ADDRESSING THE DIGITAL DIVIDE IN AUSTIN:
RESIDENTIAL TECHNOLOGY STUDY

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ABOUT MEASURE

MEASURE is a research and public education organization led by Black women and dedicated to using data and technology to pursue community-defined goals. Since its founding in 2015, MEASURE has provided over 3014 hours of free antiracist evaluation support to our community to increase their access to and use of data. MEASURE believes that, when used strategically, data provides a common language upon which community members can meet and increase their knowledge about the causes and work together to create equitable change and increase awareness.

ABOUT CITY OF AUSTIN THE OFFICE OF TELECOMMUNICATIONS & REGULATORY AFFAIRS (TARA)

The Office of Telecommunications & Regulatory Affairs (TARA) provides consumer protection through regulatory oversight, access to information and communications technology resources and infrastructure, and generates revenue to support City services (1,2). One of TARA's activities is to promote digital inclusion through access to information and communications technology and trainings.

CITY OF AUSTIN'S RESIDENTIAL TECHNOLOGY STUDY

The Fiscal Year 2021 (FY21) Residential Technology Study is building off of previous efforts that began in 1998 to understand residents' sentiments around the internet (3). The FY21 study's goal is to gain a greater understanding of digital inclusion in Austin, particularly during the COVID-19 pandemic and its impacts on digital access. MEASURE was awarded the contract to execute the portion of the FY21 Residential Technology Study that gathered lived-experiences of Austin residents, particularly those in communities that are least likely to have digital access. The goal of the analysis and results shared in this report is to create or modify policy that guides and shapes appropriate provision of services and programming that will close the identified digital gap within a reasonable amount of time.

Sources

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3. Digital Empowerment Community of Austin. (n.d.). FY21 Residential Technology Study. FY21 Residential Technology Study - Digital Empowerment Community of Austin. Retrieved January 31, 2022, from https://cityofaustin.gitbook.io/decatx/solving-for-austins-digital-access-challenges-in-response-to-covid-19-1/fy21-residential-technology-study

BACKGROUND

Digital access is the ability, both technical (i.e. skills) and financial, to make full use of the technology available and access the internet (4). The lack of digital access goes beyond issues of internet access and individual abilities and includes a problem of inclusivity and systemic inequities in institutions (5,6). The City of Austin started a Digital Inclusion Strategy in 2014 to understand the problem of the digital inclusion gap in the city. Surveys have been conducted in 2014 and 2018 to identify the feelings of residents on the topic (7). The 2018 survey indicates that 95% of respondents have a home broadband Internet connection, which is an increase 92% reported in 2014 (8). Among the 5% of respondents that indicated they do not have a home Internet connection, 72% use the Internet at another location, like public libraries, or by another means, such as using a mobile connection.

Digital and internet access are tied to telecommunications infrastructure including cell phone towers, copper cabling, fiber optic cabling, etc. The availability and quality of internet access are dependent on the locations of such infrastructure. The farther away a "receiver" is from a "transmitter," the worse access and quality will be. Infrastructure requires financial investment. Cabling for internet provision in any area has a $/km value. Rights-of-way and permits are required in the same way they are required for erecting transmission structures and distribution poles for the transmission and distribution of power respectively. Pockets of the city of Austin do not have the infrastructure necessary to provide internet access and where they do, the quality of service can be poor. Historically, there has been a divide in the City of Austin that has been referred to as the "I-35 Divide", where city resources and infrastructural investments have been inequitably focused on areas west of I-35 (9). Recent natural disasters, the COVID-19 pandemic that caused shut-ins in March 2020, and the 2021 Winter Storm Uri that caused the Texan power grid, which is disconnected from the national grid, to fail, have further exposed the compounding effects of systemic inequities.

