Next Century Cities

PROVO, UTAH

Helping residents access the necessary tools to participate in a digital society.

PRIVACY AND CYBERSECURITY

Examining their roles in digital literacy and local government.

PROVO, UTAH

CONNECTING PROVO, UTAH

With Dixon Holmes, Assistant Chief Administrative Officer and
Joshua Ihrig, Division Director, Information Systems

What are some of the major concerns that residents have about broadband access or connectivity?

Dixon Holmes: One of the concerns that we have, especially now in this era of COVID, is they may have the access, but do they have the other tools? Broadband connectivity is great, but you also have to have the know how to use it, and then you have to have either the hardware, computer, the phone, the laptop, the tablet to then make that physical connection. That's one of the things that we're working on with other partners here in Utah Valley and in Provo City.

It's awesome that we have this great connectivity potential, but until you are maximizing the benefit of that, especially for our underserved populations, then -- whether it's applying for a job, or benefits, or seeing what other resources are in the community -- that is one of the things that we're hearing as we work with groups like United Way and others to bridge that digital divide.

Joshua Ihrig: I second what Dixon said. There are three pillars of digital inclusion, and connectivity is one of those pillars. I think we're in pretty good shape on that pillar if we can maintain affordability for those services. In addition, for those that can't afford it, we need to make sure we continue to push to have low or no-cost access along with education of the services available. Typically, our biggest barrier is finding out where the places of need are. We can't use digital campaigns to reach out to individuals in need. They might have access to free or low-cost services and just not realize it. They can go to the library for free access. There are locations throughout the city that have free wireless access including sites sponsored by Google Fiber's Community Connections program. So, our challenge is really about getting the knowledge of the resources in the hands of those who need it. We're currently working with United Way, along with other participating public-private partnership organizations, doing outreach campaigns.

> ## "They may have the access, but do they have the other tools?"

Dixon, you mentioned COVID, are there specific challenges that residents are facing as a result of the pandemic?

DH: One that comes to mind most prominently is our public library. Many libraries have a bank of computers that are available to visiting patrons. There was a time where the library was closed. The library is now open, but with social distancing and trying to maintain safety, not every computer would be available. Continue Reading Provo's Story [here](#).

RECOGNIZING JAMES WISDOM OF LAWRENCE, KANSAS

Wisdom has served as Lawrence's Information Technology Director for the past 11 years.

Over the past five years, Lawrence, Kansas, has improved broadband connectivity for both municipal and residential use. Collaborating with anchor institutions, using dig-once principles, and leasing dark fiber are a few of the strategies that have enabled City officials to expand economic opportunities and improve connectivity for its residents.

Behind these amazing feats is James Wisdom, Lawrence's Information Technology Director of 11 years. Wisdom's robust and detailed documentation and mapping have been central to the City's success story. Among many accomplishments with the City of Lawrence, Wisdom helped to deploy fiber connections between 65 City buildings and City Hall, as well as connecting traffic signals, water towers, lift stations, and ambulance stations.

In addition to expanding Lawrence's network, Wisdom helped document dark fiber availability, which allows private providers to contract with the City and expand broadband competition for residents and businesses. Through partnerships with Kansas University, Haskell Indian Nations University, and KanREN, Lawrence's network continues to grow, connecting more residents, businesses, and governmental institutions.

Wisdom is planning his retirement in December 2020 and is developing an updated Fiber Plan before he transitions out of his role. Thanks to Wisdom's guidance and leadership, Lawrence can continues to develop its broadband network and expand opportunities for the people who live and work in the City.

Next Century Cities wishes Mr. James Wisdom the very best in his retirement. He has successfully helped to expand broadband access for Lawrence residents and set a benchmark of excellence in local leadership.

PRIVACY IS A CRITICAL COMPONENT OF DIGITAL LITERACY

By Amie Stepanovich

Executive Director, Silicon Flatirons Center for Law, Technology, and Entrepreneurship

Privacy is hard. A person may spend more than half of their day staring at a computer or smart device screen, wandering through an endless maze of social media, news, messaging, apps, and online stores. And that's before you factor in the systems used to track you in the real world, like shopping and travel cards, as well as the "things" in the internet of things, which are ever expanding in number and scope, both in the home and around communities.

