring that a new housing development include multi-channel conduit when it is being built (at a tiny fraction of the cost it would take to add after the streets are paved). The conduit and fiber may later be used by the local government or leased to other providers. Over a period of ten years or more, this policy could result in fiber throughout the majority of a community.

Example: Without increasing its internal spending on telecommunications, Santa Monica has seized many opportunities to lay fiber throughout the community to meet its internal needs while also connecting businesses and residents. For example, it laid extra fiber when connecting traffic signals with a grant to mitigate traffic congestion. The cost of the extra fiber was quite small but creates many opportunities for community benefits. The network has not only saved millions, it is generating millions of dollars for the city. [http://www.ilsr.org/santa-monica-city-net/]

Additional Example: In Minnesota, Dakota County has saved many millions of dollars to date by laying fiber as part of other capital projects and ensuring local governments work together in planning and executing projects in the rights-of-way. [http://www.ilsr.org/all-hands-on-deck-mn/]

Additional Information: http://nextcenturycities.org/resources/#digonce

Creating broadband-ready buildings

New providers may find it all but impossible to serve potential subscribers in existing multi-tenant residential and commercial buildings. Requiring buildings to have wiring or ducts that facilitate multiple providers can go a long way toward facilitating more investment in higher quality networks.

Example: Loma Linda, CA requires new buildings and retrofits that touch more than 50% of existing buildings to be fiber-ready and able to connect to the municipal network. Local governments could require buildings to have internal neutral wiring that any carrier could use from a demarcation point within or near the building.
[http://lomalinda-ca.gov/asp/Site/LLCCP/AboutLLCCP/TheLLCCPStandard/index.asp]

Permitting and rights of way management

Local governments should make permitting as easy as possible for building these essential networks. By streamlining permit processes, local governments can not only reduce the cost of a potential deployment but also ensure a network owner will begin to collect revenue more rapidly, both of which make a community a much better prospect for investment (whether external or internal). Note that in many cases, local governments do not own the utility poles. Without owning the poles, there is little a local government can do to force a pole owner (often the incumbent telephone company) to "play nice" with a planned network.

Example: "One Stop Road Permit Shop" from Dakota County saves an estimated $400,000 annually for the county and partner municipalities. More importantly, it has greatly simplified the permitting process for the public and private sectors alike.
[Podcast and transcript: http://www.muninetworks.org/content/dakota-county-fiber-rich-thanks-dig-once-approach-community-broadband-bits-podcast-117]

Additional Information: CTC Technology & Energy Consulting report: Technical Strategies for Facilitating Public or Private Broadband Construction in Your Community.
[http://www.ctcnet.us/publications/gigabit-communities-technical-strategies-for-facilitating-public-or-private-broadband-construction-in-your-community-3/]

Approach Broadband Internet Access as Infrastructure Investment

Local governments play a critical role in existing infrastructure projects such as roads and electrical grids—and broadband networks are no exception. Several types of infrastructure investments can assist in providing high-speed broadband to all residents:

Connecting government offices and anchor institutions with institutional fiber networks

Though many local governments and anchor institutions like schools lease services from an independent provider, many hundreds of local governments have decided to own and/or operate their own network serving only public facilities. In other cases, school districts have begun to build their own fiber network or lease dark fiber to operate their own internal network. They have found that self-provisioning can ensure higher reliability, greater capacity, and more flexibility, all at a lower total cost than other solutions. This approach results in greater efficiency and can create the expertise needed to later begin offering services to businesses and/or residents if necessary.

