

7 Dallas is home to digital equity initiatives—and strategic development of existing and new programs can address remaining needs

The City, DISD, and other nonprofits and stakeholders are actively engaged in addressing issues of digital equity. A wide range of entities provide a variety of relevant support services, including device rentals and digital skills training. Additionally, certain low-cost and subsidy programs can help ease the burden of the monthly cost of broadband service for some eligible households.

In the sections below we summarize the existing range of programs in the Dallas area that offer reduced-cost broadband service and access to devices and training and make recommendations about potential ways to build on these efforts (Section 7.5).

At the outset we note that digital equity has four elements:

- **Access:** broadband infrastructure exists, and reliable high-speed broadband plans are available for purchase
- **Affordability:** broadband service is not only available but can be obtained at reasonable prices by all
- **Devices:** residents own or have access to well-functioning, up-to-date computers—and have the capacity to maintain and replace these devices if needed.
- **Skills:** residents are able to make full use of computers and online resources, and thus are able to use these tools to communicate, work, learn, attend medical appointments, and so on—and avoid online harms.

As noted in other sections of this report, the Dallas area is generally served by broadband, so digital equity challenges therefore are mainly (but not exclusively) in the areas of affordability, device access, and skills in using broadband and computers.

7.1 Achieving affordability: A review of the existing low-cost and subsidy programs available in the Dallas market

Two low-cost internet programs are available from ISPs in the Dallas market for qualifying low-income households. However, and for a variety of reasons, a relatively small percentage of potentially eligible Dallas-area residents are making use of these programs. Federal subsidies for monthly broadband service also are available to eligible households—including one program that launched in May 2021 as this report was being written.

7.1.1 Spectrum Internet Assist

Charter offers a low-cost internet program, Spectrum Internet Assist, that individuals can choose to apply for and participate in at the household level—but it comes with an application process.

We note during our analysis of mail survey responses that use of this program appears low, as we reiterate later in this section.

Spectrum Internet Assist³⁵ offers 30 Mbps (download)/4 Mbps (upload) service and antivirus software for \$17.99 per month plus taxes and fees, with an option to rent a router for an additional \$5 per month. There are no contracts required for Spectrum Internet Assist service. Individuals must apply for Spectrum Internet Assist and meet its eligibility requirements to enroll. To qualify, a member of the household must participate in the National School Lunch Program (NSLP), the Community Eligibility Provision (CEP) of the NSLP, or Supplemental Security Income (SSI), and must not be a current Spectrum subscriber.

Because of the individual eligibility requirements, Charter does not offer the option for cities to purchase Spectrum Internet Assist subscriptions on a bulk basis. However, Charter does often offer cities the option to bulk-purchase basic broadband subscriptions (as opposed to the Internet Assist product) on behalf of residents. This is typically done to provide service to all units of a public housing or subsidized housing complex. The details and subscription prices would be the subject of negotiation between the City (or its housing agency) and Charter. A bulk-purchase service would not be subject to any individual eligibility requirements.

7.1.2 AT&T Access

Like Charter, AT&T offers a low-cost broadband service—known as Access from AT&T.³⁶ Qualifying customers receive broadband service at speeds up to 25 Mbps (download) for up to \$10 per month, with those that have slower service available paying less per month. Customers receive the maximum speed available at their address, up to 25 Mbps. The speed available also determines the monthly data allowance of either 150 GB or 1 TB. Customers are charged an additional \$10 each time they exceed the data allowance by 50 GB or less.

Households in Dallas have in the past been eligible for the Access program if a member participates in the Supplemental Nutrition Assistance Program (SNAP). As part of its Covid-19 response, AT&T expanded eligibility for the Access program to include households with income 135 percent or less than the federal poverty line, as well as households participating in the National School Lunch or Head Start programs. It also waived data overage fees for non-DSL customers. These Covid-19 response measures are only slated to be in effect through June 30, 2021.

³⁵ “Spectrum Internet Assist,” Charter Communications, <https://www.spectrum.net/support/internet/spectrum-internet-assist/> (accessed February 2021).

³⁶ “Access from AT&T,” AT&T, <https://www.att.com/internet/access/> (accessed May 11, 2021).

7.1.3 Lifeline

The Lifeline program was created by Congress (and is administered by the FCC’s Universal Service Administrative Company) with the purpose of making service more affordable by providing a modest subsidy—\$9.25 per month with an additional \$25 per month available for those who live on Tribal lands³⁷—to telecommunications carriers for service to lower-income members of the community. Adoption rates for this program remain low—around 20 percent—but, as we discuss below, the program’s impact could potentially be maximized with City and DISD support.

Challenges of the Lifeline program include community awareness and the application and eligibility verification processes. A critical effort from the City and DISD would include outreach and education for eligible families to provide information about the program, as well as resources to assist with the enrollment process. Ideally support would be provided in partnership with established, trusted community organizations that are already accustomed to providing resources of this nature.

7.1.4 Emergency Broadband Benefit Program

The Consolidated Appropriations Act established the \$3.2 billion Emergency Broadband Benefit Program.³⁸ This program is administered by the FCC and is designed to provide a broadband subsidy for eligible households that will appear as a discount on their monthly bills. While similar in this regard to the Lifeline program, this program offers a much more robust discount: The FCC will reimburse ISPs up to \$50 per month per eligible household, or \$75 per month for households on Tribal lands. Notably, this program also subsidizes the cost of a laptop, desktop computer, or tablet for each eligible household; ISPs can be reimbursed up to \$100 for a connected device, as long as they charge the recipient no more than \$50 for it.

The law states the program can run six months beyond the end of the Covid-19 public health emergency, but that is only if the funding is sufficient to cover the ISPs’ charges for all of the participants. The program began accepting applications³⁹ on May 12, 2021, and it is anticipated that the \$3.2 billion allocated to the program will provide less than a year of funding. Congress could appropriate future funds to keep the program operating, though it is unlikely the political will exists to make the program permanent.

Because the benefits available through the Emergency Broadband Benefit Program are so significant for consumers, this program stands to serve as an impactful broadband adoption plan.

³⁷ “Additional Support for Tribal Lands,” Universal Service Administrative Company, <https://www.lifelinesupport.org/additional-support-for-tribal-lands/> (accessed May 13, 2021).

³⁸ Emergency Broadband Benefit Program Report and Order, Federal Communications Commission, <https://docs.fcc.gov/public/attachments/FCC-21-29A1.pdf> (accessed May 13, 2021).

³⁹ The Universal Service Administrative Company (USAC), <https://getemergencybroadband.org/> (accessed May 12, 2021).

While the program will provide welcome financial relief for families that have been paying for broadband service throughout the pandemic, it will also create opportunities for many low-income families to subscribe to a home broadband service for the first time.

However, the way the program's rules are structured put significant burden on families to prove their eligibility and ensure their subsidy is appropriately applied. The FCC defines eligibility for the program broadly as a household in which at least one member meets one of the following criteria:

- "Has an income that is at or below 135 percent of the Federal Poverty Guidelines or participates in certain assistance programs, such as SNAP, Medicaid, or Lifeline;
- Approved to receive benefits under the free and reduced-price school lunch program or the school breakfast program, including through the USDA Community Eligibility Provision in the 2019-2020 or 2020-2021 school year;
- Received a Federal Pell Grant during the current award year;
- Experienced a substantial loss of income due to job loss or furlough since February 29, 2020, and the household had a total income in 2020 at or below \$99,000 for single filers and \$198,000 for joint filers; or
- Meets the eligibility criteria for a participating provider's existing low-income or Covid-19 program."⁴⁰

Participating ISPs will be able to verify household eligibility in one of three ways:

1. Based on the National Verifier or the National Lifeline Accountability Database
2. Based on a school's verification of a household member's participation in the National School Lunch Program or the School Breakfast Program
3. Based on the ISP's "alternative verification process" (which must be deemed sufficient by the FCC "to avoid waste, fraud, and abuse")

The program's rules raise concern that there will be significant burden on families to prove their eligibility and ensure their subsidy is appropriately applied. For instance, families will need to call their provider to ask for service and determine how to apply the subsidy. This is not an insignificant burden for the families this subsidy is intended to help, nor is the potential financial risk to those families (i.e., that they might be responsible for charges if the subsidy is not accurately applied) a minor point.

