

November 10, 2021

TO: Louis A. DePasquale, City Manager

From: Patrick McCormick, Chief Information Officer
Lee Gianetti, Director of Communications

SUBJECT: Response to Awaiting Reports 21-37 and 21-38 RE: Digital Equity

In response to Awaiting Report Items Number 21-37 and 21 -38, please be advised of the following:

In April 2021, the City released [Digital Equity in Cambridge: Data and Strategic Recommendations](#), the final report for the City's comprehensive Digital Equity study. The report provides a complete and clear understanding of the problems and gaps preventing Cambridge residents from making the city's most effective and meaningful use of broadband (high speed internet access). Additionally, the report suggests a range of solutions for the city to pursue to address the findings that emerged around broadband access, affordability, digital skills, and device ownership.

Cambridge partnered with CTC Technology (CTC) to conduct the study. CTC is a nationally recognized firm that offers independent strategic, technical, and financial guidance primarily to public sector and nonprofit entities. The report will serve as the foundation for the city's future Digital Equity and broadband initiatives. CTC has helped develop Digital Equity strategies for other cities including Austin, Texas; Portland, Oregon; and Seattle, Washington.

The study provides a range of recommended strategies to address the Digital Equity challenges within Cambridge, including:

- Convene a Digital Equity and inclusion coalition to guide implementation efforts;
- Expand the city's \$50,000 pilot program into a Digital Equity Fund emphasizing device and skills programs;
- Consider establishing a community Digital Equity specialist position or similar public support function;
- Engage local philanthropic organizations to broaden the reach of broadband equity initiatives;
- Partner with organizations that provide low-cost devices and training to Cambridge residents and expand loaner programs;
- Establish a digital skills training corps;
- Conduct a municipal broadband feasibility study that allows exploration of a variety of partnership and facilitation models;
- Facilitate the provision of additional providers of low-cost service in more CHA developments;
- Expand public Wi-Fi and charging stations in core areas, such as Porter and Central squares; and

- Promote the new Emergency Broadband Benefit program to provide temporary relief on bills and purchases for eligible Cambridge residents.

As the City Council is aware, the City of Cambridge undertook several specific actions to address emerging findings and issues in response to early study findings and challenges presented by the COVID-19 pandemic. These actions include:

- Launching a \$50,000 pilot program to assist up to 415 families in obtaining \$10 Internet Essentials subscriptions;
- Redirecting study resources that allowed CTC to conduct a preliminary high-level engineering and cost estimation work for high-speed residential broadband service in three CHA developments: Newtowne Court, Washington Elms, and the Manning Apartments;
- Engaging in preliminary discussions with business associations and Life Science Cares, a nonprofit organization that funds anti-poverty programs to begin discussions on expressed interest in being part of a public-private partnership to address digital inequities;
- Accelerating the Cambridge Public Schools laptop and hotspot provision efforts, providing all students with laptops and (where needed) hotspots, and commencing a first-ever technology lending program at the Cambridge Public Library; and
- Partnering with the Cambridge Public Library, the MetroNorth Regional Employment Board, and Cambridge Community Foundation to provide essential technology, including Chromebooks, hotspots, and webcams, to adult learners participating in Cambridge Community Learning Center programs.

Since the release of the findings, City staff have been engaged in various activities and planning efforts to begin implementing the recommendations. Ongoing initiatives and work to date focus on the development, explanation, and enhancement of key community-focused services and programs to address Digital Equity, including:

- Funding and distribution of hotspots to provide internet access.
 - Over 270 hotspots made available through Cambridge Public Library (CPL) branches, the Cambridge Learning Center (CLC), and various community partners.
 - Over 500 hotspots distributed by the Cambridge Public Schools (CPS)
- Funding and promotion of City's no-cost Internet Essentials (IE) pilot program.
 - City, Schools, and Cambridge Housing Authority (CHA) staff regularly meet Comcast to ensure that the IE program is responsive to Cambridge community needs.
 - CPS conducted outreach via email, letters, and CPS Family Engagement team and trained all Family Liaisons to support the IE program.
- Promoting the [Emergency Broadband Benefit](#) (EBB) program. Promotional efforts have included information on the City's website and in Citywide print mailings, daily email updates, and social media to encourage eligible households to receive up to \$50 per month toward broadband service and a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet.
- Applying for and CPS being awarded Emergency Connectivity Funding (ECF) for up to 500 students to receive either hotspots or IE connections, including:
 - \$149,750 to cover Comcast installations for families with CPS students.
 - \$75,000 to cover hot spot costs for families with CPS students.