Example: Santa Monica began its City Net by taking charge of its internal needs. Re-directing funds it had previously spent on leased lines from the incumbent telephone company, it built a network connecting anchor institutions. The city has continued to reinvest its savings into expanding the network, which now creates millions in revenues.
[http://www.ilsr.org/santa-monica-city-net/]

Additional Example: In Washington DC, the city's DC-Net has saved community anchors tens of millions of dollars. This is one example among many in NATOA's Comments on "Cost Estimates for Connecting Anchor Institutions to Fiber" [https://www.natoa.org/documents/NATOA%20Comments%20on%20NBP%20Public%20Notice%20%23%2012.pdf] DC-Net saved a federal agency nearly $10 million over just six years. [http://dcnet.dc.gov/sites/default/files/dc/sites/dcnet/publication/attachments/OPM_Case_Study_2012.pdf]

Additional Examples: Boston, Portland's IRNE, Dakota County in Minnesota

Providing the building blocks for broadband

One of the most basic things a local government can do is to create assets that will lower the cost of deploying a network. This can be part of the dig once policies discussed above or include extra assets created as part of building an institutional network. Such assets may include conduit, fiber optic cables, and space on towers or other facilities allowing wireless attachments. This infrastructure is often called passive because the city simply has to create physical things but generally does not have to actively operate them; independent service providers will lease these spaces or facilities to offer their own services.

Example: The city of Ammon, Idaho, has constructed a dark fiber network in some areas of town that it leases to firms that want to offer services to nearby businesses and residents. Ammon is not offering any services itself to businesses or residents; instead its fiber lowers the capital cost that independent providers would need to spend to serve the community.

Additional Example: Stockholm has become one of the most connected cities in the world (both wired and wireless) due to its massive dark fiber network. [https://www.stokab.se/Documents/Stockholms%20Stokab%20-%20A%20Blueprint%20for%20Ubiquitous%20Fiber%20Connectivity%20FINAL%20VERSION.pdf]

Additional Examples: Mesa, Arizona; Palo Alto, California; Lakeland, Florida

Serving citizens with a public network

Some of the best places in the United States to get Internet access are communities where local governments directly provide the service. In most of these approaches, the local government offers the triple play of telephone, Internet access, and cable television in competition with national cable and telephone companies. Offering the three services has been seen as the safest way to ensure the private investors that financed each project would be repaid because these communities have often chosen not to use taxpayer dollars to finance the network. Most of these communities have built their network via an already-existing municipal electrical company. However, communities without public power are recently getting more involved in this approach.

Example: Chattanooga, Wilson North Carolina, and Lafayette are three of the most well-known citywide municipal fiber networks. Each community has long had a public power provider that now runs the fiber network as well.

Additional Example: Sandy, Oregon, which has no electrical utility began building a wireless ISP in the early 2000's and has recently completed its citywide gigabit fiber network. Approximately half of all residents have already subscribed to it.

Additional Information: See MuniNetworks.org/CommunityMap

Teaming up with private partners

Some local governments have chosen to expand services with a partnership, where the risks and rewards are shared in some way between the local government and a trusted partner. In this case, the local government often focuses on core infrastructure or funding while relying on its partner to provide the services, which tend to evolve more rapidly and

require more marketing savvy. This is an area with a lot of active interest and new models but only a few long-standing examples.

Example: Though Westminster, a small community in rural Maryland, knew it wanted to dramatically improve the level of Internet access in the community, it also knew that it wanted an experienced partner to offer services to residents and businesses. The city began working with Ting, a recent entrant to fiber services after developing a very good reputation in mobile wireless services. Ting and Westminster both share the risk and rewards of the fiber network, which the City owns.

Additional Example: The cities of Urbana and Champaign in Illinois have partnered with a local company, iTV-3, to expand existing municipal fiber to connect residents and businesses across both communities [http://uc2b.net/faq/]

Additional Examples: Indianola, Iowa; Princeton, Illinois

Peer-to-Peer Exchange of Success and Best Practices

Communities can help their peers across the country by creating channels to share best practices and lessons learned from their own broadband projects. This knowledge sharing can occur through institutionalized and informal forums alike. Many local governments have made it a priority to share their knowledge, whether by presenting at conferences, joining Next Century Cities, doing interviews on Gigabit Nation or the Community Broadband Bits podcast, or even simply writing articles to explain what they did and why. These lessons are very important to inform other local governments because local governments have more challenges and different assets than the typical small ISP building a fiber network. If local governments do not share their experiences, others will have to reinvent the wheel.