⁴⁰ "Emergency Broadband Benefit," Federal Communications Commission, <https://www.fcc.gov/broadbandbenefit> (accessed May 13, 2021).

7.2 Achieving access: A review of existing City and DISD digital equity initiatives

The City of Dallas and DISD have undertaken a variety of digital equity initiatives related to broadband access and affordability, device access, and digital skills training.

7.2.1 Internet for All Coalition builds community-wide digital equity strategy

The Internet for All Coalition is responsible for the Internet for Dallas program, which aims to provide access to high-speed reliable internet and devices for all households in Dallas. It is a collaborative effort of more than 40 organizations across the Dallas area, including those from local school districts, Dallas College, the City of Dallas, the City of Grand Prairie, Region 10, community- and faith-based organizations, Dallas County, and local funders. Due to the coalition's diverse and inclusive make-up, it is well positioned to carry out a variety of programs to help increase connectivity and access.

In addition to its efforts to help ensure connectivity, the Internet for All Coalition is a helpful resource for students and families to learn how to:

- Access free and discounted service and devices
- Advocate for the service and speed you need for online learning
- Identify the best internet connectivity solutions for residents⁴¹

The coalition has several resources for persons of all ages. These resources include information and support with telehealth, job training, finding employment through the internet, and continuing education programs.

7.2.2 Digital Navigators program helps residents access internet subscriptions, devices, and training opportunities

Digital Navigators is a grant program currently offered by the City with the goal of helping to address digital equity problems in Dallas. The program offers grants to non-profits seeking to support low-income families (making less than 80 percent of area median income) with resources for internet access, hardware, and literacy programs.

Non-profits seeking to serve as navigator organizations are required to fill out applications to the City. The City has so far provided grants to two nonprofit organizations to enable those organizations to serve as "digital navigators" in the community. The first is the League of United Latin American Citizens National Educational Service Center (LNESEC), which received a \$110,956 grant to serve residents in key ZIP codes across the City. The other grant recipient, Southern

⁴¹ "About Internet for Dallas," Internet for Dallas, <http://www.internetfordallas.org/about.php> (accessed April 27, 2021).

Dallas Progress Community Development, received an award of \$25,000 and focused its efforts specifically on the 75216 ZIP code in southern Dallas.

The navigator program is fairly comprehensive in that it seeks to address not only concerns about affordability but skills and equipment gaps as well. According to the City's guidelines for applicant the "navigators" or award recipients must:

- Discuss with each client their home internet access or need for home internet access, technology experiences, and their devices.
- Assess their clients' access to technology, current digital skill level pertaining to what they need to accomplish the plan, connectivity needs, and internet use priorities.
- Advise clients about free or affordable home internet service options for which they may qualify, assist clients to apply for services they choose and support their efforts to secure service.
- Advise clients about sources of affordable computers or other internet-connected devices for which they may qualify and support their efforts to acquire appropriate devices and where they can get help for repair.⁴²

7.2.3 The City's purchase of laptops and hotspots make devices more accessible

The City of Dallas has purchased approximately 1,500 laptops and related equipment for distribution in the community. Of the total devices purchased, 1,300 will be distributed to the Dallas Public Library system and 200 will be distributed to Parks and Recreation centers across the City.

In addition, the Dallas Public Library system currently has 900 hotspots available for circulation, with 75 percent of them being used at any given time. The Library's FY 2021 budget includes the purchase of an additional 2,100 hotspots.⁴³ The Library allow residents to borrow laptops and hotspots together. City officials believe that despite these expanded efforts, there remains a great unmet demand for these devices.

7.2.4 Texas Education Agency matching funds support the purchase of devices and home internet for students

The Texas Education Agency (TEA) received \$200 million in federal CARES Act funding for the purchase of devices and home internet solutions to enable remote learning for students who

⁴² "Request for Applications (RFA): Project Title: Office of Resilience – Digital Navigators (Buyer Solicitation Number: BS20-00014266)," City of Dallas.

⁴³ "Dallas Public Library expands hotspot lending program to meet stay-at-home needs," City of Dallas, News Release, <http://www.dallascitynews.net/dallas-public-library-expands-hotspot-lending-program-meet-stay-home-needs> (accessed May 24, 2021).

lacked connectivity for the 2020-21 school year. The TEA established two main reimbursement programs: the Operation Connectivity Prior Purchase Reimbursement Program (PPRP) and the Operation Connectivity Bulk-Purchase Local Match Reimbursement Program (LMRP).⁴⁴ The PPRP funds local education agencies' technology-related purchases made to better serve students and staff during the Covid-19 pandemic. The LMRP focuses on the facilitation of online/distance learning.

These local education agencies are eligible for additional matching funds if they receive funding from their city or county's Coronavirus Relief Fund budget. The TEA will increase its match by \$1 for every dollar of local Coronavirus Relief Fund money that local education agencies receive, for up to 25 percent of the total expenditure. The amount allocated to cities were calculated based on the number of students in the Free and Reduced Lunch program in each independent school district.

The allocation to DISD, however, was not calculated using the same formula, but instead was a flat amount determined based on other investments that the City is making in partnership with DISD related to the digital divide. In addition, the end date for the funding of CRF (which is funding PPRP) is December 31, 2021,⁴⁵ making this program unsustainable in the long run unless an alternative funding source is established.

7.2.5 DISD's purchase of mobile hotspots supports student connectivity

In March 2020, DISD's board of trustees unanimously approved \$2.5 million in funding for the purchase of more than 10,000 hotspots. This program was undertaken in response to a survey of 18,000 DISD families which showed almost 30 percent of families do not have internet access.⁴⁶

Families can request these devices through their school's page on the DISD website and are able to rent them for the school year. The hotspots officially are a part of DISD's long-range plan for technology which attempted to provide a laptop or tablet to every DISD secondary student. There are already plans by the Dallas Education Foundation, the nonprofit philanthropic arm of DISD, to fundraise with the private sector in order to purchase more hotspots.

⁴⁴ "Coronavirus relief Fund (CRF) reimbursement programs," Texas Education Agency, <https://tea.texas.gov/finance-and-grants/grants/coronavirus-relief-fund-crf-reimbursement-programs> (accessed April 27, 2021).

⁴⁵ "Coronavirus relief Fund (CRF) reimbursement programs," Texas Education Agency, <https://tea.texas.gov/finance-and-grants/grants/coronavirus-relief-fund-crf-reimbursement-programs> (accessed April 27, 2021).

⁴⁶ "Trustees approve purchase of more than 10,000 hotspots for students to help close digital divide," Dallas Independent School District, <https://thehub.dallasisd.org/2020/03/26/dallas-isd-approves-2-5-million-to-help-close-digital-divide/> (accessed May 13, 2021).