Every entity you cross will have a different way of collecting, processing, and further sharing your data, and a different set of controls for you to ostensibly limit that collection. There just aren't enough hours in the day to read, understand, and take meaningful action across the ecosystem. What's more, those "controls" are often just a binary option to either consent to tracking, or to not use the service; the latter an unviable choice for many who require access for some integral part of their lives.

Unfortunately, today few conversations about privacy are truly useful. Many choose to reference the experts through an abundance of jargon and "inside baseball."

> **"If we're going to make privacy easier, we have to confront two primary shortcomings: people don't have adequate information on issues of privacy to make decisions; and when they do, they don't have tools readily available to easily or effectively act on those decisions."**

Others attempt to find mass appeal by reducing arguments to either imminent catastrophe or tiresome hand-wringing. Few offer any immediate, practical advice or actions for people to take. This may be due to the fact that, at least in the United States, there is startlingly little that people can do to remedy the issue.

If we're going to make privacy easier, we have to confront two primary shortcomings: people don't have adequate information on issues of privacy to make decisions; and when they do, they don't have tools readily available to easily or effectively act on those decisions.

The first shortcoming is easy to identify a solution for, but that solution is not itself simple. In the digital age, we must make privacy education a priority, ensuring that it is a part of basic curricula across age groups.

Continue reading Amie's piece here.

PROTECTING DATA IS AN ESSENTIAL SERVICE OF GOOD LOCAL GOVERNMENT

By John Breyault

Vice President of Public Policy, Telecommunications and Fraud, National Consumers League in Washington, D.C.

In Flint, Michigan, the failures of the municipal government to safeguard the safety of the water network did not only put tens of thousands of residents' health at risk, it poisoned citizens' faith in their local elected leaders.

Flint is a cautionary tale; but it is also an instructive one. By switching to a cheaper water supply, Flint sought to address a short-term financial emergency. But by neglecting to consider the downstream impact of that decision, the city endangered its citizens' health and their faith in government for a generation.

It is this pitfall that city leaders must seek to avoid as they embrace the promise of near-ubiquitous broadband connectivity and the resulting data revolution. The benefits of more and better data to cities of all sizes are clear: more efficient government services, more accessible educational opportunities, better data to inform city planning, to name but a few.

"When localities can't provide services because their data is locked up for ransom, the promise of ubiquitous connectivity and plentiful data becomes a real-world liability. Small businesses can't get permits. Marriage licenses can't be granted. Property sales can't be finalized."

However, simply layering the tools of the digital revolution onto aging municipal government infrastructure without careful planning is, at best, a waste of taxpayer funds. At worst, it is a recipe for disaster.

Take, for instance, the current wave of ransomware attacks targeting cities and municipalities. Cities are tempting targets for such attacks precisely because they have moved so many essential services online without sufficient attention to the lucrative attack surface they are creating. When localities can't provide services because their data is locked up for ransom, the promise of ubiquitous connectivity and plentiful data becomes a real-world liability. Small businesses can't get permits. Marriage licenses can't be granted. Property sales can't be finalized.

Continue reading John's piece here.

the policy note

UPDATING LEGACY SYSTEMS: GOOD FOR CYBERSECURITY, GOOD FOR PRIVACY

BY RYAN JOHNSTON, POLICY COUNSEL

Ensuring that every resident and municipal government is able to benefit from digital access also means that new stockpiles of data are being collected on each user. Too often, it is the decades-old server at city hall that collects and records much of the personal information the city is required to maintain. This server that may not be running the most current operating system or updated with the most recent security patches that could ward off sophisticated cyber threats.

Easy entry into a network is a dream come true for an intrepid hacker easy entry into a network to deploy malicious attacks against a community's municipal network. Legacy systems contain outdated hardware and software that are often difficult to replace, either because other systems rely on the outdated equipment and there is no modern replacement solution, or are situated within a network in such a way that any downtime would cause serious operational problems. This makes upgrading prohibitively costly or practically impossible.

