



September 30, 2020

The Honorable Dan Huberty
Chair, House Committee on Public Education
Texas House of Representatives
P.O Box 2910
Austin, Texas 78768-2910

Re: Notice of Formal Request for Information, Interim Charge 2

Chairman Huberty and Committee Members,

Thank you for your work and attention to improving broadband access across our state. Recent events have proven broadband to be a necessity for Texans to access essential services, such as remote learning and improving economic prosperity.

This letter is submitted on behalf of Texas 2036, a statewide, non-partisan think tank and advocacy group working to leverage data, research, and strategic planning to ensure that Texas remains the best place to live, work, and do business in the future. To improve broadband access across our state, Texas 2036 recommends swift adoption of a state broadband plan, the creation of a broadband office, and sustaining recent investments made in remote learning. Texas 2036 also stands ready to work with Legislators to facilitate action addressing economic barriers that have historically hindered broadband access in rural and economically disadvantaged communities.

We respectfully submit the following answer to Question 1: *Can a map, detailed list or other resources be provided that shows where there are gaps in available internet coverage? If so, please provide. What needs to be done to close the gap?*

Maps and Data on Broadband Access Gap

Texas 2036 is committed to providing accessible, actionable, and transparent data to inform policy decisions. Mapping the broadband access gap in Texas is best viewed in two categories:

1. **Infrastructure Availability** – provides detail on communities and areas around state that have and do not have infrastructure able to support at-home-broadband service (i.e. fixed broadband); including accessible speeds.
2. **Broadband Subscriptions** – provides detail on households that have and do not have subscriptions to at-home-broadband service. Data in this category provides insight into areas that have adequate infrastructure, but for various reasons may have a low percentage of households subscribing to broadband services.

State of the Data Today

Infrastructure Availability: When it comes to infrastructure availability, we believe Connected Nation Texas offers the best currently-available mapping in our state. The Texas Broadband Map can be viewed at the following link:

<https://gis.connectednation.org/portal/apps/webappviewer/index.html?id=9e10c6120228435ca35c759fac3d805e>

Maps produced by Connected Nation Texas build off of the mapping data available from the Federal Communications Commission by validating the data through working directly with broadband providers in the state to help refine their coverage areas and determine its accuracy. Through this process, Connected Nation Texas is able to produce broadband maps exhibiting fixed broadband infrastructure availability (not including mobile or satellite technologies) along with usable speeds at higher degree of accuracy than those produced by the Federal Communications Commission. Connected Nation Texas produces updated maps every six months and has various layers that allow the data to be displayed at school district levels.

Broadband Subscription: Broadband subscription rate data can be viewed accessing the U.S. Census American Community Survey. This information can be found on Texas 2036's website, which has the data available by county. The data can be viewed at the following link:

<https://indicators.texas2036.org/indicator/69>

Texas 2036 believes the U.S. Census American Survey offers the best available data to examine broadband subscription rates because to our knowledge no other reliable public dataset exists. However, caveats do exist with the American Community Survey, as it is based only on a subset of the population that responded to the survey, so it may not provide a 100% accurate picture of the broadband subscription rates in Texas.

Solutions to Consider for Closing Access and Adoption Gaps

Texas 2036 is committed to closing the digital divide gap for our students and offers the following solutions for consideration:

Support Broadband Planning and Address Economic Barriers

States have predominantly taken a “hands off” approach, relying on federal funding opportunities to guide broadband deployment within their borders. However, as more public services and commerce move online, other states have begun engaging with the private sector in the deployment of broadband technologies. Common approaches include planning, data collection, and dedicated broadband offices offering technical assistance and funding coordination to communities. The following three steps provide a pathway for Texas:

First, **swift adoption of a state broadband plan is needed to create an avenue to increased broadband access and to provide Texas broadband entities a fair shot at future federal funding opportunities.** Texas is one of the six statesⁱ that does not have a statewide broadband plan.ⁱⁱ A plan recognized by the Governor as the official state broadband plan will assist in capitalizing on federal funding opportunities and establish a clear vision for broadband deployment across our state.

Second, to implement the plan and coordinate state action, **the state should create a broadband office within an existing state agency.** Dedicated broadband staff who

understand the vision and technical aspects of broadband deployment will ensure infrastructure across the state is developed efficiently, both from a cost and time perspective. Nearly three-quarters of states have a dedicated broadband office within their governments.ⁱⁱⁱ

Third, Texas needs to **address the economic barriers that have historically hindered broadband access in rural and economically disadvantaged communities**. Lack of population density and economic resources are primary contributors to impeding broadband deployment and adoption in these communities. Funding, incentives, and regulation changes should all be considered as viable options to addressing this issue. Texas 2036 is ready to assist Legislators in developing solutions.

Sustain Investments for Remote Learning and Expand to Include Rural Students

The investment of \$200 million in Coronavirus Relief Funds to obtain over 1 million mobile hotspots and e-learning devices provided much needed help for many communities and students to prepare for the beginning of the 2020-21 school year.^{iv} This one-time infusion of federal funding from the state will need a long-term financial solution to continue progress beyond the 2020-21 school year. We applaud the Committee's efforts in examining the Technology and Instructional Materials Allotment for this purpose.

Furthermore, we encourage the Committee to seek and support long-term funding solutions to sustain broadband access for our students and continue seeking technology solutions for our rural and disconnected communities. The rapid solution implemented by Operation Connectivity provided much needed help for many communities and students but relied on existing broadband infrastructure and cellular availability. Roughly 30 percent of students live in rural areas where neither broadband nor cellular service is available.^v Students, families, and schools in these rural communities need broader and more innovative solutions to have equitable access to technology that exists in our urban communities.

