

Reliable and Affordable Broadband Internet for All



For the Community Technology and Telecommunications
Commission

July 2021

What we will be talking about in this presentation

The DI Fellowship is part of the Digital Inclusion Strategic Plan of the Telecommunications And Regulatory Affairs Office at the City of Austin, with the task of ensuring sustainable solutions to ensure reliable and affordable broadband for all.

The Community Technology & Telecommunications Commission has a dedicated focus on Digital Inclusion and Civic Engagement, with inclusion for all and “Equity” as our defined strategic outcome for disaffected and underserved populations.

Stakeholder engagement and issue identification portion of the DI Fellowship that has resulted in the emergence of priority areas and solutions. The DI solutions are framed within the priority areas of economic recovery and resilience, as outlined by the City of Austin City Council and Economic Development Department.



Contents

1. Background and overview of the effort for reliable and affordable broadband for all
2. What we have done and learned so far
3. What happens next

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Background and overview of the effort for reliable and affordable broadband for all

How we got here

- Insights from Lived Experience of Austin residents from CTTC Special Conversation
- Goal of the Community Technology & Telecommunications Commission Work Plan
- Experience from Previous City-supported projects & COA Digital Inclusion Strategic Plan
- Impact from COVID-19 Virtual Pivot
- Application to Leadership Austin and funded by St. David's Foundation (THANK YOU!)

Results of inputs:

- Khotan Harmon named LA Digital Inclusion Fellow
- Framed out the goals and inquiry areas for the project
- Aligned current City program staff to support Fellow and coordinated activities underway for project
- Identified initial stakeholders to engage in project

Project scope: Reliable and Affordable Broadband for All

Project Goals:

Our community needs a fellow to assess, identify and develop viable longer-term solutions to address the problem of digital equity to ensure reliable, affordable broadband for all. The availability of the internet is critical to participate in a growing digital society and to provide equitable, educational, job and economic opportunities and access to healthcare.

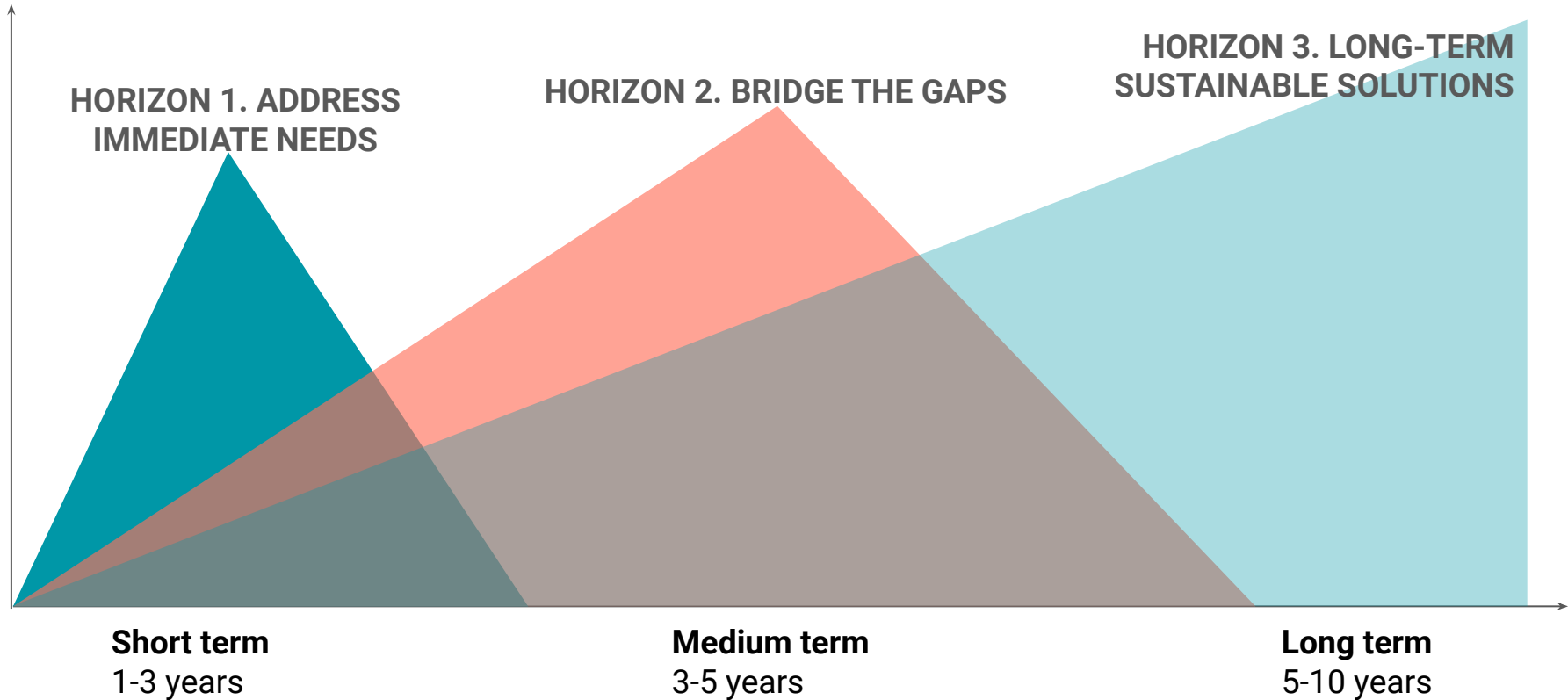
Deliverables:

Report #1: Community asset mapping and survey of existing data on the mapping and speed of private broadband infrastructure and reasons for barriers to broadband adoption.

Report #2 - Feasibility Plan based on models and best practices nationally that could be offered as a possible solution in Austin for affordable reliable broadband for all in Austin.

Stakeholder engagement - Reactivated, engaged and collaborating cross-sector of stakeholders in a wide-reaching and community-wide effort.

A 3-horizon view of the challenge and solutions



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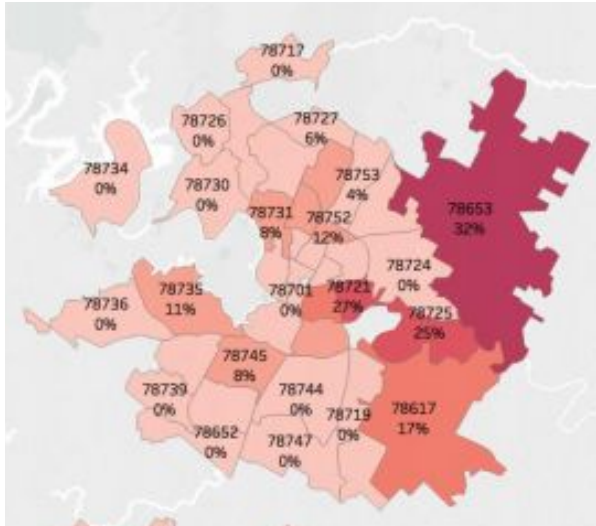
**What we have done
and
learned so far**

What we learned from the 2018 Residential Technology Survey

- Survey was sent to 11,000 random addresses, and 997 respondents completed the survey, a 9% response rate.
- The survey indicates that 95% of respondents have a home broadband Internet connection, slightly higher than in 2014 (92%).
- This is much higher than comparable national statistics--65%, according to Pew Research Center.
- Further, about two-thirds of respondents without home broadband use the Internet in some way, whether on a smartphone or at a public location.
- In terms of devices, 99% of City residents have a cellphone (of them 97% have a smartphone), 76% a laptop, 69% a tablet, and 48% a desktop.

So, WHAT is the problem and WHERE does it exist?

Survey respondents without a home internet connection, 2018



Source: [Local residential survey of technology access, 2018](#)

95% of Austin residents use the internet at home -- but this number **masks disparities between communities and levels of access.**

According to the data, the communities that tend to face the highest barriers to digital access:

- Communities of color
- Low income individuals and families
- Older adults
- Limited English Proficiency
- People with disabilities

Smartphone use is widespread. But **device gaps exist for education, employment, and health uses.**

Affordability and **skills** gaps are the **primary barriers** for people who do not use the internet.

