DIGITAL EQUITY

Initiative Action Plan

Phase 2

From Vision to Action

City of Seattle

City of Seattle

1

INTRODUCTION

Letter from Mayor Edward B. Murray 1
Executive Summary 2
Background 4
City Broadband Vision 5
Defining Digital Equity 6
Collective Impact Framework: Guide for the Digital Equity Initiative 7

8

PHASE ONE: BUILDING THE FOUNDATION

Vision: Digital Equity for All 8
Guiding Principles 9
Goals 9
Research and Engagement 10

12

PHASE TWO: FROM VISION TO ACTION

Engagement: Digital Equity Initiative Workgroups 12
Action Strategies 12
Priority Goals 13

14

DEVICES AND TECHNICAL SUPPORT

Overview 14
Barriers 14
Case Study 16
Action Strategy Map 18
Action Strategies 19

20

CONNECTIVITY

Overview 20
Barriers 20
Case Study 24
Action Strategy Map 26
Action Strategies 27

28

SKILLS TRAINING

Overview 28
Barriers 28
Case Study 30
Action Strategy Map 33
Action Strategies 32

Next Steps 34
Definition of Terms 36
Acknowledgements 37
Contact Information 38

Friends,

It is with considerable pride that I share a vision for Seattle's digital future: one where technology opportunities empower all residents equitably throughout our city.

Internet access is vitally important to Seattle, as is the education needed to fully benefit from it. All residents deserve access to basic services, educational and employment information, and the ability to connect with friends and family. The Digital Equity Initiative aims to close the digital gap and provide these benefits to every resident.

The Initiative strives to close the digital gap through three main goals:

- Device and technical support,
- Greater Internet connectivity, and
- Skills training

Each of these goals tackles a different barrier that often prevents historically underserved and underrepresented groups from achieving digital equity. We cannot erase these barriers overnight.

However, by incrementally working to support these goals, we will find that each becomes a little bit less burdensome over time.

To date, we have established key partnerships and built a common agenda to achieve meaningful social change. The Digital Equity Initiative's thorough stakeholder research established a launching point for Seattle to take actionable steps to achieve meaningful results.

I am eager to see where this Initiative can take us as a community. Seattle is a city known for technology and innovation, yet too many residents do not have sufficient Internet access or the skills necessary to participate fully in our high tech economy and community. Working together, we can make Seattle a leader in ensuring digital equity and opportunity for all our residents.

- Edward B. Murray, Mayor of Seattle

SEATTLE IS A CITY KNOWN FOR TECHNOLOGY AND INNOVATION. YET, TOO MANY RESIDENTS DO NOT HAVE SUFFICIENT INTERNET ACCESS OR THE SKILLS NECESSARY TO PARTICIPATE FULLY IN OUR HIGH TECH ECONOMY AND COMMUNITY.

WORKING TOGETHER, WE CAN MAKE SEATTLE A LEADER IN ENSURING DIGITAL EQUITY AND OPPORTUNITY FOR ALL OUR RESIDENTS.

EXECUTIVE SUMMARY

THE CITY OF SEATTLE LAUNCHED A DIGITAL EQUITY INITIATIVE IN JANUARY 2015 TO RESEARCH AND DEVELOP A PLAN TO HELP ENSURE ALL SEATTLEITES HAVE ACCESS TO, AND ARE PROFICIENT IN, USING DIGITAL TECHNOLOGIES.

THE DIGITAL EQUITY INITIATIVE HAS THREE PHASES:

1. Conduct research to establish vision and goals
2. Define achievable strategies and develop the Digital Equity Action Plan
3. Implement the Digital Equity Action Plan

This report outlines results from the first two phases.

PHASE ONE: BUILDING THE FOUNDATION

From January to July 2015, the City engaged with more than 100 community members, technology leaders, civic and education leaders, businesses, and City department staff to develop a digital equity vision, principles, and goals. Engagement and collaboration occurred through: in-depth stakeholder interviews, four roundtable discussions with community leaders and residents, conversations with the Community Technology Advisory Board, and a joint meeting with internal City of Seattle departments and the Digital Equity Action Committee – a group of external stakeholders representing leaders from community-based organizations and the technology sector.

To develop an initial set of possible action strategies, the City identified barriers to digital equity for individuals, small businesses, and community organizations. The City also referred to other city and regional digital equity plans and conducted the first ever City department inventory to identify programs that support digital equity goals.

The community and department engagement coupled with our research led to a strong digital equity vision, principles, and set of goals that set the stage for the second phase of the Digital Equity Initiative Action Plan roadmap: developing specific strategies to complete the Plan.

PHASE TWO: FROM VISION TO ACTION

From July to December 2015, the City of Seattle developed specific action strategies to support three priority goals of the Digital Equity Initiative.

1. Devices and technical support: Ensure affordable, available, and sufficient devices and technical support for historically underrepresented residents, small businesses, organizations, and communities.

2. Connectivity: Ensure sufficient options for affordable and available Internet connectivity for historically underrepresented residents, small businesses, organizations, and communities.

3. Skills Training: Create and deliver educational opportunities for residents to gain technology skills necessary to be successful in employment, entrepreneurship and technology leadership, lifelong learning, civic engagement, and use of essential online services.

The City formed three workgroups organized by the three priority goals. Each workgroup consisted of four to six subject-area experts including technology leaders, civic and education leaders, businesses, and City department staff.

Workgroup discussions built on ideas developed in Phase One and focused on: action strategy criteria including measurable impact, resources needed and available, achievability, equity, cost, and timeliness. Following an initial evaluation process, workgroups identified additional action strategies and defined steps for implementation including potential targets, funding sources, and partners.

Workgroups developed the following action strategies in which the City of Seattle will work with community-based organizations, public agencies, City departments, businesses, and education partners to provide:

DEVICES AND TECHNICAL SUPPORT:

- Increase assistive technology at community sites
- Increase support for device ownership programs
- Improve digital connectivity in public spaces

CONNECTIVITY:

- Improve high-speed Internet infrastructure
- Improve Internet availability to individuals
- Improve digital connectivity at public libraries and community centers

SKILLS TRAINING:

- Boost digital skills training programs
- Prepare qualified trainers
- Provide additional resources and support for community-based organizations

DIGITAL EQUITY INITIATIVE ACTION PLAN ROADMAP

BACKGROUND

For two decades, the City of Seattle has worked to provide community members with equal opportunity to access and use technology. The City has strived to ensure residents have access to contribute content and interact with public services online such as www.seattle.gov.

Starting in the 1990s, the City partnered with community-based organizations to launch a number of innovative programs to close the digital equity gap (or "digital divide"). These initiatives include Technology Matching Fund grants; setting up public access sites and training in libraries, community centers, and other city facilities; providing cable broadband for community organizations; and launching the technology indicators for a healthy community project to measure technology, and broadband access and adoption (see www.seattle.gov/tech).

The City's past and current programs are closely linked with the City's Race and Social Justice Initiative to eliminate racism, to close the digital equity gap for historically underserved and vulnerable communities, and to break down structural barriers limiting opportunity (see www.seattle.gov/civilrights).

Every four years, the Community Technology Program conducts community research based on technology indicators to gather data about technology use and barriers to adoption in Seattle. In 2014, the City released the latest findings (see www.seattle.gov/tech/indicators). This research found the City is making great strides in technology use and access, but there is still a significant gap in access to the Internet and the skills to use it.