7.2.6 Signal extender initiative expands access to free Wi-Fi

One of the actions or programs undertaken by the City of Dallas in response to the Covid-19 pandemic has been the installation of Wi-Fi signal extenders at several public libraries. The initial rollout of the program utilized the Dallas West, Highland Hills, Paul Laurence Dunbar-Kiest and Prairie Creek libraries.⁴⁷ The signal extenders were donated to the City by Cisco and allow a Wi-Fi signal to be extended up to 300 feet outside of the building. This did not generally extend coverage to nearby residential homes but provided a limited area of service around the library. Additionally, Cisco donated two monitors that can be used for video conferencing, virtual tours, telehealth appointments, and other applications.

These programs are promising, with staff at the Prairie Creek location reporting an increase in overall Wi-Fi usage at their location. Many of the libraries are located in areas having low rates of broadband use.⁴⁸

7.3 Dallas organizations active in digital equity

In addition, there are several independent nonprofits and other organizations that are active in digital equity initiatives throughout Dallas.

7.3.1 Dallas Innovation Alliance (DIA)

The Dallas Innovation Alliance is a coalition from the City of Dallas including corporations, civic and NGO organizations, academic organizations, and private individuals who are “invested in Dallas’ continued evolution as a forward-thinking, innovative, ‘smart’ global city.”⁴⁹ The alliance has several efforts underway. The first of these involves implementing a smart city strategy focused on the West End in Central Dallas.⁵⁰ The initial project was launched in 2017 in partnership with AT&T and included elements like smart water meters, pedestrian sensors, public Wi-Fi, and digital infrastructure nodes.⁵¹

DIA is also responsible for the Mobile Learning Lab, a converted school bus that has been turned into a large-scale mobile hotspot and classroom. The bus offers free Wi-Fi in a limited area around

⁴⁷ “How hot spots are bridging southern Dallas’ digital Divide during the coronavirus pandemic,” Cooper, B., *The Dallas Morning News*, <https://www.dallasnews.com/news/public-health/2020/08/28/how-hot-spots-are-bridging-southern-dallas-digital-divide-during-the-coronavirus-pandemic/> (accessed April 27, 2021).

⁴⁸ “How hot spots are bridging southern Dallas’ digital Divide during the coronavirus pandemic,” Cooper, B., *The Dallas Morning News*, <https://www.dallasnews.com/news/public-health/2020/08/28/how-hot-spots-are-bridging-southern-dallas-digital-divide-during-the-coronavirus-pandemic/> (accessed April 27, 2021).

⁴⁹ “Mobile Learning Lab,” Dallas Innovation Alliance, <http://www.dallasinnovationalliance.com/ml/> (accessed May 13, 2021).

⁵⁰ “Phase one: The West End,” Dallas Innovation Alliance, <http://www.dallasinnovationalliance.com/projects> (accessed April 27, 2021).

⁵¹ “Phase one: The West End,” Dallas Innovation Alliance, <http://www.dallasinnovationalliance.com/projects> (accessed April 27, 2021).

the bus (i.e., a radius of approximately 300 to 500 feet).⁵² The lab also offers furniture and umbrellas to help ensure participants are able to use the Wi-Fi in relative comfort. In addition to the Wi-Fi, the Mobile Learning Lab offers classes to help improve digital literacy. DISD, using similar technology, has deployed eight additional buses.⁵³

7.3.2 Comp-U-Dopt

Comp-U-Dopt is a national non-profit which seeks to provide technology and education to underserved youths throughout the country. They accomplish this by providing free computers and associated devices to low-income families. The devices are then distributed through “computer drive-thrus” like the one Comp-U-Dopt established in North Dallas.⁵⁴ Comp-U-Dopt will also soon operate a lottery to provide devices to pre-registered applicants. The City of Dallas has also been in talk with Comp-U-Dopt over the possibility of donating City computers for distribution in the Dallas area.

In addition to its primary purpose of providing free computers, Comp-U-Dopt offers a variety of youth digital literacy courses designed for all age categories.⁵⁵ The programs for younger children focus on STEM and coding programs to help increase overall technical skills. High schoolers focus on coding, computer building, and drones to learn higher level skills that are both practical and marketable. All high school participants are given a refurbished laptop they can keep after the program ends.

7.4 A sample of digital equity programs and strategies in other cities

Dallas, the DISD, and other partners are fortunate to have established the Internet for All coalition and created a range of digital equity programs. As Dallas seeks to augment its efforts, the experiences of other municipalities may prove useful.

In CTC’s work with other cities, we have identified best-practice strategies used to create more digitally inclusive communities. The following points highlight some of the lessons these practitioners have learned about what strategies have the greatest impact, what hurdles are likely to arise, and what kind of roles City government is best suited to play in the digital equity ecosystem:

- Community organizations already working with target populations are best suited to assist in overcoming barriers to broadband adoption

⁵² “Mobile Learning Lab,” Dallas Innovation Alliance, <http://www.dallasinnovationalliance.com/ml> (accessed May 13, 2021).

⁵³ “Mobile Learning Lab,” Dallas Innovation Alliance, <http://www.dallasinnovationalliance.com/ml> (accessed May 13, 2021).

⁵⁴ Comp-U-Dopt, <https://www.compudopt.org/dallas> (accessed April 27, 2021).

⁵⁵ Comp-U-Dopt, <https://www.compudopt.org/dallas> (accessed April 27, 2021).

- A digital equity agenda is most likely to succeed when it is integrated and connected to other City goals
- City staff can play an important role in helping develop an evaluation framework and data collection system at a citywide or regional level
- Only a fraction of potentially eligible households makes use of discounted internet offerings, both because of a lack of awareness and the difficulty involved in navigating the sign-up process
- Regular community assessments allow City staff to reset priorities in light of shifts in barriers to adoption
- A digital equity agenda needs a champion in a leadership position to encourage cross-departmental collaborations and pursue philanthropic donations
- Digital inclusion coalitions can delegate responsibilities to community organizations, but should define performance metrics and establish accountability mechanism to ensure progress
- Bad credit has become a significant barrier to broadband adoption

The following sections describe some of these key findings in more detail.

7.4.1 Coalitions are key drivers of change in other cities

As a recent Benton Institute report⁵⁶ noted, coalitions are critically important to engage stakeholders and drive change. In Dallas, the Internet for All Coalition represents an important platform for addressing broadband challenges in the metropolitan area. Although Dallas stakeholders may already be aware of other such coalitions, other examples include the Digital Inclusion Alliance San Antonio (DIASA),⁵⁷ which is cultivating and promoting public policies and initiatives that prioritize digital equity; the Portland Digital Inclusion Network,⁵⁸ a coalition of community organizations interested in raising awareness about digital equity barriers and developing solutions to bridging the digital divide; and the Digital Empowerment Community of Austin, a network of community stakeholders in Austin, TX, working on different facets of the digital equity issues there.⁵⁹

A City government or school district is well suited to implementing some solutions, especially on tasks involving infrastructure improvements, staffing, and programs. But they cannot alone

⁵⁶ https://www.benton.org/sites/default/files/growinghealthy_ecosystems.pdf

⁵⁷ <https://digitalinclusionsa.org/>

⁵⁸ <https://www.portlandoregon.gov/oct/73860>

⁵⁹ <http://austintexas.gov/page/digital-empowerment-community-austin>

address all challenges related to digital equity, particularly not all relating to connecting residents with subsidy programs, providing devices, assisting with device maintenance and updates, and helping people develop better computer skills. Coalition could be charged with proposing ways to accelerate other initiatives and also to find alternate sources of funding – such as from foundations, as noted below.