The Childcare Example - 2000 Days!

- 2000 Days between birth and Kindergarten! Build quality foundation for children, and support families and strengthen communities by allowing parents to participate in the workforce that will ensure continued economic growth and resilience for communities.
- **34,000 children** under the age of six living in poverty in the Austin area.
- Currently there are only **3000 child care spots available for these children** in regulated child care programs, centers, and family care across the region, which include registered homes, licensed homes, and licensed centers.
- There are **429 licensed child care providers and 134 registered family child care home practitioners**, with only 31 of whom accept subsidies. 80% of child care centers have 20 employees or fewer.
- **5% of licensed centers permanently closed** and **10% of licensed/registered homes** permanently closed their businesses. Another 8% of centers and 12% of home-based providers were temporarily closed.
- Strategies aligned with Council Priorities on economic recovery and resilience:
 - **Shared Services Model** - “Back Office” for all day care businesses regardless of their size or zip code
 - **Child care as gateway to workforce development** - childcare center and home based day care programs need coaching and mentorship to become highly functioning small businesses, start, restart jobs, create jobs, become licensed, registered high quality care businesses to attract caregivers accessing their services.

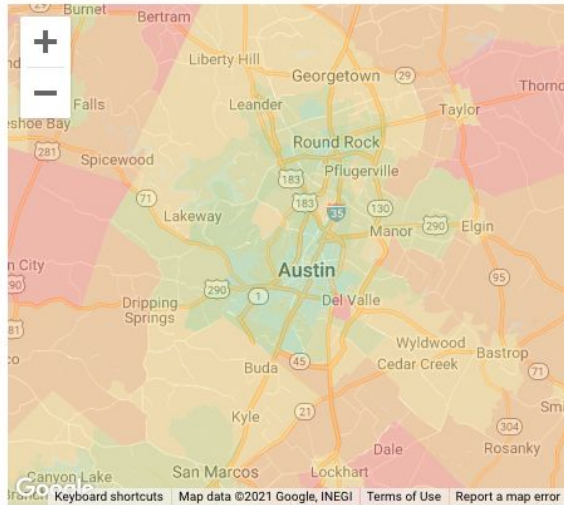
**What is the reality of
digital inclusion
in Austin
post-COVID?**

We are learning...

- Data-driven approach
- **Community COVID survey fatigue** - we are working with research and community partners on data sharing and learning to optimize data sharing and minimize additional surveys - (e.g. Mission Capital, Children's Optimal Health, DECA partners, Social Isolation Taskforce, City of Austin departments such as Economic Development, Austin Public Health, Workforce Development)
- **A new approach to the bi-annual Residential Technology Survey** - the 2021 Residential Technology Survey is being deployed in two parts:
 - **Summer 2021** - Deep community-focused, community-lead, lived-experience data gathering in partnership with community partner (Measure)
 - **Fall 2021** - deployment of a residential quantitative survey in the City of Austin.

Some questions we are exploring...