Education and age are the most significant factors differentiating technology access and adoption. But the data also show important differences based on income, ethnicity, and disability.

Mayor Murray took office in 2014 and established technology goals that included increasing broadband access and making Seattle a national municipal leader in championing technology access and affordability for all.

Launched by the Mayor in 2015, the Digital Equity Initiative was co-sponsored by the Department of Information Technology and the Office of Civil Rights. The Initiative created the opportunity to establish new City-wide strategies with achievable goals, review investments, and identify partnership opportunities.

KEY FINDINGS FROM 2014 INFORMATION TECHNOLOGY ACCESS AND ADOPTION REPORT

LACK OF INTERNET ACCES AND USE AT HOME PERSISTS.

15% of Seattle residents don't have Internet access at home. The percent without access was higher for our immigrant/refugee families.

COMMUNITY TECHNOLOGY ACCESS SITES VITAL FOR THOSE WITH LIMITED RESOURCES.

20% of Seattle residents used computers at public locations at places like the library. Immigrant and refugee families stressed a need for community access locations.

LOW-INCOME RESIDENTS USE THE INTERNET LESS.

Seattle's residents earning under $20,000 per year were about 25% less likely to use the Internet than those earning more than $100,000 per year.

CITY BROADBAND VISION

Internet access is the infrastructure challenge of the early 21st century and access to the information and services it provides are responsible for economic growth, job creation, education, and a better quality of life. The City of Seattle is exploring options that would increase the availability of competitive, affordable, and equal broadband Internet access options that approach one gigabit of bandwidth across the city.

BROADBAND ACCOMPLISHMENTS

1. **Gigabit service availability and competition:** Cities are seeking opportunities to increase the availability of high-speed Internet access in their communities. To attract new broadband investment, the City increased coordination across its departments and simplified permitting processes. As a result, in 2014 CenturyLink selected Seattle as one of its gigabit cities and began deployment of fiber-to-the-premise (FTTP) Internet service to Seattle homes. Wave Broadband has also begun deploying FTTP gigabit broadband service. To date, more than 160,000 Seattle homes have gained access to gigabit speed broadband. Since CenturyLink's announcement, Comcast has tripled Internet speeds for its most popular packaged at no additional cost.

2. **Public/private partnerships:** Seattle made its spare fiber optic network capacity available to Internet service providers wanting to expand their service. In 2015, Cascade Networks became the first company to lease portions of the City's dark fiber to provide Internet access in the International District.

3. **The Seattle Public Library's Wi-Fi Hot Spot Program:** The Seattle Public Library initiated a program to loan Wi-Fi hotspots (small devices that provide users with Wi-Fi connection and Internet service) to residents. In 2015, the Library provided 325 hotspots for use by library patrons and will increase that number to 725 in 2016.

4. **ConnectHome Partnership:** In 2015, the City of Seattle and Seattle Housing Authority were selected to participate in the U.S. Department of Housing and Urban Development's (HUD) ConnectHome initiative. Through this initiative, HUD seeks to accelerate broadband adoption by children and families living in HUD-assisted housing. The program components include broadband deployment, free or discounted Internet service for residents, and digital skills training.

DEFINING DIGITAL EQUITY

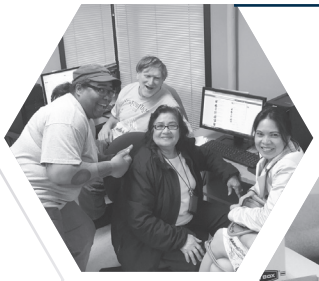
Digital equity seeks to ensure all residents and neighborhoods have the information technology capacity needed for civic and cultural participation, employment, lifelong learning, and access to essential services.

It is important to make the distinction that the Digital Equity Initiative is focused on equity, not equality. Although the two words seem to represent a similar intention, they have very different meanings. Equality results when everyone receives the same resources or services. In contrast, equity is focused on fairness to ensure historically underrepresented residents are equipped with the tools needed to achieve their personal goals and contribute to society.

Working toward digital equity involves intentional strategies and investments to reduce and eliminate historical barriers to access and use technology. Digital equity can:

> **When I think about digital equity, I think of the concept that all do well. Everybody comes out ahead and in a better place than they were before.**
>
> Stakeholder Interview
> April 2015

Offer better quality of life and empower communities through civic and cultural participation



Allow family and friends to connect through social networking and mobile devices

Provide everyone the opportunity to use necessary health, consumer, legal, and social services

Create educational and economic opportunities that lead to economic success for all residents

Clear the way for more self-sufficient residents, community-based organizations, and small businesses

COLLECTIVE IMPACT FRAMEWORK: GUIDE FOR THE DIGITAL EQUITY INITIATIVE

The Digital Equity Action Plan is a collective impact initiative in which organizations from different sectors agree to solve the City of Seattle's digital gap issue and create social change. The City of Seattle chose to follow the collective impact framework due to its high accountability and alignment of resources and investments. A successful collective impact initiative has five conditions that together lead to positive results:

1. COMMON AGENDA:

Collective impact initiatives require participants to share a vision for change that includes a common understanding of the issue and a cooperative approach to solving it through agreed-upon action strategies.

2. SHARED MEASUREMENT SYSTEMS:

Consistently collecting data and measuring results based on shared indicators ensures all efforts stay on track and keeps all participants accountable.

3. COORDINATED EFFORTS:

To ensure success, each participating organization should focus on their area of specialization and coordinate their activities with other stakeholder efforts.

4. CONTINUOUS COMMUNICATION:

Developing trust among stakeholders takes time; participants need to meet regularly over several years to build rapport and learn how to best work together.

5. BACKBONE SUPPORT ORGANIZATIONS:

As coordination takes time, it is crucial for specific organizations with dedicated staff to serve as the backbone for the entire initiative. For the Digital Equity Initiative, the City of Seattle is excited to play the role of the backbone organization in order to convene partners, align stakeholders, and work through partnerships to achieve its shared vision.

PHASE ONE: BUILDING THE FOUNDATION

VISION:

DIGITAL EQUITY FOR ALL

WE ENVISION SEATTLE AS A CITY WHERE TECHNOLOGY'S OPPORTUNITIES EQUITABLY EMPOWER ALL RESIDENTS AND COMMUNITIES—ESPECIALLY THOSE WHO ARE HISTORICALLY UNDERSERVED OR UNDERREPRESENTED.

The vision statement, principles, and goals in this section are the key result of Phase One and helped to guide the development and selection of action strategies. Representing many hours of deliberation with internal and external stakeholders, they are designed to be inclusive—particularly in historically underserved communities—and reflect best practices learned through research and community participation. Finally, they explicitly call out barriers needing to be addressed to achieve digital equity.

GUIDING PRINCIPLES

These are overarching values and intentions that apply to our goals and strategies.

ELIMINATE BARRIERS:
Identify and eliminate structural barriers to digital equity for vulnerable, historically underserved, or underrepresented residents, small businesses, organizations, and communities.

ALIGN AND INTEGRATE:
Link digital equity work to strategic areas including education, jobs and economic development, health and human services, justice, safety, race and social justice, and civic engagement.

BE A LEADER:
Be innovators of digital equity.

COORDINATE:
Work together in partnership with government, cultural and community organizations, libraries, schools (Pre-K-12 and higher education), and businesses to build resources, maximize investments, and employ best practices in digital inclusion.