Examples: Cities that have joined Next Century Cities; ILSR podcast interviews and case studies; stories in Broadband Communities magazine.

Collect Data to Prove the Case

Data about broadband networks and their impacts can provide a powerful tool for advocates in other communities seeking similar infrastructure. Local governments are ideally positioned to gather important information that can be used to demonstrate the positive impacts of ubiquitous broadband access. Whereas private sector companies are most focused on maximizing revenue, local governments should be focused on ensuring businesses and residents can maximize the benefits of connectivity.

Examples: Municipal electric utilities publishing savings and benefits of smart grid approaches; Local governments can work with a firm like SNG to survey businesses before and after receiving high quality Internet access to gauge impacts.

State Government

State governments can play a critical role in facilitating and empowering community-led broadband initiatives. Effective leadership at the state level can:

Empower Communities through Resources

Through funding initiatives, state governments can play a critical role in assisting community-led efforts. For instance, state governments can create grant and/or loan approaches to encourage projects. Minnesota spent $20 million on grants for 19 projects to expand Internet access in the most rural areas. New York has established a $500 million fund for matching grants to build high capacity networks. States may also establish an effort to aid local governments in accessing capital markets by combining multiple offerings into one and offering a backstop to ensure a low interest rate. States should be aware that a requirement for a network to serve only underserved or unserved populations makes long term financial sustainability questionable. Allowing networks serving largely unserved or underserved areas to overlap some areas with existing service may be preferable.

Example: The Massachusetts Broadband Institute built a middle mile network around the state and is currently granting $40 million to subsidize the capital cost of publicly owned last mile networks in rural western Mass. [http://broadband.masstech.org/sites/mbi/files/documents/building-the-network/mbi-boadband-last-mile-project-guide-4-1-2015-final.pdf]

Additional Examples: Minnesota established its one time $20 million Border-to-Border Broadband Fund in 2014 [http://mn.gov/deed/programs-services/broadband/grant-program/]; Virginia Resources Authority (VRA) has some capacity to help rural communities expand Internet access: [http://www.ilsr.org/rule/2887-2/]

Convene Partners

State governments can bring together stakeholders and communities from across the state to discuss the importance of broadband and share best practices to facilitate further network development. These are key opportunities to shine a light on successful examples that others may not be aware of and can help attract press attention on those that are leading by example. States must be careful not to be captured by incumbent interests that may want to restrict the types of approaches available.

Example: Working with the state Office of Consumer Counsel, the cities of New Haven, Stamford, and West Hartford issued an RFQ for entities that would work with them for a universal open access fiber network.

[http://www.ct.gov/broadband/site/default.asp, http://ct-n.com/ondemand.asp?ID=11499]

Modernize State-Level Regulations

State policies may enable or disable different approaches. For instance, approximately 20 states have limited local government capacity to invest in one or more approaches or partnerships. States should remove any barriers to local choice—communities will have to take responsibility for the consequences of any action or inaction. Some have justified the state preempting local authority as a measure to protect taxpayers. To date, we are unaware of a single instance where a state had to deal with any debt created by a community network. For states where authority is unclear, the state should make it clear that local governments have the authority to build or partner for new networks.

Information: The Baller Herbst Stokes & Lide law firm maintains a library of resources on state barriers [http://www.baller.com/category/community-broadband/federal-state-developments/]

Additional Information: The Coalition for Local Internet Choice (CLIC) is a national coalition of businesses, organizations, and individuals that believes decisions about improving broadband Internet access should be made locally and not preempted by states or federal policy. [http://www.localnetchoice.org/]

Create Representative Task Forces

Task forces or committees focused on Internet access have been created in many states but have not often resulted in substantive new investment or changes to the status quo. States that have task forces should consider increasing representation from local businesses, residents, and local governments to ensure incumbent voices do not dominate the agenda. Particularly in rural areas, the voices of cooperatives and other locally rooted entities should be elevated rather than those of service providers that are not locally based.