Internet Provider Competition Map For Austin

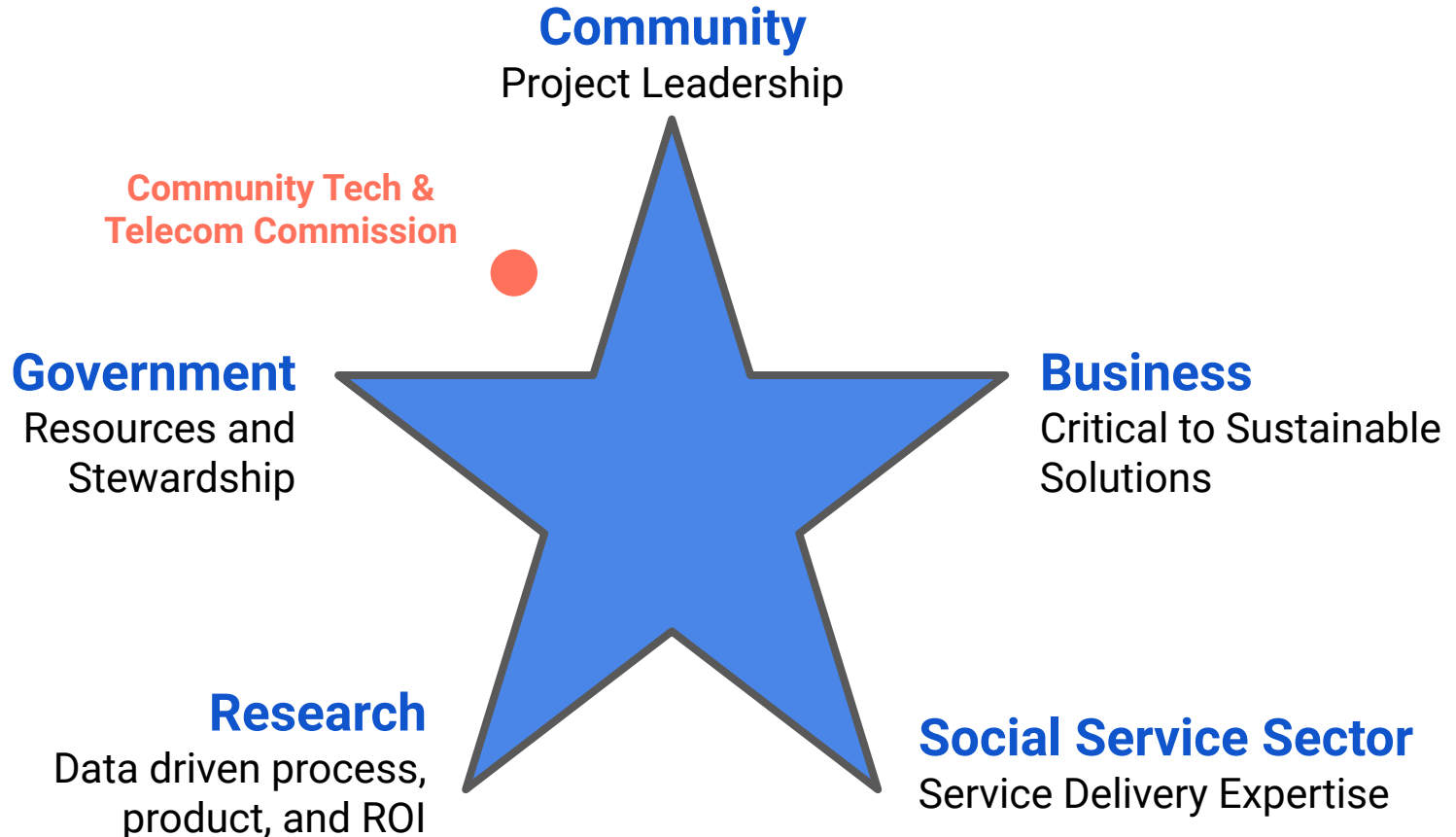


- How do broadband availability, quality, speed, and cost vary across Austin?
- How are existing services working or not working for residents? What community needs are not addressed by existing services?
- What types of challenges residents have experienced from COVID: Bandwidth limitations, device limitations. What changes have residents made to cope with COVID-19? Are these challenges short-term or long-term -- I.e., resolved when COVID is over, or not?

Official data says Austin is well served with internet infrastructure and providers. But this hides the true story.

Source: [BroadbandNOW](#) (FCC data self-reported by Internet Service Providers)

Exploring Sustainable Cross-Sector Solutions



Where we started...

