Seattle
Information Technology

Best in Class Digital Services

Internet for All Seattle Update Report

2021

Contents

Internet for All Seattle Update 2021

In 2020, Resolution 31956 was adopted by the City Council and signed by the Mayor which sets 'the goal of enabling all Seattle residents to access and adopt broadband internet service that is reliable and affordable.' The resolution requested a report from Seattle IT examining existing and proposed short-term solutions to increase internet access and adoption. The first Internet for All Seattle Report was transmitted to the City Council Transportation & Utilities Committee on September 14, 2020, outlining existing and proposed short-term solutions to increase internet access and adoption equitably, and a timeline for presenting subsequent reports to the Committee for the longer term, sustainable solutions of the Action Plan.

This report is pursuant to Resolution 31956 and the Transportation & Utilities Committee Chair's request to transmit the next report in the first quarter of 2021 summarizing progress on initial strategies to increase access and adoption of affordable and reliable internet service. As part of this work, the Seattle Information Technology Department has prepared the 2021 Internet for All Seattle update report for review. The report includes an update on the action plan, the evaluation and the Race and Social Justice Analysis.

This Internet for All Seattle update report and any subsequent report updates are prepared as addendums to the first Internet for All Seattle report and serves as a progress update.

Action Plan Update

Over the last six months, the City has undergone significant change, as our region moved through various phases of the coronavirus response plan and measures to ensure our safety. During this tumultuous time, the City has looked to the Internet for All Action Plan as a framework to move closer to our goal of universal internet adoption. The City and our public and private sector partners have strived to make a positive impact, despite working within constrained resources. We focused on activities to meet immediate needs, like distributing devices, hotspots and vital information to community, as well as laying the groundwork for the future by establishing new partnerships, enhancing our technology infrastructure and tracking legislative opportunities.

Some of the highlights of our activities included:

Driving Resources to Communities in Need

- Seattle IT invested $320,000 in Technology Matching Fund grants to 15 community-based organizations.
- Seattle Public Schools distributed 43,000 laptop/iPads, 3,200 hotspots/internet codes and launched 8 tech support centers.
- The Seattle Public Library increased hotspots circulation to 1335 with 410 targeted to specific communities.
- Office of Economic Development provided 174 hotspots to Digital Bridge job seekers.
- Human Services Department secured 138 hotspots for a Social Connectivity project for seniors.

Enabling Infrastructure Improvements

- Planning for Wi-Fi upgrades began at Magnuson Community Center and Langston Hughes.
- Two Seattle locations have been selected to deploy a Seattle Community Cellular Network.
- Comcast Lift Zones have been expanded to four locations to provide free Wi-Fi.

Building Regional Partnerships

- Seattle IT developed a partnership with Lumen (formerly CenturyLink) to provide 20 complimentary Gigabit internet service connections to non-profit organizations.
- Seattle Public Schools and Seattle Housing Authority hired Digital Equity Coordinators.

Monitoring Policy Opportunities

- The City tracked timely legislation for digital equity, including the FCC Emergency Broadband program, federal COVID-29 relief and infrastructure bills, and Washington State bills for digital equity.

Connecting Community to Information

- Seattle IT supported 1,800 customer service requests and conducted low-cost internet outreach to 3000 residents.
- The City developed a dynamic free public Wi-Fi map to be published in the second quarter.
- The City shared vital information about internet service provider improvements to their low-income discount plans.

More detail on progress of Action Plan is provided in the Appendix A: Action Plan Table Update.

Evaluation Update

The Internet for All Seattle report provided a full gap analysis of internet adoption in Seattle. To measure progress in closing the gaps identified in this first report, the City plans to conduct research in 2022 to update the 2018 Technology Access and Adoption Study. This plan is contingent on funding. New research will provide a comprehensive view into Seattle residents' access and adoption of internet and technology. Key metrics will be compared to the last study to track our progress over time. The next survey would be the fifth time this residential digital equity data has been collected since 2000.

To better understand the City's progress in closing the gaps until we conduct the next population-level survey, Seattle IT solicitated input from multiple City departments and external partners. We gathered survey data from six City departments, four public agencies, and four private sector & philanthropy partners for this interim report. Seattle IT's reporting includes data provided by 13 community organizations funded for digital equity programs in 2019-2020. Other reports also roll-up information from multiple community-based partners & grantees. The response to the survey was voluntary, and no formal verification of the data has been conducted. The data generally reflects work since the pandemic began through 2020, though some data reflects work into Quarter 1, 2021. Different agencies aggregate and report based on different time frames (e.g. school year or calendar year). A list of participating organizations to the survey is provided in Appendix B.

2020 Data Collection Results

While the numbers do not paint the full picture of our regional efforts to address digital equity, the highlights below provide insight on ways the City and our partners responded to meet community connectivity needs. Demand for and the importance of affordable connectivity was amplified given COVID-19 restrictions and guidelines, and the City ramped up efforts to share low-cost broadband options to over 3,200 residents throughout Seattle. To fill the gaps and connect residents close to where they live and gather the City enabled 670,632 Wi-Fi connections at libraries and other public sites. We also supported sponsored internet at 252 community locations through partnerships with local internet service providers. Digital literacy remained a persistent challenge for low-income residents, limited-English speakers, and others furthest from equity.

Collectively our region provided 5,818 hours of digital skills training to 5,228 residents and helped over 40,520 residents with tech support. Additionally, 12,979 residents who struggled to pay for basic Internet even at discounted rates, received free connectivity through mobile hotspots or cable broadband connections. The region also stepped up to donate 9,000 devices and loan 40,000 devices to those in need.

Outreach & Assistance	Internet Connectivity	Devices	Digital Skills & Technical Support

Outreach & Assistance

The Seattle IT Cable & Broadband Office provided this assistance to residents in 2020.

921	834	482	1000+
Internet Related Service Requests	Provided Internet Discount Program Information	Provided Wave Low-Income Internet Sign-Up Information	SPS & Partners Low-Income Internet Sign-Up Assistance

Internet Connectivity

Mobile Hotspots & Sponsored Fixed Internet

Mobile Hotspots Loaned	Mobile Hotspots Owned	Fixed Internet
5447	**7140**	**392**
SPS Mobile Hotspots **4084**	Comcast Reported **6826**	SPS Fixed Internet **176**
Seattle Public Library (1335) plus other City of Seattle supported programs **1363**	City of Seattle Supported Programs **314**	Other Fixed Internet **216**

Broadband for Organizations (Access for All)

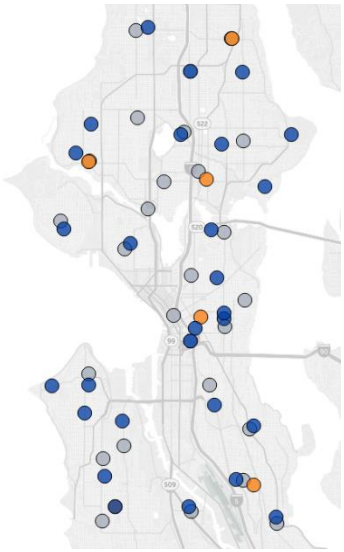
By providing broadband connectivity and computers to organizations, the City and our private and non-profit partners assist those working directly with residents to help them build skills, access services, obtain computers, and get technical support.

Through the **Access for All Broadband Program**, internet service providers provide 3rd tier business class internet to community organizations providing access and/or training.

18	252	$470,880
New Sites Added in 2020	Total Sites Served	Value of Service for 2020

Public Wi-Fi

Following the closures of facilities due to the pandemic, there continued to be resident use of Wi-Fi access points outside libraries and community centers, and use increased as the Parks' Community Centers opened on a limited basis for childcare and teen learning support. The City of Seattle currently provides exterior public Wi-Fi in limited areas at two locations: City Hall and at Seattle Center. In addition to the municipal Wi-Fi access reported here, Comcast provided public Wi-Fi through their commercial system.



473,777	196,855*	50
Seattle Public Library Connections Made in 2020	Other City of Seattle Sites Connections Made in 2020	Total Public Wi-Fi Locations

* Full data set for City sites not available currently. Data is based on Meraki access point reports at 23 sites.

Devices

The following describes the total devices distributed by all partners through City department programs, Seattle Public Schools, and others responding to the data collection survey.

Devices distributed for participants/clients to own

8,235	836	285	34
Chromebooks	Laptops	Desktops	Tablets

Devices loaned to participants

80	31,217	0	12,054
Chromebooks	Laptops	Desktops	Tablets

Assistive Devices

62 people were provided with assistive technology hardware. Thirty-two of these were provided through City programs.

Devices for Organizations:

107 laptops and Chromebooks were distributed to organizations for them to use in providing services.

57	50	29	136
Laptops	Chromebooks	Tablets	Total

Digital Skills & Technical Support

The City and community partners report that nearly 6,000 hours of digital skills training and support were delivered, serving 5,228 residents. In addition to this, Seattle Public Schools (SPS) reports serving 40,520 participants through a mix of phone and in-person support by SPS staff (34,480 served) along with Digital Learning professional development programs for educators and staff, family and community-based organizations, and mentors. Sea.citi is also a strong partner in this effort, and its network of volunteers assisted 1,200 people with Chromebooks and use of online school services. The pandemic has resulted in the growth of both the need and delivery of technical support programs. There has been a blending in the delivery of traditional technology assistance with “digital navigation” to help provide a mix of technical aide, resource referral, and guidance in using online services and applications.

Race and Social Justice Analysis Update

Race and social justice is a key pillar of Internet for All (IFA), and the IFA resolution requested Seattle IT to apply a Racial Equity Toolkit to the strategies and Action Plan included in this report.

The first Internet for All Seattle Report detailed the internet adoption gap for Seattle residents and outlined short-term actions and long-term solutions to increase internet access and close the gap. By analyzing the City's recent 2018 Technology Access and Adoption Study augmented with Census American Community Survey data, and consistent with findings from similar research from King County, we find that this gap is concentrated geographically in certain areas of the City. IFA's roadmap and action plan strives to close the remaining gap.