Example: Minnesota established an "Ultra High-Speed Broadband" task force in 2008. The group decided on official goals for broadband in the state by 2015, which has emboldened broadband expansion advocates to demand better policies because the state has not achieved its goals. A key lesson was the importance of the Task Force traveling around the state to have local hearings, giving residents, businesses, and organizations an opportunity to speak.
[Final report: http://minnesota.publicradio.org/features/2009/11/documents/Final-BB-Report.pdf]

Build Out the Middle Mile

Ensuring that communities have robust backhaul to connect to the rest of the Internet is important for financially-viable business plans for next-generation networks. Many states have regions where one or a small number of ISPs dominate the backhaul market. Building middle mile connections, most notably open access approaches that ensure multiple providers can use the infrastructure, will allow ISPs (particularly small private and community networks) to offer higher capacity connections at reasonable prices. And when built with modern technology, this approach may allow ISPs to offer their services anywhere the middle mile can connect them to open last mile networks. States already have internal needs that reach across the states but most lease lines from an incumbent provider like the telephone company. Replacing leased lines with state-owned fiber (the need for which will only increase) and adding extra capacity to lease to others may even be less expensive than continuing to lease lines from incumbent providers. Adding new fiber will result in more resiliency because a single fiber cut will not strand an area served by multiple options. Some of this investment may also be accomplished with a statewide "dig once" approach over time.

Example: Kentucky is currently negotiating a contract with Macquarie to build an open access middle mile network across the state. This approach has the potential to dramatically lower the cost of Internet transit (fees to access the rest of the Internet) in small ISPs around the state.

Additional Examples: Many of the broadband stimulus projects, like Maine's Three Ring Binder, have built regional networks along these lines.

Elevate the Issue and Stakes

Elected officials, from the Governor to State Legislators can use their positions to call for local choice and block any actions by incumbents to use their power to restrict competition in the telecommunications market. Speaking out in favor of smart local approaches will result in more attention and media coverage, which will inspire other communities to work toward better Internet access.

Example: Janice Bowling is a state Senator in Tennessee that has led an effort to remove barriers in state law that limit the ability of existing municipal fiber networks to serve their neighbors.
[http://nextcenturycities.org/2014/11/19/watch-envisioning-a-gigabit-future/]

Federal Government

Even the federal government has a role to play in ensuring the success of local broadband projects. The federal government was essential in ensuring all Americans were connected to the electrical grid, which it accomplished by encouraging investments by municipalities, cooperatives, and the private sector. This lesson is directly applicable to efforts to connect everyone with high quality Internet access. The federal government can:

Protect Market Competition through Antitrust and Antimonopoly Action

The federal government has the authority to prevent market consolidation and mergers that are not in the public interest. In recent years, the Department of Justice and Federal Communications Commission have stopped mergers between AT&T/T-Mobile and Comcast/Time Warner Cable. Both would have allowed firms that already have significant market power to substantially increase it, which would harm competition and economic outcomes throughout society. However, even as presently constituted, the large cable companies have the power to engage in predatory pricing to thwart competition (as well as engage in a variety of other anti-competitive tactics). The federal government should take a stronger role in limiting the power of the largest firms to ensure small firms are able to enter the market and compete.

Example: After the city of Monticello, Minnesota, built a municipal fiber network to improve Internet access in the community, Charter lowered its rates well below its own cost to drive out the new competition. [http://arstechnica.com/tech-policy/2012/03/predator-or-prey-charter-cuts-internet-prices-to-compete-with-city-owned-network/]

Additional Example: Senator John McCain has introduced legislation to reduce the power of the largest firms controlling television channels. The current cable television market structure gives many advantages to the biggest firms while penalizing the smallest, which harms prospects for competition. Senator McCain's bill would give consumers more options. [http://www.mccain.senate.gov/public/index.cfm/press-releases?ID=8a5d2818-ac05-71a2-5eae-5b58400e0019]