ENSURE EQUITABLE DEVELOPMENT:
Plan technology infrastructure and services in coordination with community development to maximize public access, broadband capacity, digital education, and innovation opportunities in historically underrepresented neighborhoods and for vulnerable residents.

GOALS

The City of Seattle developed six goals for the Digital Equity Initiative in Phase One as shown below. These goals describe digital outcomes to achieve, and they served as the foundation for developing the action strategies found in Phase Two. In preparation for Phase Two, the City identified three of the six goals that are top priorities—because they feasibly measure progress and emphasize equitable efforts. The other three supporting goals will serve as guiding principles.

PRIORITY GOALS FOR ACTION STRATEGY DEVELOPMENT

DEVICES AND TECHNICAL SUPPORT:
There are affordable, available, and sufficient devices and technical support for all historically underrepresented residents, small businesses, organizations, and communities.

CONNECTIVITY:
There are sufficient options for affordable and available Internet connectivity for all historically underrepresented residents, small businesses, organizations, and communities.

SKILLS TRAINING:
There are educational opportunities for all residents to gain technology skills necessary to be successful in employment, entrepreneurship and technology leadership, lifelong learning, civic engagement, and use of essential online services.

SUPPORTING GOALS TO GUIDE ACTION STRATEGIES

OUTREACH AND ACCESSIBILITY:
Make it easy for all residents and communities to know about, find, understand, and use appropriate services and information. Recognize specific needs of our historically underserved residents, including those with disabilities, low literacy, and limited English skills.

BUILD COMMUNITY CAPACITY:
There is capacity for digital equity program providers to sustainably deliver quality services, implement best practices, and adapt to emerging technologies.

CREATE INCLUSIVE ENGAGEMENT AND EMPOWERMENT:
Digital tools maximize diverse, inclusive civic engagement, sense of community, and participation in decision making.

RESEARCH AND ENGAGEMENT

The Initiatives, vision, goals, and potential action strategies were informed by current research and the diverse and thorough knowledge shared by outreach participants. The City interviewed stakeholders, hosted roundtable discussions, and formed internal and external committees to gather input. Staff applied the Race and Social Justice Inclusive Outreach and Public Engagement guide to assist in identifying diverse participants.

City staff sought models and comments about the following topics:

- Views regarding digital equity
- Existing digital equity programs and services
- Challenges or barriers to achieving digital equity
- Best practices
- Draft vision statement and goals
- Recommendations and solutions

INTERNAL AND EXTERNAL COMMITTEES:
Formed interdepartmental and external committees representing staff and Seattle community and interest groups.

Collaborated to help the City shape a vision and goals for digital equity as well as identify an initial list of possible action strategies.

RESEARCH:
Gathered other regional and government digital equity plans to identify approaches and common elements that could inform the City's Digital Equity Initiative.

Conducted an initial City inventory of programs that identified departments with programs supporting digital equity goals and some of the community-based efforts.

COMMUNITY ROUNDTABLES:
Hosted a series of four roundtable discussions at the New Holly Seattle Public Library, a non-profit meeting center (the 2100 Building), Google, and Youngstown Cultural Arts Center, with 39 individuals from community-based and business organizations participating.

Facilitated conversation where participants discussed best practices, the draft vision, and barriers to digital equity.

IN-DEPTH INTERVIEWS:
Interviewed 17 members from community-based organizations who shared best existing programs and practices for digital equity in Seattle and discussed barriers.

> I know we will have achieved digital equity when every person has equal access to current hardware and software, an unlimited, high-speed Internet connection, and the energy to power the needed equipment; and is able to participate in civic, employment, education, and social life without barriers.

(Stakeholder Interview – April 2015)

PHASE TWO: FROM VISION TO ACTION

The City generated a number of action strategy ideas toward the end of Phase One. Action strategy ideas ranged from shorter-term options (up to three years) including holding an educational forum with low-income housing developers and sharing building requirements for broadband readiness, to longer-term strategies such as developing a joint fund that would support digital equity programs and scholarships or service vouchers.

ENGAGEMENT: DIGITAL EQUITY INITIATIVE WORKGROUPS

To follow the collective impact initiative model, the City formed three workgroups organized by topic (devices and technical support, connectivity, and skills training). Workgroups were comprised of four to six members who actively work within each of the subject areas.

Workgroup discussions evaluated ideas developed in Phase One based on criteria including measurable impact, resources needed and available, achievability, equity, cost, and timeliness.

After the initial evaluation process, workgroups honed Phase One strategies, identified additional action strategies, and defined steps for implementation including potential targets, funding sources, and partners.

ACTION STRATEGIES

The Digital Equity Workgroups developed goals and initial ideas into concrete S.M.A.R.T. action strategies and developed action strategy maps for each of the three priority goals. Strategy maps are a visual tool to describe and communicate strategies, identify necessary tools, choose appropriate measures, and organize efforts to meet shared goals.

PRIORITY GOALS

AS DESCRIBED IN THE PHASE ONE SECTION, THE CITY SELECTED THREE PRIORITY GOALS FROM THE ORIGINAL SIX GOALS TO FOCUS EFFORTS AND DEVELOP SPECIFIC ACTION STRATEGIES:

DEVICES AND TECHNICAL SUPPORT:

Ensure there are affordable, available, and sufficient devices and technical support for all historically underrepresented residents, small businesses, organizations, and communities.

CONNECTIVITY:

Ensure there are sufficient options for affordable and available Internet connectivity for all historically underrepresented residents, small businesses, organizations, and communities.

SKILLS TRAINING:

Create and deliver educational opportunities for all residents to gain technology skills necessary to be successful in employment, entrepreneurship and technology leadership, lifelong learning, civic engagement, and use of essential online services.

The sections on the following pages provide an overview of the three priority goals, identify current barriers and programs related to each topic, and detail action strategies and next steps to achieve the goals.

DEVICES AND TECHNICAL SUPPORT

OVERVIEW

Access to reliable and current technology devices is crucial to participate in today's digital society. In addition to having access to devices, technical support to assist users should be available, multilingual, and ongoing.

Based on the 2014 Information Technology Access and Adoption Report, those with limited resources rely on public locations to access the Internet in Seattle. Twenty percent of respondents use computers at the library. Focus group participants reinforced the need for community access locations.

The report also found that Seattle residents use the Internet in multiple locations. The table below shows locations telephone and online respondents mentioned using to access the Internet.

GOAL: THE CITY OF SEATTLE STRIVES TO PROVIDE HIGH-QUALITY DEVICES AND TECHNICAL SUPPORT FOR INDIVIDUALS, COMMUNITY-BASED ORGANIZATIONS, AND SMALL BUSINESSES.