In addition to infrastructural inequities, regulatory laws enacted by the Texas Legislature have blocked local governments' abilities to negotiate agreements with companies. These laws have led to negative outcomes for consumers, competition, inequitable services, and a reduction of revenues to the city from companies, who use the public right-of-way for private use, that could be used to support digital equity programs.
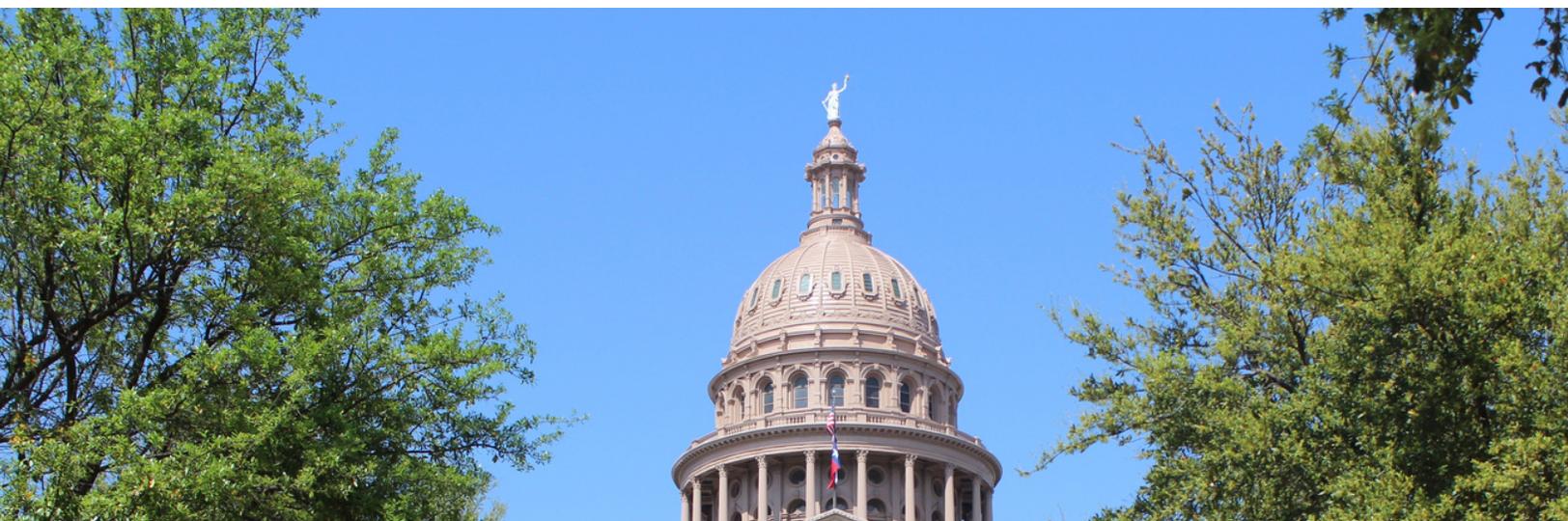
Sources

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5. Straubhaar, J. D., Spence, J., Tufekci, Z., & Lentz, R. G. (2013). *Inequity in the Technopolis race, class, gender, and the digital divide in Austin*. University of Texas Press.
6. Chakravorti, B. (2021, July 20). *How to close the digital divide in the U.S.* Harvard Business Review. Retrieved January 26, 2022, from https://hbr.org/2021/07/how-to-close-the-digital-divide-in-the-u-s
7. City of Austin Digital Inclusion Strategy 2014. (2014) Retrieved from https://www.austintexas.gov/digital-inclusion-strategy-2014/digital-inclusion-strategy-2014
8.Digital Inclusion in Austin Final Report. (2018) Retrieved from
 https://www.austintexas.gov/sites/default/files/files/Telecommunications/DigitalInclusion/Digital_Inclusion_Final_Report_8.13.2019.pdf
9. Zehr, D. (n.d.). Inheriting inequality: Austin's segregation and gentrification. Austin American-Statesman. Retrieved January 30, 2022, from https://projects.statesman.com/news/economic-mobility/

In 2005, the Texas Legislature enacted Chapter 66 of the Texas Utilities Code which assigned municipal franchising to the State Public Utility Commission of Texas and does not allow for input from local governments (10). Prior to 2005, Texas municipalities were the local franchising authority to negotiate cable franchise agreements and community benefits in those agreements to address community needs. For example, in the early 2000's, the City of Austin negotiated a cable television franchise agreement, a new entrant to the Austin market, Grande Communications, to compete with Time Warner Cable. A key requirement granting the franchise was to require Grande to initially build out their network and offer services in East Austin to ensure that low-income residents and neighborhoods were served first and not by-passed to have an opportunity of having an alternative choice from a monopoly company. Chapter 66 of the Texas Utilities code allowed existing cable franchises to expire and eliminated the ability of local governments to negotiate community benefits such as reasonable build-out requirements of networks to ensure equitable and universal access to the same level of services, discounted rates to low-income or seniors or persons with disabilities.

Then in 2017, the Texas Legislature enacted Chapter 284 of the Texas Utilities Code for wireless small cell permitting which preempted local governments from negotiating any community benefits such as improving wireless coverage in areas of the City that are unserved or underserved. The state law set statewide right-of-way (ROW) permitting fees and compensation below cost or rental value for use of public right of way. It includes no build-out requirements (11).

Sources

11. Hawkins, R. (2022, January 19). Private Utility Franchising and Rate Regulation. Retrieved March 14, 2022, from https://www.austintexas.gov/edims/document.cfm?id=375054

HISTORICAL TIMELINE

An overview of key historic events that are related to digital inequity have been documented in the historical timeline graphic, _History of Digital Inequity in Austin, Texas_ (13). Note: Use the cited web link in the Sources section at the bottom of the page to view the historical timeline in a larger format.

MEASURE
Community Led. Data Driven.

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REFERENCES
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DIGITAL INEQUITY IN AUSTIN, TEXAS
UNPACKING THE HISTORY OF INJUSTICE

2000s
SOCIAL MEDIA
Modern social media quickly becomes a means for sharing information, making connections, and news updates. (11). Notably during the 2021 Winter Storm Uri many resources were being shared via social media and people without digital access were at a disadvantage.

1928
MASTER PLAN CREATED
The 1928 Master Plan created a "Negro District" which required all Black Austinites to move to East Austin. This plan evolved into the segregation of the Hispanic/Latino community as well (2).

1953
UNDER-REPRESENTATION
In 1953, Austin adopted a model for city council based on "at large" positions, limiting place-based representation (4). In subsequent years "The Gentlemen's Agreement" was adopted. These systems prevented non-White groups from being able to win elections to the City Council.

