Digital Equity Plan for Older Adults & Adults with Disabilities

2024-2028

SF TECH COUNCIL

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Introduction

Digital equity begins with individuals and their communities. It requires meeting people where they are, understanding their needs and goals, and assessing the barriers and challenges they experience with technology, and working with them to overcome these barriers so they can live and thrive in a digital world.

Being connected is no longer a privilege; it's a human right.

Without broadband access, devices, digital literacy skills, and support, older adults and people with disabilities in San Francisco struggle to:

- *Navigate online government services* (find information on services and resources, complete applications, upload forms)
- *Participate in virtual medical services* (e.g., conduct video visits, access patient portals, refill prescriptions)
- *Find and maintain employment* (perform job searches, prepare resumes, apply for jobs, conduct virtual interviews, acquire basic job-related tech skills)
- *Access news and resources* (access in-language media, search health information, receive emergency alerts and information, participate in civic activities)
- *Meet daily needs* (conduct online banking and grocery shopping, use ride-share platforms, navigate public transit and way-finding apps)
- *Connect socially* (communicate with friends and family, participate in group and class activities)

Vision

San Francisco is a city where people with disabilities and older adults have full and equitable access to digital technology and its benefits so that all can participate and thrive in the City's connected community.

FRAMEWORK

A digital equity strategic framework targets access and adoption gaps, namely high-speed internet access and the skills and tools to use it effectively, for historically excluded and disadvantaged communities, specifically those with low incomes, communities of color, older adults, people with disabilities, and those with limited English proficiency, and the organizations which support them.

DEFINITIONS

Digital Equity
A society that achieves digital equity is one where individuals and communities, especially those who are underserved or have been historically marginalized, together with the organizations that serve them, have the technological capacity and resources they need to fully participate and thrive in the digital world (i.e., daily activities, economic opportunities, and social and civic engagement).

Digital Inclusion
Digital inclusion encompasses the strategies—policies, practices, and activities—that are necessary to ensure that all individuals have access to the digital resources they need to meet their goals, such as:

- High-speed internet service that is affordable, reliable, and accessible;
- Internet-enabled personal mobile and computer devices that meet user needs;
- Customized digital skill training and ongoing tech support; and
- Culturally competent, multi-lingual, and accessible services and online content.

Executive Summary

This *Digital Equity Plan for Older Adults and Adults with Disabilities in San Francisco* details an extensive investigative and strategic planning process aimed at enhancing digital equity for San Francisco's older adults and people with disabilities.

The primary goals of this Plan are to describe the digital equity barriers and needs of San Francisco's older adults and people with disabilities, as well as the organizations that serve them. The broader vision underpinning these goals is to ensure that these populations have full and equitable access to digital technology and its benefits, allowing them to participate and thrive in the City's connected community.

Metta Fund reached out to SFTC to create a process to better understand the digital equity barriers and needs of San Francisco's older adults and people with disabilities as well as the organizations that serve them, based on how, where, and why people use the internet, and with the goal of shaping a plan for the City of San Francisco and sharing the outcomes with the State of California to inform the development of the State Digital Equity Plan.

Today, 24% of San Francisco's residents are 60 or over and one in ten residents report a disability. Together, they represent nearly one in three residents, many of whom are at risk for experiencing digital inequities. These populations are racially and ethnically diverse, with a majority identifying as Black, Indigenous, and Other People of Color (BIPOC). By 2030, San Franciscans over the age of 60 will represent 30% of the population.

Key findings from the report show a significant desire among older adults and people with disabilities to be online, with broadband adoption rates surprisingly high. However, there remain challenges in infrastructure (affordable, reliable internet, and devices), consumer adoption (digital literacy and tech support), and achieving equitable opportunities through technology.

Critical barriers include language obstacles, particularly for non-English speakers, affordability issues, and a lack of awareness regarding available benefits such as the Affordable Connectivity Program (ACP) and other low-cost broadband connection options. The pandemic has further highlighted disparities for those with less digital capacity, exacerbating the digital divide.

Organizational capacity features heavily in the report, revealing that while most community organizations recognize the importance of digital inclusion, many face challenges such as funding, language capacity, and staff burnout.

The report ultimately provides a series of broad recommendations to bridge these divides. These include enhancing internet infrastructure and accessibility, developing a robust device ecosystem, investing in digital literacy and support, ensuring inclusion in design and access, raising awareness, fostering collaboration and partnerships, and securing sustainable funding for ongoing efforts.

Supporting a vision of a city where all individuals, regardless of their age or disability status, can thrive in a connected community, SFTC presents a detailed roadmap for reducing the digital divide and ensuring that every resident has the capacity and resources they need to participate fully in our digital world.

SF TECH COUNCIL CO-DIRECTORS:
Karla Suomala
Andrew Broderick

February 2024

ABOUT US
San Francisco Tech Council (SFTC) is a mission-driven, multi-sector collaborative that advances digital inclusion for older adults and people with disabilities so all can participate in the City's connected community. Launched in 2015, SFTC serves as the community table around which member organizations and partners sit to discuss issues and brainstorm opportunities to harness innovation and advance digital equity efforts.

The Community Living Campaign, a nonprofit working to increase independence and reduce isolation for seniors and people with disabilities, is SFTC's backbone organization and fiscal agent. SFTC is funded by the San Francisco Department of Disability and Aging Services (DAS) and Metta Fund.

Methodology

In this comprehensive process, SFTC actively engaged with the community, conducted in-depth primary and secondary research, and analyzed data to pinpoint digital equity barriers faced by older and disabled adults, along with the organizations supporting them.

Core Planning Group
To support the planning and implementation of research activities as well as development of a digital equity framework and plan, SFTC first convened a Core Planning Group (see APPENDIX A) comprising representatives from 19 organizations to develop and oversee the process, as well as to use the findings to establish strategic priorities for achieving digital equity for San Francisco's older and disabled adult residents and the organizations serving them. We met four times as group throughout the planning process.

In total, the 52 stakeholder organizations (see APPENDIX B) that were represented in this multisector stakeholder engagement process included:

- Community anchor institutions
- County and municipal government agencies
- CBOs providing direct services to older adults
- Age and disability advocacy groups
- Workforce development programs
- Affordable housing authorities
- Healthcare provider organizations

Primary Research Activities
SFTC conducted 46 in-depth interviews (see APPENDIX C for key questions) with organizations across the City to better understand their clients' digital needs and barriers as well as their capacity to meet them.