Areas of Central and South Seattle represent the largest portions of the 5% gap in internet adoption:

- South Central Seattle (Pioneer Square, Yesler Terrace, and International District)
- South Seattle (New Holly, Rainier Valley, and Beacon Hill)
- West Seattle (High Point and South Park)
- Areas of downtown
- Lake City

When the City looks at key demographic groups without internet in their home, we see those who are low-income, household members living with a disAbility, English is not their primary language, those with less formal education, Seattle Housing Authority households, older adults, and BIPOC (Black, Indigenous, and People of Color). COVID-19 has magnified the impact for these key groups and families requiring internet for work and schooling purposes. The completed analysis is provided in Appendix C.

Appendix A: Action Plan Table Update

As noted in the first *Internet for All Seattle* Report, Seattle IT welcomed additional feedback from the City Council and stakeholders to refine the Report recommendations. The proposed action items required additional collaboration and refinement with partners and stakeholders. Based on this ongoing work, Seattle IT updated the description for a few of the Actions and consolidated some of the proposed Actions to reflect the updated strategy and most effective approach. The following table maintains the consistent formatting from the first Internet for All Seattle Report with a row added below each action item to provide a progress update. The table includes a status update and a summary of the steps and actions taken to describe the developments.

The description for Phase 1, Phase 2, and Phase 3 from the first Internet for All Seattle Report is provided here for reference.

- **Phase 1**: Actions for immediate implementation. Implementation requires minimal modifications to existing program operations. Priority focus are students and job seekers during COVID-19 and economic recovery.
- **Phase 2**: Short-term implementation actions that require additional time to complete resource estimate and planning before implementation. Continue focus on students and job seekers.
- **Phase 3**: Long-term implementation actions that require significant planning; one-time and ongoing annual cost estimates; modification and integration with existing programs; and strategic planning for a best-in-class, scalable telecommunication infrastructure.

Strategy 1. Increase awareness and adoption of low-cost internet programs and devices.		
Action 1.1	Phase 1	**Ramp up the City's outreach and engagement about low-income programs for residents and nonprofits**. Prioritize outreach to reach low-income households, BIPOC, students, and job seekers. Leverage the City's website by adding content on pages that engage low-income residents, such as the Affordability portal, the main Utility Assistance Program, Fresh Bucks, and others. Leverage City staff that engage directly with priority communities: ○ DON Community Liaisons to share content and develop in-language videos or audio voiceovers. ○ SPL staff to answer phone calls to inform patrons about broadband options. ○ HSD staff to promote content through digital forums, such as their Aging and Disability Service sponsored community coffee hours. ○ FAS Mobile Customer Service Center vans Conduct outreach with partner organizations and existing networks, such as affordable housing communities, faith institutions, and digital navigators. Conduct outreach through low-tech channels, such as mailings and phone calls.

		Continue to provide information to the City's Utility Discount Program enrollees about low-income discount programs offered by internet service providers. Explore working with other public agencies so they can refer people to low-cost internet programs.
Action 1.1	Phase 1	**Status:** Ongoing **2021 Update:** • In 2020, Seattle IT supported 1,800 customer service requests, including 900 related to low-income internet. • Seattle IT conducted low-income internet outreach to the Southeast Seattle Senior Center, Central Area Senior Center, Helping Link, Literacy Source, HSD's Youth Employment service program, and the Digital Equity Learning Network. Together the programs reach over 3,000 clients around the Seattle area. • Current information on low-cost internet program offerings, including translated information tables, is provided on the Mayor's COVID-19 webpage and Seattle IT's Office of Cable Communications webpage.
Action 1.2	Phase 1	**Explore working with other public agencies so they can refer people to low-cost internet programs.**
Action 1.2	Phase 1	**Status**: Closed (Item 1.2 has been updated and consolidated with Action 1.1 based on additional staff feedback with a related overall purpose in Action 1.1. Action 1.2 is now considered closed and will be tracked as part of Action 1.1.)
Action 1.3	Phase 1	**Partner with Seattle Public Schools to promote and support internet sign-up events.** Continue to support internet sign up events in priority digital equity zones. Explore opportunities to work with organizations and digital navigators.
Action 1.3	Phase 1	**Status:** Closed (advisory only.) Future collaboration and updates with Seattle Public Schools on low-income internet outreach and enrollment will be tracked as part of Action 1.1. **2021 Update**: • Seattle Public Schools (SPS) completed internet sign-up events for the ramp up to the start of school. City staff assisted with the events. • SPS has sponsorship agreements in place with Comcast and Wave and continues to enroll people directly through the schools. They utilized Levy funds with COVID-19 relief funds from the Office of Superintendent of Public Instruction (OSPI) to sponsor internet service for student families. For the 2020-2021 school year (Sept-June) OSPI reports that they reimbursed Seattle Public Schools up to $15/family for 1,366 accounts and paid Comcast directly for another 16 families. • Starting in the fall of 2020, SPS students and families have been able to receive

		internet sign-up and other technical assistance and support for devices and use of online school services at eight Technology Support Centers around the city as well as through an available Student Tech Line for students and staff. • SPS hired their first Digital Equity Manager in December 2020. The new position will be involved in helping with communications and strategy on connecting student families to the internet and tech support services.
Action 1.4	Phase 3	**Explore one-stop portal for enrollment/verification in all low-income programs, including access to internet (using Affordable Seattle model/website).** Implement a cloud-based, integrated system so that it is easy and simple for residents to access all affordability programs from one platform, including mobile app enrollment capabilities.
Action 1.4	Phase 3	**Status:** While this is a Phase 3 action item, the following efforts have occurred since the initial Internet for All Report. **2021 Update:** The most recent engagement with Google.org and the Innovation Advisory Council's Affordable Seattle 2.0 scope targets to create a system where residents submit their information to the City of Seattle once and have the option to enroll in multiple programs across agencies. This effort provides the most promising opportunity to assess the feasibility of also integrating low-income internet program enrollment with third-party sign-up sites like Comcast and Wave.

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
Action 2.1	Phase 1	**The Seattle Public Library will upgrade Wi-Fi equipment at all branches.** Seattle Public Library (SPL) will explore the project costs associated with extending Wi-Fi coverage to outside the branch buildings. **The description for this action has been updated from the initial IFA Seattle Report based on updated information provided by the Seattle Public Library Technology Officer.*
Action 2.1	Phase 1	**Status**: In-progress by SPL with updated deployment schedule. **2021 Update:** SPL completed Wi-Fi upgrades at nine branches (South Park, International District, Lake City, Northgate, Northeast, Ballard, Green Lake, Wallingford, Madrona) with 18 branches remaining. All Wi-Fi equipment upgrades are now expected to be complete by end of Q2-2021.
Action 2.2	Phase 1	**Continue to provide access to public computer kiosks and Wi-Fi in many of our City's community centers, libraries, and certain City-owned facilities.** Explore expansion of hours as part of economic recovery effort once locations are allowed to reopen to the public.

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
Action 2.2	Phase 1	**Status:** On standby in compliance with the Governor's four-phase Safe Start plan. **2021 Update:** City Parks and Recreation Community Centers that have been opened on a limited basis to serve as teen hubs and childcare facilities have Wi-Fi and public computer kiosks available.
Action 2.3	Phase 1 & Phase 2	**Develop GIS Mapping Application for public Wi-Fi.** **Publish dynamic GIS Wi-Fi map of City public sites.** Conduct a marketing campaign to promote availability. While the majority of these locations are temporarily closed to the public due to COVID-19, the GIS mapping links to additional Wi-Fi strategies. Include crowdsource capability for identifying non-City outdoor Wi-Fi available to the public. Either develop a crowdsource app for identifying other non-City facility outdoor Wi-Fi and/or encourage the use of Openwifispots.com, which identifies almost 350 free hotspots at coffee shops, restaurants, hotels, and other businesses across the City. **Develop a "Seattle Digital Equity Atlas" using existing data layers to identify opportunities to strategically deploy Wi-Fi.** Improve data reporting on use of current city Wi-Fi and cross-reference existing infrastructure and community need. Enhance ITD's data system for reporting on guest Wi-Fi to provide monthly reports on levels of Wi-Fi use. Develop a system to integrate this with SPL data and other Wi-Fi provider data and map it to provide public information and data driven strategic planning for meeting future needs.
Action 2.3	Phase 1 & Phase 2	**Status:** In-progress. **2021 Update:** • Seattle IT is set to launch the dynamic Free Public Wi-Fi map of City public sites in Q2-2021. • Initial elements of the Seattle Digital Equity Atlas have been created and used to support Action 2.12 (Develop proposal to strategically deploy more public Wi-Fi in digital equity zones). Based on data, the priority digital equity zones are: 1) Yesler Terrace, 2) South Park, 3) Rainier Beach – Rose St., and 4) Othello/New Holly.
Action 2.4	Phase 1	**Leverage 5G Wireless Technology** Continue to ensure equitable roll-out of small cell attachments to support high-speed broadband access in underserved neighborhoods. Identify and remove barriers to deployment of infrastructure needed for 5G technology, including installation of fiber and small cells. Explore policies, strategic partnerships, and leverage existing city assets to encourage investment in, and expedite the deployment of 5G technology. Advocate and partner with carriers for low-cost internet plans and free public Wi-Fi.
Action	Phase	**Status**: Ongoing

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
2.4	1	**2021 Update**: • Small cell deployment activity in the City is monitored for roll-out through a quarterly update and review of Seattle City Light's (SCL) pole attachment permits overlayed onto the City's Racial & Social Equity Index map. The map is used to focus conversations across departments and with wireless carriers on the City's priority of having equitable access to next generation wireless networks across Seattle and in digital equity zones. • Seattle IT, SCL, and Seattle Department of Transportation (SDOT) held a series of targeted discussions to consider policies and practices raised by wireless carriers as potential barriers to investment in, and expedited deployment of, next generation wireless networks. Discussions are on-going and are focusing on viable practices that could reduce network construction time and costs to encourage digital equity zone small cell deployments. • All wireless providers report making system improvements in 2020 that are initial elements of next generation (5G) networks in Seattle. The improvements are citywide and benefit all 4G LTE users by increasing network capacity, reducing congestion, and supporting higher connectivity speeds.
Action 2.5	Phase 1	**Conduct Wi-Fi assessment for small businesses and HSD community providers** To ensure sufficient bandwidth, partner with the Seattle Human Services Department (HSD) HSD to assess the broadband capacity at critical community service sites, including homeless shelters, nutrition sites, senior living facilities, senior centers, and others. Ensure connectivity for older adults, low-income, and insecurely housed residents. Partner with the Seattle Office of Economic Development (OED) to assess small business needs.
Action 2.5	Phase 1	**Status:** Ongoing **2021 Update:** • Seattle IT has begun reaching out to BIPOC and community providers to gauge needs and to provide support for connectivity. • Seattle IT participated in planning sessions for the Africatown Land Trust William Gross Center and referred them to potential internet service providers. • Six organizations receiving Technology Matching Funds in 2020 reported providing low-income, insecurely housed, BIPOC communities with over 185 hours per week of community Wi-Fi. On average, 95 individuals accessed this connectivity on a weekly basis.
Action	Phase	**Partner with Seattle Public Schools to increase hotspot devices available for distribution to**