1964
CIVIL RIGHTS
The Civil Rights Act was the second to the last act that threw out Jim Crow laws. The Civil Rights Act of 1964 dealt a crucial blow to discrimination in the workforce by making it illegal for any business, private or public, to practice discriminatory hiring (and firing) practices (9).

2005
TEXAS REGULATORY POLICIES
In 2005, Chapter 66 of the Texas Utilities Code was enacted, which removed municipal franchising to the State Public Utility Commission of Texas, and does not allow for input from local governments. Prior to this, Texas municipalities were the local franchising authority to negotiate cable franchise agreements and community benefits to address community needs.

1865

FREEDMAN COMMUNITIES
Juneteenth, June 19, 1865 marked Black emancipation from slavery. An 1865 City Council meeting called for extreme policing and punishing of "idle" Black people (1).; anti-Black violence was praised. During this time Freedman communities in Austin were established (1).

REDLINING
Public policies like the National Housing Act of 1934, which established and reinforced housing segregation (also known as "redlining"), have contributed to unequal opportunities and have marginalized certain groups of people (3). The echoes of this policy still influence our cityscapes. With educational funding tied to property. taxes, and in extension the value of the housing in a neighborhood, redlining still contributes to the systematic denial of resources to Black and poor neighborhoods.

1934

DE-SEGREGATION OF SCHOOLS
Following the U.S. Supreme Court's 1954 decision in Brown vs. Board of Education, the AISD Board of Trustees originally adopted a policy of integration (5).

I-35 DIVIDE & TECHNOPOLIS BLUEPRINT
In 1954, construction of I-35 began in Texas. In Austin, this created the "I-35 divide", physically dividing the city. Infrastructural developments were primarily allocated to areas west of I-35, which became predominantly White (6,7).

In 1957, a group of private leaders created vision for Austin becoming a tech hub (8). Several think tanks were held to further this vision.

1954- 1957

SILICON HILLS
Austin started as a high-tech hub in the '80s, and was known as "Silicon Hills." The initial tech industries hosted in Austin included semiconductor (AMD, Samsung, Motorola/Freescale/NXP, Applied Materials), enterprise software (IBM, Trilogy, Tivoli, National Instruments) and computer hardware (Dell, IBM, Apple) (10).

1980

DIGITIAL INCLUSION PROGRAMS
The Clinton administration began plans for creating programs and infrastructure to address the digital divide. The Bush administration succeed and developed policies counter to that of the Clinton administration and favored free-market solutions (8).

1990s

1995
Incorporated in 1995 by legendary community leaders, Sue Beckwith and Ana Sisnett (1952-2009), Austin Free-Net was the first organization to wire city libraries and put computers in schools and community centers around Austin." (13)

TEXAS REGULATORY POLICIES
In 2017, Chapter 284 of the Texas Utilities Code was enacted for wireless small cell permitting which preempted local governments from negotiating any community benefits.

COVID-19 PANDEMIC
The novel COVID-19 pandemic quickly shifted operations to virtual platforms and closed many public spaces. The pandemic became a public health crisis disproportionately impacting Austin's Black and Brown communities also exacerbates existing economic inequities (12).

2020

Sources

13. Onyewuchi, U, Blanc, P. Taylor, R. (n.d.). _History of Digital Inequity in Austin, Texas._ Retrieved from https://www.canva.com/design/DAEqQ1tPRvg/_uQBCggC5w9GCH6nWvopHA/view?utm_content=DAEqQ1tPRvg&utm_campaign=designshare&utm_medium=link&utm_source=sharebutton

METHODOLOGY

MEASURE's Equity Focused Group tool approach allows those who are historically and systematically impacted by disparate social outcomes to make up the majority of the focus group and leads to an elevation of rich data, showcasing the lived experience of focus group participants. As part of the City of Austin's Residential Technology Study, a series of focus groups were held to understand community members' lived experiences around accessing the internet and technology, what programs or services, if any, helped them, and what they needed in order to improve their digital access and skills. The target population was people who were least likely to have access to the internet or technological devices. These groups included, but were not limited to, persons with low income, older adults, immigrant populations, and Black, Brown, Asian, Native-American, and multi-racial and multi-ethnic communities.

The participants were recruited by local community partners and individual outreach efforts using social media, radio public service announcements, and distributions of fliers at local libraries and public places. Recruitment occurred from September 2021 through January 2022. There were nine focus groups sessions held virtually, using a web-based video conferencing application called Zoom, from September 2021 through January 2022, during weekday evenings and Saturday mornings. Participants had the option to join by phone if joining via an internet-enabled device was not possible. Due to the COVID-19 pandemic, there were no in-person focus groups. Each focus group session was 90 minutes long. Participants were compensated $100 for completing the focus group.