Additionally, 42 of these organizations completed surveys (see APPENDIX C for the survey instrument) that shed light on the importance of digital inclusion/equity to the mission of each organization, as well as the types of digital programs and services they provide.

Secondary Research Activities
In addition to our primary research activities, SFTC integrated findings and recommendations from previous reports conducted by DAS into its digital equity plan: *Dignity Fund Community Needs Assessment* (2022); *Impact of COVID-19: Multiethnic Older Adults and the CBOs Serving Them* (2022); *Listening Sessions with Communities of Color* (2021); *Empowered San Francisco Technology Needs Assessment* (2021); and *LGBTQ Older Adult Survey* (2021).

Our findings also reflect local government policies and initiatives to achieve digital equity for older and disabled adults (Department of Technology's Fiber to Housing program; Department of Disability and Aging Services' SF Connected Program; *Mayor's Office of Housing and Community Development's Digital Equity Strategic Plan 2019-2024*; and the *Age and Disability Friendly San Francisco 2022-2025 Action Plan*).

Methodology, continued

Statistical Analysis
SFTC conducted a baseline assessment of broadband availability and computer access in San Francisco using five-year 2021 data from the American Community Survey (ACS) as well as data from the *Digital Equity Act Population Viewer* to identify zip codes with the highest levels of digital inequity and the communities where a significant proportion of residents experiencing the greatest inequities are older and disabled adults.

Data were collected and analyzed across 27 zip codes from two perspectives: relative metrics (expressed in percent of the older and disabled adult population affected for each zip code) and absolute values (size of the older and disabled adult population affected group in each zip code).

Statistical analysis was used to evaluate factors impacting digital equity in three separate sections: factors related to broadband availability and device access; age and socioeconomic factors; and vulnerable populations. The criteria in each section were assigned a weight, and the methodology to define the most affected zip codes in San Francisco was based on weighted ranking.

State Digital Equity Plan
Throughout the process, SFTC and its member and partner organizations have actively participated in the Statewide Digital Equity Planning process by engaging with Outcome Area Working Groups, filling out organizational and household surveys, and attending an in-person regional listening session in Oakland.

Volunteers at ACP Enrollment Event at SF Public Library - Main
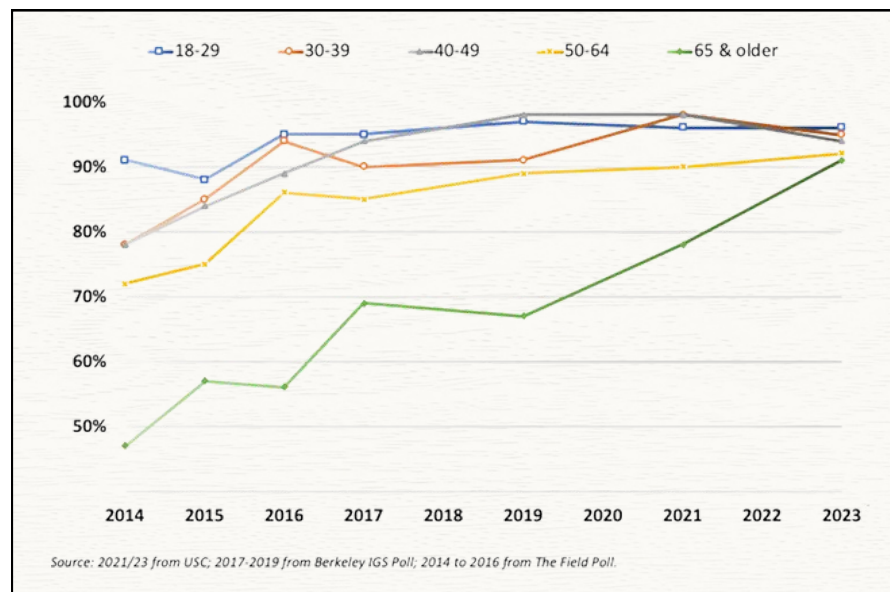
Broadband Availability

State of California

Older adults and adults with disabilities have reached broadband adoption rates comparable to the general population (91%). In fact, since 2014, aging individuals and people with disabilities have made more progress toward broadband adoption than any other segment of the population.

Broadband adoption by age

In California, broadband adoption among adults 65+ increased from less than 50% with broadband in 2014 to 91% in 2023 (2021/23 USC; 2017-19 Berkeley IGS Poll; and 2014-16 Field Poll), the same level of adoption for the State of California as a whole (2023 SDEP Telephone Survey).

Source: 2021/23 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.

Broadband adoption by disability status

For people with disabilities, the results are similar, increasing from slightly less than 60% in 2014 to over 90% in 2023.

Source: 2021/23 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.
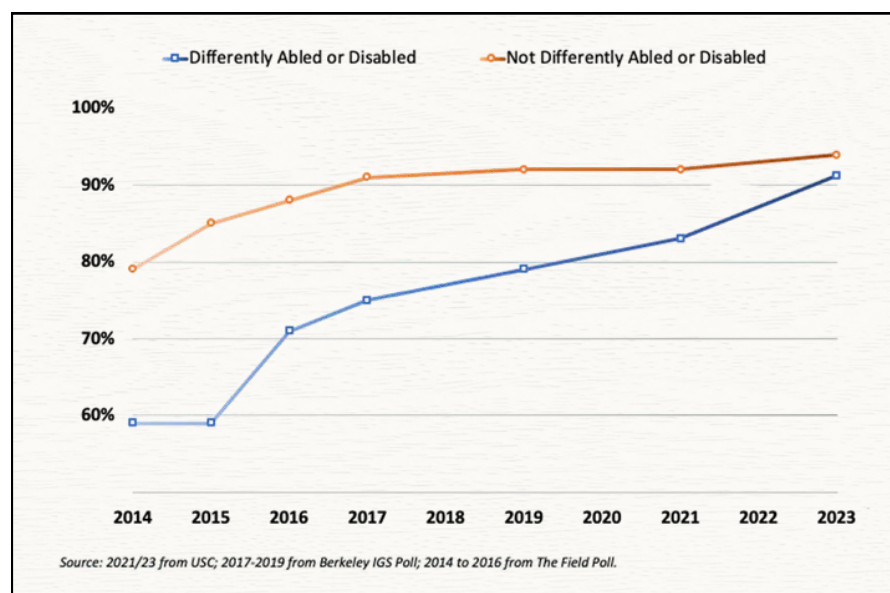
San Francisco City and County residents are largely connected

According to the U.S. Census Bureau, American Community Survey (ACS) 2018-2022, **91.6% of San Francisco households have a broadband internet connection.**

91.6%
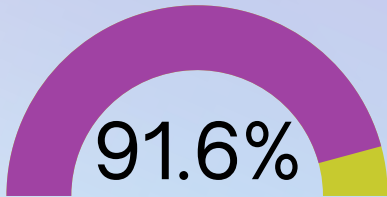
These numbers don't tell the whole story, though. Connectivity across the City is not uniform: there are many areas where internet connection is unreliable or unavailable or internet speeds are not adequate for household needs. Older buildings and Public Housing units in San Francisco (for low-income families, seniors, and people with disabilities) often have limited connectivity.