7.4.2 Examples of digital equity funds in Seattle, Austin, and Boston

Modest grant funding streams from the City can be leveraged by community organizations for considerable impact. For example, Seattle has used a technology matching fund since 1997 to support local organizations working to close the digital divide.⁶⁰ The fund’s annual budget has grown to \$320,000; it supports an average of 12 organizations per year.

Inspired by Seattle’s program, the City of Austin launched its Grants for Technology Opportunities Program in 2001.⁶¹ Similarly, the City of Boston began offering \$35,000 in grants through its digital equity fund⁶² in 2017 and expanded it to \$100,000 annually in 2019. The fund of moderate amount could help support many of the strategic recommendations made, whether by this report or by stakeholders in the City who have an excellent understanding of the problems and connections with the affected families. And the process of vetting and awarding grant applications will help the City and other stakeholders understand the evolving nature of the problem and maintain good working relationships.

7.4.3 Foundation engagement accelerates efforts in Cleveland

Engaging with local foundations and other philanthropic entities can potentially help broaden the funding base for digital equity initiatives. A number of potential project types could be suitable for foundation funding, such as:

- Providing laptops, Chromebooks, and other devices to low-income residents or others who have devices in poor condition
- Establishing resource centers where members of the community can access devices, high-speed internet, and training/mentoring
- Providing funding for community outreach specialists to help older residents or others in need to learn basic digital skills

A model for a foundation role emerged recently in Cleveland, where the Cleveland Foundation, Cuyahoga County, and T-Mobile partnered to launch the Greater Cleveland Digital Equity Fund.⁶³

⁶⁰ <https://www.seattle.gov/tech/initiatives/digital-equity/technology-matching-fund>

⁶¹ <https://www.austintexas.gov/department/grant-technology-opportunities-program>

⁶² <https://www.boston.gov/innovation-and-technology/digital-equity-fund>

⁶³ https://www.clevelandfoundation.org/news_items/digital-equity-fund/

The fund was initially launched with \$3 million in commitments intended to address immediate and long-term needs involving access, computing devices, skills, and technology support.

The George Gund Foundation gave an additional \$1 million grant to support digital needs—such as hotspots and laptops—for K-12 students in the Cleveland Metropolitan School District and others who lack broadband access and devices to learn remotely during the pandemic.

T-Mobile committed to providing 7,500 unlimited data hotspots and \$1 million of in-kind equipment donations, while other local organizations will provide up to 10,000 computers and ongoing support to area students.

7.4.4 Digital equity guides and resources

The following guidebooks and resource pages may help individuals and organizations pursuing digital equity to learn what is working in other communities and develop their own plans of action.

[National Digital Inclusion Alliance's \(NDIA'S\) Discount Internet Guidebook](#) offers a guide for digital inclusion practitioners wanting to help their community find affordable home broadband service. It describes large ISPs affordable broadband options and explains how eligible households can sign up.

[Digital Inclusion Coalition Guidebook](#) reports on lessons learned from six established community-wide digital inclusion coalitions in an effort to help local communities implement their own digital inclusion coalition.

[Digital Inclusion Start-Up Manual](#) provides guidance for communities looking to increase access and use of technology in disadvantaged communities through digital literacy training, affordable home broadband, affordable devices, and tech support. The guidebook was updated in September 2020 to reflect best practices around Digital Inclusion programming in the age of COVID-19.

[NDIA's Resource Page](#) includes link to strategy guides, local government plans and reports, sources of data and research on the digital divide.

[National Collaborative for Digital Equity's \(NCDE's\) Guide to CRA Grantmaking for Digital Equity and Economic Inclusion](#) offers a detailed description of how banks can meet Community Reinvestment Act (CRA) obligations through investments in digital equity.

[NCDE's Digital Equity Resource Page](#) provides links to sources of free and low-cost broadband, devices, apps, software, and technical support, as well as other digital literacy, education, and professional development resources.

[Consortium for School Networking’s Digital Equity Toolkit](#) details strategies that school systems are successfully using to narrow the “homework gap” in their communities, as well as guidance on how these steps can integrate with broader digital inclusion efforts.

[HUD’s ConnectHome Playbook](#) provides a step by step guide for building a digital equity initiative, lessons from 28 pilot projects, and tips for how ConnectHome partners can help families in HUD-assisted housing overcome some barriers to adoption.

7.5 Recommendations for expansion or creation of digital equity initiatives in Dallas

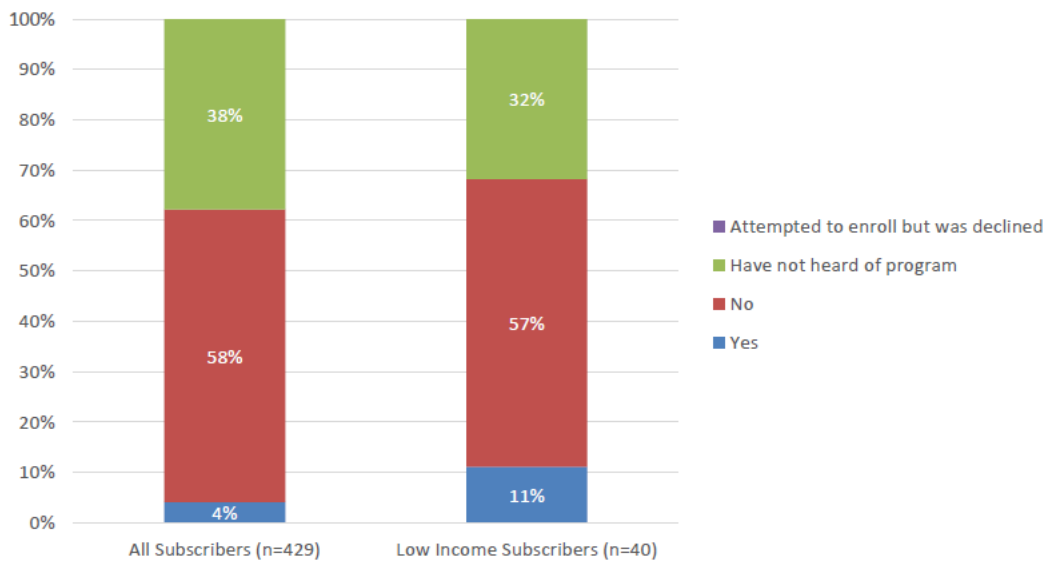
The extensive efforts by both the City and DISD—as well as the two entities’ partnership around these issues—have made Dallas a burgeoning national leader in advancing digital equity. CTC recommends the strategic expansion of existing initiatives and introduction of new efforts to address persistent digital equity gaps in Dallas.

7.5.1 Recommendation: Expand the Digital Navigators program across systems to maximize participation in low-cost programs and federal subsidy programs

Charter’s Spectrum Internet Assist program, AT&T’s Access program, the federal government’s Lifeline and Emergency Broadband Benefit programs, and the new Emergency Connectivity Fund offer opportunities for qualifying residents to receive subsidies, low-cost, or discounted broadband services. But each program has its share of hurdles that make enrollment challenging, and participation rates have historically been low.