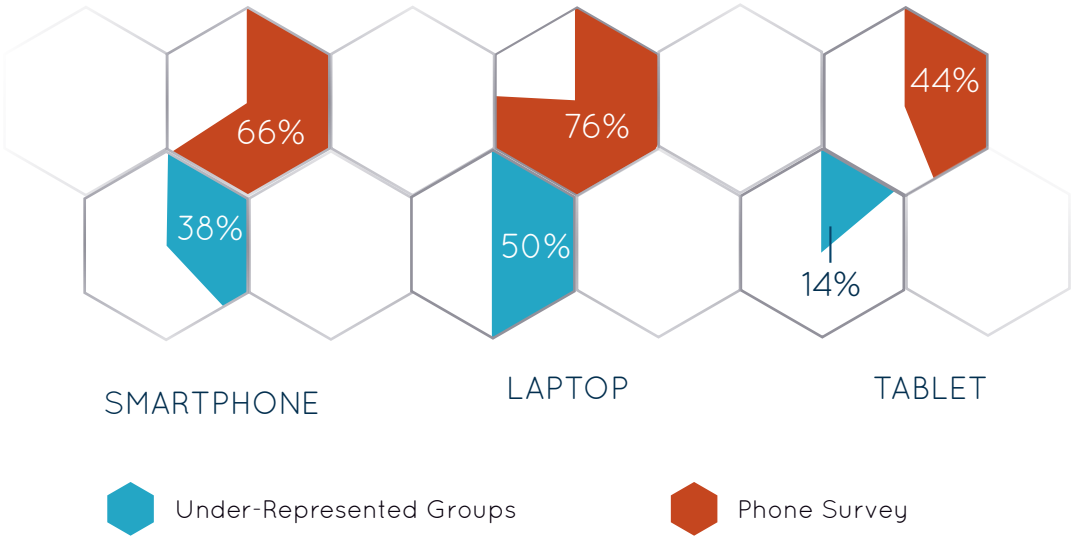
During our Phase One outreach, stakeholder interviews and discussions identified several barriers related to devices and technical support:

- No access to technology or limited use due to old devices
- Lack of transportation to computer labs

- Outdated, inadequate devices necessary to deliver programs
- No funding or inconsistently qualified volunteers to ensure ongoing IT infrastructure and support

- Inadequate system to connect donations and recycled devices to those needing them

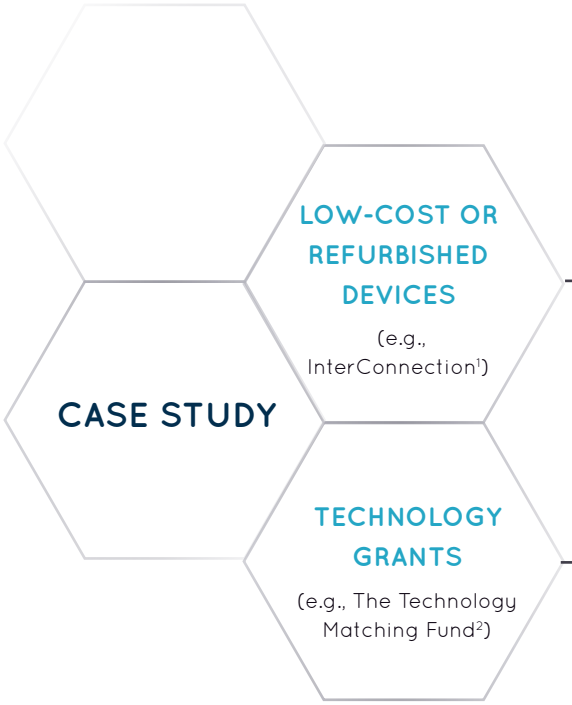
TECHNOLOGY OWNERSHIP OF MOBILE INTERNET



Source: 2014 Information Technology Access and Adoption Report

COMPUTER, CELLPHONE, AND MOBILE DEVICE OWNERSHIP SINCE 2000

	2000	2004	2009	2013
Use computer	88%	85%	88%	90%
Use Internet				89%
Own computer	76%	83%	88%	88%
Own desktop & laptop			42%	39%
Desktop only			27%	16%
Laptop/netbook only			19%	33%
Cellphone	46%		80%	89%
Smartphone			35%	58%
Any mobile device (Smartphone or tablet)				66%
Any tablet				40%



Programs providing low-cost or refurbished devices are in high demand. Many digital learners cannot afford devices and these programs provide quality products at affordable prices.

Technology-focused funding fills an area of need not well addressed by other funding sources. Many community organizations do not have resources to buy technology, which is often seen as an overhead expense. They also lack adequate staffing to consistently deliver quality digital literacy programs. Technology grants help nonprofits build and maintain their technology infrastructure and provide quality training.

[1]InterConnection: Seattle-based national organization that sells high-quality refurbished computers and laptops to low-income individuals, nonprofit and non-governmental organizations.

[2]Technology Matching Fund: City of Seattle fund that improves digital equity by providing annual grants for technology projects.

COMPUTER WORK STATIONS TO ENHANCE YOUTH EDUCATION

Initiative: In Fall 2014, the North Seattle Boys & Girls Club was awarded $20,000 from the Technology Matching Fund to create 23 computer work stations.

Outcome: The new computer work stations now provide free computer access and education to hundreds of youth. Homework takes priority for computer use during the school year when more than 100 youth come to the Club each afternoon. In the evenings, youth participate in technology education classes where they focus on writing and design projects. Teens also use computers to do research for their classes, create blogs about community service projects, and learn how to build a resumé.

> "Our computer labs are a springboard for so many programs and opportunities. Strong technology skills open doors for our Club kids, and will likely provide a way out of poverty for many."

– Joan Caldon, Club Executive Director for North Seattle Boys and Girls Club and STEM committee member for Boys & Girls Clubs of King County

DEVICES & TECH SUPPORT

This map demonstrates the conditions needed to achieve citywide access to devices and technical support.

The City of Seattle will work with community-based organizations, public agencies, City departments, business corporations, and local and national foundations to 1) increase assistive technology at community sites, 2) increase support for device ownership programs, and 3) develop technology support programs.

The graphic below details the Digital Equity Initiative action strategies developed to ensure there are affordable, available, and sufficient devices and technical support for all historically underserved residents, small businesses, organizations, and communities in Seattle.

D1

INCREASE ASSISTIVE TECHNOLOGY AT COMMUNITY SITES

2017

D1.1 Develop a plan for expanding assistive technology devices and software at public computer labs

D2

INCREASE SUPPORT FOR DEVICE OWNERSHIP PROGRAMS

END OF 2017

D2.1 Promote a program to recycle devices and coordinate with refurbishment programs to distribute devices to low-income residents

D2.2 Develop a pilot scholarship, voucher, or financing option to obtain laptops or desktop devices for low-income residents who want to buy devices, or for those who complete a foundational skills training program through a qualified partner

D3

DEVELOP TECHNOLOGY SUPPORT PROGRAMS

END OF 2017

D3.1 Create and implement a marketing and communications strategy that will increase promotion of local technology resources including: low-cost Internet services, computer and Internet training courses, public access locations, and free or low-cost computer hardware

BY 2018

D3.2 Expand access to and awareness of tech support options for community members, computing labs, and small businesses

CONNECTIVITY

OVERVIEW

Technology devices provide the greatest benefit when the user has a reliable high-speed Internet connection. Based on the 2014 Information Technology Access and Adoption Report, the majority of Seattle residents have Internet access via cable or DSL service at home and are using higher-speed services than in the past.