Chinatown, Bayview Hunters Point, Sunnydale, and Potrero Hill, for example, all struggle with connectivity issues, ranging from dead zones to unreliable internet service. In Chinatown, "just 63% of its residents have a broadband plan of any kind" (Brown, A. *SF Chinatown struggles with low broadband penetration*. San Francisco Chronicle. Dec. 8, 2023).

In addition, there are approximately 530 single-room occupancy hotels (SROs) in San Francisco, housing about 22,000 people. These individuals are at a particularly high risk of digital inequity due to the lack of internet service in the buildings and the high cost of internet subscriptions.

ACP Enrollment is still low

While 35% of San Francisco households are eligible for the Affordable Connectivity Program benefit, **only 37% of eligible households are enrolled.**

This is far below the statewide enrollment rate of 49% (CA Broadband for All. *Affordable Connectivity Program Enrollment Tracker*. January 15, 2024). Eligible older adults and people with disabilities are less likely to be aware of this benefit than the general population.

The Affordable Connectivity Program stopped accepting new applications and enrollments on February 7, 2024. Individuals who qualified for this benefit before this date will continue to receive your benefit for now. A final date has not been announced.

> Chinatown isn't the only area of San Francisco with low broadband penetration, but it is the most densely populated ... The neighborhood has 900 businesses crammed within 28 square blocks, and many still rely on dial-up internet connections, some of which are too slow to process credit card transactions or sustain a security-camera video stream."

A. Brown, SF Chronicle

# Areas at-risk for digital inequity in San Francisco

Inclusive of the **total resident population** (Map 1), our data analysis found that these San Francisco zip codes had the lowest broadband subscription rates, levels of personal computer device ownership, and income levels.
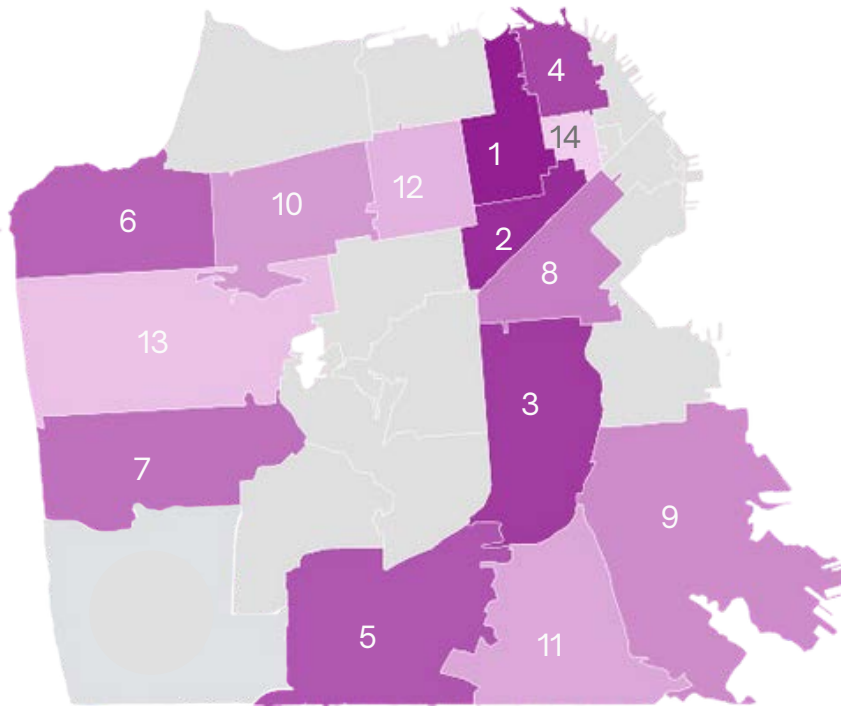
1. **94109**
2. **94102**
3. **94110**
4. **94133**
5. **94112**
6. **94121**
7. **94116**
8. **94103**
9. **94124**
10. **94118**
11. **94134**
12. **94115**
13. **94122**
14. **94108**

Map 1: Inclusive of total population: 1 = Highest risk for digital inequity

For **older adults and people with disabilities in particular,** these 10 zip codes reflect the neighborhood areas where both of these populations are at the greatest risk of digital inequities.
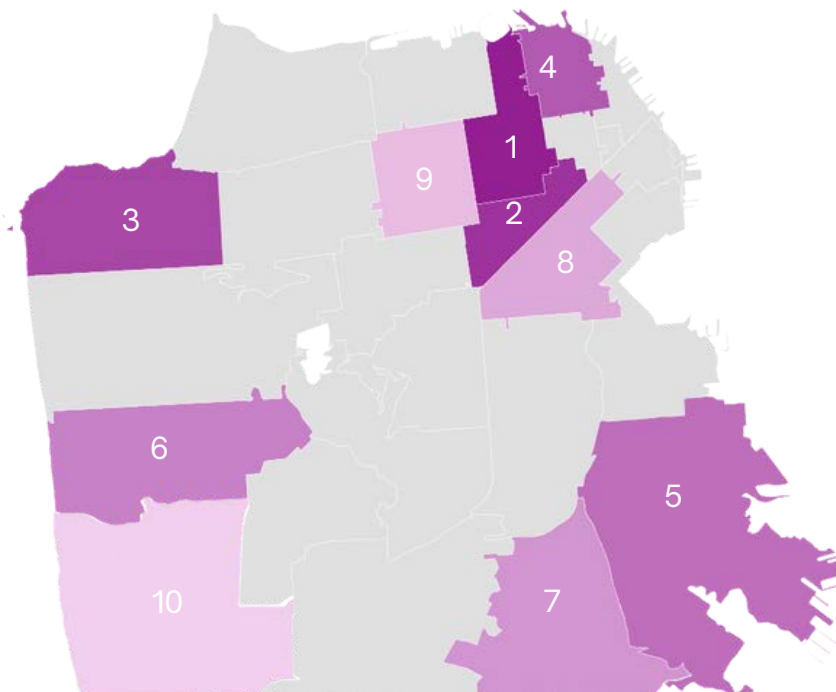