Of the nine focus groups, the first focus group was dedicated to developing the research protocol with the community (conducted in English). Five other sessions were in English, two in Spanish, and one in Dari. There were a total of 54 participants. The participants' demographic characteristics are as follows: In terms of age, 30% were 18-25 years old, 22% were 26-35 years old, 17% were 36-45 years old, 15% were 46-55 years old, 4% were 56-65 years old, 7% were 66 years old or older., and 6% were unknown. The ethnic makeup was 28% Black, Afro-Caribbean, or African American, 9% were East Asian or Asian American, 33% were Latino or Hispanic American, 2% were Middle Eastern or Arab American, 6% were of multiple ethnicities or ethnic background not listed, 6% were South Asian or Indian American, 9% were White or Euro-American, and 8% were unknown or preferred not to say. The gender identification was 57% female, 35% male, and 2% non-binary, and 6% unknown. In terms of education, 7% had less than a high school diploma, 17% had a high school diploma or equivalent, 7% had vocational or trade school, 20% had some college but no degree, 33% had an undergraduate degree, 9% had a graduate degree, and 6% were of unknown educational level. Participants' marital status were 17% divorced, 33% married, 26% never married, 2% separated, 2% widowed, and 28% unknown. In terms of income, 31% of participants earned less than $20K, 17% earned between $20K-$39K, 9% earned between $40K-$59K, 11% earned between $60K-$79K, 2% earned between $80K- $99K, 2% earned more than $100K, and 28% of participant income levels were unknown.

THEMATIC ANALYSIS

Note summaries, transcriptions, and some video recordings were used to identify top themes from the focus groups. Focus groups were iterative, in that some questions were adjusted or added as new topics emerged during the data collection period. For instance, after a few focus groups, we added questions that allowed us to dig into the impact of the 2021 winter storm (Uri). With a changing protocol, a quantitatively focused frequency analysis cannot be used to identify top themes, as the frequency of themes could be the result of primed questions. Instead of using frequency, top themes were identified based on threads of shared topics between at least three sessions. The themes on the following pages were identified in the data and will be explored in this analysis, along with recommendations for further exploration.

Focus Group Questions:
1. How do you access the internet?
    a. What distance do you have to go to access the internet?
    b. What places other than the public library would be useful? (i.e. churches, cafe, etc.)
    c. How has the pandemic affected your access to the internet?
2. What are your experiences with accessing or learning about technology?
    a. How do you find out about new technology?
3. What programs or organizations do you currently use for accessing technology?
4. What are your needs to address or improve digital acumen/literacy (understanding of new technology)?
5. How does your access to technology impact your employment or learning?
    a. Are you working or learning remotely?
6. What would you like tech or internet companies to do to improve your access to the internet or technology?
7. What questions have not been brought up that you would like to ask?

INFRASTRUCTURE AND SERVICE INEQUITY

A lack of options for better internet service came up over and over in the sessions. Gentrification and rising cost of living are deeply influencing participants' ability to pay for or access technology and internet. Many go to local public spaces (e.g. coffee shops, libraries, grocery stores) to access internet. One key topic related to infrastructure that emerged during multiple sessions, was the 2021 Winter Storm. Many participants pointed to the storm as a key example of how digital inequities played out. Not only did participants not have power, but they did not have access to the internet to be warned about the coming weather to prepare, nor to connect to loved ones or get resources and information during the storm. Another important infrastructure-related topic that came up was around cellular vs Wi-Fi. Many participants who had Wi-Fi at home described struggling to access the internet when they left the home, making access overall harder. The cost of having cellular data was mentioned as high, but it was the inability to find access that was most commonly referenced as a barrier.

PRIVILEGE AND EXISTING ACCESS

There was a wide range of relative privilege represented in the focus groups. It was apparent, even during the sessions, that not all participants had quality access to internet. Many dropped in and out of the call or were unclear due to technical difficulties. Some participants described themselves as having considerable digital privilege, while others were more limited. One irony that was regularly surfaced by participants is that so much is only available online now, including the knowledge about how to develop your digital knowledge. This makes it especially hard for people to learn or get access if they do not already have access. This compounding inequity of basic access showed up over and over again, especially when the pandemic hit and cut off public access to the internet (i.e. libraries closing) and to resources that would help them eventually get access or build their digital literacy skills. For some, having existing privilege enabled them to navigate the effects of the pandemic with more ease, while others were challenged to find access. For example, when the pandemic hit, English as a Second Language (ESL) classes were stopped, which meant that non-English speaking women, who already faced systematic underinvestment in the countries they migrated from, were unable to continue their education. A few participants described losing access to the libraries, which is where they got internet access. One participant eventually found that they could go to FedEx to have their emails printed out at 8 to 20 cents per page. The ever-growing cost of living was also pointed to as a threat to digital equity. Not only were participants having to weigh whether they could continue to pay for internet with the increased costs of their other basic needs, but as community members are pushed further out due to housing costs, they must spend more time and money on transportation to reach publicly available internet sources.