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
2.6	2	**students to enable remote learning.**
Action 2.6	Phase 2	**Status**: Closed (advisory only) **2021 Update**: Action 2.6 is now considered closed and further updates will be provided through Action 1.1 above.
Action 2.7	Phase 2	**Advocate expansion of the hotspot devices program to address high-priority resident needs through the Seattle Public Library hotspot program.** Expand the SPL hotspot program that provides devices for extended loan periods to target populations, including Seattle Public Schools families, unemployed job seekers, and insecurely housed residents living in Tiny Home Villages. *The description for this action has been updated from the initial IFA Seattle Report.
Action 2.7	Phase 2	**Status:** Ongoing **2021 Update**: The Seattle Public Library (SPL) increased the number of available hotspots for 2021, with the addition prioritized to organizations and programs services serving BIPOC residents, insecurely housed, survivors of domestic violence, students, and families. SPL now has 1,335 hotspots with 925 in general circulation for residents and 410 going for the targeted digital inclusion programs, which currently includes 50 for students at the World School, 35 for students being served by the City Parks and Recreation Teen Hub program, and 325 to other community organizations (including Somali Safety Task Force, Sacred Heart Shelter, API Chaya and others).
Action 2.8	Phase 2	**Explore new models to distribute hotspot devices through partnership with BIPOC organizations.** Building off the success of the SPL hotspot program, explore partnership opportunities with other City departments and non-City organizations who could loan hotspot devices to BIPOC communities.
Action 2.8	Phase 2	**Status**: Ongoing. **2021 Update**: Office of Economic Development (OED) provided 174 hotspots to Digital Bridge participants with 1-year prepaid subscription. See Action 3.3 for more information.
Action 2.9	Phase 2 and Phase 3	**Upgrade Wi-Fi access points in Seattle Parks & Recreation Community Centers.** Complete upgrade of all SPR Community Center Wi-Fi systems. Expand coverage area with exterior Wi-Fi Access Points.
Action 2.9	Phase 2 and Phase 3	**Status**: Ongoing **2021 Update**: • Seattle IT and Seattle Parks and Recreation (SPR) upgraded Wi-Fi service to those community centers that were opened for childcare and Teen Hubs. Seattle IT boosted

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
		the bandwidth provision to ensure sufficient capacity for these programs to operate. • Planning is underway on external Wi-Fi at Magnuson Community Center and on both internal and external Wi-Fi upgrades at Langston Hughes. The technical site survey of Magnuson has been completed. Both of these locations will require Landmarks approval for attaching any external equipment.
Action 2.10	Phase 2	**Work with Seattle Public Schools to examine feasibility of expanding Wi-Fi system to the exterior in safe public use locations.** Interior Wi-Fi is currently restricted to staff and students with SPS logins. SPS was able to boost interior Wi-Fi access point radio signals to provide some expanded coverage near entryways at select schools but would need to add exterior access points to significantly expand coverage to outdoor areas.
Action 2.10	Phase 2	**Status**: Closed (advisory only). Seattle Public Schools (SPS) is continuing to provide the current Wi-Fi for students and staff. There is no current SPS funding for expansion and operating costs. SPS is interested in continuing to participate in broader planning and collaboration on connectivity.
Action 2.11	Phase 2	**Support a Seattle Community Cellular Network.** Explore and support the development of a Community Cellular Network, which uses cellular (LTE) technologies in the recently opened Citizens' Band Radio Service (CBRS) spectrum. A nonprofit, the Local Connectivity Lab (LCL), and the University of Washington are currently implementing the Seattle Community Cellular Network to share free or low-cost broadband access in higher-need areas throughout the city.
Action 2.11	Phase 2	**Status**: Ongoing **2021 Update**: In November 2020, the LCL received a $50,000 King County Digital Equity grant to deploy Community Cellular Network (CCN) sites. The first site deployed in Seattle is located at the Filipino Community Service Center building in the Rainer Valley (57th & Martin Luther King Jr Way S). LCL is actively working with other Seattle community organizations to explore other viable CCN sites.
Action 2.12	Phase 2	**Explore public agency partnerships to expand Wi-Fi coverage in digital equity zones.** Explore partnerships with other public agencies to add public Wi-Fi. Work with the UW, area universities and colleges, Port of Seattle, and others to expand the availability of public Wi-Fi around public facilities (e.g. Wi-Fi at all transit stops). Ask the federal Government Services Administration to open public Wi-Fi at the Beacon Hill Veterans Administration and other federal facilities. **Develop proposal to strategically deploy more public Wi-Fi in digital equity zones.** Digital Equity locations identified in the City's 2017 Public Wi-Fi Study and 2018 Technology Access and Adoption Study include Yesler Terrace, High Point, South Park, Rainier Vista,

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
		Othello, Rainier Beach, Lake City, SW Roxbury Street Corridor, 23rd Avenue Corridor, New Holly, and International District. These digital equity locations are deemed important to improving access to the internet for lower-income residents and were informed by findings from the 2015 Digital Equity Action Committee, Technology Access and Adoption Study, and consultation with the Mayor's Office of Policy and Innovation, Human Services Department, and the Seattle Housing Authority. Information gathered from the "Seattle Digital Equity Atlas" will guide and refine the digital equity zone locations. Project planning has not occurred, and funding would need to be secured. There may be infrastructure in place that could be leveraged to deploy Wi-Fi in high need areas.
Action 2.12	Phase 2	**Status**: Ongoing. Items 2.12 and 2.15 in the first Internet for All Report are consolidated based on additional staff feedback with a related overall purpose in both action items. Action 2.15 below is now considered closed and will be tracked as part of Action 2.12. **2021 Update**: • Free and low-cost connectivity options have been expanded in targeted areas through Comcast's installation of Lift Zones at El Centro de la Raza (Beacon Hill), YWCA White Center (South Delridge) and YWCA Willows (NewHolly). Comcast continues work to deploy a 4th Lift Zone in Seattle, at the University Heights Center (U-District). Comcast Lift Zones provide free Wi-Fi in facilities identified to help students get online, participate in distance learning, and do their schoolwork. Along with free internet connectivity, Lift Zones provide access to hundreds of hours of educational and digital skills content to help families and site coordinators navigate online learning and are designed to serve as places where students and families can get online and access the resources they need. • Seattle Public Schools made a significant increase in Wi-Fi bandwidth to prepare for schools to reopen with the greater number of student devices. SPS had approximately 6,000 1:1 devices before COVID-19, and now has about 53,000 1:1 devices for students. To provide sufficient Wi-Fi for student needs, Seattle Schools: 1) upgraded internet circuit capacity from 10 Gbps to 100 Gbps for the whole district; 2) are upgrading Wi-Fi in middle schools and high schools in the next 6 months; and 3) are upgrading the networking between the schools and the district HQ to multiple 100 Gbps rings. There is currently no increased focused on improving outdoor coverage on school campuses; their central focus remains 100% indoor coverage for the Wireless Local Area Network (WLAN). However, SPS continues to be interested in broader solutions. • Seattle IT, SCL, and SDOT collaborated to review where planned infrastructure projects overlap in digital equity zones to help identify areas that lend themselves to pursuing public-private partnerships to promote buildout for more connectivity options. Work is on-going into Q2.

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
Action 2.13	Phase 2	**Explore mobile public Wi-Fi buses or vans in strategic locations at strategic times.** Add mobile hotspots to buses or vans. Include tech support and workshops in coordination with training partners. Seattle Goodwill is currently standing up a similar program using vans and connectivity from T-Mobile. This action could also support internet access for the unhoused community through mobile service vans that go to encampments. Consider adding mobile hotspot capacity to FAS's existing Mobile Customer Service Center van and deploy van to strategic locations in need of Wi-Fi capacity (e.g., unhoused community encampments).
Action 2.13	Phase 2	**Status**: As a Phase 2 action, this item is planned for future exploration.
Action 2.14	Phase 2	**Examine expansion of HSD Social Connectivity tablet distribution pilot to include Wi-Fi hotspots.** Install Wi-Fi hotpots in senior housing facilities to provide building-wide Wi-Fi access for residents. This expands HSD's Social Connectivity project currently underway to distribute tablets to isolated older adults.
Action 2.14	Phase 2	**Status**: Ongoing **2021 Update**: The City Council budget process dedicated $50,000 for HSD to purchase hotspots with 1-year service to be managed by SPL through HSD Social Connectivity project. 138 T-Mobile hotspots were purchased in 2020 with distribution focused in 2021.
Action 2.15	Phase 2 & 3	**Develop proposal to strategically deploy more public Wi-Fi in digital equity zones.** Digital Equity locations identified in the City's 2017 Public Wi-Fi Study and 2018 Technology Access and Adoption Study include Yesler Terrace, High Point, South Park, Rainier Vista, Othello, Rainier Beach, Lake City, SW Roxbury Street Corridor, 23rd Avenue Corridor, New Holly, and International District. These digital equity locations are deemed important to improving access to the internet for lower-income residents and were informed by findings from the 2015 Digital Equity Action Committee, Technology Access and Adoption Study, and consultation with the Mayor's Office of Policy and Innovation, Human Services Department, and the Seattle Housing Authority. Information gathered from the "Seattle Digital Equity Atlas" will guide and refine the digital equity zone locations. Project planning has not occurred, and funding would need to be secured. There may be infrastructure in place that could be leveraged to deploy Wi-Fi in high need areas.
Action 2.15	Phase 2 & 3	**Status**: Closed. Internet for All Report Items 2.12 and 2.15 are consolidated based on additional staff feedback with a related overall purpose in both action items. Action 2.15 is now considered closed and will be tracked as part of Action 2.12.
Action	Phase	**Explore a digital version of the Adopt-A-Highway program to fund publicly available Wi-Fi.**