1. **94109**
2. **94102**
3. **94121**
4. **94133**
5. **94124**
6. **94116**
7. **94134**
8. **94103**
9. **94115**
10. **94132**

*Map 2: Older adults and people with disabilities:* 1 = Highest risk for digital inequity

Redlining

Together, these maps reflect the areas that have been most impacted by historical redlining practices and, more recently, what we today call **"digital redlining"** (Map 3). See Map 4 for the original redlining map of San Francisco that was used to determine lending practices for home mortgages.
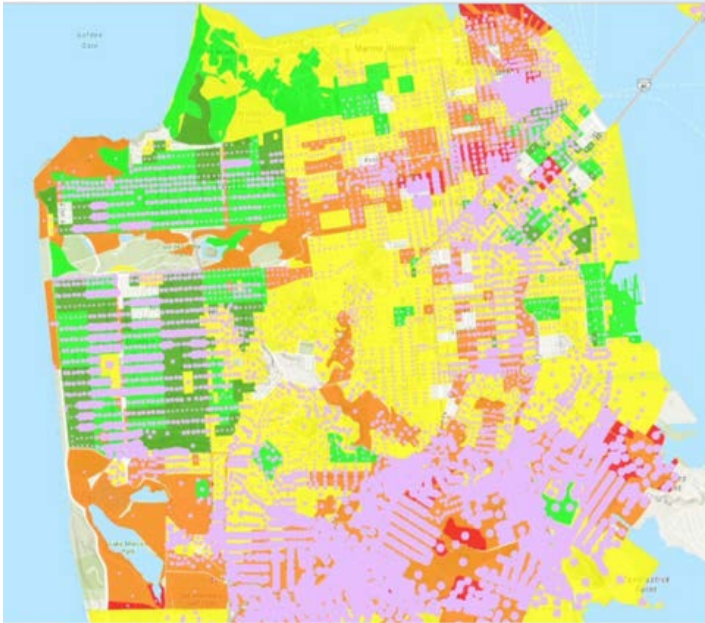
Map 3 reflects the digital redlining of San Francisco. *Areas in red, pink, and orange reflect communities with low Internet speeds, below average adoption rates, and a high burden with access costs relative to household income compared to yellow- and green-colored communities.*

Source: Greenlining Institute. 2021.
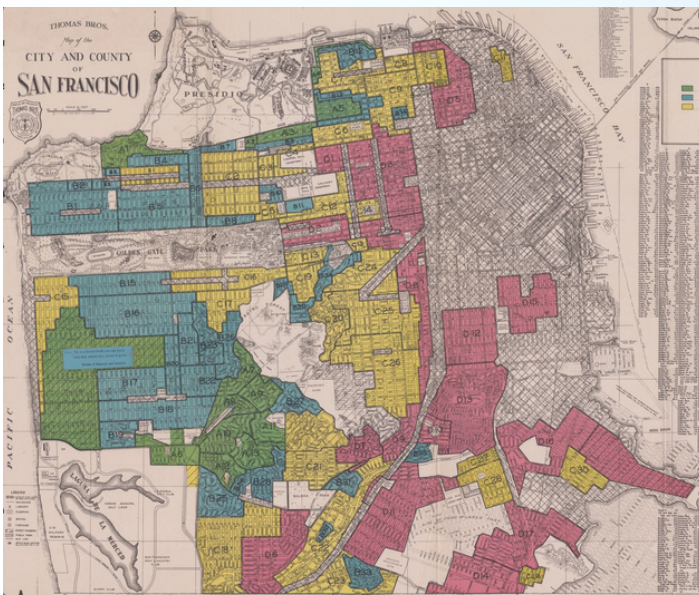
Map 4 is the San Francisco County Redlining Map of 1937.
- *Green areas (A) were considered the best neighborhoods for making home mortgage loans.*
- *Blue areas (B) were not quite as desirable as A areas, but still quite good.*
- *Yellow areas (C) were considered in decline.*
- *Red areas (D) were considered to be in full decline, areas lenders should steer clear of. The Red and Yellow areas were largely populated by African Americans, Asians, and other immigrant laborers.*

Source: *How Government Redlining Maps Pushed Segregation in California Cities.* Matthew Green, 2016. KQED.

Organizational Capacity

42 organizations in San Francisco (non-profits, community-based organizations, and government agencies) that serve older adults and/or people with disabilities completed surveys (see APPENDIX C) that shed light on the importance of digital inclusion/equity to the mission of each organization, as well as the types of digital programs and services they provide.

95%
indicated that **digital inclusion/equity efforts are important to the mission** of their organization, with 79% noting that it was very or quite important.

81%
say their organization **provides digital inclusion programming and services** for older adults and/or individuals with disabilities.*

*Those that do not: City departments, clinics and hospitals, and care-giver focused organizations.

DIGITAL INCLUSION PROGRAMMING

Of the 34 organizations that **offer digital inclusion programming** for older adults and people with disabilities:

88% provide digital literacy or skills training ranging from basic to mid-level skills

65% provide individualized tech support (non-hardware related)

62% offer free or affordable internet options (hotspots or subscriptions)

56% provide free or affordable devices

Of the 34 organizations that provide digital inclusion programming:

100% offer in-person options*

62% also offer online options

47% provide support or instruction by telephone

*either at their own site or at a remote location such as a library or senior center

LANGUAGE CAPACITY

88%
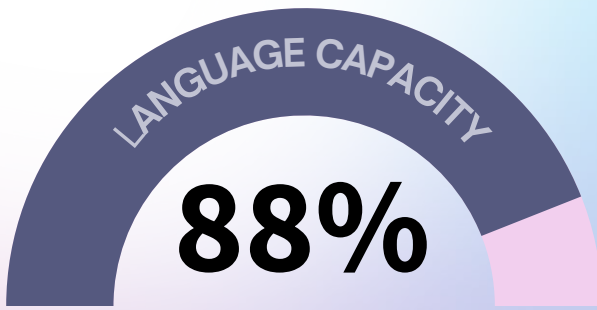
of organizations that offer digital inclusion programming provide options in languages other than English.