SKILLS, LEARNING, AND DIGITAL LITERACY

Another aspect of the privilege of having existing access is the direct influence it has on being able to continue to build digital literacy skills, especially as technology changes so rapidly. As one participant said about learning any given aspect related to the internet: "Having libraries are great, but if I have to read every textbook on this from a library to get this, I won't be there". He further pointed to the cumbersome nature of how advanced some digital content can be and how much learning it requires with the analogy that, if he has to have "115 tabs open just to actively learn something, I can't imagine what you would need to do if you don't have access." Participants described a wide variety of sources for learning about technology, from family members, younger generations, to commercials, and doing their own searches online. As previously mentioned, many participants used in-person resources for learning, which were discontinued during the pandemic. For instance, the library, Best Buy, and Apple in-person trainings were no longer held or were moved to virtual platforms, cutting off valuable resources for the participants. Many participants relied on family or children to help them learn, and some younger participants described having to play that support role for their families and friends. For many, friends and other peer groups seemed vital to getting them access and knowledge. A particularly important illustration of that emerged during one of the focus groups, when a participant offered himself up directly to other participants if anyone needed support. He empathetically described how he knew what it was like and was happy to exchange information to help folks with any questions they "think are too dumb to ask." When the pandemic hit, not only did many folks lose access to their social network, but they also lost access to the individuals that helped them navigate and use technology so that they could in theory make those connections virtually. One participant described a lot of anger.

NAVIGATION, TRUST, AND ADOPTION

In numerous sessions, participants described as a barrier for themselves or others a fear and mistrust about technology and the internet, and this having an influence on digital inequities. Some people are scared or unsure how to safely navigate the internet, and some people are navigating and experiencing real risks and threats, so they become scared. Some participants asked how technology systems are being held accountable for data breaches and cyber attacks. This can be a challenge not only for the individuals in adopting technology, but for organizations trying to provide services to people to support them. Often, resources or online pages are not in languages that are accessible either, further risking trust and understanding. Not only different languages, but the jargon or specialized technical language used on some sites can be overwhelming and intimidating. As one person said, "If I have a question I have to read a dissertation." One person gave a local unemployment agency's website as an example of an inaccessible site for themselves, much less for those who are not as familiar with technology or speak a different language. Participants also pointed to how the loss of in-person training influenced trust-building around digital literacy.

PERSPECTIVE FROM DARI AND SPANISH FOCUS GROUPS

Amongst the Spanish and Dari focus group sessions, a few themes emerged that were unique from those of other sessions.

- **Finding balance:** Despite their appreciation for the increased likelihood of access to the internet compared to their home countries, there was hesitancy around over-exposure of their children or young relatives to internet content that could overwhelm and distract them from important life matters. Participants emphasized that they ensure the younger generation use the internet in a balanced way. There was an undertone of upholding their respective cultures while absorbing the new American one.

- **Gender gaps:** Participants in the Dari session highlighted the opportunities to address the gender gap that existed in their home countries where girls and women were denied opportunities for digital access. One female participant from Afghanistan felt empowered to improve her digital literacy being in the United States. The converse was the case for a male Afghan who was advocating for the young girls whose education in assimilating the new culture was halted by the COVID-19 pandemic, where these girls and women did not have the access to the internet and to learning as they used to, with library closures and the like. There was an overall sentiment of "no woman left behind."

- **Language barriers:** The importance of media content in other languages, like Dari and Spanish, was shared. A lot of content on US websites are in English and new immigrants are still trying to learn English. Not having new knowledge in a language they can understand deters them from growing in digital literacy.

Sources
1. Numbered footnotes..
2.

LIVED-EXPERIENCE DATA & STORYTELLING

"

(Referring to the speed at which technology changes)
"Having libraries are great, but if I have to read every text book on this from a library to get this, I won't be there."

- Participant

"I think we have a digital cast system... we deem some people worthy of some resources [and some] people unworthy of other resources ... it's not like we lack the money or technology for everyone to have access."

- Participant

our experience
makes us

EXPERTS

"[If I need] 115 tabs open just to actively learn something, I can't imagine what you would need to do if you don't have access."

- Participant

OPPORTUNITIES AND REFLECTIONS:

As the research team listened to participants and analyzed the data, the following opportunities and reflection questions emerged:

- Who are the "frontline" roles that could influence digital adoption so that their lack of access does not have a cascading negative effect on a larger network (e.g. teachers, social workers)? Are there strategies and models from vaccine staged distribution that could be adapted for digital equity solutions?
- How can institutions with trust (e.g. churches) become key partners and resources for building access points and knowledge hubs?
- How can institutions that are adapting to digital service delivery and are vital for everyday living (e.g. banks, medical, education) partner in the trust-building work needed for technology adoption?
- How can the City of Austin work with service providers to improve the consumer selection process to not only be more transparent but also to be more user-friendly, meeting people where they are at in their digital literacy?
- What opportunities are there to identify and invest in community-based groups and individual leaders who can serve as internal advocates for digital equity in their peer groups? For instance, groups of elders who are passionate about spreading the word and dispelling myths about the internet.
- How can more non-digital marketing materials be used to promote access to technologies and resources (e.g. paper mailouts, radio programming)?
- Can the collective memory and experience of the winter storm be leveraged for advocacy to individuals and institutions for change?
- How can additional resources be added to make both Wi-Fi and cell coverage more accessible?