- **Issues assessment** - to better understand the issues around digital inclusion and who was not connected and why.
- **Stakeholder identification**- began asking who should be part of the solution and identified three sectors: 1) private sector - business solutions and business investment
2) social sector - the service providers, non-profits, community serving organizations,
3) Government - local, county, state and federal.
- **Digital Inclusion Solutions** - started to examine the validity of the commonly held “three legs of the stool” as sustainable digital inclusion solution: 1) access, 2) devices, 3) skill training
- **Models** - searched for and identified reliable and affordable broadband for all models nationally that we could replicate and/or adopt for Austin.

Key learnings to guide solutions

- This is not a technology problem. And the solution will not be solely a technology solution.
- Cross sector collaboration and planning is key to sustainable long term solutions, and a breaking through of siloed efforts, resources and focus.
- Existing solutions focus on alleviating immediate needs or continuing programs and services for deepening needs made apparent through COVID.
- The momentum and success of the project will depend on collaboration, planning and execution in distinct timelines.

A Common Vision: Align with City Council priorities for relief and recovery

Outlined in [Resolution No. 20210325-111 \(March 25, 2021\)](#)

- **Homelessness**, and related housing, mental health, and substance abuse issues
- **Early childhood care and education** that is high quality and affordable
- Jobs for working class Austinites that include good wages, benefits, and workplace protections, and associated **workforce development** and work programs
- **Food and housing insecurity**

Digital equity challenges articulated by the CTTC special called meeting

In 2019 the Commission created the Strategic Tech & Telecom Policy Impact Working Group with the goal of organizing a Digital Inclusion Stakeholder Summit during Digital Inclusion Week 2020. The Digital Inclusion Stakeholder Summit convened key representative stakeholders from critical parts of the Digital Inclusion Ecosystem over a week of programming to help align goals, strategies and outcomes, as well as celebrate successes.

Key challenges outlined at the [Oct 9, 2020 special called meeting](#):

- No universal screen reader standard
- Digital skills training for parents and working student families
- Insufficient hotspot bandwidth for common share wi-fi access scenarios
- Lack of culturally competent device training and resources (ESL, Deaf, visually impaired, etc)
- Lack of relevancy and trust in internet or tech companies
- Lack of geographically equitable broadband

Identify whom to serve in community-wide digital inclusion needs

We were challenged to ask ourselves: “Who is the most isolated from the resources and services of the City of Austin in our community?”

Communities that face the biggest barriers to digital access include:

- Older adults
- People/communities with Limited English Proficiency, English Second
- Communities of color
- Lower income communities
- People with disabilities
- Households with school-aged children

Five Pillars of Sustainable Digital Inclusion Solution

Key drivers of inclusion and outcomes include:

1. **Affordability** - competition in pricing, affordability, bulk purchase, etc.
2. **Internet connectivity** - ubiquitous reliable and high-quality internet connection
3. **Devices** - appropriate devices for appropriate use and age
4. **Training** - training and skill development on the devices that are language and age appropriate
5. **IT Support** - continued digital accompaniment and digital navigation post-training to ensure full adoption, use and mastery of devices.

3

What happens next

Work currently underway

Initiative	Desired outcomes	Timeframe
Qualitative study of digital inclusion	<ul style="list-style-type: none">• Understanding of the lived experience of communities• Insights on how digital inclusion services could work better for communities, and unmet community needs• Communities connected to existing resources, if appropriate	Research partner onboarded in Jun 2021. Summer 2021: Design and conduct study Fall 2021: Share insights and recommendations
Community convening on broadband for all	<ul style="list-style-type: none">• Community activation on the challenge, pilot solution ideas, and funding opportunities	June 2021: Planning with organizational partners Late Summer/Fall 2021: Community convening aligned with Digital Inclusion Week
Mapping internet coverage and speed	Accurate map of internet coverage and speeds across the Austin region <ul style="list-style-type: none">• Understand needs, opportunity areas for pilots and policy solutions• Ensure that bulk internet subscriptions provide value for investment and residents• Understand the speed and quality of internet connections for residents	Summer/fall 2021

Tracking funding and program developments

Federal government (Refer to Slides 29 and 30 for additional detail)