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
2.16	3	The City could consider the innovative approach of creating a digital version of the long-standing, widely supported Adopt-A-Highway program to fund publicly available Wi-Fi. This option could allow for the City to incur costs for initial infrastructure build-out and seek private sponsorship to cover ongoing costs related to operations, support, and service. The Wi-Fi guest screen could possibly include advertisement. Research feasibility of sponsored Wi-Fi to develop and sustain availability. Explore increasing public Wi-Fi at low or no cost to the City through models that are supported by advertising and other revenue-generating streams. The City needs to examine the business feasibility and public policy implications of these models and engage the community to determine how these approaches would work in Seattle.
Action 2.16	Phase 3	**Status**: As a Phase 3 action, this item is planned for future exploration.
Action 2.17	Phase 3	**Explore development of sponsored internet kiosk program.** The public can access the Wi-Fi signal from a kiosk up to 150 feet away and will just need to sign on to the hotspot network. Internet kiosks can provide speeds up to 300 Mbps and support hundreds of Wi-Fi users at a time. The kiosks would each need to have a fiber connection and be equipped with Hotspot 2.0, allowing users with Hotspot 2.0 enabled devices to automatically connect to nearby hotspots and enjoy automatically encrypted browsing. (Case study: New York City's LinkNYC hotspot kiosks) Explore possible partnerships with other public agencies.
Action 2.17	Phase 3	**Status**: As a Phase 3 action, this item is planned for future exploration.
Action 2.18	Phase 3	**Foster development of discounted wireless data service products that utilize mobile infrastructure.** Approach cellular service providers to develop low-income data service plans that offer similar service levels and price to low-cost wireline service programs (e.g., *Internet Essentials*, *Simply Internet*).
Action 2.18	Phase 3	**Status**: Item 2.18 consolidated with item 5.2 based on additional staff feedback with a shared overall purpose in the action items. Action 2.18 is now considered closed and will be tracked as part of Action 5.2.
Action 2.19	Phase 3	**Explore feasibility of providing City fiber backhaul to strategic low-income housing locations to support free or low-priced fixed wireless internet service to residents.**
Action 2.19	Phase 3	**Status**: As a Phase 3 action, this item is planned for future exploration.
Action	Phase	**Support a model for low-income housing buildings to provide an activated high-speed**

Strategy 2. Expand free or low-cost connectivity options in targeted areas of the city.		
2.20	3	**internet service connection to all units.** Explore the provision of an active high-speed internet service connection to all residential units in Seattle Housing Authority and other low-income multi-family housing buildings and support efforts to allow federal funding to cover the costs of implementation and provision of service. Target service levels to meet *future* broadband needs (i.e., min 100 Mbps). This model would eliminate barriers vulnerable populations face in navigating registration for ISP service programs, meeting eligibility criteria for low-cost programs, and paying monthly ISP bills. It would also allow for bulk pricing to support higher speeds offered for lower overall prices.
Action 2.20	Phase 3	**Status**: While this is a Phase 3 action item, the following efforts have occurred since the initial Internet for All Report. **2021 Update**: Seattle Housing Authority (SHA) hired their first Digital Equity Coordinator. This Coordinator and the SHA Digital Equity Subgroup will be working with the City to explore future internet service options and advocating for Federal policy changes to enable lower cost options. Seattle IT met with Bellwether Housing to explore how they can provide free, in-unit internet to residents as a way of narrowing the tech-inequity and connectivity access disparities.

Strategy 3. Partner with organizations to deliver culturally relevant digital inclusion programs.		
Action 3.1	Phase 1	**Develop a citywide asset map/directory of community-based organizations delivering digital equity programs.** Partner with DON, OED, OIRA, ITD, DEEL, ARTS, HSD, SPR, SPL to develop inventory.
Action 3.1	Phase 1	**Status**: Action 3.1 is now considered complete and closed. **2021 Update**: The Office of Immigrant and Refugee Affairs (OIRA) developed an initial version of the asset map. The map includes community-based organizations that provide basic digital literacy programming.
Action 3.2	Phase 1	**Support community-driven internet adoption solutions through open, competitive grant programs.** Identify and support innovative, community-led digital inclusion projects through the Technology Matching Fund and other grant programs. Leverage this process to broker support from other partners. Adapt City grant guidelines to issue rapid response grants that serve priority populations and allow digital equity expenditures.
Action 3.2	Phase 1	**Status**: Ongoing

		2021 Update: The 2021 **Technology Matching Fund** cycle has concluded with 15 projects recommended for funding. The City's budget of $320,000 will be matched with a projected $480,795 in community resources. The projects will reach over 2,130 residents throughout the City in historically underserved and underrepresented BIPOC communities: • Seven will focus on limited English proficient immigrant and refugee communities; • Five will provide a lending library of devices to meeting community needs; • Five will primarily serve older adults; • Four will primarily serve youth and young adults; and • Three projects will provide services in coordination with low-income/transitional housing programs. Additionally, this year's grants address many of the challenges of working within the confines of the COVID-19 pandemic. • Most are looking at creative solutions for transitioning back to in-person instruction, while continuing to provide hybrid options. • Hardware purchases are varied with some being distributed to students as loaners and to keep. The cycle, which generated 55 applications from community members and community-based organizations representing all City Council districts, totaled $1.28 million in requests. Verizon Foundation has committed to fund an additional project ($25,000).
Action 3.3	Phase 1	**Continue effective, scalable programs that address adoption barriers beyond internet access, such as digital literacy and devices.**
Action 3.3	Phase 1	**Status**: Ongoing **2021 Update**: *The following updates on services delivered exemplify some of the effective work that integrates City and community resources to deliver integrated, effective programs. **Digital Bridge workforce pilot** for job seekers and workforce training partners led by the Office of Economic Development (OED), Seattle IT and Seattle Jobs Initiative (SJI) has concluded. An outcome and process evaluation along with recommendations for scaling the program to reach more residents will be completed in Q2-3. In addition to SJI's investment, $200,000 in initial funding was provided by OED with an additional $50,000 for laptops from Comcast and $18,699 for evaluation from the University of Washington Population Health Initiative's COVID-19 Economic Recovery Research Grant program. Comcast is providing $30,000 for continued funding in 2021 for the Digital Bridge project. Forty-eight percent of participants did not have any regular access to the internet except for free Wi-Fi. • 193 low-income job seekers received refurbished Windows laptops with Microsoft Office suite. • 174 participants received Mobile Citizen hotspots. • 175 Northstar digital literacy assessments completed.

		• Additional funding came from UW Center for Population Studies pandemic response research funds. **The Ready to Work Program** assisted 109 low-income immigrants and refugees wanting to improve their English and digital literacy skills to find a job or get a better job. The program managed by the Office of Immigrant and Refugee Affairs (OIRA) provided 1,728 hours of training with many students taking multiple units. Partners included Asian Counseling and Referral Service, Rainier Beach Library, Neighborhood House at High Point, and Literacy Source. **Aging and Disability Services of Seattle & King County (ADS)** entered into a Social Connections partnership with the Washington State University King County Extension where student volunteers assisted 15 older adults in the use of their own internet-connected devices to support social connectivity during COVID-19. Through a grant from the UW - Northwest Geriatric Workforce Enhancement Center, ADS also distributed 19 tablets to older adults who need them to maintain social connectivity and connect with telehealth resources. ADS is now working to distribute Wi-Fi hotspots for older adults. The **Seattle Youth & Families Services' Youth Employment Program (SYEP)** pivoted services to provide a Summer Virtual Job Readiness program to 200 16-to-24-year-old participants and then launched the School Year YEP Program. To assist those in need, they set-up 24 laptops to loan out. This program is provided through the City's Human Services Department (HSD). The **Y Social Impact Center YTech Digital Pathways** program, managed by Seattle IT, provided 157 hours of digital skills and job training for 95 insecurely housed 16-to-24-year-old program participants. Eight Seattle Housing Authority students completing an introductory coding class offered by the Y the Horn of Africa Services Seattle Youth Employment Job Resource Training (SYEP JRT) received laptops. Horn of Africa Services provided 14 students with 100 hours of training through this partnership. **Black Girls Code.** Seattle IT is exploring a partnership with Microsoft to host workshops for students with Black Girls Code. **The Seattle Public Library's Your Next Job program** provided 265 job seeking residents with (1) online information literacy, (2) basic digital literacy, and (3) language support for navigating online employment resources. 23 of these patrons self-identified as beginner-level digital literacy. 22 of the patrons who identified as beginners requested in-language services. The in-language service and materials were made available and distributed in Amharic, Arabic, Chinese, Korean, Oromo, Somali, Spanish, Russian, and Vietnamese. SPL is creating basic digital literacy videos in-language to assist Your Next Job participants with accessing online resources, including getting a library card and searching for online in-language content. A **Digital Skills Steering Committee** convened to develop a standardized approach to assessing digital skills across workforce development institutions locally. The Committee is led by the Office of Economic Development with Seattle IT, Seattle Colleges, Seattle Jobs Initiative, University of Washington Information School, Literacy Source, WA State DSHS, Office of Immigrant & Refugee Affairs, and Seattle Goodwill. The Committee completed development of a skills checklist for use with intake in employment training programs. The Office of Economic Development is working with Port Jobs and with Project Hire to incorporate the checklist.

Action 3.4	Phase 2	**Support digital navigators through a train-the-trainer model to provide 1:1 device, connectivity, and technology support.** Often those most in need of tech assistance have barriers that are best addressed with 1:1 support by trusted community members or someone they are already interacting with. Hotlines are useful, but often not accessed by those most in need of support (language barriers, etc.). Utilizing a train-the-trainer model could more effectively bring language-accessible assistance by digital navigators directly to the community.
Action 3.4	Phase 2	**Status**: Ongoing **2021 Update**: • Multimedia Resources & Training Institute (MMRTI) launched a family Digital Navigator Program in Q4-2020, funded through a partnership between Seattle Housing Authority and Seattle IT. The program assisted 63 residents in 7 languages from the Yesler public housing community with digital skills training and technical support. • Department of Neighborhoods (DON) completed a pilot in 2020 to build Digital Navigation skills for Community Liaisons in storytelling and video production. The Community Liaisons produced short videos to highlight community stories and the digital divide.