CONCLUSION

In summary, the insights from lived-experiences of community members, in addition to previous studies, provide a solid foundation for generating and improving solutions to eliminate digital inequity. Solutions developed should incorporate a targeted approach for disrupting one or more of the systemic issues that are the root causes of digital inequity (i.e. education, housing, etc.). A few participants shared how learning computer skills as part of primary education gave them a good foundation for digital proficiency and flourishing in the digital age. Digital literacy programs should be designed to support various demographic needs, age-specific needs, cultural differences, languages, and learning styles. Appropriate programming in multiple languages, whether through the public library, the City of Austin's YouTube Channel, local radio stations, or a combination of these could be dedicated to improving digital literacy, inclusivity of people of different cultures in the Austin area, and sharing resources that will benefit all Austin residents. There is also a need to ensure that solutions develop that are human-centered. For example, when the school system deployed school buses as Wi-Fi hotspots, many children had to sit outside in various weather conditions for hours to access their educational systems online and complete assignments. A human-centered approach can take into account the full user experience of the solutions developed.

Furthermore, throughout the recruitment process, the research team found that individual community liaisons and word-of-mouth were the best ways to reach people. At the time of the study, a one-stop-shop to find technological help wasn't easy to locate. There were websites for various organizations, but unless the person was aware of the organizations, they would never know to go to their website. As part of this study, a resource guide was created to connect participants with services and organizations that could help them with their technological needs (see Tech Connect flier). This tool can be printed and shared via text messaging to reach people outside of social media and other internet-based platforms.
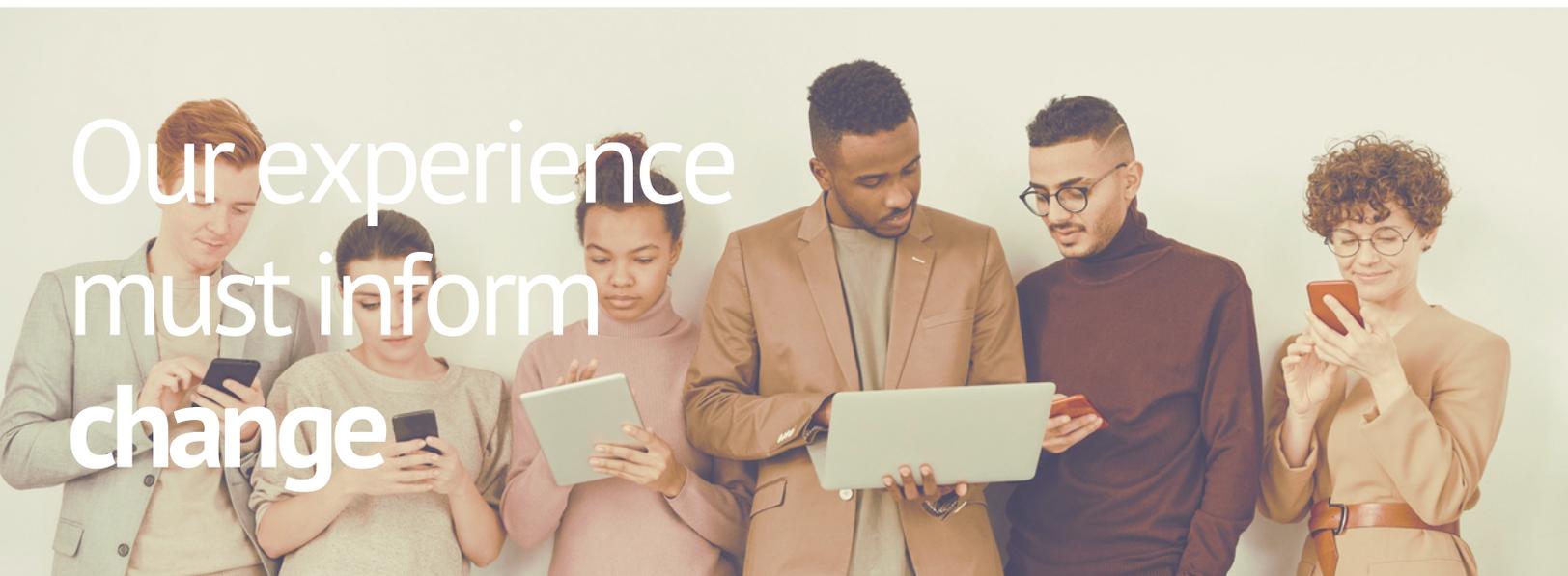
Our experience must inform change

Tech Connect

A quick starter guide to getting help for technology needs in Austin.

Internet Access

AUSTIN FREE-NET
512-974-1463
workforce@austinfree.net
https://www.austinfree.net/

AUSTIN PUBLIC LIBRARY
(20 locations)
512-974-7400

EMERGENCY BROADBAND BENEFIT
(833) 511-0311
EBBHelp@USAC.org

SPECTRUM INTERNET ASSIST
(844) 525-1574
https://www.spectrum.net/support/forms/spectrum_internet_assist

Tech Jobs & Training

AUSTIN FREE-NET
https://www.austinfree.net/

AUSTIN AREA URBAN LEAGUE TECH AND CAREER ACADEMY (AAULTCA)
8011A Cameron Rd Building A-100
Austin, TX 78754
(512)-478-7176
https://aaul.org/tca

AUSTIN URBAN TECHNOLOGY MOVEMENT (AUTM)
https://www.autmhq.org

GOODWILL CENTRAL TEXAS COMMUNITY CENTER
1015 Norwood Park Blvd Austin TX 78753 or (512) 637-7100

Programs for Children

AUSTIN PUBLIC LIBRARY
512-974-7400
https://library.austintexas.gov/database-subjects/all-databases

Tech Devices

EVERYONEON
https://www.everyoneon.org/

Other Resources

UNITED WAY
Dial 211
The 2-1-1 phone line is free, confidential, multilingual, and available 24/7

Accessibility

TALKING BOOK PROGRAM (TBP)
Provides free library services to qualifying Texans with visual, physical, or reading disabilities.
512-463-5458

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Conexión Tecnológica

Una breve guía para obtener ayuda para las necesidades tecnológicas en Austin.