- **80%** have Spanish language capacity
- **70%** have capacity in Chinese languages (Cantonese and/or Mandarin)
- **23%** have capacity in Russian
- **20%** have capacity in Tagalog
- **20%** have capacity in Vietnamese

What are people using to go online?

Smartphones are the most frequently used devices among older adults and people with disabilities. **Tablets** (iPad and Android) are the most commonly distributed devices among organizations that have the capacity to equip clients and participants.

Pre-pandemic vs. today

Although we do not have a pre-pandemic baseline for comparison, we learned in our interviews that perhaps one or two organizations offered online digital inclusion programming before March 2020.

For the organizations that offer online programming, they no longer view it as a temporary fix but as an important way to provide content for clients.

Key organizational priorities

When asked about key outcome priorities for clients participating in digital inclusion activities, these areas emerged with the greatest frequency:

1. **Access to essential services and civic participation (56%)**

2. **Digital literacy (53%)**

3. **Social engagement and inclusion (40%)**

George W. Davis Senior Center
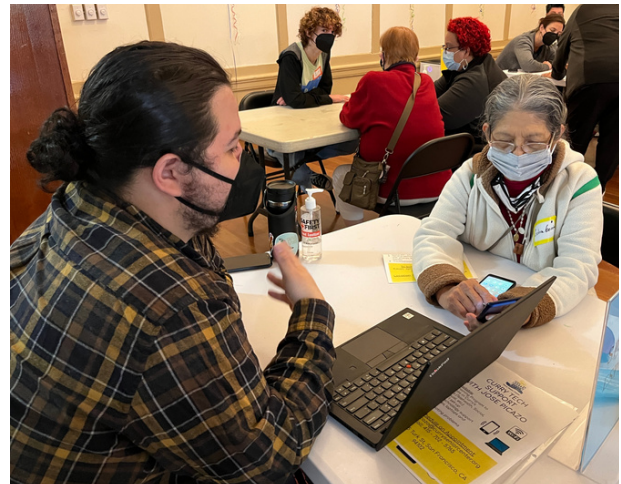
Mission Neighborhood Centers

Key Findings

Older adults and people with disabilities want to be online.

*"We have a huge community of interest... We've got a large monolingual Cantonese-speaking community that absolutely adore and love the volunteer tech person who comes."*

Golden Gate Senior Services

An internet connection alone is not sufficient. Many older adults and people with disabilities lack the digital literacy skills and support they need to access essential services online, participate in daily activities, and maintain connections with family and friends. Many are simply unaware of what an internet connection will allow them to do (i.e., telehealth visits, online banking, entertainment, etc.). Others are hesitant about using new technologies and going online or are afraid of scams and fraud.
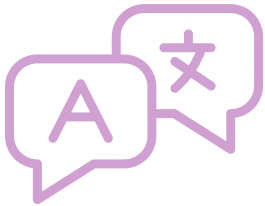
Language barriers are another significant barrier, especially in San Francisco, where nearly half of adults who are 60 years of age or older speak a primary language other than English.* This is particularly true for those who speak Cantonese or Mandarin, Spanish, Vietnamese, Tagalog, and Russian. These language barriers can impede their ability to understand and engage with technology, navigate online services, and even express their needs or seek help effectively. In addition, many online platforms do not have language capacities beyond English or Spanish.

Affordability is a critical concern, particularly for low-income older adults and individuals with disabilities who often struggle to afford internet services or devices, especially those reliant on fixed incomes or Social Security benefits. According to the *2021 Empowered San Francisco Technology Needs Assessment,* the top two barriers to digital equity for adults with disabilities were the unaffordable cost of high-speed internet (28% of surveys) and device expenses (27%). Statewide, 26.2% of people with disabilities live in poverty, twice the rate of those without disabilities, with even higher rates in cities like San Francisco, where 33.3% of individuals with disabilities live below the poverty line.

*SF Department of Disability and Aging Services, DAS-infographic-demographics-2021-v7.

Assistive technologies, while often overlooked in considerations of digital equity, can be a powerful tool to advance digital equity for people with disabilities. Assistive technologies can:

- **Allow individuals to participate fully** in various aspects of digital life, such as communication, learning, and accessing information.
- **Improve quality of life** by assisting with tasks that enhance independence and self-reliance.
- **Facilitate access to necessary resources** and services, especially for those with limited mobility or cognitive impairments.
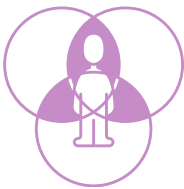
 Finally, while age and disability status themselves are significant factors in understanding who is being left behind, **the intersectionality of age and disability with other equity factors make it even more likely that an individual will be at a greater risk** for experiencing digital inequity in San Francisco:

- **Low-income**
- **Members of a racial or ethnic minority**
- **Limited English-language proficiency**
- **Lower educational attainment**
- **Veterans**
- **Formerly incarcerated individuals**
- **Those who identify as LGBTQ+**

THE IMPACT OF THE PANDEMIC

The pandemic has had a significant and lingering impact on the health and well-being of older and disabled adults:

- Many older adults and people with disabilities have not fully recovered from and regained their pre-pandemic status. **They are frailer (physically and cognitively) and reluctant (afraid) to return to in-person activities.** Additional resources are needed to reach new clients and encourage existing ones to come back.

- The pandemic **exacerbated the bifurcation between those clients with more and those with less digital capacity**. Those with greater capacity gravitated towards virtual programming and services during the pandemic. Those with less were more reliant on human support and will continue to be.

- The **digital divide bell curve has shifted.** Fewer people today are on the wrong side of the digital divide (income and language are primary predictors for those who are). For those on the wrong side, client capabilities, needs, and goals are diverse and highly individualized.

- **Social isolation had a twofold negative effect on older adults and adults with disabilities.** It accentuated their reliance on and exposed their limited ability to independently access and to use technology effectively. Those who live alone have been at a particular disadvantage due to their lack of a strong social support network.

Gaps & Barriers

1. NETWORK AND DEVICE ACCESS BARRIERS

1.1 Many older adults and people with disabilities in San Francisco lack home Internet access that is affordable, high-speed, and reliable.

1.2 Many people who qualify for low-cost or free internet through federal programs such as the Affordable Connectivity Program (ACP) are not aware that the program exists. In addition, the complex enrollment process is a barrier for many individuals without support.

1.3 Due to the high cost of living in San Francisco (housing, food, essential services), many older adults and people with disabilities who have incomes above the federal poverty level do not qualify for federal programs such as ACP and cannot independently afford the cost of home internet services.