Texas 2036's Focus on Broadband

As you are well aware, the recent coronavirus pandemic accentuated Texas' digital divide and further exacerbated broadband disparities across the state. At the onset of the pandemic, an estimated 3 million households – over 8 million individuals – did not subscribe to at-home-broadband, ranking Texas 38th in nation for broadband subscriptions.^{vi} The income gap associated with subscriptions is similarly stark. Fewer than half of the state's households earning less than \$20,000 a year subscribed to at-home-broadband, while 82 percent of households earning \$75,000 or more did.^{vii} Additionally, according to recent data produced by Connected Nation Texas, nearly 1 million individuals, 89 percent residing in rural communities^{viii}, do not have adequate broadband infrastructure to sufficiently support access to essential services.^{ix}

Texas 2036 is committed to solving the digital divide in our state. We view broadband as critical infrastructure for continued global competitiveness in the 21st century and a pathway for improving the quality of life for all Texans. By 2036, Texas is expected to add nearly 10 million people, increasing our population to 38 million. This growth will provide various opportunities for our state and broadband access will play a critical role to maximize our potential. When examining this issue, Texas 2036 encourages the Committee to take a holistic viewpoint of broadband access to included other public interests alongside remote learning. Here are two potential upsides of broadband access to keep in mind:

Improves Limited Telehealth Availability

74 counties do not have a hospital; 22 rural hospitals have closed since 2010; 35 counties do not have a primary care physician – a majority of these counties also have inadequate broadband infrastructure for telehealth access.^x

Activates Unrealized Economic Potential in Rural Texas

Over a 10-year period, Deep East Texas seeks to benefit by experiencing \$1.4 billion in GDP growth and 10,300 new jobs in the region.^{xi} Rural small business in Texas seeks to benefit \$6.7 billion in annual sales and 23,400 new jobs.^{xii}

Before the pandemic, Texas 2036 began working on this issue by gathering necessary data and hosting community advisory group meetings. When the pandemic hit, we stepped up and began assisting where needed. We were called on by Operation Connectivity to help connect the estimated 1.8 million students that lacked technology for remote learning.^{xiii} Texas 2036 had the esteemed honor to lead the Funding and Budget Workstream of Operation Connectivity. The workstream was tasked to develop a cost model for different connection options, locate funding, and develop strategies for securing funds. Under the Executive Committee's leadership, Texas 2036 was proud to contribute in helping the state secure over 1 million e-learning devices and mobile hotspots for students during this unprecedented crisis. However, our work as a state is not complete. As previously stated, disparities still plague our state when it comes to broadband access.

Again, Texas 2036 would like to thank the Committee for their time and attention to improving broadband access in our state. We look forward to working and collaborating with you on this important issue in the near future. Please do not hesitate to reach out, if we may be of assistance.

This Request for Information was respectfully submitted by John Hryhorchuk, Director of Policy at Texas 2036. He can be reached in the following ways:

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ⁱ Soon to be five. South Carolina started their Broadband Plan in July using Coronavirus Relief Funds

ⁱⁱ Connected Nation Texas

ⁱⁱⁱ Pew Charitable Trusts, Key Elements of State Broadband Programs, May 2020, <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2020/05/key-elements-of-state-broadband-programs>

^{iv} Office of the Governor Press Release, Governor Abbott Announced Procurement of Over 1 Million Devices, WiFi Hotspots Through Operation Connectivity, August 2020, <https://tea.texas.gov/sites/default/files/covid/Governor-Abbott-Announces-Procurement-Of-Over-1-Million-Devices-WiFi-Hotspots-Through-Operation-Connectivity.pdf>

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- ^v Analysis Completed by Operation Connectivity Consultants in Preparation for Operation Connectivity Executive Committee Meeting, July 2020
- ^{vi} United State Census Bureau, 2018 American Community Survey, Presence and Types of Internet Subscriptions, Note: excludes satellite and cellular services.
<https://data.census.gov/cedsci/table?q=0100000US.04000.001&tid=ACSDT1Y2018.B28002&hidePreview=true>
- ^{vii} United State Census Bureau, 2018 American Community Survey, Percentage of Households with Subscription to Any Broadband Service. <https://www2.census.gov/programs-surveys/acs/data/pums/2018/?#>
- ^{viii} Connected Nation Texas, What Can Texas Do?, <https://connectednation.org/texas/what-can-texas-do/>
- ^{ix} Connected Nation Texas, What Can Texas Do?, <https://connectednation.org/texas/what-can-texas-do/>
- ^x Kaiser Health News analysis of hospital cost reports filed to the Centers for Medicare & Medicaid Services
- ^{xi} Deep East Texas Council of Governments, The Case for Broadband in Deep East Texas, May 2020, https://0d24fbc8-d5de-4683-8267-6b36f8555656.filesusr.com/ugd/a7f184_e621109bfa1142d5989bec16970497d6.pdf
- ^{xii} U.S. Chamber of Commerce, Unlocking the Digital Potential of Rural America, Table A.7, March 2019. <https://americaninnovators.com/wp-content/uploads/2019/03/Unlocking-the-Digital-Potential-of-Rural-America.pdf>
- ^{xiii} Texas Education Agency, A Guide to Operation Connectivity, August 2020, https://tea.texas.gov/sites/default/files/covid/crf_-_oc_one-pager.pdf