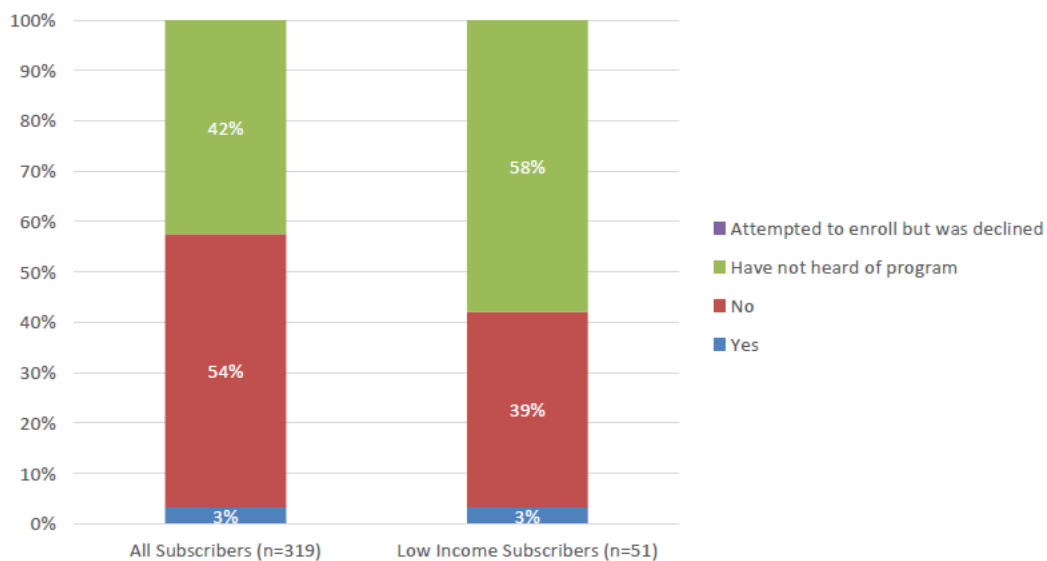
The survey data show that these programs are extremely underutilized in Dallas. As illustrated in Figure 107, just 4 percent of all AT&T customers are enrolled in the ISP’s Access program for low-income households. Eleven percent of customers earning under \$25,000 per year said they are enrolled in the program.

Figure 107: Enrolled in AT&T's Access Program



As illustrated in Figure 108, just 3 percent of all Spectrum customers and low-income customers are enrolled in the ISP's Internet Assist program for low-income households. Four in 10 customers earning under \$25,000 said they had not heard of the program.

Figure 108: Enrolled in Spectrum's Internet Assist Program



Just 1 percent of low-income subscribers (earning under \$25,000 per year) receive the \$9.25 subsidy under the FCC's Lifeline program, and 7 percent are unsure whether they receive the subsidy. Most households are not receiving the subsidy (see Figure 109).

Figure 109: Receive \$9.25 Subsidy Under FCC's Lifeline Program



CTC recommends the City take a series of steps to alleviate the barriers to enrollment in all three programs by expanding the piloted Digital Navigators program. Additionally, a partnership between the Digital Navigators and DISD to undertake this effort could increase awareness about the programs and educate residents about eligibility and program benefits. Such a strategy would leverage existing City efforts to maximize the impact of existing, long-standing programs that are available to a large number of residents.

In terms of the Emergency Broadband Benefit Program, the Digital Navigators could seek to maximize the participation of families in this new FCC program—and the amount of federal subsidy funds coming to residents. The Digital Navigators can use its existing structure to help families understand and navigate the process. The Navigators might even connect families to ISPs to facilitate their enrollment. This will require coordination with the FCC to understand the criteria the FCC will apply for determining the broader eligibility criteria in the federal subsidy program, and to communicate those criteria and any documentation requirements to eligible families.

The Digital Navigators program may also want to consider providing call center support to help smaller ISPs and residents understand and navigate the program, ensure ISPs get qualified by the FCC to participate, and then to determine that families are eligible. This approach would take some of the burden off smaller ISPs. For big ISPs, this is a relatively easy chore; they have access to the federal Lifeline verifier, as well as their own low-income programs.

In addition, the Digital Navigators could continue to provide support for enrollment in the federal Lifeline program as well as Spectrum Internet Assist and AT&T Access. Such an initiative builds on the work and success of the program to date, while leveraging the opportunities presented by incumbent ISPs and the federal government.

In our experience, a call center staffed by three people could assist approximately 8,000 families per year; the number aided by three staff members could be higher or lower based on demand for the service and the ease or difficulty in connecting families with the relevant programs.

The table below estimates the costs of staffing, marketing, and operations for a call center and related communications efforts to increase community awareness of these opportunities. The first section provides Year One costs; the second section provides annual costs for the initiative in subsequent years. The numbers are based on CTC’s experience with similar initiatives.

Table 41: Estimated Initiative Budget – Providing Resources to Help Residents Enroll in Low-Cost and Subsidy Programs⁶⁴

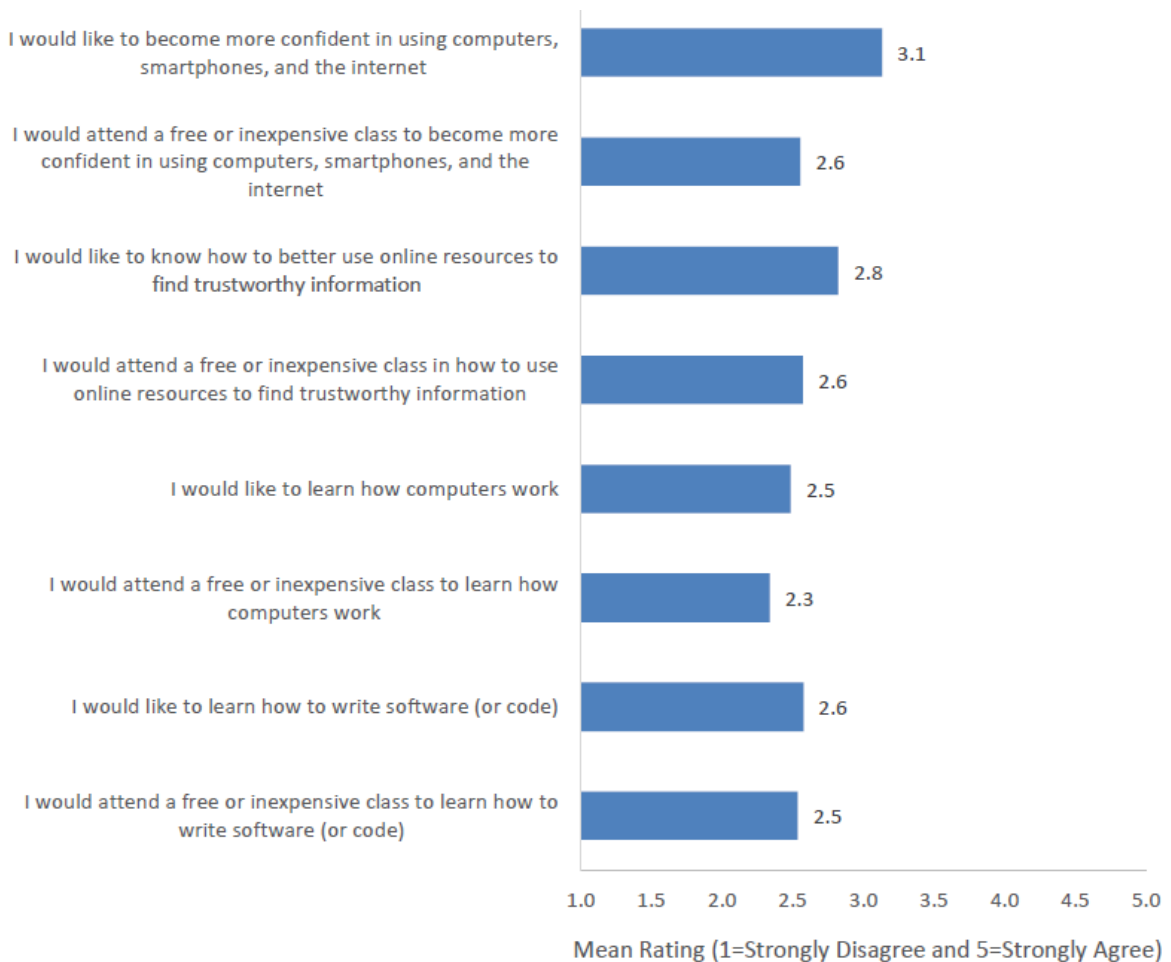
Year One	Budget
Creation and distribution of informational materials such as web pages, fliers, inserts, and mailers	\$20,000
Call center technology and software licenses	\$20,000
Three full-time call center staff (\$40 hourly rate)	\$249,600
Total	\$289,600
<i>Estimated cost per household if 8,000 households are assisted</i>	<i>\$36</i>
Subsequent Years	Budget
Creation and distribution of fliers, inserts, and mailers	\$5,000
Maintenance of call center and equipment	\$10,000
Three full-time call center staff, based on an hourly rate of \$40	\$249,600
Annual Costs for Year Two Onward	\$264,600
<i>Estimated cost per household if 8,000 households are assisted</i>	<i>\$33</i>