Additional Examples: Podcasts discussing telecommunications and antitrust: Community Broadband Bits 148 [http://www.muninetworks.org/content/comcast-merger-wrap-and-anti-monopoly-policy-community-broadband-bits-episode-148] and 83 [http://www.muninetworks.org/content/real-threats-monopoly-community-broadband-bits-podcast-83]

Remove Barriers and Break Down Silos

In some cases, the federal government can act as a bulwark against state barriers regarding broadband infrastructure projects. By exercising preemptive powers, federal policymakers can remove barriers to broadband deployment, as well as break down bureaucratic silos. For instance, one agency may refuse to allow grants for one kind of infrastructure to be used for multiple purposes, meaning that conduit for traffic signaling may not be used to

improve Internet access for businesses or anchor institutions. Though these rules may make sense narrowly in the silo, they raise the cost of investment in needed infrastructure when viewed more holistically. The executive branch should review such rules to lower the cost of infrastructure investment and remove any uncertainty in how valuable assets may be used.

Example: The FCC has used its authority to remove barriers in North Carolina and Tennessee that limited local authority to build or expand fiber networks to themselves or nearby communities.
[http://www.baller.com/2015/03/fcc-memorandum-opinion-and-order-granting-wilson-n-c-and-chattanooga-epb-preemption-petitions-march-12-2015/]

Additional Examples: Local governments in Colorado and Florida have been either discouraged or prohibited from using conduit and fiber built in part with transit grants for other purposes, such as economic development. Conduit should be used widely, not dedicated for only one type of telecommunications service.

Strengthen the Case through Nationwide Data Collection

Collecting higher-quality data at the national level can help inform decisions made in communities across the country, providing a wealth of information about approaches and tools to meet unique needs. Current data collection is insufficient, leading to numerous examples of people buying homes after being promised they have broadband Internet access, only to find out they did not [http://consumerist.com/2015/03/25/new-homeowner-has-to-sell-house-because-of-comcasts-incompetence-lack-of-competition/]. In collecting this data, agencies should develop reasonable processes for small ISPs, recognizing that they are often already more responsive at the local level than the largest ISPs (which have more capacity to comply with data disclosure requirements though are also more reluctant to share their data publicly). Federal agencies can assist this goal by collecting accurate data with regard to

- Adoption
- Service availability (actual connection rates, not just advertised)
- Cost over time
- Low-income digital inclusion programs

Examples: The National Broadband Plan called on FCC to improve data collection [http://www.broadband.gov/plan/17-implementation-and-benchmarks/#r17-2]

Additional Information: The Government Accountability Office has recommend the FCC improve its data collection practices [http://www.gao.gov/products/GAO-10-249]

Fill the Funding Gaps

Funding for broadband infrastructure is often difficult to find - despite its critical importance to a thriving future. The federal government can assist communities through grant and loan opportunities. Rural electrification depended on the federal government loaning funds to newly created rural cooperatives. The history of success of municipal and cooperative approaches in providing infrastructure to rural America suggests that these efforts should be prioritized for grant/loan funding. Grants and/or loans should cover for capital costs that accompany a financially sustainable plan without future federal subsidies. The federal government should ensure paperwork requirements are more suited to small, rural operations than large firms that retain many lawyers.

Example: Originally called the Rural Electrification Administration, now Rural Utilities Service, this branch of the US Department of Agriculture has long provided loans and support to cooperatives and entities deploying telecommunications in rural areas.

Additional Examples: The NTIA and USDA both ran broadband stimulus programs (BTOP and BIP) that resulted in significant investment, particularly in middle mile connections, across the United States. [http://www2.ntia.doc.gov/awards, http://www.rd.usda.gov/programs-services/farm-bill-broadband-loans-loan-guarantees]

Use the National Platform

Much like the state bully pulpit, only bigger. National elected leaders are powerful actors in any policy debate. National officials can influence policymakers at the state and local level by taking a stand for local Internet choice and improved access while highlighting good examples that should be emulated.