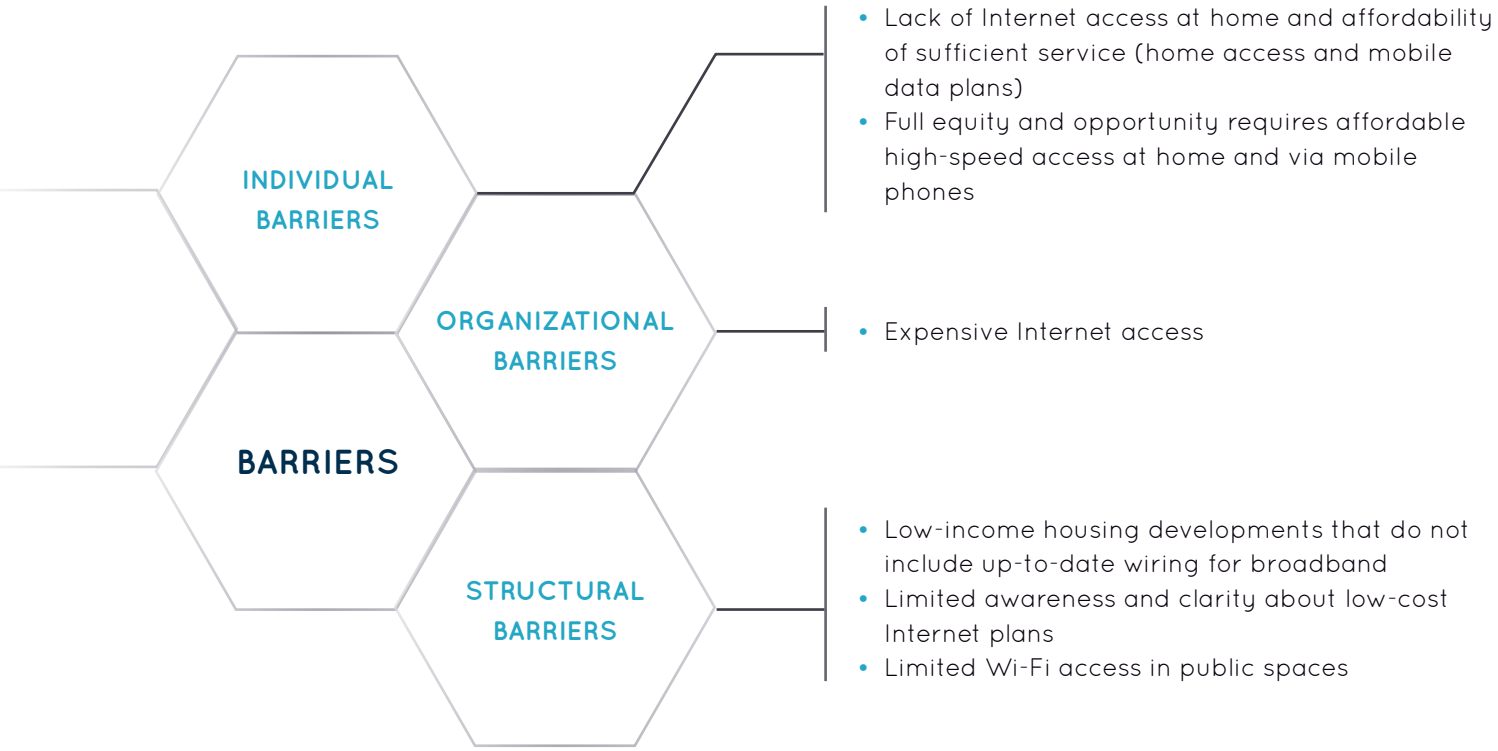
In the past decade, home Internet access in Seattle has increased from 57 percent to 85 percent. However, there are still barriers for many to access high-speed Internet due to income, language, disability, and cultural factors. In addition, relevance, skills, and cost were identified as the greatest barriers to using the Internet for non- Internet users.

As shown in the chart below, the greatest difference by income is in cable Internet subscribership. Of Internet subscribers, only about a quarter of the lowest two household income groups (under $30,000) have cable Internet, compared to two-thirds of households who make $100,000 per year or more.

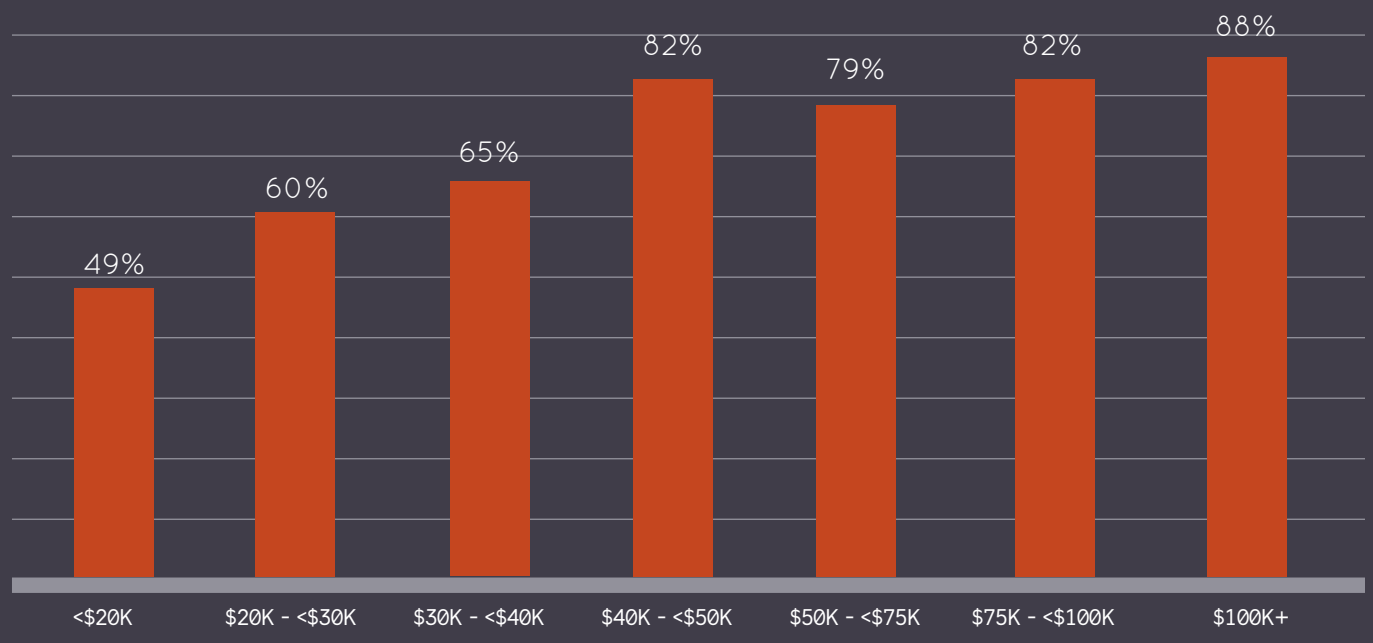
The report found that Seattle users want higher-speed Internet services. The majority of users interviewed by phone (85 percent) responded they would be interested in super high-speed Internet access, as did all of the online respondents.

GOAL: THE CITY OF SEATTLE STRIVES TO ENSURE THERE ARE SUFFICIENT OPTIONS FOR AFFORDABLE AND AVAILABLE INTERNET CONNECTIVITY FOR ALL HISTORICALLY UNDERSERVED RESIDENTS, SMALL BUSINESSES, ORGANIZATIONS, AND COMMUNITIES.