7.5.2 Recommendation: Fund the expansion of digital skills training offered through the Digital Navigators program

In addition to access to robust and affordable broadband, residents require digital skills in order to fully take advantage of the opportunities that come with a broadband connection. The survey data show there is moderate interest among respondents in becoming more confident in using computers, smartphones, and the internet, or in using online resources to find trustworthy information, and slightly less interest in attending a free or inexpensive class about these topics.

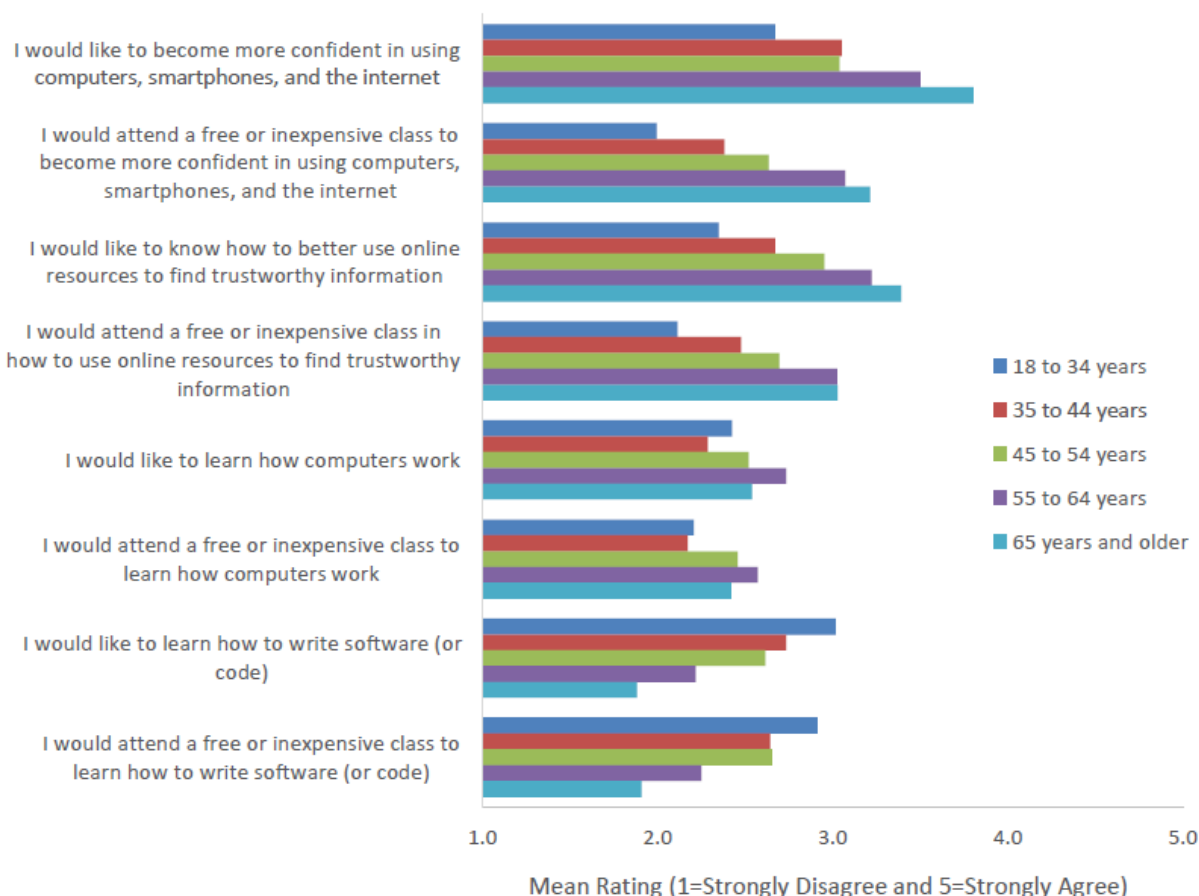
⁶⁴ Numbers are derived from CTC’s experience designing and operating call centers to support broadband subsidy programs on behalf of state government entities.

Figure 110: Agreement with Statements About Training Related to Computers and the Internet



Interest in training varies significantly by age of respondent. As illustrated in Figure 111, those ages 55 and older expressed greater interest in becoming more confident in using computers and related technology and in learning how to better use online resources, as well as attending a class about these topics, compared with younger respondents. Those under age 35 are more likely than older respondents to agree they would like to learn how to write code or to take a class about this topic.

Figure 111: Agreement with Statements About Training by Respondent Age



If funding allows, Dallas could build upon its successful Digital Navigators program to continue to support community organizations with the capacity needed to enable digital skills training initiatives. The short, one-month duration of the program has been identified as a challenge. Additional funding for the Digital Navigators program would allow current service providers to expand their digital skills training initiatives and would allow for the City to support additional organizations in providing such training, especially those that serve senior residents. Table 42 describes the estimated budget for training 5,000 residents.

Table 42: Estimated Budget for Digital Navigators Training Program

Category	Budget
Training cost per student	\$200
<i>Estimated cost if 5,000 residents are assisted</i>	<i>\$1,000,000</i>

Community-based groups in Dallas are well-positioned to offer direct support services to residents. Supporting these established organizations would be an effective and efficient way for

the City to enable digital skills training programs and device distribution efforts that meet residents’ needs. Potential grantees include community centers, senior-serving organizations, health care centers, neighborhood organizations, faith-based organizations, immigrant support organizations, and organizations that provide support to those experiencing homelessness. These community-based groups are often well- positioned to offer direct support services to residents but are typically resource-strapped and lack the capacity to offer additional programs.

7.5.3 Recommendation: Purchase devices and fund the expansion of digital skills training and device recycling

While the availability of internet-enabled devices is relatively high in households with internet access, there are variations in device ownership based on age and household income, as seen in Figure 112 and Figure 113.