Examples: President Obama spoke in Cedar Falls on January 14, 2015, to announce his support for municipal broadband networks. [https://www.whitehouse.gov/the-press-office/2015/01/14/remarks-president-promoting-community-broadband]; FCC Chairman Wheeler spoke at the Broadband Communities Summit in Austin Texas, on April 14,2015. [https://www.fcc.gov/document/chairman-wheeler-broadband-communities-summit-austin-tx]

Philanthropy

Philanthropic partners can be critical advocates for successful broadband projects, offering communities a number of tools to facilitate the development of fast, affordable, and reliable Internet in a community. In many cases, philanthropies have begun to engage productively in developing broadband networks, with room to further expand these efforts. Some of these activities include:

Support Advocacy

Philanthropic support has been crucial in helping to establish key advocacy groups for broadband. With funding from large foundations, organizations such as Next Century Cities are able to develop an effective platform for engaging key stakeholders and decision-makers in the larger broadband policy debate.

Example: Thanks to generous philanthropic support, Next Century Cities is able to provide a platform for city leaders to share their experiences and voices in the national broadband discussion [www.nextcenturycities.org]. Similarly, the Institute for Local Self-Reliance (ILSR) advocates on behalf of local autonomy regarding a number of vital issues, including community broadband [www.ilsr.org, www.muninetworks.org].

Fund High-Impact Research

Knowledge production and dissemination helps bolster community campaigns for broadband Internet, providing both a sense of current gaps and suggesting possible solutions and benefits. Funding from philanthropic organizations can support high-quality research.

Example: The Open Technology Institute (OTI) at New America conducts high-quality research into the state of broadband Internet, including deployment models and cost information [www.newamerica.org/oti/]. Harvard's Berkman Center is another example [cyber.law.harvard.edu].

Create Forums for Knowledge-Sharing

Communities and stakeholder groups often learn best when they share experiences with one another. Mutual learning forums, supported by philanthropies and foundations, can be an effective tool for advancing access to fast, affordable, and reliable broadband Internet.

Example: The Coalition for Local Internet Choice (CLIC) brings together broadband experts and administrators to share best practices and develop strategies to uphold local choice for communities [www.localnetchoice.org].

Improve Civil Society and Empower Communities

Other philanthropy-supported groups work in the community at large to ensure that all members of a given town or city can reap the benefits of broadband Internet.

Example: KC Digital Drive works in the Google Fiber-connected city of Kansas City to help residents take full advantage of their gigabit connection. Efforts of the organization include developing gigabit apps, using broadband Internet to drive economic development, and bridging the digital divide [www.kcdigitaldrive.org].

Other avenues for philanthropic engagement remain largely untapped, though they offer significant benefits to broadband deployment projects. Some of these new programs include:

Work Collectively with Peer Funders

By collaborating among partner and peer organizations, philanthropic funders can amplify the impact of individual investments and develop a shared broadband strategy.

Example: In February of 2015, the presidents of the Ford, Macarthur, Open Society, Mozilla, and Knight Foundations, along with partners from private industry and government, launched the Netgain Challenge to identify areas for effective collaboration to address key issues in technology [http://netgainchallenge.org/].

Leverage Community Foundation Assets

While smaller than major philanthropies, community foundations possess valuable local knowledge that can effectively direct resources to important players in local broadband Internet projects.

Support Core Costs through Funding and Investment

Philanthropies can draw upon significant funds to assist in broadband projects. Supporting broadband can include large-scale program-related investments (PRIs) and instruments such as social impact bonds to support capital costs. Some of the challenges with connecting low-income populations are one-time capital expenditures that may be smart investments if a local service provider is willing to partner and ensure services are then available. Smaller-scale investments include matching funding to support feasibility studies. When assisting in feasibility studies, care should be taken not to establish a pipeline of the same consultants/vendors/etc for every community in the program. Communities have a variety of needs that may be better suited to some consultants and vendors than others.