> We have a lot of clients who are just above those income and eligibility limits for some of the public benefits that automatically qualify them for ACP. It's always that kind of lower-middle income group that is really hard because they don't qualify for a lot."
> Family Caregiver Alliance SF

1.4 Many affordable housing, supportive housing, single-room occupancy buildings, especially older structures, are not wired for high-speed internet access in resident units which leaves many residents with few if any options to have a private high-speed internet service.

> "With our clients in SROs it can be similar; the [SROs] might not be wired for internet or the building claims to have internet for the entire building, but then it doesn't work in certain rooms." Curry Senior Center

> "Some of our larger buildings actually don't have the capacity to have wifi because there's no fiber and or they have concrete walls." Chinatown Community Development Corporation

1.5 Parts of San Francisco are deemed "dead zones" due to unreliable or slow fixed wireless and mobile broadband internet service. This disproportionately impacts individuals and businesses in low-income neighborhoods with many BIPOC residents.

"There are those dead zones… low quality, low broadband, all of that is an ongoing challenge. That contributes to the family trying to get online with more than one person at a time, and it becomes a much greater barrier." SF African American Faith Based Coalition

1.6 There is limited availability of **affordable, functional, and appropriate devices** that meet user needs.
- Many older adults and people with disabilities own devices that are outdated and lack the functionality and features required to meet their needs.
- There is no consistent or formal pipeline, at scale, of used or refurbished devices for older adults and people with disabilities to gain access to free or low-cost devices.

"The problem is that with some of our clients, probably 30 to 40% of them are homeless. Their phones get stolen, they lose everything and have to start over each time. And we don't have phones for them or iPads [to use]."
St. Francis Living Room

"I think the biggest resource deficit we have is in putting actual easy-to-use technology in people's hands. We can have someone go through a computer basics [class], but then they walk away and they never use [the skills]." Goodwill

1.6 Age- and disability-friendly public spaces for those without home internet access or a personal device are limited.

"They come in because they don't have a computer at home, and they come to us so they can read their email, usually a relative saying hi, and they do some online research." Sequoia-Aquatic Park

HOW DO ORGANIZATIONS PROCURE THE DEVICES THEY DISTRIBUTE?
- **Funding and grants**, including specific technology-focused funding initiatives
- **Donations** from individuals, companies, or other organizations
- **Purchasing equipment directly**, potentially at discounted rates or through liaisons with providers
- **Partnerships or collaborations with other agencies** that have device lending or distribution programs
- **State or city initiatives,** such as the Digital Connections Initiative, that distribute devices
- **Resetting and repurposing** used or donated devices for community use

2. CONSUMER ADOPTION AND TECH SUPPORT BARRIERS

"The biggest, most consistent gap among our patrons is digital literacy and comfort."
SF Public Library

2.1 Many older adults and people with disabilities lack the basic digital skills and knowledge they need to independently and confidently accomplish routine daily tasks.

🔍 "You can't ask someone to do a time card if they're supposed to download an app but don't understand how or even what an app is..." Goodwill ✕

"A lot of social services have reverted to like online forms and information. This adds another layer of stress to the digital literacy component because they [patrons] are already in a high stress situation have to get that form in." SF Public Library

2.2 Lack of tech training opportunities and resources in languages other than English (i.e., Chinese, Spanish, Vietnamese, Russian, Korean, Japanese, Tagalog, etc.).

🔍   ✕

"[There's a need] for bilingual services. A lot of our clients are not primarily English speakers." Courtland Senior Center

"Most of our participants speak and read Chinese. So, getting onto a digital device... there's that barrier of language." SteppingStone

2.3 Limited availability of high-touch, personalized, one-on-one digital literacy training and support in community settings including the home.

2.4 Lack of awareness and information about digital literacy training and support resources (device programs, classes, tech support), especially for those with limited English proficiency.

2.5

Psychosocial factors are common barriers that many older and disabled adults experience.
- **"Tech anxiety,"** or fear of using technology (i.e., "breaking" something) and the shame they feel about their lack of digital capacity.
- **"Tech hesitancy,"** or uncertainty about the value and benefit of digital interventions in their lives.
- **"Digital confusion,"** feeling overwhelmed or frustrated by the complexity of the tech world (i.e., knowing the difference between WiFi and cellular data, navigating the multiplicity of devices, figuring out what an app is, etc.).

" Like hesitancy around the vaccine, there's technology hesitancy with older adults. This hesitancy of the unknown is the biggest barrier that I find with the clients that I serve."
Southwest Community Corporation, IT Bookman Center

2.6

Concerns about online fraud and scams, as well as privacy and security concerns for their personal data when using technology.

"There's this web of confusion. Everyone thinks they've been hacked and it's partly because these systems are complicated and they just confuse people and scare them. SF Public Library"

2.7

Cognitive decline can be a barrier to learning how to use technology, which requires patient instructors and specialized training approaches.

"It really seems that isolation has a twofold negative effect on the ability to access and connect with technology and just grasp it."
Institute on Aging

2.8 Many people with disabilities would benefit from greater access to assistive and adaptive technologies. Without them, they are often unable to use standard devices to access online services, accomplish online tasks or participate in their online communities.

- **Lack of awareness of the range of assistive technologies** available and information about how different devices and software can improve the quality of life for individuals with disabilities.
- The **cost of assistive technologies** can be prohibitive for many people with disabilities, leaving many struggling to make do or get by with standard digital technologies.
- **Availability of assistive technologies** in San Francisco is limited to just a few organizations who aren't able to meet the need or demand, and who lack resources to expand device libraries and conduct outreach to vulnerable populations.

LIGHTHOUSE FOR THE BLIND AND VISUALLY IMPAIRED

"Sometimes we just have to show clients what's possible by doing a demo with the [assistive] technology we have, starting with some really small wins like just teaching them how to use Siri on their iPhone to do basic tasks or to send a text message. Then the light starts to turn on and they're like, *Wow, this is actually possible.*

"Affordability [of assistive technologies] is obviously one of the first challenges and then lack of knowledge, especially if English is not their first language. And many people don't know that their devices [i.e. smartphones, tablets, etc.] have options that can work for them even though they're losing their sight."

2.9 Limited options for participating in the workforce; many employers do not provide appropriate accommodations to support individuals with disabilities in the workplace.