- Effort under way to ensure billing and costs are transitioned to ECF funding.
- Distributing and funding of computing devices including providing 65 standalone Chromebooks and 41 Chromebook + hotspot bundles via the CPL loan program.
- Strengthening and expanding internet access in public open spaces and buildings including:
 - Adding capacity to provide higher speeds and reliable connectivity to more users.
 - Creating interactive and more informative maps and lists of [Cambridge Public Internet \(CPI\) locations](#) on the City website.
- Working with local nonprofits and Comcast representatives to identify community spaces suitable for free internet access via the Comcast Lift Zones program.
- Facilitating ongoing meetings between the City Manager's office and Information Technology, Human Services, Community Development, Library, and School Departments' staff to design and coordinate Digital Equity activities that complement and coordinate with other equity and outreach efforts across the City.
- Convening regular meetings with CHA to develop and support digital initiatives including:
 - Flushing out implementation details for the June 2021 CTC engineering report and preliminary high-level capital and operating cost estimates for installing the necessary infrastructure to support an option for high-speed wired broadband service at one or more of 3 CHA sites CHA sites that was conducted by the City (**Appendix A**). Service provider and business model decisions still need to be determined. Discussion on this emerging project continue involve multiple potential stakeholders including MIT, Starry, Kendall Square Business Association, and Google.
 - Pilot project to develop and deliver new training curriculum and program in cooperation with Tech Goes Home and community partners.
- Holding preliminary discussions with local nonprofits to inform Digital Equity initiatives and broader community efforts, including Cambridge Nonprofit Coalition, CCTV, and Tech Goes Home.
- Reviewing Digital Equity study findings with and engaging local business associations and philanthropic entities in discussion on creating partnerships for long-term citywide Digital Equity efforts.
- Forging a Digital Equity partnership between the City and Worcester Polytechnical Institute (WPI) including joint grant application, research, and summer internship resulting in:
 - Analysis and overview of Digital Equity programs across the country
 - Findings focused on achieving a balance between centralized municipal driven programs and decentralized community-based programs and services
 - Presentation to and discussion with City, School, CPL, and CHA stakeholders on how findings relate and should inform Cambridge initiatives (**Appendix B**).

FY22 Workplans for Digital Equity Initiatives and 21st Century Municipal Broadband Project

Based on the recommendations from the City's Digital Equity Study and WPI research partnership on Digital Equity program outcomes in cities across the country, it is clear that structuring the right collaborative approach, within the context of Cambridge, to meet a variety of individuals where they are, with the right combination of services, at the right time, is key to having a positive, sustainable impact. Steps toward this objective include:

- Creating new Digital Equity and municipal broadband websites, which are under active development, to inform community and partners on Digital Equity efforts, resources and opportunities, as well as regular updates on the status of the 21st Century Municipal Broadband feasibility effort underway
- Exploring the establishment of new Digital Equity & Broadband project role, and convening a Digital Equity and Inclusion Coalition.
- Conducting Digital Equity workshop with local nonprofits to agree on shared objectives, confirm existing relevant services and programs, identify resources needed to scale up existing programs and provide new services, identify a structure and operating model for collaborative delivery of services and metrics for ongoing evaluation of success factors and to inform course corrections and changes over time.
- Establishing a federated services entity and suite of services for tech support, training 1:1 guidance (digital navigation), and appropriate combination of assistance with skills, devices, and connectivity to address gaps and needs of specific residents or neighborhoods.
- Developing appropriate program evaluation models and metrics to measure progress toward Digital Equity goals.
- Completing research on how to establish a Digital Equity fund, including identifying potential fund structure, governance, and funding sources.
- Developing and submitting FY23 Digital Equity budget request. Areas that will be explored include funding opportunities for:
 - Digital Equity and Broadband project coordinator or advocate;
 - Additional Digital Equity training, device and connectivity initiatives, and other programmatic funding;
 - Expanded Public Internet to bolster and increase public wi-fi access in City parks and public open spaces – ARPA funding request of \$275,000; and
 - Pilot for Digital Equity skills program and support operations center.

See **Exhibit 1** for Digital Equity Implementation Task Timeline.

In addition to conducting the City's Digital Equity Study, CTC Technology & Energy was awarded the contract to conduct the City's 21st Century Municipal Broadband Feasibility Project and the effort is now underway. CTC will be conducting baseline analysis; performing technical analysis and design; performing market analysis, financial analysis, and developing business and city-ownership models; conducting stakeholder engagement; and generating a comprehensive report. Following the completion of the analysis of different business and city-ownership models, CTC will present to the City the benefits and drawbacks of each option in terms of costs, revenue, risk, and potential legal and regulatory issues of each model. CTC will assist the City in identifying the preferred model that best aligns with the City's policy priorities. CTC though this process will seek to provide the City with all the relevant information and stakeholder management support needed to reach a decision on the business and ownership model so that the City can proceed to the next phase. Once the analysis just described is completed, there is a critical decision point that the City needs to make related to the preferred model it wants to pursue to achieve its Digital Equity connectivity and Municipal Broadband goals. Once this decision is made, the process will be ready to move to the implementation phase.

Because this project is a high priority for the City, City Council, and the community and fits into an eligible category of the American Rescue Plan Act (ARPA), the City is using ARPA money to fund this \$465,000 initiative. As mentioned, regular updates on the status of this project will be shared via the City's new website that will be launched by year end.

See **Exhibit 2** for 21st Century Broadband Project Task Timeline.

Once the new Digital Equity and Municipal Broadband websites are launched this year, updates on both initiatives will be shared with the community on a regular basis.

Exhibit 1: Timeline of Digital Equity Activities to Date and Planned



Exhibit 2: Timeline of 21st Century Municipal Broadband Study