Acceso a Internet

AUSTIN FREE-NET
512-974-1463
workforce@austinfree.net
https://www.austinfree.net/

BIBLIOTECA PÚBLICA DE AUSTIN
(20 ubicaciones)
512-974-7400

EMERGENCY BROADBAND BENEFIT
(833) 511-0311
EBBHelp@USAC.org

SPECTRUM INTERNET ASSIST
(844) 525-1574
https://www.spectrum.net/support/forms/spectrum_internet_assist

Empleos y Formación

AUSTIN FREE-NET
https://www.austinfree.net/

AUSTIN AREA URBAN LEAGUE TECH AND CAREER ACADEMY (AAULTCA)
8011A Cameron Rd Building A-100
Austin, TX 78754
(512)-478-7176
https://aaul.org/tca

AUSTIN URBAN TECHNOLOGY MOVEMENT (AUTM)
https://www.autmhq.org

GOODWILL CENTRAL TEXAS COMMUNITY CENTER
1015 Norwood Park Blvd Austin TX 78753 or (512) 637-7100

Programas para Niños

BIBLIOTECA PÚBLICA DE AUSTIN
512-974-7400
https://library.austintexas.gov/database-subjects/all-databases

Dispositivos tecnológicos

EVERYONEON
https://www.everyoneon.org/

Otros Recursos

UNITED WAY
La línea telefónica 2-1-1 es gratuita, confidencial, multilingüe y está disponible las 24 horas del día, los 7 días de la semana.

Accesibilidad

TALKING BOOK PROGRAM (TBP)
Servicios de biblioteca gratuitos para tejanos que califiquen con discapacidades visuales, físicas o de lectura. 512-463-5458

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APPENDIX

To view *Table of Coded Themes and Examples from Focus Groups* in larger text see link:
https://docs.google.com/document/d/1rcqrcV64dPDEz8BomLqA4V9nU0qMAS7_/edit

Coded Themes and Examples from Focus Groups

Code / Label & Summary Explanation	#1 English Language	#2 English Language	#3 English Language	#4 Spanish Language	#5 Dari Language	#6 Spanish Language	#7 English Language	#8 English Language
Transparency or Clarity: Not clear where access is and why it is not consistent. Options are not clear.	This could really contribute to a sense that the city is supporting only wealthy citizens. (Ex: minute 12:39, 13:42; 33:44	Multiple participants referenced cost changes and not having clarity on this in relation to options. Ex: 30:00 – cost and only two options and lack of value of "free" internet quality. Digital literacy is also key to being able to understand your options, much less the actual infrastructure options. Not always clear how different aspects affect speed/quality (e.g. hardware, number of people).	32:00 reasons for high prices are pretty much bogus Not many options in our area to find cheaper solutions.		30:00 Why don't they provide the best to everyone? Why do we have levels in our options to purchase internet? Prices are too high and quality too poor.		20:00 Confusion about the value and use of certain city applications, like 311. 45: quality and price don't seem to match	
Privilege: Access is in wealthier areas, jumpstart for folks who already have access		43:00 – 46:10 already had resources (e.g. internet) so was able to make the transition. If you don't have the access already, you will not be able to keep up with the fast pace of tech change. So much access online to learn right now. "Having libraries are great, but if I have to read every text book on this from a library to get this, I'm won't be there". Having 115 tabs open just to actively learn something. I can't imagine what you would need to do if you don't have access. Historical displacement	27:00 lower income already have lower access to services 28:00 Lower income areas have less voice are listened to less. Not as many people voicing from lower income areas. *RT: another way the compounding inequities will continue is less voice to influence.* 31:00 Internet is very expensive always having to make the choice to keep it but barely 38:00 cost of living too high generally		52:00 Compounding inequities example – women in afghan community don't speak english and could no longer go to classes when covid hit. If they can't speak english they can't continue to advance. 1:10 I want to be part of the solution for the next generation.	31:00 Cost of living keeps going up and cannot afford internet. Pay for internet that is not high quality, not reliable.	15:00 language barriers, cost of internet, and cost of transportation to get to internet. Cost of living forces people further out from locations to access good internet and makes cost of getting to internet higher.	25:00 – There is an irony in the access issue because there are publicly available resources and options to learn but the only way to find out about them is if you already have access. 32:00 Gentrification is key issue. Cost of living is already high, not just internet. 36:00 To access basic services now, internet is required. 51:00 Don't know how I would learn without the access first.
Navigation & Trust: Not sure who or how to trust information	There is an opportunity for the city to build a relationship with citizens that is trust based through supporting the navigation challenge	51:30 – outreach is really important because not everyone knows what the resources are to help them. 53:00 – formerly incarcerated population is also marginalized in outreach and access, how do we set people up for success before they transition? 54:30 – both public resources (e.g. workforce) and private resources (e.g. venmo) have not become accessible and navigating these						

