

North Central Texas Municipal Broadband Guidance - Whitepaper

NCTCOG Transportation Department

Background

On December 4th, 2023, the North Central Texas Council of Governments (NCTCOG) Transportation Department hosted the Municipal Stakeholder Broadband Roundtable. During this meeting, several members of the 16-county NCTCOG region convened at the NCTCOG headquarters to discuss the state of municipal involvement in broadband and digital equity in their communities. This delegation of those closest to the topic in their respective municipalities helped to guide NCTCOG staff on action related to broadband topics on policy, funding, deployment, and legacy in the region.

Roundtable Members

City of Dallas – William Zielinski, CIO	Town of Prosper – Leigh Johnson, Director of I.T.
Dallas County – Lillian Painter, Broadband Manager	City of Fort Worth – Kevin Gunn, CTO
Town of Little Elm – Shea Rodgers, CIO	City of Arlington – Stuart Young, Real Estate Manager

NCTCOG Transportation Involvement

In March of 2022, the Regional Transportation Council approved an action item that requested two phases of “equal access to the internet.” Phase One requested that the NCTCOG Transportation Department fund an autonomous vehicle, fully equipped with a Wi-Fi hotspot and devices on board, to help bring internet access to lower income communities. Phase Two requested that NCTCOG staff scope a fiber optic network deployment along East Lancaster Ave and East Rosedale St, with new construction (underground) along East Lancaster and a retrofit (aerial) along East Rosedale.

As this action was meant to be an introduction to the topic of municipal broadband funding from a transportation point of view, the vision for the program is much broader. In concert with the currently funded initiatives, the NCTCOG Transportation Department has been conducting outreach and research on current needs and strategies to address them throughout the 16-county service area. The gathered information and voices from the region point to our partner agencies experiencing similar issues to other parts of the country with diverse geographical landscapes. With this analysis, the time for further action became apparent and the NCTCOG Transportation Department organized the broadband roundtable previously mentioned, to organize siloed concerns and deployments.

Current National and State of Texas Broadband Landscape

This section walks through the history and underlying factors related to the challenges faced by members of the Roundtable, as well as several other agencies across North Central Texas and the Nation.

Federal Programs

During the COVID-19 pandemic, our country was exposed to several underlying societal inequities that did not only pertain to the timeline of the pandemic. One of the most glaring topics to arise from these inequities was that one in five U.S. households did not have internet services in the home. “Equitable” in

terms of public broadband funding initiatives means ensuring that communities have covered three major elements: access to reliable infrastructure and technology, affordability of services, and education programs to assist with utilizing internet applications.

Regarding reliable infrastructure, the National Telecommunications and Information Administration (NTIA) established criteria for measuring severity of need per household. Per the NTIA's statutory funding priorities:

- An area that only has access to internet speeds below 25/3 Mbps is considered "unserved."
- An area that has access to internet speeds below 100/20 Mbps is considered "underserved."
- An area that has access to internet speeds above 100/20 Mbps is considered served and ineligible for funding.
- All anchor institutions that serve the community should have minimum speeds of 1/1 Gbps.

President Biden's Infrastructure Investment and Jobs Act (IIJA) allocated \$65B in various programs to several federal agencies for the purpose of increasing residential access to equitable broadband services. These programs are:

- NTIA's Broadband Equity, Access, and Deployment (BEAD) Program (\$42.45B). BEAD provides this funding to "be distributed among states, territories, D.C., and Puerto Rico, for projects that support broadband infrastructure deployment and adoption."
- NTIA's Enabling Middle Mile Broadband Infrastructure Program (\$1B). "The purpose of this grant program is to expand and extend middle mile infrastructure to reduce the cost of connecting unserved and underserved areas to the internet backbone."
- NTIA's Tribal Broadband Connectivity Program (TBCP)(\$2B). "TBCP directs funding to tribal governments to be used for broadband deployment on tribal lands, as well as for telehealth, distance learning, broadband affordability, and digital inclusion."
- NTIA's Digital Equity Act Programs (\$2.75B). "To promote digital inclusion and equity to ensure that all individuals and communities have the opportunity to acquire the same skills, technology, and capacity needed to engage in the Nation's digital economy."
- U.S. Department of Agriculture's Rural Utilities Service (\$2B). The program covers "Distance Learning, Telemedicine, and Broadband Program, under which recipients are obligated to utilize \$5 million of their award for the establishment and growth of cooperatives to offer broadband."
- The Federal Communications Commissions (FCC) Affordable Connectivity Program (ACP) Fund (\$14.2B). The ACP helps to "provide direct subsidies to qualifying households for the purchase of broadband service."

Currently, the most contested topic of federal broadband funding is focused on the ACP. The \$14.2B ACP Fund is due to expend all funding sometime early to mid-2024. Several state governors and digital equity organizations have pushed Congress to extend the ACP Fund so that millions of Americans continue to receive the affordability necessary to access internet services.

State of Texas Programs

The State of Texas, in response to a federal call for state intervention of broadband access inequities, created the Broadband Development Office to help coordinate a plan of action. There are some key

considerations to keep in mind when discussing how Texas differs from other states and their broadband plans.