During Phase One, stakeholder interviews and discussions identified several barriers related to connectivity:

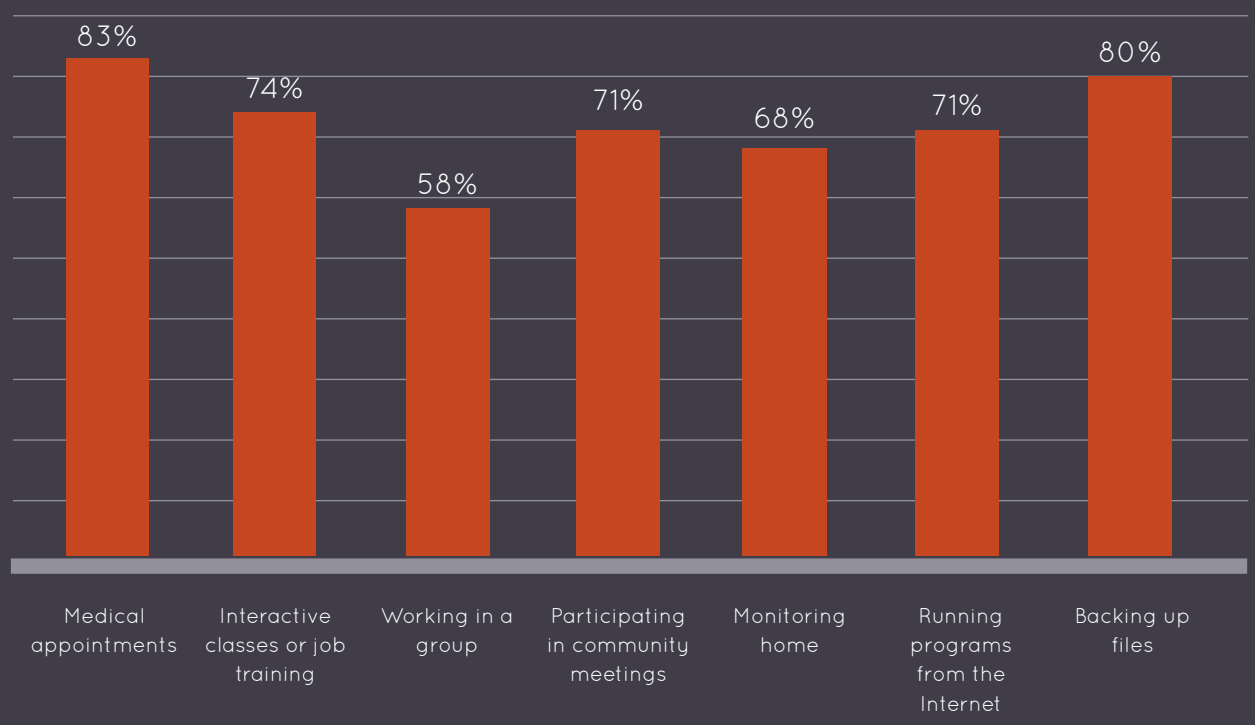


DSL AND CABLE BROADBAND SUBSCRIBERS BY INCOME

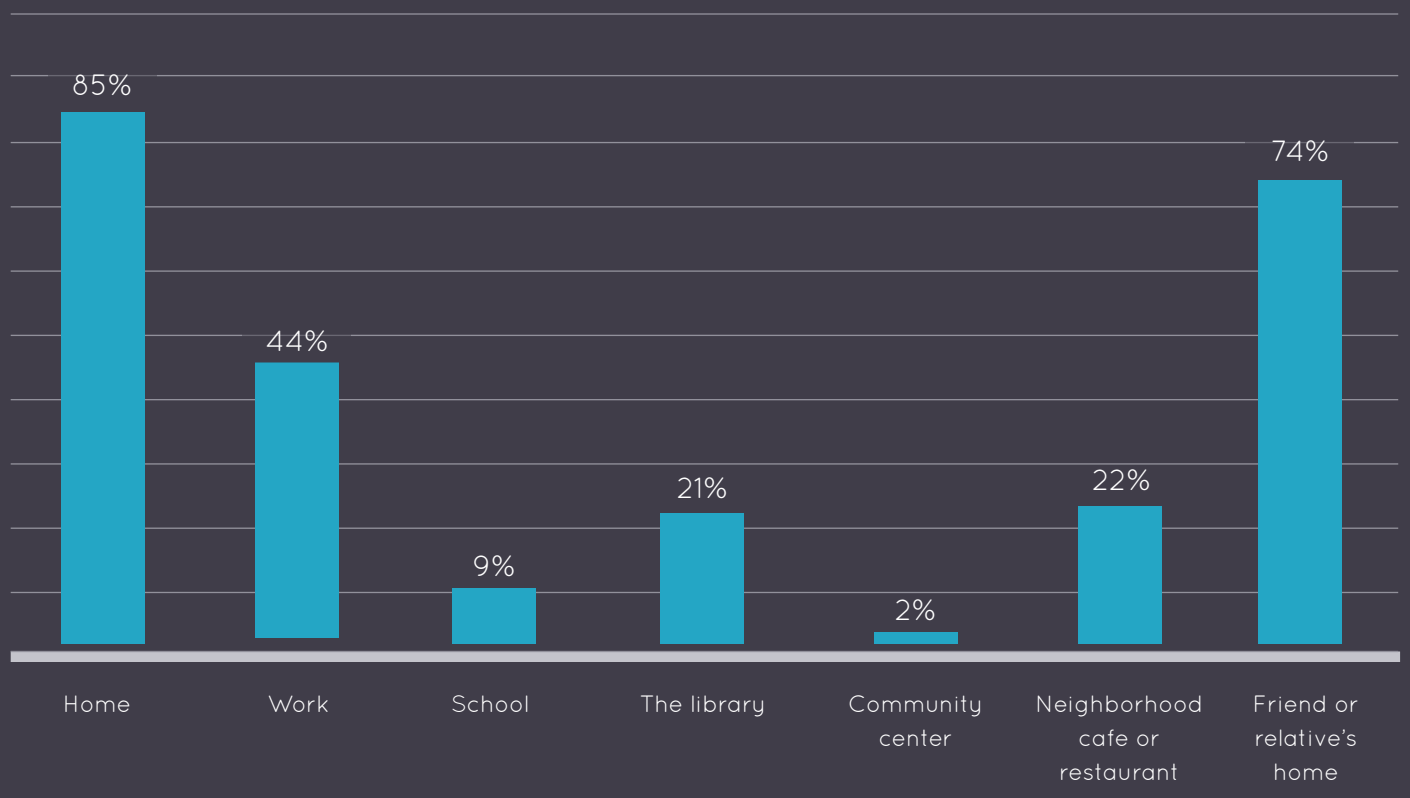


SEATTLE RESIDENTS SHOWED STRONG INTEREST IN HIGH-SPEED BROADBAND SERVICES

(PERCENT OF ALL RESIDENTS INTERESTED IN SERVICE)



LOCATIONS USED TO ACCESS THE INTERNET



> Access to high-speed broadband is no longer a luxury; it is a necessity for American families, businesses, and consumers. Affordable, reliable access to high-speed broadband is critical to U.S. economic growth and competitiveness. High-speed broadband enables Americans to use the Internet in new ways, expands access to health services and education, increases the productivity of businesses, and drives innovation throughout the digital ecosystem.

– President Barack Obama

Digital learners are more successful if they can access the Internet at home. Low-income Internet programs help make Internet connectivity affordable for those who might not otherwise have access. Use of these programs could be increased with greater promotion, broader eligibility, lowering costs as much as possible, and simplifying the sign-up process.