Strategy 4. Pursue private sector and philanthropic support.		
Action 4.1	Phase 1	**Evaluate ways to increase the supply of refurbished devices to low-income residents.** Promote donations of refurbished computers for low-income residents. Develop agreements with local nonprofit refurbishers, such as InterConnection and Friendly Earth, to provide free or low-cost equipment to low-income residents. Leverage the City's Surplus Computer Program managed by FAS and HSD.
Action 4.1	Phase 1	**Status**: Ongoing **2021 Update**: • Seattle IT met with Seattle Goodwill and Friendly Earth to outline a plan of promoting laptop donations designated for refurbishment. Laptops received at their Puget Sound region Goodwill donation sites would be picked up by Friendly Earth, refurbished and distributed to their workforce training students. Both organizations are evaluating their infrastructure needs and staffing capacity. • Seattle IT met with Mason America; a Seattle-based mobile infrastructure start-up interested in providing devices to support digital equity efforts in Seattle. Discussed an opportunity for Mason America to partner with the UW Local Connectivity Lab for their Community Cellular Network pilot. • As noted in Action 3.3, the Digital Bridge workforce pilot, through a $50,000 grant

		from Comcast to InterConnection, provided for 193 refurbished laptops to low-income residents enrolled in their job training and placement programs. InterConnection provided the laptops with one-year warranties and loaded with Microsoft Office suite applications.
Action 4.2	Phase 1	**Support promotion of donations from the City's COVID-19 donation webpage to solicit support for internet adoption.**
Action 4.2	Phase 1	**Status:** Completed **2021 Update**: • Information and links to partner donation sites added to "I Want to Donate/Volunteer" on http://www.seattle.gov/mayor/covid-19#iwanttodonatevolunteer.
Action 4.3	Phase 2	**Explore all opportunities to facilitate donations, sponsorships, and financial support from external partners (public/private).** **Updated 4.3 Action Plan heading to describe consolidated items.* **Partner with a nonprofit organization or foundation to manage an "Internet for All fund".** Develop a process for the City to accept money and donations for digital equity projects. Explore partnership with United Way of King County to create a model like the Cleveland Foundation's Digital Excellence Initiative. Create a "Round Up for Digital Equity" program to solicit donations at checkout in grocery stores. **Develop a device and internet hotspot sponsorship program.** Explore partnership opportunities to fund donations of devices and internet service to be distributed to individuals through community-based organizations. Target donations to low-income areas. Scale donations to sponsor entire buildings. **Partner with corporate and philanthropic donors to secure support for Internet for All.** **Sponsor hotpots to high priority populations.** Advocate that ISPs provide Utility Discount Program customers with internet hotspot devices.
Action 4.3	Phase 2	**Status**: Items 4.3, 4.4, 4.6, and 7.3 in the first Internet for All Report are consolidated based on additional staff feedback with a related overall purpose in the action items. **2021 Update**: • Seattle IT reached a partnership agreement with Lumen (formerly CenturyLink) to join the City's *Access for All* (AFA) program and provide 20 complimentary Gigabit internet service connections to non-profit organizations that provide technology and/or digital literacy services to underserved or low-income, vulnerable populations (also see Action 7.4). • King County launched a Digital Equity Grant program with CARES funding to support the work of schools and community-based organizations serving historically disadvantaged communities, BIPOC, seniors, newly unemployed, disabled, and ESL residents. Grants totaling $1.2 million went to 21 organizations; over $800,000 went

		to 14 Seattle organizations. $1 million went to K12 Roadmap Schools, which includes South Seattle with Seattle Public Schools receiving $76,410. The funds helped launch a new multilingual technical support line called TechConnect Washington. The support line is a project of the Equity in Education Coalition (EEC), who was also a recipient, in partnership with YearUp Pro and with additional support from Facebook. • Seattle IT staff is working with King County as they prepare a new broadband and digital equity plan to be released in 2021. King County is interested in continuing collaboration for an update of the Technology Access and Adoption residential needs and opportunities research. • The *All in Washington* coalition launched a Digital Equity Initiative fundraising campaign in September focused on supporting student needs through school districts across the state. Seattle Public Schools has received $75,560 to date and the surrounding districts of Highline and Renton have received a total of $192,940. InvestED is providing the intermediary work with school districts. Donors to the fund can make statewide contributions to the digital equity support or specify the school district they want to support.
Action 4.4	Phase 2	**Develop a device and internet hotspot sponsorship program.** Explore partnership opportunities to fund donations of devices and internet service to be distributed to individuals through community-based organizations. Target donations to low-income areas. Scale donations to sponsor entire buildings.
Action 4.4	Phase 2	**Status**: Item 4.4 consolidated with 4.3 in the first Internet for All Report based on additional staff feedback with a shared overall purpose in the action items. Action 4.4 is now considered closed and will be tracked as part of Action 4.3.
Action 4.5	Phase 2	**Explore partnership with local banks to direct Community Reinvestment Act (CRA) support toward broadband.** Explore partnership with local banks that have Community Reinvestment Act (CRA) obligations to direct investments toward internet adoption in prioritized areas. Broadband projects are eligible to receive CRA funding.
Action 4.5	Phase 2	**Status**: This Phase 2 action item is an item under consideration based on available opportunities.
Action 4.6	Phase 2	**Partner with corporate and philanthropic donors to secure support for Internet for All.**
Action 4.6	Phase 2	**Status**: Item 4.6 consolidated with 4.3 in the first Internet for All Report based on additional staff feedback with a shared overall purpose in the action items. Action 4.6 is now considered closed and will be tracked as part of Action 4.3.

Strategy 5. Champion legislation/policies to advance universal internet adoption.		
Action 5.1	Phase 1	**Review implementation of the "Project and Construction Coordination" policy to evaluate installation of conduit/fiber for projects in the right-of-way management system.** Review projects for inclusion of conduit and fiber to provide more access to communications-enabling infrastructure. *This is Seattle's "Dig Once" policy. Link to the coordination requirements and Seattle Municipal Code 15.32.050.
Action 5.1	Phase 1	**Status**: Ongoing **2021 Update:** On November 9, 2020, SDOT moved to the Accela permitting platform, which is accessible through the Seattle Services Portal (SSP), making SDOT's permitting and inspections processes more consistent, predictable, and transparent for users. Since SDOT issues many different permits with varied requirements in the Street Use division, SDOT moved to Accela in phases over the last two years. The move on November 9 was the final migration for SDOT. The new Accela system has the ability to collect more comprehensive information including data for conduit installation and the SDOT right-of-way management system (dot_Maps) will provide data on where fiber/conduit is being installed that may inform the policy and strategy that SDOT and Seattle IT are collaborating on to promote the inclusion of conduit and fiber through the "Project and Construction Coordination (SMC 15.32.050)" policy. As of November 11, 2020, 371 permits or 3% of all total permits included Communication/Fiber as part of the utility information section on the permit in the Accela permitting system.
Action 5.2	Phase 1	**Advocate for state and federal Digital Equity Act and similar legislation that will provide funding and support for state and local digital inclusion action.** Collaborate with key advocates, including other local government CIO's, broadband and digital inclusion leaders, National League of Cities, National Digital Inclusion Alliance, U.S. Conference of Mayors, the City's Boards and Commissions, and representatives of BIPOC, AARP, consumer, and similar organizations. **Foster development of discounted wireless data service products that utilize mobile infrastructure.**
Action 5.2	Phase 1	**Status**: Ongoing. Item 2.18 in the first Internet for All Report consolidated with item 5.2 based on additional staff feedback with a shared overall purpose in the action items. **2021 Update**: Federal: **FCC Federal Emergency Broadband Benefit program**: Seattle IT led the effort to develop and submit comments to the Federal Communications Commission (FCC) regarding implementation of the $3.2 billion Emergency Broadband Benefit (EBB) Program, with Seattle

		Public Schools District, Seattle Housing Authority, and the Washington State Broadband Office joining us as co-parties in the filing. The FCC's adopted Report and Order for the EBB program cited our recommendations numerous times. Seattle IT also contributed to FCC comments filed by the National Digital Inclusion Alliance (NDIA) and Next Century Cities (NCC) and was cited by NCC in their reply comments. Seattle IT is continuing to track the program rollout and is planning outreach, in partnership with the WA Broadband Office, Governor's office, Equity in Education Coalition, WSU Program for Digital Initiatives, and NDIA, to ensure a broad and effective awareness effort for eligible residents to utilize the benefit. **Continuing COVID-19 Relief and proposed Infrastructure bill:** Seattle IT provided comments to the City's federal delegation, through the Office of Intergovernmental Relations, on elements of the proposed federal infrastructure bill that could benefit broadband development and digital equity, including a digital equity grant program that the State, City and community institutions could be eligible for. Some of the infrastructure proposal builds on the Digital Equity Act proposed by Sen. Murray. Seattle IT is monitoring passed and proposed COVID-19 relief bills where digital inclusion funding is direct or work is an allowable expense. For instance, Treasury recently released an FAQ that internet is an eligible expense in emergency rent relief. The American Rescue Plan Act provides reimbursement for school and library hotspots. Seattle IT will continue to work with the federal agencies as their programs roll out and our advocacy partners, including NATOA, NDIA, SHLB and Next Century Cities. State: Seattle IT's work with the Washington State Internet Access Crisis Team (I-ACT), composed of broad BIPOC organizations, educators, legislators, Governor's Office and the Department of Commerce helped result in a new Connect Washington Coalition and having the Governor's budget include a $6.2 million proposal for digital navigators, a state digital equity data dashboard, and increased funding for digital inclusion in the State Broadband Office. We also contributed to HB1460, which proposed a state lifeline broadband program and digital equity grants for which the City and our local partners could be eligible. Seattle IT and the Office of Intergovernmental Relations has monitored and tracked proposed broadband and digital equity bills concerning infrastructure expansion, internet and computers for students, support for digital skills development, and the right/capacity to repair computer equipment. Seattle IT advocated to protect and ensure the City's local authority over rights-of-way impacts from small cell deployments, and the ability to secure local digital inclusion public benefits, consumer protection, and permitting control. Seattle IT's collaborators on the state policy and legislation includes the Association of Washington Cities, Connect Washington, the King County Digital Equity Learning Network (DELN), Washington Nonprofits, Washington Association of Telecommunications Officers and Advisors (WATOA), and the Association of Washington Housing Authorities.