Example: Blandin Foundation Matching Feasibility Cost Studies

Community

Successful broadband projects need engagement from all members of the community to maximize the social benefits of the network. This includes involvement from the private sector, key pillars of civil society, and individual citizens. Some tools for effective community engagement might include:

Engage with Anchor Institutions

Organizations such as libraries, schools, and communities of faith often play a critical role in community projects. Identifying and engaging respected leaders of these anchor institutions can help solidify social and political support for broadband projects. These institutions are already hubs of information for many in the community and may already be serving a substantial portion of the people that lack access at home or are in need of digital literacy training.

Example: The Schools, Health & Libraries Broadband Coalition, or SHLB, works to support projects connecting key anchor institutions to broadband networks. [www.shlb.org]

Additional Example: The City of Austin's digital inclusion plan actively incorporates representatives from key anchor institutions, with the steering committee including representatives from the city's libraries and housing authority.

Educate the Community

High-quality Internet access creates a tremendous variety of indirect benefits for the community including enhanced educational opportunities, avenues for civic growth and participation, improved healthcare outcomes, and even higher property values relative to areas without high-quality Internet access. However, these benefits are accrued generally by the community rather than specifically by the network owner, not unlike the benefits from roads. Roads themselves have tremendous maintenance costs but they enable commerce and travel, which is why building and maintaining streets is an important function of government. The many indirect benefits from improved Internet access are not immediately apparent without an effort to engage and educate the community.

Example: WiredScore is a project that started within the New York City Economic Development Corporation. It rates buildings based on a number of broadband metrics to ensure potential buyers and renters have the information necessary to properly value real estate. [WiredScore.com, www.greenbuildingsnyc.com/2013/10/06/city-rolls-out-leed-for-broadband-certification-program-for-nyc-office-buildings/]

Additional Information: The Fiber-to-the-Home Council and Broadband Communities magazine have produced a Fiber-to-the-Home Primer [www.bbpmag.com/FTTHprimer/]

Lift Up Citizen Voices

Citizen testimonials about broadband offer a useful tool for advocates. By putting a human face to these technological issues, citizen-centered media campaigns can help to garner further community support.

Examples: The nonprofit Charlotte Hearts Gigabit has played an important role in helping make Charlotte's broadband ambitions come to fruition. A grassroots effort led by Charlotte citizens, Charlotte Hearts Gigabit has hosted public events in which members testify to the importance of fast, affordable, and reliable broadband Internet in their daily lives. [www.charlotteheartsgigabit.com]

Additional Information: Next Century Cities 'telling your story' toolkit [www.nextcenturycities.org/resources/#tellingyourstory]

Engage the Whole Community, and Be Honest about Access

Successful broadband efforts require input from all segments of the community. Advocates should seek to engage less-advantaged communities, while recognizing existing gaps in access to fast, affordable, and reliable Internet.

Example: In Chattanooga, The Enterprise Center works across the community to engage constituencies in the mission of making the city a hub for innovation. The organization works alongside small business and anchor institutions to improve broadband in the city, and recently launched a Tech Goes Home CHA initiative to pilot digital inclusion projects in Chattanooga.
[http://www.theenterprisectr.org/]

Additonal Example: KC Digital Drive [http://www.kcdigitaldrive.org/]

Organizing neighborhood conversations

Conversation among residents of a community can help to galvanize support for broadband infrastructure and serve to educate community members about the importance and potential of high-speed Internet. Community members are encouraged to talk to their friends and neighbors about the need for fast, affordable, and reliable Internet.

Example: To amplify its advocacy efforts on behalf of several Internet policy issues, the Electronic Frontier Foundation (EFF) has helped to organize citizens in San Francisco and across the country, facilitating public discussions on issues such as privacy rights and net neutrality.
[https://www.eff.org/deeplinks/2014/11/rain-or-shine-bay-area-internet-users-take-net-neutrality-fight-city-hall]

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