3. ORGANIZATIONAL CAPACITY

3.1 Funding presents a major challenge, leading to staffing shortages, difficulty in extending services, and constraints on being innovative or piloting new initiatives.

We're underfunded. If you're trying to help me build my capacity, you gotta give me enough to build it. And it's not happening." SF African American Faith Based Coalition

Flexible funding is not really built into the contracts as much as it should be. For instance, we have CPUC funding, which we think is great, except for they want eight hours of classroom training for each participant and for most of our folks it's almost impossible to get them to go through eight hours." Felton Institute

3.2 Sustainability of services is threatened by short-term funding that doesn't allow for long-term planning or the creation of stable, ongoing programs that clients can rely on.

"I think stable funding is one of the big barriers for us. We might have some funding now, but what about in six months? And so that's a true challenge for us, the long term perspective."
SF Department of Disability and Aging Services

3.3 Language capacity, which is connected to staffing and the need for services that accommodate multiple languages.
- Difficulty in recruiting, hiring, and training digital navigators and trainers (especially Chinese- and Spanish-speakers) to meet the high demand for instruction.
- Providing in-language, ongoing user support is often resource intensive and tailored to the circumstances, needs and goals of each individual.

"Trainers are at capacity and especially in the Chinese language community...they have so many students and they do more than twice as many training hours as anybody." Community Living Campaign

"Our trainers have to be able to read and speak Japanese, which makes it even harder to find people." Kimochi, Inc

3.4

Staffing shortage and burnout:
- Lack of staff roles or insufficient staffing capacity to meet the needs of those clients who are not able to navigate the complexity of essential services (food, housing, medical care, public benefits), most of which are now online.
- Lack of formal arrangements between organizations and a shared pipeline of volunteers at a system level who are culturally competent to serve as tech trainers, mentors, or coaches.

> " Someone comes to the library in high need, under stress, 15 years behind on their computer skills and they have to file this online application [for housing, benefits, etc.] right now. We're not set up to handle that with a minimum of friction."
> SF Public Library

3.5

Technological capacity:
- Limited organizational ability to provide tech training for staff on internal digital systems and programs and keeping digital navigators and tech trainers up-to-date in their ability to provide meaningful digital literacy offerings.
- Lack of staff awareness and training around the use of assistive and adaptive technologies to better meet client needs.

Jackie Chan Senior Center

> " We're looking at every possible angle as to how we can better help older adults learn and that requires learning on our part, learning what is out there, what kind of technology we can use to help our clients get to the next level."
> Felton Institute

3.6

Space and location:
- Limited availability of adequate, affordable organizational space for access to training and other service interventions, especially in light of pandemic-related downsizing.
- Limited ability to meet clients "where they are at" and in-language to provide culturally-competent services (i.e., their homes, neighborhood centers, community anchor institutions).
- Difficulty in meeting demand for hybrid service models to ensure that all can participate and that individuals with technology barriers are not excluded.

Mission Neighborhood Centers

Bayview Hunters Point YMCA

Lady Shaw Senior Center

SUBSCRIBE

IV. SYSTEM-LEVEL CHALLENGES

4.1 Lack of a comprehensive and integrated set of City-wide policies, strategies, and accountability to make digital equity a reality for older adults and people with disabilities.

4.2 Lack of a centralized resource hub or directory to assist individuals with identifying and receiving referrals to digital resources and programming.

It would really help to have all of these tech resources in a really consolidated place. Things keep changing and trying to figure out who's doing what and what the available resources are is a challenge…like navigating through the ACP information or connecting people to organizations that provide training and access."
Family Caregivers Alliance SF

4.3 Need for more coordination or collaboration between community-based service providers to share resources and better coordinate services in meeting the needs of older adults and people with disabilities.

4.4 Lack of cross-sector initiatives, especially public-private partnerships, that leverage private sector resources and expertise for public infrastructure and/or service initiatives.

4.5 Lack of flexible and sustainable funding sources to maintain and build digital inclusion programming that can meet the growing demand.

We have to fight to even get funding for seniors in the city and state budgets. In California they do have a plan in place, but how that looks on the local level, and how it's gonna trickle down… There needs to be a lot of advocacy." Booker T. Washington Community Service Center

4.6 Access to current and reliable data and information about digital equity needs and digital inclusion system capacity in San Francisco City and County.

4.7 Lack of public awareness (and ableism and ageism) around the digital needs and barriers of the sizable and growing number of older and disabled adult residents.

Best Practices

What's working?

Well-trained Instructors and Staffing:
Patient and well-trained instructors who can handle a range of learning levels are crucial. Organizations that are successful place a strong emphasis on being deliberate in hiring practices to ensure instructors can engage learners at various stages.

"The quality of our navigators makes the difference. I think they've done a great job in really building trust and rapport with participants." SF Mental Health Association

Individualized Support and Training:
The digital literacy skills and experiences of older adults and individuals with disabilities vary widely. It is often the personalized, one-to-one training (or small groups) that proves instrumental in helping them establish connections, navigate devices, and gain confidence in their online endeavors.

"Group classes don't always work with our clients because everyone is at a different level of understanding, a different skill level, and has different needs and interests." Felton Institute

Peer-to-Peer Learning:
Initiatives that integrate peer support cultivate connections by leveraging shared identities and experiences, proving essential in sustaining engagement and rapport among program participants.

"Peer training is such a vital part of the role because it teaches you how to take the information that you already have...and then to communicate it to a peer in a way that feels supportive and non-judgmental." SF Mental Health Association

"There's a lot of relatability and definitely a level of patience and understanding that comes when a peer is able to support another peer." Conard House

SPOTLIGHT: Best Practices Embodied by Digital Navigators

"Teaching and empowering others — that's the path of digital navigators," says Steph Minor, Senior Digital Equity Program Manager at Community Tech Network (CTN). CTN has more than 15 years of experience in delivering direct services: digital skills training, tech support, connectivity assistance, "everything that Digital Navigators need to know and do."

> **The thing that works in every single case is digital navigators who come from the communities they're serving.** They can live with a disability, they can be 80 years old, they can be a recent immigrant...if they are someone you know and trust who can give you this information, it's going to make the learning more successful," according to Kari Gray, Community Tech Network.

So what do digital navigators *do*?

They offer **digital literacy training and support,** helping individuals understand and use technology such as smartphones, computers, and the internet. They also **address continuous tech support needs** such as dealing with broken devices, spyware, lost passwords, and operating system updates.