Action 5.3	Phase 3	**Explore methods to address inadequate broadband connectivity in older apartment and condo buildings, due to insufficient internal telecom infrastructure, building upon the City's B4B-*Build for Broadband* initiative to foster competitive, high-speed broadband in multi-dwelling units buildings.**
Action 5.3	Phase 3	**Status**: While this is a Phase 3 action item, the following efforts have occurred since the initial Internet for All Report. **2021 Update**: Seattle IT explored the use of G.Fast and G.hn technologies to provide high speed internet over existing copper wiring. These solutions could potentially address slow speed offerings in older, multiple dwelling unit (MDU) buildings.
Action 5.4	Phase 3	**Explore a policy requiring internet access in all new affordable housing investments.** Develop a policy requiring and incentivizing buildings funded with affordable housing dollars to include internet access to each unit, particularly in high displacement areas or areas with low access to internet.
Action 5.4	Phase 3	**Status**: As a Phase 3 action, this item is in the process of being explored.

Strategy 6. Strengthen regional collaboration by forming an "Internet for All" Coalition.		
Action 6.1	Phase 1	**Establish an Internet for All Coalition to help advance the Action Plan.** The coalition will meet regularly to examine partnership opportunities, receive feedback, and discuss progress on the strategies and actions. The coalition will be comprised of members from Seattle IT, City departments, City Council, Seattle Public Schools, Community Technology Advisory Board, community-based organizations, technology companies, public agencies, and telecommunication companies. The group will meet regularly for the first year from September 2020 to September 2021 and reevaluated thereafter.
Action 6.1	Phase 1	**Status**: Item 6.1 is now considered closed. **2021 Update**: Upon further examination, additional staff feedback, and consultation with Council Staff, the purpose of the Internet for All Coalition will be supported through existing Digital Equity Groups, including: 1) Internet for All Working Group comprised of City of Seattle stakeholders; 2) Community Technology Advisory Board (City of Seattle); 3) Digital Equity Learning Network of Seattle & King County (City/County); 4) Connect Washington Coalition (State); and 5) National Digital Inclusion Alliance (National).

		Seattle IT's Community Technology and Broadband Team are digital equity leaders and active participants in the five major Digital Equity groups. The updated approach and strategy upholds the initial concept of the Internet for All Coalition and aligns with takeaways from the October 28, 2020 NDIA Webinar on Coalitions: • Coalition brings groups together to brainstorm the best way to accomplish a goal, identify opportunities, common strategies, and prioritization to get the word out about what is being done, and then how to tackle that job together. Additionally, a coalition serves as a communication network allowing coalition members to share as much information as possible, which is the best approach right now.
Action 6.2	Phase 3	**Review opportunities to coordinate with other public entities on long-term wired and wireless infrastructure expansion.** This may include Port of Seattle, Seattle Public Schools, Sound Transit, University of Washington, and other public agencies.
Action 6.2	Phase 3	**Status**: While this is a Phase 3 action item, the following developments have occurred since the initial Internet for All Report. **2021 Update**: • The Governor's budget includes funding for expansion of broadband planning and Seattle IT expects this may be an opportunity to review and develop opportunities as the State staffs up and begin this work. Seattle IT participates in regular meetings with the Director of the State Broadband Office. • King County is developing a broadband and digital equity plan, expected to be released in Q2-2021. They consulted with Seattle IT in its development, and we expect more specific work following its release. We have already exchanged information on the Community Cellular Network project as we work towards pilot sites.

Strategy 7. Advocate to ensure Internet Service Provider offerings meet residents' needs.		
Action 7.1	Phase 1	**Request aggregated enrollment data for low-cost internet programs.** The enrollment data will provide key metrics for the IFA evaluation dashboard. The low-income internet sign-up data would be represented in its aggregated form by census tract. The City is not requesting raw data that could cause concerns related to privacy, or proprietary and competitive information. The data could go through an intermediary organization. We are proposing to develop a GIS dashboard displaying recent internet subscription data from the American Community Survey and other tech surveys. Coupled with internet sign-up data for census tract areas with a high internet adoption disparity, the dashboard would allow the City and its partners to effectively monitor implementation.

Action 7.1	Phase 1	**Status**: Ongoing **2021 Update**: • Comcast reports adding approximately 7,000 Seattle households to the *Internet Essentials* program during 2020. As of year-end 2020, they report a cumulative *Internet Essentials* subscriber level of 16,000 Seattle subscribers and a Washington statewide subscribe level of approximately 140,000 households. • Wave reports adding approximately 305 households in Seattle to the *Simply Internet* program and 71 to the *Internet First* programs during 2020. As of year-end 2020, Wave reports a cumulative *Simply Internet* subscriber level of 759 Seattle households. There are also the 71 households on *Internet First* which was launched as a national program in 2020 to address pandemic related needs. For Seattle, Wave will continue to support *Simply Internet* as the permanent low-cost program for low-income residents.
Action 7.2	Phase 1	**Request to extend and improve ISP COVID-19 mitigations.** Examples include: • Extend Comcast's no-cost Internet Essentials beyond first 60 days. • Extend use of Verizon and AT&T wireless phones as hotspots. • Continue and expand free Wi-Fi access in low-income neighborhoods. • Waive 90-day waiting period for low-income eligible households. If household is eligible, immediately shift over to low-income pricing to align to need. • Increase speed level on the low-income price tier from 25 Mbps to 50-100 Mbps. • Continue free use of phones for hotspots on wireless service. • Foster development of wireless low-income programs.
Action 7.2	Phase 1	**Status**: Ongoing **2021 Update**: • Comcast extended through June 30, 2021 its offer to provide new Internet Essentials eligible customers with the first 60 days of free service. The 60-day free offer was scheduled to end 12/31/2020. The extension was a nationwide policy. • Comcast increased the service levels for the low-cost Internet Essentials program from 25/3 Mbps to 50/5 Mbps. Increase is applied to all current and new program participants starting March 2021. It is a nationwide and permanent program enhancement. • Wave increased the service levels for the low-income internet programs (Simply Internet and Internet First) from 25/3 Mbps to 50/5 Mbps. Wave implemented the change to all current and new program participants starting in Feb 2021. Wave proactively identified a small number of customers needing modem upgrades to receive the higher-level service and shipped them for self-installation.

		• Comcast and Wave confirmed that low-income internet programs offerings do not have data caps. • Seattle IT sent all internet service providers (ISPs) serving Seattle residents (wireline and wireless) information on an FCC opportunity to learn more about participating in the FCC's Emergency Broadband Benefit (EBB) and Lifeline programs, and expressed City's interest in having all Seattle ISPs participate in the programs.
Action 7.3	Phase 1	**Sponsor hotpots to high priority populations.** Advocate that ISPs provide Utility Discount Program customers with internet hotspot devices.
Action 7.3	Phase 1	**Status:** Item 7.3 consolidated with 4.3 in the first Internet for All Report based on additional staff feedback with a shared overall purpose in the action items. Action 7.3 is now considered closed and will be tracked as part of Action 4.3.
Action 7.4	Phase 1	**Enhance the "Access for All" Program benefits.** Appeal to ISPs to increase number of nonprofits eligible each year for the "Access for All" program that provides free high-speed internet service connections to eligible non-profit organizations located in Seattle. Consider expansion and service improvements at existing locations by providing 3rd tier business class service bandwidth, replacing old equipment, and adding Wi-Fi repeaters. Through the partnership and agreements with Comcast and Wave, the City can allot 25 new site connections annually (20 Comcast, 5 Wave). Many "Access for All" sites provide free internet access to their client populations.
Action 7.4	Phase 1	**Status**: Ongoing **2021 Update**: • Lumen (formerly CenturyLink) agreed to join the City's *Access for All* (AFA) program and provide complimentary Gigabit internet service connections to non-profit organizations that provide technology and/or digital literacy services to underserved or low income, vulnerable populations. Lumen has committed to providing the ultra-high capacity connections to 20 sites on its fiber network, with the sites being identified and approved for AFA participation by the City. Seattle IT is working with Lumen to determine the serviceability of some initial sites with a target to have non-profits start being connected by Lumen in April 2021. • Seattle IT assisted AFA participant, the West Seattle Senior Center, with Wi-Fi planning and bandwidth issues. Seattle IT worked with Comcast to have the site service level upgraded and it is now getting the full 200 Mbps bandwidth service. The increased bandwidth supports a pilot project to train volunteers (at the Center) who will then go out into the community to provide devices and training for Seniors who do not have the ability to connect with family, friends, and services. • 2021 applications for new AFA sites are underway. To date, two organizations have been approved and are being scheduled for installation with Wave. One is the Equity

		in Education Coalition (EEC) that educates people on inequities in opportunity, gaps in achievement, and ways to address the inequities that are perpetuated in the education system. The other recipient is the Quantum Martial Arts program that will use the connection to provide free Wi-Fi at its Central District site to support diverse youth program members and low-income families participating in their programs.
Action 7.5	Phase 2	**Promote consumer protections for low-cost programs.** Develop materials to educate and protect consumers enrolled in low-cost programs from raised fees and contract issues. Continue collaboration with national associations to advocate for federal development of consumer protections for internet services.
Action 7.5	Phase 2	**Status: Ongoing**
Action 7.6	Phase 3	**Explore process to auto-enroll people in low-cost programs such as Supplemental Nutrition Assistance Program (SNAP) and other non-City programs serving priority populations.** Provide a mobile app option for enrollment.
Action 7.6	Phase 3	**Status:** As a Phase 3 action, this item is planned for future exploration.