> **"Local governments may need additional support to identify how their outdated systems could affect their citizens' data."**

Consequently, critical infrastructure networks may have inherent security vulnerabilities that are often not compatible with security features surrounding access, including multi-factor authentication, single-sign on and role-based access. Legacy systems can also lack sufficient encryption methods to protect citizens data. These systems may vary in "outdatedness" simply because of differences in hardware and software support. Local governments may need additional support to identify how their outdated systems could affect their citizens' data.

Continue reading Ryan's Policy Note here.

BROADBAND NEWS

Boulder, Colorado. The Boulder Public Library and Boulder Housing and Human Services Department partnered to develop the "Bridging The Digital Divide" program to directly address the City's digital inequities. Senior citizens and school-aged youth will be eligible to receive internet access and/or digital devices through the program. **(The City of Boulder)**

Kansas. Governor Laura Kelly signed an executive order forming the Kansas Office of Broadband Development. The Office of Broadband Development will conduct annual evaluations on the state of broadband connectivity and affordability. The research will be used to develop strategies to strengthen broadband infrastructure in Kansas. Kansas is home to five NCC municipalities including **De Soto, Hays**, **Kansas City**, **Lawrence**, **and Spring Hill**. **(KFDI)**

Los Angeles,California. The Los Angeles County Board of Supervisors approved a motion to expand internet access for some of the City's most underserved communities. The motion will create a plan that considers the following:

- Develop best practices for streamlining the permitting of high-speed broadband internet;
- Explore both public and private options for providing access to internet, including leveraging grants;
- Develop a database and geographic information system to display existing broadband infrastructure;
- Explore revisions to the County's General Plan to give unincorporated areas sufficient access to high-speed internet; and
- Explore new strategies to provide free, low-cost or permit based internet to disadvantaged communities. **(SCV News)**

Missouri. Eleven broadband projects will receive funding as part of the Missouri Emergency Broadband Investment Program. More than 450 households are expected to receive broadband access as a result of the projects' initiatives. **(KRCG)**

Wisconsin. Together with the state Public Service Commission (PSC) and the Wisconsin Economic Development Corporation (WEDC), Governor Tony Evers announced the six Wisconsin communities that will be a part of the Broadband Connectors Pilot program cohort. Those communities are: Lac du Flambeau Band of Lake Superior Chippewa Indians, Ho-Chunk Nation, School District of Owen-Withee, Town of Cross, St Croix County, and Fond du Lac County. Each community will receive assistance with completing applications for federal, state, and private-sector broadband expansion funds. **(STL News)**

NCC is Working to Connect Members

SANTA CRUZ, CA

SACRAMENTO, CA

Communications Advocates Order Ex Parte Filing on AT&T Terminating DSL. Next Century Cities joined the Communications Workers of America, Public Knowledge, the National Digital Inclusion Alliance, and other advocacy groups in filing an ex parte in response to AT&T's recent announcement that they will discontinue sales of their DSL service. Read the full ex parte here.

NCC Submits Recommendations to the California Public Utilities Commission and Reiterates the Importance of Supporting Local Connectivity Solutions. On October 12th, NCC submitted public comments before the CPUC on behalf of NCC's member municipalities in California. As Tom Mullen, Chief Data Officer from Riverside County explained, "The pandemic has shined a bright light on the ongoing struggle in many communities to gain access to high-speed broadband services and break through the digital divide." The filing includes local perspectives on successful broadband deployment strategies, reiterates the importance of network resiliency, and describes ways to improve broadband opportunities for California residents in low-income, redlined, and Tribal communities.

NCC Urges California to Support Local Governments Working to Expand Broadband Access. Amplifying calls from NCC member municipalities and public interest advocates, NCC sent a letter to California Governor Gavin Newsom urging him to reconvene the California Assembly to discuss ways to support local connectivity initiatives. The letter describes how increasing connectivity options will help to ensure that residents have the requisite connectivity to remain safe and fully recover from the pandemic. Thanks to the local officials in **Santa Cruz** and other member municipalities in California for speaking up on this issue.