		systems is harder and harder. "If I have a question I have to read a dissertation." The idea that you cannot speak to a person to solve your tech problem is challenging. 1:00 – "It feels like we're being pushed. You don't have a choice and why can't I go at my own pace?" Not even in my language. There is a dependency by some on younger people or trusted relationships to use and access technology. As intermediary (social work type job), I am always pushing my clients on the technology side. Loss of in-person training affects trust						
Infrastructure: Poor access and infrastructure	There are limited choices and limited affordability (which probably go hand in hand in a market based economy). How can the city incentivize	Number of people on the internet is problematic. Often have to go to neighborhood store for wifi.	45:00 Impressed that there are public wifi spots on buses and bus stops, like school bus hotspots.	47:00 Weather is key issue. Without internet could not get news or facebook networks to know. Cannot prepare.	1:15 As immigrants could not connect with their loved ones at home. Can only have voice call.	23:00 The winter freeze exposed a lot of infrastructure inequalities. This played out with digital equity too. Could not contact family to find out	Gentrification and segregation	1:10 Weather as key issue highlighting inequity. Folks can't know about emergencies without access.
	competition for this market?. There is also a lack in variety of channels of connection (ex: Speaker 4, minute 18:35). This has compounding effects for children in lower access neighborhoods who have to stay home (ex: Speaker 5 20:01).					what they needed. The freeze was announced on social media and internet so not all folks were warned. Time? East vs West divide on internet access. One side got to keep working, the other did not from home.		
Channels for learning about Access: how folks learn about access points	Example: Speaker 5, 36:55; Speaker 4 51:16; Speaker 7 55:39	Example 14:50 and 33:30 – learned about technology through personal connection. 41:00 – parents learn as they support children at schools. Learned about AUTM through colleagues. Use code academy, workforce solutions, mostly googling. Some social networks like Facebook. 109 - Social Solutions was a tangled mess. Difficulty is in which office you go to. One person who heard through my anger and pointed me in the right direction. Without that person I	1:00 learn through family and through work 1:08 some church organizations provide learning	59:00 learn through kids, through existing access on facebook. No one said they have an organization or place they go to access internet. One person could not use her phone while on the job and only has a few hours after work to check her phone before having family responsbilities.		Learn from those around them (e.g. kids). 43:00 Learn from the technology itself.	1:06 When pandemic hit, lost access to library and thus the internet 1:08 One person resorted to going to FedEx to print his emails. 8-20 cents per page.	Learn from others.

		don't know if I would be where I am. Offered himself as a peer support for other participants who may have questions that they "think are to dumb to ask". Loss of in-person training options that used to be available through things like Best Buy and Apple store. Library too.					
Tech Inequity: examples of lacking the right hardware access or computer literacy	Example Speak 5, 37:50	Example of art for tech and inequitable access for creation process Idea of making out public and social services the most advanced in the world. We need to shift cultural paradigm.		1:20 Poor signal outside the home. Coverage needs to be better.		31-ish Teacher did not have good tech access so educational learning was poor. 42:00 Pandemic meant a loss of the access points she had to the internet (e.g. school) and her phone was not enough anymore.		1:07 The cascading effect of teachers having poor internet connection can be extensive—teacher can't teach, student not only doesn't learn, but then also uses internet as excuse.
Skills: Different learning styles and existing knowledge: There are varying degrees of knowledge that folks bring to the digital pivot that create inequities	There is a lot of agism in the transition.	14.50 – 17:00 Participant had to rely on children and coworkers to help with technology, but covid removed that access just the time that the digital was increasing. A lot of anger. 17:50 – 20:30 example of ageism and compounding effort needed by those with less knowledge before pivot.					
Digital Risks and Technology adoption: Malicious behavior against and abuse of users and knowledge of how to navigate the evolving technology securely	How is the city engaging other infrastructure groups that have big consumer groups? E.g. banks.	22:00 – data breaches that are personal devices or systems, lack of trust in digital systems and user experience, and how do we hold those systems accountable.	41:00 Some people are scared of internet and using it. Leaks and cyber attacks.			Time – notes: fear of fraud	Some fear about security risks	1:00 Folks fear the internet. There is a risk factor that has to be overcome for some potential end users. Need to share more about the benefits.
Language, Ethnicity, & Race Identity: Internalized and externalized biases contribute to the way people respond to technology and learning about technology.		Example 33:30 – participant explains that bias about race identity and language influence peoples perception of how to support someone with technology and it produced some strategies for participant to avoid learning as well. Example 48:50 – unemployment page was such a hassle and had to support my family in finding employment, it wasn't accessible to me so how would it be to older generation and those with different				Recommendation from community – produce flyers and pamphlets to mail out about resources		

		languages. Not a lot of programs with translators or workshops to even connect with the community. Even with bare minimum of English, the big words aren't accessible.					
Insights from question about connecting with more folks for future focus groups:	Times: Saturday morning, early evening Groups to connect with: folks with disabilities, folks in mid-careers, folks right out of school, older folks, unhoused, previously incarcerated.	Being available at times like late night or weekends, because people are not available.					