Strategy 8. Examine new technologies to ensure best-in-class internet infrastructure and consumer choices.	
Action 8.1	**Continually monitor other municipalities of comparable sizes to examine the financial feasibility of a municipal fiber-to-the-premise broadband system.**
Action 8.1	**Status:** Since the first Internet for All Report, no new municipal fiber systems in cities of comparable size were reviewed. Monitoring for comparable cases will continue in 2021.
Action 8.2	**Monitor and research use of technologies including Wi-Fi 6, Satellite Internet, 10G Platform, G.Fast, Citizens Broadband Radio Service (CBRS), Microsoft Airband, and WiMax.**
Acton 8.2	**Status:** On-going **2021 Update**: • The FCC took action that made more spectrum available for indoor, unlicensed Wi-Fi operations with the potential to increase capacity at our indoor public Wi-Fi locations. The FCC action has made 45 megahertz immediately available in 5.9 GHz spectrum band for indoor, unlicensed Wi-Fi operations. Most Wi-Fi equipment is expected to be able to take advantage of the spectrum with quick software upgrades. The new spectrum's impact will be further amplified by the fact that it is adjacent to an existing Wi-Fi band, which, when combined with the new spectrum band, will enable wider channels that can be immediately used by Wi-Fi 6 to support gigabit connectivity with lower latency, improved coverage, and better power

	efficiency. • At the end of December 2020, Verizon has launched its Multi-access Edge Computing (MEC). Verizon's MEC (called "the 5G Edge") is in partnership with Amazon Web Services (AWS) to create a type of edge computing that tightly integrates the network and compute resources to guarantee customers latency of between 25 to 50 milliseconds, improving performance and allowing for applications to act in real-time. The platform is expected to support new innovations and be "transformative to many industries, from gaming to content distribution to industrial manufacturing." Verizon says the gains in 5G deployment was a factor in Seattle being one of the first 10 cities to launch and mentions the helpful collaboration with the City of Seattle and Seattle City Light.
Action 8.3	**Examine opportunities to leverage network assets in Seattle City Light, Seattle Public Utilities, and Seattle Department of Transportation's infrastructure as a platform for low-cost wireless broadband delivery.**
Action 8.3	**Status:** On-going **2021 Update**: • Seattle IT engaged the City Fiber Network Advisor in exploratory meetings to discuss the use of City fiber for Internet for All related projects. Meetings have also been conducted with Seattle Public Schools, UW, and King County for exploring possible use of fiber consortium partner resources for Internet for All related projects. As noted in the first Internet for All Seattle Report, over the last 20 years, Seattle brought together a consortium of 20 public entities to construct publicly owned fiber options to connect public facilities in the City and county and share ownership, responsibility, and use of the fiber. The current agreement and setup are not conducive to private sector use of the assets to deliver low-cost wireless broadband. • Seattle IT worked with SCL to review where replacement program poles are in digital equity zones areas and to explore how the pole replacement program might provide an opportunity for wireless deployment partnering in DE Zones. Initial findings are that, due to SCL's need to closely control and coordinate replacement pole efforts in batches, it will be difficult to insert another party into the process on a discontinuous pole need basis.

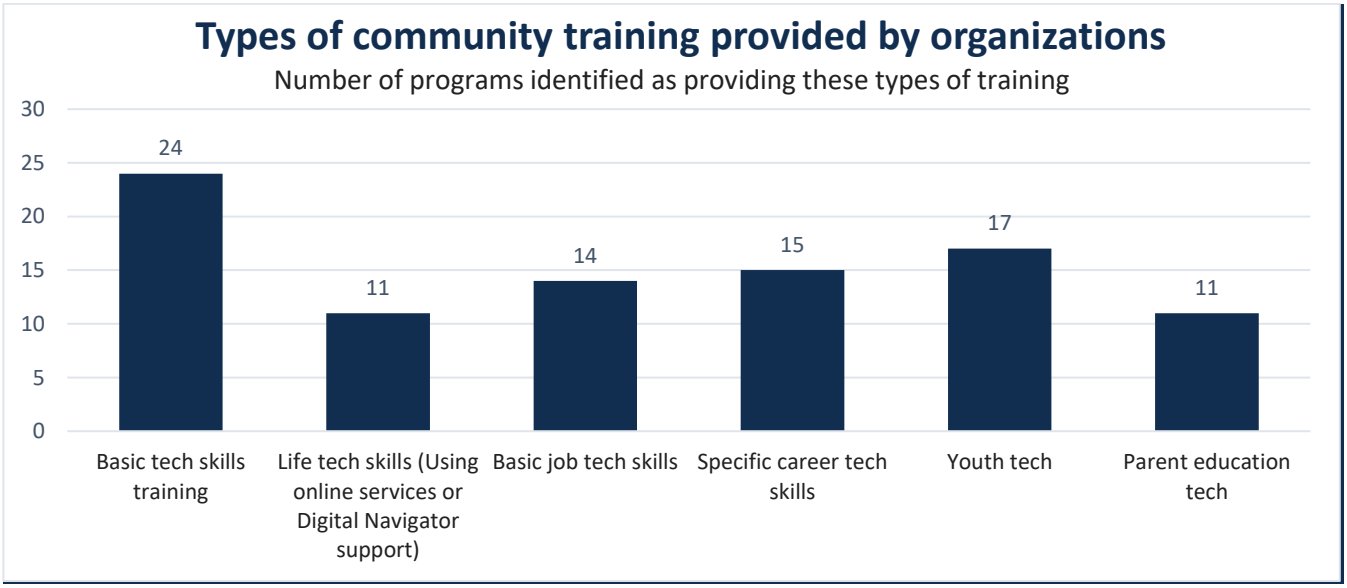
Appendix B: Evaluation – Additional Charts

Data for the Internet for All Seattle update report was provided by the following City departments, organizations, and companies:

City of Seattle
- Seattle IT*
- Office of Immigrant and Refugee Affairs
- Office of Economic Development
- Human Services Department (Youth and Family Empowerment, Aging & Disability Services)
- Department of Neighborhoods
- The Seattle Public Library

Seattle Public Schools
Seattle Housing Authority
Sea.citi
King County IT
Washington State Office of the Superintendent of Public Instruction (OSPI)
Comcast
Wave Broadband
All in Washington /InvestED

* Includes data provided by 13 community organizations funded for digital equity programs in 2019-2020. Other reports also roll-up information from multiple community-based partners & grantees.



Participant Demographics of those receiving digital equity services			
1) Age	**Participants**	**Seattle Schools Programs**	**City supported programs**
Older adults (age 60+)	191	0	191
Adults (age 25-59)	346	0	337
Young adults (18-24)	1633	1531	102
Teens (age 13-17)	13998	13847	134
Pre-teens (age 6-12)	24924	24643	27
Pre-school (age 0-5)	2200	2200	0
Unknown/unreported	1808	311	149
TOTAL:	**45100**		

2) Race/Ethnicity	**Participants**	**SPS Programs**	**City supported programs**
Black, African-American, Other African	7167	6807	360
White	19169	19077	92
Asian, Asian-American	5185	4964	221
Hispanic/Latinx/Spanish Origin	5808	5722	86
American Indian or Alaska Native	185	170	15
Native Hawaiian or Pacific Islander	188	184	4
Middle Eastern or North African	25	0	25
Other race/ethnicity	5328	5297	31
Unknown/unreported	2028	311	89
TOTAL:	**45083**		

3) Gender Identity	**Participants**	**SPS Programs**	**City supported programs**
Male	21934	21702	232
Female	20818	20383	435
Gender non-conforming, genderqueer, transgender, non-binary, other	140	136	4
Unknown/unreported	2191	311	252
TOTAL:	**45083**		

4) Other (if applicable & known)	**Participants**	**SPS Programs**	**City supported programs**
Limited English speaking	5875	5481	302
Immigrant/refugee*	336	0	336
Homeless/housing insecure	1952	1878	74
Disabled	6272	6242	30
Low-income	303	0	303
Unemployed	43	0	43
LGBTQA+	14	0	14

Appendix C: Race and Social Justice Initiative Analysis

Racial Equity Toolkit

Title of policy, initiative, program, budget issue: Internet for All Seattle

Description: On July 27, 2020, the City of Seattle adopted the Internet for All Seattle Resolution (31956), a vision of enabling all Seattle residents to access and adopt broadband internet service that is reliable and affordable. The resolution requested that the Seattle Information Technology Department provide reports and plans, including a gap analysis, lessons learned, and an Internet for All Action Plan to the City Council.

Department: Seattle Information Technology

Contact Name: Delia Burke

Contact Email: delia.burke@seattle.gov

☐ Policy ☒ Initiative ☐ Program ☐ Budget Issue

Step 1. Set Outcomes.

1a. What does your department define as the most important racially equitable community outcomes related to the issue?

In partnership with community, we aim to achieve digital equity so that all residents have the digital access and skills they need to meet their basic needs and be connected.

For Seattle residents furthest from digital equity, the most important racially equitable outcomes from this initiative include:

- Increased internet connections.
- Increased internet hotspots distributed.
- Increased devices distributed.
- Increased digital skills training.
- Increased investments for digital equity.

1b. Which racial equity opportunity area(s) will the issue primarily impact?

☒ Education

☐ Criminal Justice

☐ Community Development

☒ Jobs

☐ Health

☐ Housing

☐ Environment

1c. Are there are impacts on:

☐ Contracting Equity

☐ Workforce Equity

☒ Immigrant and Refugee Access to Services

☒ Inclusive Outreach and Public Engagement

To reach the goal and expedite universal access and adoption centered on communities most impacted, Internet for All strategies are guided by several underlying principles: 1) partner with community-based organizations, 2) provide language access, and 3) ensure the City's digital resources and communications are accessible to all.

Step 2. Involve Stakeholders. Analyze Data.

2a. Are there impacts on geographic areas? ☒ Yes ☐ No

☐ All Seattle neighborhoods

☐ Ballard

☐ North

☒ NE

☒ Central

☐ Lake Union

☒ Southwest

☒ Southeast

☒ Delridge

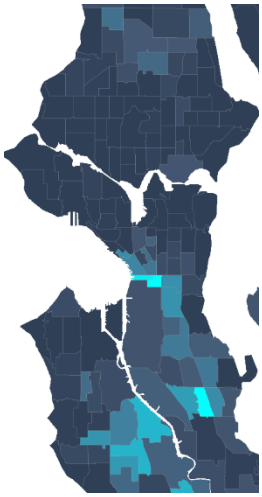
☒ Greater Duwamish

☒ East District

☐ King County

☐ Outside King County

The first Internet for All Seattle Report detailed the internet adoption gap for Seattle residents and outlined short-term actions and long-term solutions to increase internet access and close the gap. By analyzing the City's recent 2018 Technology Access and Adoption Study augmented with Census American Community Survey data, and consistent with findings from similar research from King County, we find that this gap is concentrated geographically in certain areas of the City. IFA's roadmap and action plan strives to close the remaining gap.