Figure 112: Devices Available in the Home by Respondent Age

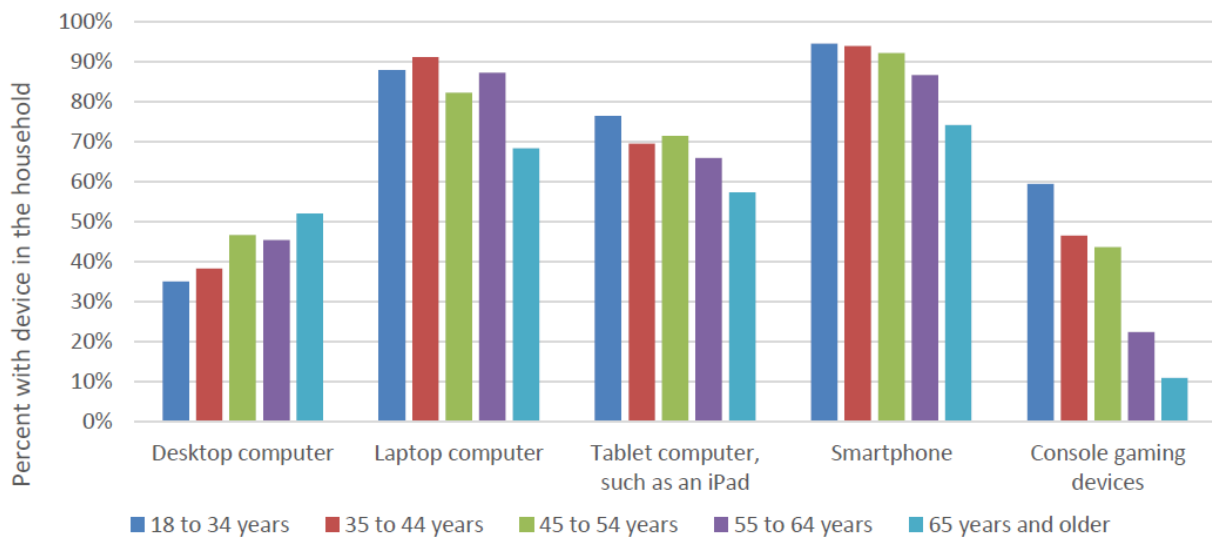
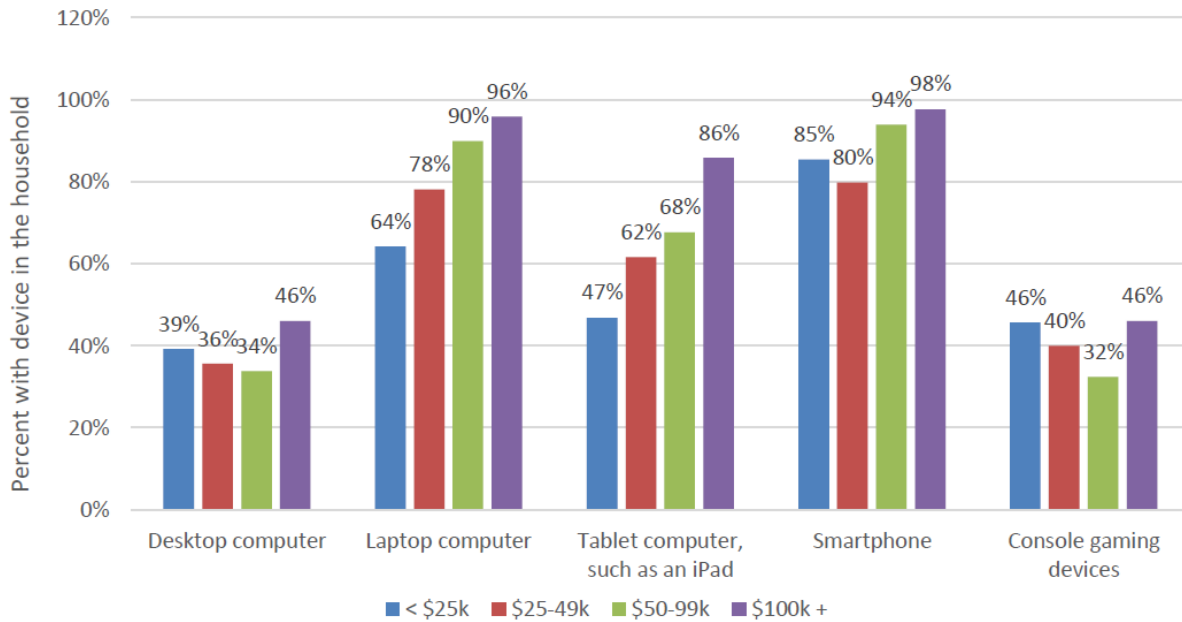


Figure 113: Devices Available in the Home by Household Income



Additionally, one-fourth of internet subscribers earning under \$25,000 experience issues at least weekly with their primary computer becoming inaccessible or unusable (see Figure 114). Three in 10 low-income respondents said it would take one to six months to replace a lost or damaged computer, and another 30 percent said they would not be able to replace it (see Figure 115).

Figure 114: How Often Computer Becomes Unusable by Household Income

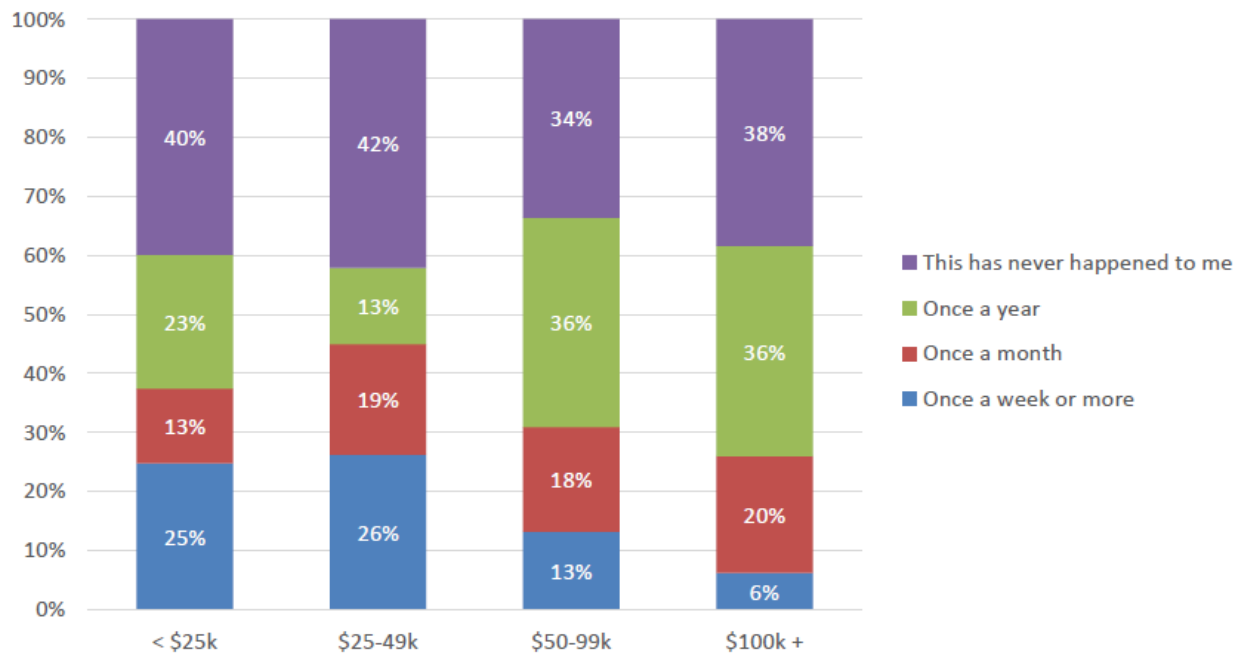
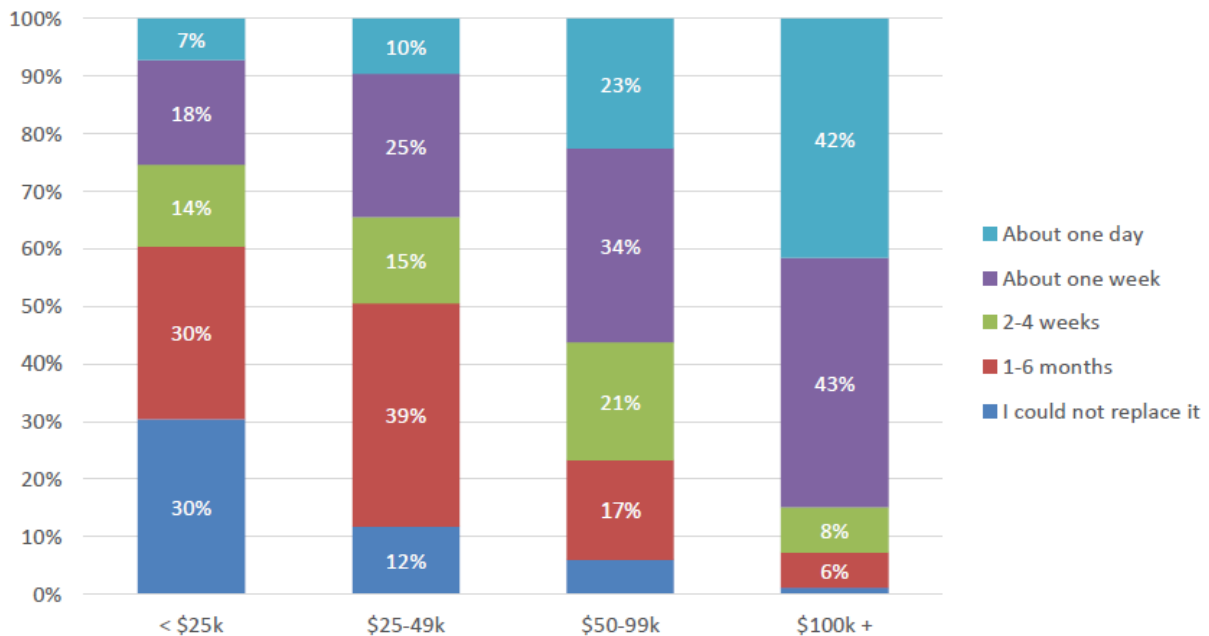