BRIDGING THE DIGITAL DIVIDE: FREE WI-FI IN PUBLIC SPACES

Initiative: In March 2015, the City of Seattle partnered with Microsoft to implement a new free Wi-Fi service at Seattle Center. More than 12 million people visit Seattle Center each year, and this allows users to enjoy fast, free broadband on their devices. This device handles more than 25,000 users at a time and enables speeds more than 100 times faster than the old system.

Outcome: The previous Wi-Fi network at Seattle Center only supported email and basic web browsing and often got bogged down when too many people used the system at the same time. Increased capacity of the new Wi-Fi service enables visitors to make Skype calls, back up photos, and connect with events and vendors at the Seattle Center. The technology will be especially helpful during big events held at the Seattle Center.

> AT SEATTLE CENTER, OUR PURPOSE IS TO DELIGHT AND INSPIRE THE HUMAN SPIRIT, AND THIS REMARKABLE NEW WI-FI SYSTEM WILL DEFINITELY SERVE TO ENRICH THE VISITOR EXPERIENCE.

– Robert Nellams, Seattle Center Director

CONNECTIVITY

This map demonstrates the conditions needed to achieve citywide Internet connectivity.

* home, small business, or community-based organization

The City of Seattle will work with community-based organizations, public agencies, City departments, business corporations, and local and national foundations to 1) improve high-speed Internet infrastructure, 2) improve Internet availability to individuals, and 3) improve digital connectivity in public spaces.

The graphic below details the Digital Equity Initiative action strategies designed to make it easy for all Seattle residents and communities to know about, find, understand, and use appropriate services and information.

C1 IMPROVE HIGH-SPEED INTERNET INFRASTRUCTURE

END OF 2016

C1.1 Provide recommendations on design best practices for competitive and sufficient broadband infrastructure and convene a training for planners and developers to incorporate these best design practices into building plans

END OF 2017

C1.2 Evaluate building codes for multiple dwelling units to ensure adequate access and infrastructure for high-speed Internet service and propose any necessary policy and legislative solutions

C2 IMPROVE INTERNET AVAILABILITY TO INDIVIDUALS

THROUGH 2019

C2.1 Expand programs to enable Internet to underserved individuals (e.g., SPL personal hotspot lending program)

C3 IMPROVE DIGITAL CONNECTIVITY IN PUBLIC SPACES

END OF 2017

C3.1 Develop a long-term strategy to ensure sustainability of community computer labs with high-speed Internet

C3.2 Set up multiple charging options for phones, tablets, and laptops in community centers and Seattle Public Libraries

C3.3 Develop a public Wi-Fi access plan for disadvantaged and underserved areas of the city (e.g., transit tunnels, homeless encampments, parks & rec community centers)

C3.4 Implement building-wide Wi-Fi where feasible at Parks and Recreation community centers

SKILLS TRAINING

OVERVIEW

Living in a digital economy, the lack of skills to use technology effectively will eliminate a historically underrepresented person's ability to participate in a variety of opportunities such as applying for jobs, researching community issues, accessing health care, and furthering their education.

Based on the 2014 Information Technology Access and Adoption Report, participants said they would like to know more about how to use the Internet to improve their lives. The report also found respondents want technology training and materials available in different formats, including classes and workshops, videos, and one-on-one instructions, along with more use of graphics and translations.

GOAL: THE CITY OF SEATTLE STRIVES TO CREATE AND DELIVER EDUCATIONAL OPPORTUNITIES FOR ALL RESIDENTS TO GAIN THE TECHNOLOGY SKILLS NECESSARY TO BE SUCCESSFUL IN EMPLOYMENT, ENTREPRENEURSHIP AND TECHNOLOGY LEADERSHIP, LIFELONG LEARNING, CIVIC ENGAGEMENT, AND USE OF ESSENTIAL ONLINE SERVICES.

During Phase One, stakeholder interviews and discussions identified several barriers related to skills training:

BARRIERS

INDIVIDUAL BARRIERS:

- Fear of failure, feeling inadequate for lack of knowledge
- Need to be able to find appropriate training, understand the pathway, and select from a range of training from beginner job skills to advanced technical skills (STEM, coding, computer science)
- Youth have false sense of digital literacy because they know how to navigate mobile devices, but do not know how to research or write for the digital age

ORGANIZATIONAL BARRIERS:

- Lack of sustainable funding results in high staff turnover, which also reduces instructional program delivery and limits partnership development and volunteer management
- No shared curriculum to use among community centers and libraries or with community-based organizations

STRUCTURAL BARRIERS:

- No central place for listing and finding trainings
- Lack of specific information to refer participants to next level of training and resources

SKYWALK
1996

Providing training options that meet a diversity of learning styles is essential; some digital learners fare better in a community-based classroom setting, while others thrive with one-on-one assistance tailored to their specific needs

2015 TECHNOLOGY MATCHING FUND GRANTS TO PROMOTE DIGITAL SKILLS AND EDUCATION

Initiative: The Technology Matching Fund annually provides grants of up to $30,000 for technology projects. In 2015, the Fund granted money to 22 local nonprofit groups for a total of $470,000 in grants.

Outcome: One of the nonprofit recipients is the Big-Brained Superheroes Club, which will provide STEM programs for youth from Yesler Terrace, ages 8 and up.

Another nonprofit recipient, the Coalition for Refugees from Burma, will use funds to purchase laptops and provide basic computer literacy courses for newly-arrived refugee adults, conduct trainings for parents of school-aged youth to support their children's education, and offer enrichment programs to engage youth with high-tech concepts and careers.

SKILLS TRAINING

This map demonstrates the conditions needed to achieve citywide skills training.

The City of Seattle will work with education partners, community-based organizations, public agencies, City departments, business corporations, and local and national foundations to 1) boost digital skills training programs, 2) prepare qualified trainers, and 3) provide additional resources and support for community-based organizations.

The graphic below details the Digital Equity Initiative action strategies aimed to create and deliver educational opportunities for all Seattle residents to gain the technology skills necessary to be successful in employment, entrepreneurship, lifelong learning, civic engagement, and use of essential online services.

S1 BOOST DIGITAL SKILLS TRAINING PROGRAMS

- MID 2017 — **S1.1** Increase digital skills training for families in three Title I schools; these trainings will allow families to better use Seattle Schools' online systems, engage with schools, track student progress, and provide academic support
- END OF 2017 — **S1.2** Increase STEM and coding instruction for students in out-of-school programs and support coding education programs for adults
- END OF 2018 — **S1.3** Increase awareness of digital skills training programs among "vulnerable workers," employers and service providers
- END OF 2019 — **S1.4** Increase access to technology skills training for small businesses owned by minorities and women

S2 PREPARE QUALIFIED TRAINERS

- END OF 2017 — **S2.1** Increase capacity of instructors and volunteers in historically underserved communities to deliver digital literacy instruction via a pilot "train the trainer" program

S3 PROVIDE ADDITIONAL RESOURCES AND SUPPORT FOR COMMUNITY-BASED ORGANIZATIONS

- END OF 2016 — **S3.1** Lead a marketing campaign to increase awareness of training and technical support opportunities
- END OF 2017 — **S3.2** Create a funding collaborative to combine and align resources that support the Digital Equity Initiative's goals

NEXT STEPS

AS THE CITY IMPLEMENTS THE DIGITAL EQUITY INITIATIVE ACTION PLAN, STAFF WILL CONTINUE OUR COMMITMENT TO ENGAGE PARTNERS AND STAKEHOLDERS, REFINING THE APPROACH BASED ON INPUT AND BEST PRACTICES TO ENSURE SUCCESS. THIS PLAN COULD NOT HAVE BEEN COMPLETED WITHOUT THE HELP OF OVER 100 PARTNERS AND STAKEHOLDERS ACTIVE THROUGHOUT PHASES ONE AND TWO.