- Emergency Broadband Benefit
- American Rescue Plan -- multiple funds
- NTIA Broadband Infrastructure Program
- NTIA Connecting Minority Communities Pilot Program

Texas State Broadband Office

Local/municipal

County

Foundations

Private investment

Next steps



- Summer/fall -- timing TBD:
- Community convening on broadband for all
 - Mapping internet coverage and speed

- <----- Res Tech Study Data collection and outreach (Qualitative) ----->
- Design near-term opportunities and inform mid-term recommendations:
- Develop benchmarks to address unmet needs
 - Solutions to create immediate connectivity opportunities
 - Community outreach and qualitative research
- Get insights and results from study

Ask of the CTTC

We need advocacy and resources to make this a priority for Austin.

- A Commission recommendation to Council
- We need real input from them. Are we focused on the right areas? Is our approach sound? What is missing?
- Be involved in: designing and applying the evaluation of this whole effort
- "Role for the CTTC:
 - - Help us define digital citizenship and think through the future
 - - Be part of the steering committee: give guidance and direction"



Backup

A framework for pilots and solutions

Horizons: Degree of change

Horizon 1: Address immediate needs

Horizon 2: Bridge the gaps

Horizon 3: Long-term sustainable solutions

City Council priorities

Homelessness

Workforce development

Early childhood care and education

Food and housing insecurity

Community digital inclusion needs

Older adults

Communities of color

People with disabilities

People with Limited English Proficiency

Lower income communities

Households with school-aged children

Pillars of a solution

Affordability

Appropriate devices

IT support, digital navigation

Internet Connectivity

Training and skill development

Partners

Community

Government

Research

Business

Social Service Sector

Funding opportunities: Federal (1/2)

Updated 5/28/2021

Opportunity	Who + what it funds	Funding available	Status + timeline
FCC Emergency Broadband Benefit	Low-income households to purchase internet subscriptions and connected devices.	\$3.2B total fund Households apply, and funding goes to internet service providers.	Open for enrollment as of May 12, 2021. Program end when funding runs out.
ARP: Coronavirus State & Local Fiscal Recovery Funds	State, territory, Tribal, and local government expenses in response to public health emergency and its economic impacts.	Austin: \$188M TX: \$15.8B Travis Co: \$247M States and cities receive block grants split between 2021-2022.	First wave of funding disbursed to cities in May 2021. 25% already allocated. Council is setting priorities for remaining \$143.6M for FY2021-22. Majority expected to be directed toward homelessness. Can cover costs incurred thru Dec 31, 2024.
NTIA Broadband Infrastructure Program	Public-private partnerships to deploy fixed broadband to census blocks with at least one household/business without access to 25/3 speed. Primarily rural, but also urban areas that meet requirements.	\$288M total fund. Approx 200 awards between \$5M - \$30M. No small projects.	Open for application. Deadline: Aug 17. Decisions announced in Nov. Apply early.

[View a more detailed breakdown of funding opportunities.](#)

Funding opportunities: Federal (2/2)

Updated 5/27/2021

Opportunity	Who + what it funds	Funding available	Status + timeline
American Rescue Plan (ARP): Emergency Connectivity Fund	School and library purchases of internet equipment and connectivity for educational purposes	\$7.2B total fund Schools and libraries apply for funding for eligible projects.	Not yet open. Final guidance coming soon. Funding ends one year after the end of COVID public health emergency.
ARP: Coronavirus Capital Projects Fund	State, territory, and Tribal infrastructure projects in response to the public health emergency—including broadband investment.	\$10B total fund TX: \$100M + additional based on proportion of rural and low-income population	Applications will open in summer 2021. Treasury guidance coming soon.
NTIA Connecting Minority Communities Pilot Program	Internet access services and equipment for HBCUs, Tribal colleges, and minority-serving nonprofits and businesses. No funding for infrastructure.	\$285B total fund.	Applications will open in summer 2021.

[View a more detailed breakdown of funding opportunities.](#)