Figure 115: When Could Replace Computer by Household Income



The City or DISD could forge partnerships with, or replicate programs offered by, organizations such as Comp-U-Dopt, PCs for People, Tech Soup, and Tech Goes Home. These organizations have a variety of successful and scalable models for reselling, refurbishing, or offering new laptops and other devices and training to partner organizations.

Given the availability of funds for efforts such as this, we recommend the City purchase new devices at a far larger scale to address Dallas residents’ immediate challenges. A one-time purchase of new computers for the roughly 65,000 households that lack a computer⁶⁵ would cost approximately \$13 million (Table 43).

Table 43: Estimated Budget for One-Time Device Purchase Program

Category	Budget
Obtain 65,000 devices (based on 2019 American Community Survey data that 12.8% of Dallas households lacked a computer)	\$13,000,000
Total	\$13,000,000
<i>Estimated cost per household</i>	<i>\$200</i>

7.5.4 Recommendation: DISD should prepare for procurement of home-based services under Emergency Connectivity Fund

The Emergency Connectivity Fund represents a significant opportunity for DISD to apply for federal funding to offset the costs of its efforts to ensure all unserved students have broadband access for the coming school year. Importantly, federal reimbursement from the Emergency Connectivity Fund could dovetail with a bulk-purchase of services from Charter or AT&T for unserved DISD families.⁶⁶

As an estimate of the number of DISD households lacking broadband, we consider wireless infrastructure Model 2 (see Section 2.2), which aims to serve the 45,000 student households at schools with low CRI scores. If we estimate that a bulk purchase price might be around \$20 per household per month, DISD could potentially facilitate the provision of broadband to those families for about \$10.8 million per year—reimbursed by the Emergency Connectivity Fund in the first year to the extent a student is not currently connected. (While there has been some discussion in Washington of continued subsidy, we would not assume that ECF will continue to pay in future years.)

By way of background, the FCC’s E-rate program has previously subsidized broadband service to schools and libraries. As we describe in Section 8.2.3, the American Rescue Plan Act included a \$7.2 billion appropriation to create the Emergency Connectivity Fund, which extends E-rate support to reimburse schools and libraries for providing equipment and connectivity services to

⁶⁵ “Quick Facts: Dallas city, Texas,” U.S. Census Bureau, <https://www.census.gov/quickfacts/fact/table/dallascitytexas/PST045219> (accessed June 2021).

⁶⁶ Charter offers bulk-purchase option for entities such as cities or school districts to purchase internet services for residents. In February, Charter responded to a Region 10 ESC request for proposals (RFP) with an offer to provide 50 Mbps service for \$29.99 monthly per household, which would be reduced to \$24.99 if 3,000 or more subscribers were added.

K-12 students *at their homes and other locations*. All schools and libraries that are eligible for E-rate are also eligible for the Emergency Connectivity Fund program

The FCC issued rules for the Emergency Connectivity Fund in early May 2021.

The FCC issued rules for the Emergency Connectivity Fund in early May 2021. Priority is given to students and library users who will be unserved by broadband in this school year. The first application window has passed, but a second ECF application window will be open from Sept 28, 2021, to October 13, 2021, for the current school year (specifically for July 1, 2021, to June 30, 2022). ECF will allow for reimbursement retroactively for qualified expenses within this period.

This program will pay 100 percent of a school or library’s “reasonable” costs for mobile hotspots (up to \$250 each), connected devices (up to \$400 per device), and services; it will not cover the cost of infrastructure construction. Wi-Fi hotspots for school buses are allowed—and present an option for delivering service beyond individual homes.

In terms of services purchased with Emergency Connectivity Fund money, the FCC does not specify a minimum definition of broadband (such as the 25 Mbps download and 3 Mbps upload requirement for some other programs); rather, it requires the connection be sufficient to enable remote learning, which includes videoconferencing. As mentioned above, if DISD were to negotiate a bulk purchase of Charter or AT&T services to connect unserved students, that contract could be eligible for reimbursement—likely within a range of \$10 to \$25 per month per user.⁶⁷

Unlike the standard, rigorous E-rate procurement process, the Emergency Connectivity Fund will require participating school districts to verify and self-certify that beneficiaries are not also receiving benefits under other federal programs such as the FCC’s Emergency Broadband Benefit Program subsidy. DISD and other school districts that tap into this funding source should develop a rigorous process and document every step, so as to be prepared for a potential future audit of its participation.

7.5.5 Recommendation: Evaluate bulk purchase of service for unserved residents

If the City were to consider a bulk-purchase of services for unserved residents, the annual costs could be considerably higher than a bulk-purchase program only for DISD families—depending on the scope of the subsidy effort (Table 44).

According to the Census, as of the American Community Survey for 2019, only 76.6 percent of Dallas’ 513,000 households had a broadband internet subscription. We thus estimate 23.4

⁶⁷ “How the FCC Will Help Schools and Libraries Bridge the Digital Divide,” Benton Institute for Broadband & Society, May 13, 2021, <https://www.benton.org/blog/how-fcc-will-help-schools-and-libraries-bridge-digital-divide> (accessed May 24, 2021).