The City is committed to transparency and accountability as staff work to accomplish the three priority goals:

1

IMPROVING ACCESS TO COMPUTING DEVICES AND TECHNICAL SUPPORT

2

ENSURING SUFFICIENT OPTIONS FOR AFFORDABLE AND AVAILABLE INTERNET CONNECTIVITY

3

ENHANCING OPPORTUNITIES FOR DIGITAL SKILLS TRAINING

AS PART OF OUR COMMITMENT, THE CITY WILL UNDERTAKE THE FOLLOWING NEXT STEPS:

ESTABLISH A LEADERSHIP TEAM

Create a digital equity leadership team to guide and support implementation. The team will be comprised of internal and external Digital Equity Action Committee representatives who participated in developing the strategies and will be supplemented by other key industry experts. This group will meet a few times initially to ensure coordinated efforts using the collective impact framework, provide input on implementation needs, and establish shared measurements. After start-up, the team will meet quarterly to support coordinated efforts moving forward.

DEVELOP A DETAILED WORKPLAN

Develop detailed implementation plans for each strategy. This document lays out a framework, but implementation will require specific engagement from a variety of stakeholders to establish timeline and required resources. This detailed planning, leading to action will primarily be managed by Department of Information Technology staff.

IDENTIFY AN EVALUATION PLAN

Identify specific outcomes and metrics for each strategy as part of the development of an overall evaluation plan. DoIT staff and the leadership team will define metrics for success and develop measurement strategies.

STRENGTHEN PARTNERSHIPS AND INVESTMENT

Identify and engage additional partners, volunteers, and resources to advance the Initiative. DoIT staff will work with the Office of Economic Development, other City departments, and the leadership team to communicate with industry and other partners to formally engage them in appropriate strategies.

REPORT ON PROGRESS

Share progress on a regular basis via summary progress reports issued annually. As implementation moves forward, success stories will be shared through existing social media and communication channels.

THE CITY CANNOT ACCOMPLISH THIS WORK ON ITS OWN. IMPLEMENTING THE DIGITAL EQUITY INITIATIVE WILL REQUIRE STRONG PARTNERSHIPS AND INVESTMENT OF PUBLIC, PRIVATE, AND COMMUNITY RESOURCES. WITH YOUR HELP AND INVOLVEMENT, WE WILL BE ABLE TO CLOSE DIGITAL GAPS EXPERIENCED DAILY BY SEATTLE'S HISTORICALLY UNDERSERVED AND VULNERABLE COMMUNITIES.

DEFINITION OF TERMS

DoIT: Department of Information Technology – department in the City of Seattle responsible for building, operating, and maintaining a wide variety of technology policies, tools and systems to meet the needs of the public and City of Seattle departments and employees.

DSL: Digital Subscriber Line – technology to provide high-speed Internet using telephone networks.

Hotspot: Physical location that offers Internet access over a wireless local area network through the use of a router connected to an Internet service provider.

ISP: Internet Service Provider – company that provides services to access and use the Internet.

MDU: Multiple Dwelling Units – Classification of housing where multiple separate housing units for residents are located within one building or several buildings within one complex. The most common form is an apartment building.

MiFi: Wireless router that acts as a mobile Wi-Fi hotspot.

RSJI: Race and Social Justice Initiative – Seattle's citywide effort to end institutionalized racism and race-based disparities in City government.

STEM: Science, Technology, Engineering and Math education — an interdisciplinary and applied approach that focuses on problem-based learning.

Wi-Fi: Wireless networking technology that allows computers and other devices to access the Internet over a wireless signal.

ACKNOWLEDGEMENTS

The City of Seattle thanks the community members, technology leaders, civic and education leaders, businesses, and City department staff who volunteered their time to develop a digital equity vision, principles, goals, and action plan.

Kathryn Aisenberg
Steve Albertson
Irma Anderson
Christina Arcidy
Samantha Becker
Solomon Berhome
Nick Berry
Ryan Biava
Mario Bolden
Charles Brennick
Delia Burke
Sarah Castaldo
Shauna Causey
Margaret Cesena
Jen Chantrill
Hsiao-Ching Chou
Megan Coppersmith
Valerie Craig
Shanna Crutchfield
Gregory Davis
Susan Davis
Michael Davis
Janice Deguchi
Joseph DiChiaro
Joanne Donahue
William Dorn
Lloyd Douglas
Diane Douglas
Jason Edens
Sahar Fathi
Dave Forrester
John Forsyth
Kent Foster
Wyking Garrett
John Giamberso
Malcolm Grothe
Peter Gruenbaum
Derrick Hall
David Harris
Mohamed S Hassan
Hans Hechtman
Natalie Hester
Tracy Hilliard
Annie Holden
Daphra Holder
Honorable Don Horowitz
Lynda Hunter
Marcia Johnson
David Kaz
Mala Kessay
Steve Kipp
Patricia Lally
Shauna Larsen
Brandon Lindsey
Jim Loter
Rebecca Lovell
Derek Low
Lois Maag
Jon Madamba
Miguel Maestas
Cass Magnuski
Susannah Malarkey
Willa Mallister
Karen Manuel
Cornelius Mason
Lance Matteson
Kristen McDaniel
Steve McDowell
Bobby Morrison
Rasmus Mortensen
bg Nabors-Glass
Justin Natali
Kathryn Neal
Charles Ng
Minh-Duc Nguyen
Darcy Nothnagle
Liz Pearce
Bill Pease
Karen Perry
Julie Pham
Irene Plenefisch
Mike Pollack
Carmen Rahm
Michael Ramos
Chas Redmond
Sabrina Roach
Lambert Rochfort
Julianna Ross
Rowena Rye
Derek Scheips
Kate Schneier
Charles Schrag
Joy Scott
Rinkle Shah
Shannon Steffenson
Mary Taylor
Toby Thomas
Graham Thompson
Tony To
Sarah Trowbridge
Ivette Urban
Jim Valley
José Vasquez
Stacey Wedlake
Sheree Wen
Martha Winther
Deborah Witmer
Inye Wokoma
Tim Wolfe
Karia Wong
Allan Yeung
Vicky Yuki
Kira Zylstra

CONTACT INFORMATION

City of Seattle
Digital Equity Initiative

Mayor Edward B. Murray

Michael Mattmiller, Chief Technology Officer and Director, Department of Information Technology

Patricia Lally, Director, Office of Civil Rights

Department of Information Technology Project Team: Delia Burke, Derrick Hall, David Keyes, Kendee Yamaguchi, Vicky Yuki

FOR MORE INFORMATION

www.seattle.gov/digital-equity

communitytechnology@seattle.gov

@diginclusion

SeattleCommunityTech

OR CONTACT

David Keyes
Community Technology Program
Department of Information Technology
david.keyes@seattle.gov
206.386.9759

City of Seattle