The first understanding one must have regarding public broadband investment in Texas is legality. Texas Utility Code Subchapter E, Sec. 54.201 states that a municipality may not obtain the certificate to operate as a service provider for telecommunications services. This simply means that a municipality in the State of Texas cannot facilitate “to the home” services to customers. There have been certain instances, however, that have allowed some Texas municipalities to work around this law. The case of Mont Belvieu, Texas, and the creation of their municipal provider MB Link is a prime example. The City of Mont Belvieu argued that the statutory definitions of “connecting to a telecommunications provider” were not consistent with connections to the internet.

The second consideration is that the State of Texas received the largest allocation of funding from BEAD at \$3.3B, nearly doubling the second largest allocation (California - \$1.8B). Currently, the State BDO still needs approval of its Initial BEAD Proposal to access the \$3.3B from the NTIA. The State has requested that all stakeholders provide feedback on this proposal, along with several other programs surfacing as a result of incoming funding. Additionally, with the November 7 passing of Proposition 8, the State of Texas is now able to create the proposed \$1.5B Broadband Infrastructure Fund (BIF) that will help support further expansion of broadband infrastructure across the state.

Finally, public sector stakeholders need to be aware of the State’s efforts to award the cumulative \$4.8B for broadband infrastructure. The State has shifted stances on this topic over the course of 2023. Initially, the State procured a vendor called LightBox to create a statewide broadband infrastructure location assessment for the purpose of guiding awarded funding. Due to complications related to the challenge process of eligible locations and coordination with NTIA regulations, this state broadband location map will no longer act as the point of reference for the awarding of BEAD and BIF funding. Instead, the State has notified stakeholders that the FCC’s national broadband map will be that reference.

Private Industry Monopolies and Digital Redlining

Due to the history of general inaction from Texas municipalities on residential broadband infrastructure, an unfortunate event of “digital redlining” has occurred from the private sector. There are two major concerns that are shown through an analysis of any given community in North Texas which are access to proper broadband infrastructure and the ability of residents to afford it. Typically, in areas where there is a lack of profit incentive to provide adequate broadband infrastructure, those communities are negatively affected in two ways:

1. Private Internet Service Providers (ISPs) will not build the infrastructure to serve areas that do not provide a return on investment.
2. Areas that have lesser quality infrastructure are typically charged equivalent or higher rates than areas that have adequate infrastructure.

While encouraging free-market competition of broadband services is the priority of any local economy, many of these ISPs have capitalized on their investment in proprietary Right-of-Way infrastructure. Once an ISP has achieved that monopoly, other ISPs find that entering the market is near impossible due to an inability to build their own infrastructure to scale and compete.

Data Issues and Mapping Roadblocks

The Federal Communications Commission (FCC) has historically been regarded as the federal government’s resource for communications connectivity mapping. As part of the IJA, the NTIA, in concert with the FCC, was tasked with updating the national broadband availability map to help guide funding allocations. This map was initially created using data from FCC Form 477. Form 477 requires “all facilities-based broadband providers to file data with the FCC twice a year on where they offer Internet access service.”

It is worth noting again that the State of Texas map mentioned in the “State of Texas Programs” section above is no longer being used for the allocation of the \$4.8B. The State has written into their BEAD proposal that they will use the NTIA availability map to award funding. Given this change of allocation methodology, municipal leaders should stay keen on the issues surrounding Form 477 data and the current version of the national map.

Since its publication, the FCC relied heavily on private ISPs to report accurate and thorough data that shows the location of hardware and the true speeds provided via this hardware. During the updating process, the NTIA requested that municipalities coordinate local and regional challenges to this data to increase its validity. After receiving the most recent map challenges in 2023, the NTIA confirmed over 1.5 million households nationwide that were altogether left out of the initial Form 477 data.

By adding over 1.5 million serviceable locations, it became clear that the responsibility to provide inclusive reporting methods rested heavily on the public sector. Additionally, before recent changes to the State of Texas’ funding methodology, the entirety of the 16-county NCTCOG region was deemed ineligible for funding. This was due to eligibility previously being measured in hexagonal sections of cumulative availability percentages. Now, the methodology states that any individual household that is “unserved” or “underserved” based on the NTIA definition, is eligible for funding.

Guidance from Roundtable

Our regional municipal partners all shared common frustrations pertaining to the broadband landscape. The recurring points of feedback were consistent with similar challenges faced throughout local and regional organizations across the nation. As a result of the thoughts and experiences shared by the members of the roundtable, it was agreed that the role of the NCTCOG should be the convener of several topics related to policy, legislation, data, and strategy.

Steps moving forward:

1. The NCTCOG will assist the region with the coordination of data collection and analysis for the purpose of better reporting broadband availability, affordability, and residential usage rates.
2. The NCTCOG will create a policy committee consisting of elected officials in the region to provide clear and consistent feedback to the Texas Broadband Development Office.
3. The NCTCOG will leverage this policy committee to form a legislative program that will help guide the State of Texas legislature on regional needs.
4. The NCTCOG will continue with outreach to broadband practitioners in the region and encourage municipalities to appoint broadband technical leads. Additionally, the NCTCOG will create a strategy for municipal best practices in achieving internet for all residents.

NCTCOG Transportation would like to encourage all municipalities that have experienced complaints about internet accessibility in their communities to join this coalition. As we gather more support from our partner agencies, we will request your insight to help guide policy changes, data practices, and broadband equity programming.

For more information or for requests to join the policy or technical committees:

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