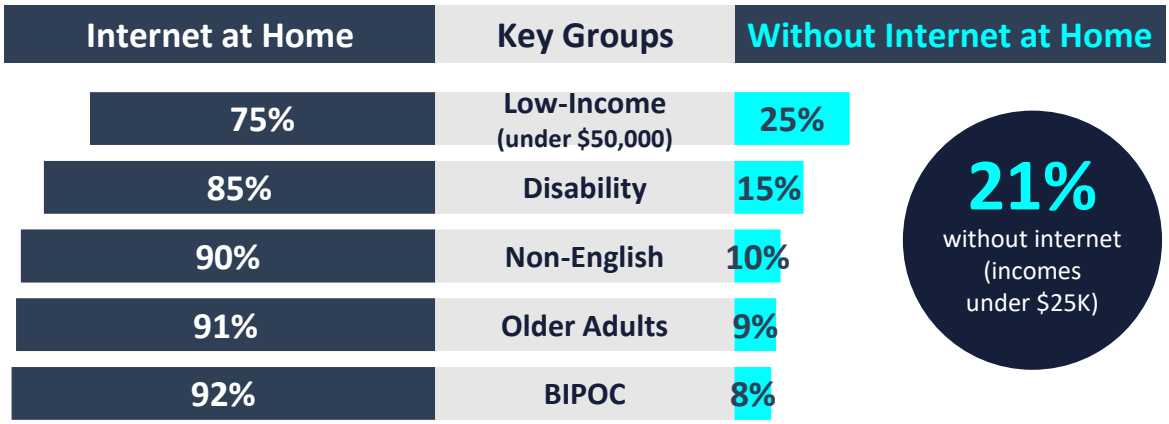
Areas of Central and South Seattle represent the largest portions of the 5% gap in internet adoption:

- South Central Seattle (Pioneer Square, Yesler Terrace, and International District)
- South Seattle (New Holly, Rainier Valley, and Beacon Hill)
- West Seattle (High Point and South Park)
- Areas of downtown
- Lake City

The lighter areas represent a higher proportion of residents without internet in their home.

2b. What are the racial demographics of those living in the area or impacted by the issue?

When the City looks at key demographic groups without internet in their home, we see those who are low-income, household members living with a disAbility, English is not their primary language, those with less formal education, Seattle Housing Authority households, older adults, and BIPOC (Black, Indigenous, and People of Color). COVID-19 has magnified the impact for these key groups and families requiring internet for work and schooling purposes.



A full gap analysis to better understand the gaps in affordable broadband access for Seattle residents can be found on pages 13-28 of the Internet for All Seattle Report.

2c. How have you involved community members and stakeholders?

Seattle IT gathered feedback from multiple stakeholders to understand the needs and strategies to achieve universal internet adoption, including:

- City Departments,
- Internet service providers,
- Seattle Public Schools,
- King County,
- Seattle Housing Authority,
- The Digital Equity Learning Network of Seattle and King County,
- Community Technology Advisory Board,
- Technology Matching Fund grantees, and
- Seattle Music Commission's Youth + Community Committee Digital Equity Cohort.

Other sources of feedback include recent studies and research, including:

- Black Brilliance Research Project,
- ITD/UW Digital Skill Sets for Diverse Users research,
- OED's regional economic development strategy,
- OED/SIT Digital Skills Steering Committee and UW research,

- National Digital Inclusion Alliance best practices,
- Seattle Job Initiative "Essential Employability Skills: Digital Literacy",
- 2018 Technology Access and Adoption Study,
- 2017 Plan for Facilitating Equitable Access to Wireless Broadband Services in Seattle, and
- Seattle Housing Authority resident engagement survey.

2d. What does data and your conversations with stakeholders tell you about existing racial inequities that influence people's lives and should be taken into consideration?

From our data, we learned that race is a key factor in internet adoption. For example, the data shows that:

- 49% of African/African American residents had below average online skills.
- 8% of BIPOC and 10% of limited English proficient residents have access to reliable home internet connections.

Additionally, community stakeholders have shared the following:

- "Many community members have identified that, in addition to access to internet, access to a computer is one of the biggest barriers they face regarding digital equity. While some families might have one computer, this is not sufficient for homeschooling and such when there are several kids in one household and more than one working parent that might also need access to a computer." –Alberto Rodriguez who leads the Duwamish Valley Program

- "I'm happy to see the City adopt the Internet for All resolution because this is a social justice issue," said Cat Howell, Educational Director for Literacy Source, an organization providing free learner-centered basic education to low-income adults in the Seattle area. "We see every day the impact of no or limited internet access on the Literacy Source students' access to education, services, civic participation, employment and many other important parts of our current lives in COVID-19 times."

2e. What are the root causes or factors creating these racial inequities?

There are multiple roots causes creating digital inequity in our systems and institutions, including:

- **Wealth inequity**. Barriers to wealth accumulation, home ownership and wage growth have prevented an equitable sharing of the prosperity in the City of Seattle. This has contributed to a racial wealth gap and as a result, the costs to purchase sufficient Internet is prohibitive to many.
- **Lack of financial resources and social infrastructure for internet and community Wi-Fi.** There is a lack of affordable connectivity options available in BIPOC communities for those who cannot afford home internet service or mobile data plans. The low-cost internet plans may not always be sufficient to meet residents' needs.

Step 3. Determine Benefit and/or Burden.

3. How will the policy, initiative, program, or budget issue increase or decrease racial equity? What are potential unintended consequences? What benefits may result? Are the impacts aligned with your department's community outcomes that were defined in Step I?

The Internet for All initiative will increase racial equity by prioritizing those communities most impacted. By applying a racial equity lens to Internet for All, the City will make gains in removing inequities that continue to manifest in our collective institutions and systems.

Equitable solutions may be most challenging in areas where local government has limited jurisdiction and current influence. Previous work and research in digital inclusion has illuminated that "making it available to all" is not equitable or effective.

Also, it is important to strike a balance between the need to provide rapid response and planning for a longer-term impact. Quick one-time support poses a risk of band-aiding rather than building sustainable, systemic solutions. The Internet for All Action Plan will focus on those strategies rooted in achieving systemic change.

Going forward, it is critical to center this work in community and to continue to engage residents most impacted in the City's decision-making processes.

Step 4. Advance Opportunity or Minimize Harm.

4. How will you address the impacts (including unintended consequences) on racial equity? Seattle IT has developed a detailed Action Plan driven by eight innovative, effective, and efficient strategies to equitably increase broadband access and adoption. The full Action Plan and detailed strategies can be found on pages 40-50, Internet for All Seattle Report .

- **Program Strategies**: The Action Plan proposes 8 key strategies:
    1. Increase awareness and adoption of low-cost internet programs and devices.
    2. Expand no or low-cost connectivity options in targeted areas of the City.
    3. Partner with organizations to deliver culturally relevant digital inclusion programs.
    4. Pursue private sector and philanthropic funding.
    5. Champion legislation/policies to advance universal internet adoption.
    6. Strengthen regional collaboration by forming an "Internet for All" coalition.
    7. Advocate to ensure Internet Service Provider offerings meet residents' needs.
    8. Examine new technologies to ensure best-in-class internet infrastructure and consumer choices.
- **Policy Strategies**: Strategy 5 in the Action Plan focuses on aligning the City's legislative policy priorities and coordinated actions to creatively incentivize the market, spur competition, and address digital equity in low-income areas.
- **Partnership Strategies**: Strategy 4 in the Action Plan identifies actions that supports a holistic and coordinated response across organizations and institutions to achieve digital equity. Additionally, a deeper exploration of strategic partnerships essential to this initiative can be found on pages 51-56, the Internet for All Seattle Report .

To mitigate unintended consequences from these strategies, we intend to continue our stakeholder engagement to gather feedback on challenges and best practices to share with the community. For example, one unintended consequence of all students having video capabilities for classroom instruction is that some students may feel uncomfortable showing their housing situation to classmates. This privacy concern could be shared with teachers to foster culturally sensitive online learning environments.

Step 5. Evaluate. Raise Racial Awareness. Be Accountable.

5. How will you evaluate and be accountable? How will you evaluate and report impacts on racial equity over time? What is your goal and timeline for eliminating racial inequity? How will you retain stakeholder participation and ensure internal and public accountability? How will you raise awareness about racial inequity related to this issue?

As requested by City Council, Seattle IT will provide updates on Internet for All progress, as well as a comprehensive plan to implement both a near-term process evaluation to ensure effective implementation of Internet for All Seattle, and a long-term outcomes evaluation to assess the effectiveness of Internet for All Seattle once implemented. The process evaluation will provide suggestions for improvements so that corrective action can be taken to maximize the opportunities for successful implementation. The outcome evaluation will describe lessons learned that can be made available to other cities so that Internet for All can benefit other parts of the State of Washington and the nation.

The north star racial equity targets for Internet for All are:

- Support Seattle Public Schools' efforts to increase and improve student-household internet access and quality.
- Foster up to 20,000 internet connections & devices for underserved.
- For the next Technology Access and Adoption Study, the data points toward universal internet adoption.
- Significantly increase the internet adoption rate for households with annual incomes under $25,000.

Internet for All is a priority area in the City's Reimaging Seattle Framework and ongoing participation will continue with City stakeholders to further the goals of the initiative.

5b. What is unresolved?

Achieving digital equity is an ongoing challenge, given the nature and pace of technological innovation. For example, providing technology skills training in a remote location continues to be a barrier during social and physical distancing. With the closure of traditional digital literacy training centers (public libraries, community centers, community-based organizations), trainers are exploring ways to bring education to remote locations, where the needs of the BIPOC and vulnerable communities are highest.

Step 6. Report Back.

6. Share analysis and report responses from Step 5 with Department Leadership and Change Team Leads and members involved in Step 1.

The Internet for All Seattle update report and subsequent reports will be shared broadly with City stakeholders and other key partners.