NCC Participates in Panel on Digital Divide in the Era of COVID-19. Executive Director Francella Ochillo participated in the Moving Underserved Communities Forward event series hosted by ALLvanza, the Multicultural Media, Telecom and Internet Council (MMTC), and OCA - Asian Pacific American Advocates, featuring FCC Commissioner Jessica Rosenworcel. On October 14th, policy experts from Information Technology and Innovation Foundation, National Urban League, and Wiley Rein discussed ways to help ensure that all communities have access to the digital resources that they need.

IN CASE YOU MISSED IT

Rebuilding America: The Road Ahead. Siegel Foundation released a framework for multidimensional infrastructure that supports a range of societal goals including closing the digital divide. Looking toward the year 2050, the report outlined the investments our country must make across our digital, physical, and social infrastructure. Each of these dimensions contributes to problems facing American society today including the environment, racial injustice, economic inequity, and social upheaval.

Broadband Blueprint: How to Achieve Universal Availability. Angie Kronenberg, Chief Advocate & General Counsel, leads INCOMPAS' call for Congress to make $100 billion in federal funding available to local communities, a plan that could help achieve faster broadband speeds and affordable prices in the U.S. The paper explains why federal, state, and local governments should focus on: (1) adding networks, not fees; (2) streamlining deployment; (3) investing in unserved or underserved communities; (4) improving broadband mapping data; (5) promoting competition; and (6) future proofing networks. INCOMPAS emphasizes that making broadband available to all is a monumental goal that has the potential to create massive economic and societal benefits. However, as noted in the blueprint, it will take a coordinated effort between corporations and every level of government. Read the report summary [here](#).

NTIA's BroadbandUSA Launches Digital Inclusion Webpage. The National Telecommunications and Information Administration debuted a new webpage highlighting federal digital inclusion resources and state and local government digital inclusion programs. The new page includes an interactive map of the country.

Digital Inclusion and Parity: Implications for Community Development. Roberto Gallardo, Lionel Bo Beaulieu, and Cheyanne Geideman explain how digital parity can lead to more inclusive communities. Noting the importance of broadband infrastructure, the writers introduce a household-level digital inclusiveness index (DII) that examines the differences among specific groups regarding device and internet access, utilization, and internet benefits, and the role that digital parity can play in reducing the gap between these groups. This kind of data can "provide valuable information that community leaders and practitioners can use to pursue more targeted efforts to advance digital inclusion in their communities."

The Cost of Connectivity in the Navajo Nation. In the Navajo Nation, [over half](#) of Navajo chapters lack any broadband access of any kind. Open Technology Institute analyzed internet service plans in over 100 Navajo chapters and found that federal data on internet service in the Navajo Nation is not only inaccurate, but "the market is characterized by slow, outdated, and expensive service plans."

Opportunities for Members

Mountain Connect Panel Featuring NCC Member Municipalities. This year's conference, October 26-27, 2020, is focused on the need for ubiquitous fiber and wireless infrastructure. Zach Friend (**Santa Cruz, CA**), Candelaria Mendoza (**San Antonio, TX**), and Ricky Santiago (**Louisville, KY**), will share insights on how local governments are working to implement connectivity solutions and why stakeholders at every level of government should work towards a nationwide strategy to bring broadband within reach for every community. Recognizing that budget shortfalls may prohibit participation in the conference, **Mountain Connect has generously offered free registration for local government officials.** Register here using conference code THX2020MC.

US Ignite Launches Project OVERCOME, a 1.5 Million Grant Program Designed to Accelerate Novel Broadband Deployments in Underserved Communities. Funded by a $1.945 million National Science Foundation Grant, Project OVERCOME will support the selection and buildout of five proof-of-concept network deployments designed to connect both rural and urban communities in novel ways. US Ignite will oversee the selection process as well as the build-out phase of the winning concept proposals. Project teams will be chosen based on the use of innovative technologies, such as mesh networks and new spectrum access solutions, in addition to creative deployment models that leverage both public and private sector partners. **NCC Member municipalities are encouraged to apply. Grant proposals are due January 8, 2021.** Register for the Project OVERCOME webinar on November 10th at 11:00 AM ET. View the RFP here.

*Editor's Note: Our October 7, 2020 publication incorrectly listed Barbara Fuller as Washtenaw County Commissioner. Her correct title is Chair of the Washtenaw County Broadband Task Force.

LOUISVILLE, KY