Digital navigators **assist with connectivity issues,** aiding individuals in accessing affordable internet services and figuring out how connect their devices to the internet.

They provide **individualized support** tailored to the person's needs, from setting up devices to applying for jobs or services online.

They address specific community needs by offering **culturally competent services in multiple languages**, making digital navigation more accessible and effective for non-English speakers or diverse cultural groups. Some digital navigators also help people **access healthcare services or fill out necessary online forms** for various public services.

Best Practices, continued

Reiterative and Non-Judgmental Instruction:
Repeating and reinforcing learning in a supportive, non-judgmental manner makes a significant difference. This is particularly the case for individuals with no prior tech experience and for those with mild cognitive impairments.

Responsive and Adaptable Programs:
Adjusting programms to evolving needs and employing flexible delivery methods, including hybrid options, is crucial. This is especially important in sustaining connections with older adults and individuals with disabilities who may be homebound.

Community-based Programming:
Co-creating programs with community input and crafting specialized programming that meets the specific needs of the target population is effective.

Comprehensive Digital Services:
Offering digital literacy training alongside access to the internet and devices, such as tablets or computers, enhances the success of program outcomes. Ensuring that individuals have all three components fosters confidence, encourages ongoing use, and boosts overall engagement.

Collaboration with Other Organizations:
Partnerships and collaboration with other organizations have helped in expanding reach and resources, with some programs utilizing outreach and community-based organizations for referrals and engagement.

Holistic Case Management:
Many older adults and adults with disabilities face various barriers, including digital inequity, mental health concerns, housing and food insecurity, and limited healthcare access.
    Organizations adopting a comprehensive approach that integrates digital inclusion efforts acknowledge the interconnectedness of these factors and their collective impact on a person's well-being. A "wraparound" approach addresses multiple barriers simultaneously and clients are more likely to experience positive outcomes.

"

"It's really about patience and being deliberate about the needs of the group [that is learning digital skills]. You walk them through so they can see it many, many times and then they feel the success…and they want to keep going and that's how they learn." Goodwill

"In order to get our clients to really learn digital skills, it's better when they meet with us because we have the connection, the relationship, with them. They actually do better when the instruction comes from someone they already know."
Department of Public Health

"You get that technology, you get your hotspot, we teach you how to get onto it. You take that digital literacy class with the device that you will walk away with so that you can gain that kind of confidence." Goodwill

"I think having strong partner relationships like we've built through the Tech Council is the way to go. In San Francisco we have an example of what it could look like to cross refer."
Community Tech Network

"

SPOTLIGHT: Integrating Technology for Holistic Case Management

Self-Help for the Elderly (SHE) understands the importance of holistic case management, especially in the realm of digital equity and access. Winnie Yu, Chief Program & Compliance Officer, emphasizes the integration of technology into their social services department to provide comprehensive support to individuals.

According to Yu, assisting clients with their immediate needs is pivotal for building rapport and trust. With technology embedded in their social services, SHE ensures accessibility for all clients, regardless of the door they enter. This approach facilitates in-house referrals and allows the address many of their clients' diverse client needs.

> " Basically it's the whole shebang, the whole enchilada. It's kind of all or nothing because if you only do a part of it, it's very unlikely to be successful because there are so many other components that need follow up and follow through," says Yu.

Jin Tran, Program Supervisor, further underscores this approach by highlighting how combined services enable staff to bridge gaps across various client needs, including housing applications and SNAP benefits. This integrated approach results in more impactful and holistic case management for their clients. At SHE, the integration of technology serves as a catalyst for enhancing client support and fostering a more inclusive environment.

Curry Senior Center: Senior Vitality Program

Launched in 2014, the Senior Vitality Program is a nationally-recognized initiative serving low-income older adult residents in San Francisco's Tenderloin district.

The Program offers comprehensive training and assistance with digital health tools, health coaching, and engaging social activities and provides free devices like iPads, Fitbits, and digital scales, accompanied by home internet support. To participate, clients must express interest in health management and/or loneliness reduction, in addition to committing to a minimum of one year of tech training.

What sets Senior Vitality apart is its commitment to fostering a sense of community rather than operating as a revolving door. Past participants continue to receive ongoing communication, and attend classes, events, and virtual gatherings. The Program has expanded its scope to include LGBTQ+ Tech Support, providing a vital gateway for those seeking mental health assistance within the community.

Felton Institute: Tech Squad

The Tech Squad is committed to bridging the digital gap and fostering equity, particularly for older adults and individuals with disabilities who often find themselves on the wrong side of the digital divide.

The Program's effectiveness relies on extensive collaboration with individuals who feel disconnected from the digital world or doubt their ability to adapt. It offers basic education on the relevance of technology for social connections, personal pursuits, accessing services, and fostering inclusion.

Using an older adult-centric lens, **the Program provides specialized training that prioritizes trust and collaborative learning over rigid classroom methods.** Tech Squad conducts community outreach to engage hard-to-reach populations and collaborates with partner organizations to deliver tech training in local communities. By meeting people where they are and supporting their digital journey, Tech Squad believes in inclusivity for all in the digital age.

Roadmap to Digital Equity

RECOMMENDATIONS

1.0 Internet

1.1 Expand free, affordable, and reliable internet options, including but not limited to high-speed broadband services.

1.2 Address connectivity issues in geographically underserved neighborhoods and historically marginalized communities impacted by digital redlining practices.

1.3 Strengthen high-speed broadband infrastructure in affordable housing, single-room occupancy, and supportive housing sites.

1.4 Build a publicly-owned, locally-controlled municipal broadband network that will deliver low-cost, high-speed internet access citywide at affordable monthly subscription rates.

1.5 Extend the provision of free, high-speed, secure public WiFi network services and hotspots citywide for people who can't afford home broadband service.

2.0 Device Ecosystem

2.1 Develop a robust device ecosystem in San Francisco that sources affordable used devices throughout the City, incorporates refurbishing and repair, and facilitates distribution to the community.

2.2 Create more loan- or learn-to-own program pathways for older adults and people with disabilities to obtain devices along with digital literacy training and support.

2.3 Strengthen the network of assistive and adaptive technology lending libraries and services that promote low-cost ownership and financing options for assistive and adaptive technologies.

3.0 Digital Literacy and Support

3.1 Invest in training and support programs that focus on reducing psychosocial barriers to technology use (i.e., tech anxiety, hesitancy, confusion, lack of confidence).

3.2 Enhance efforts to scaffold training and support resources and learning opportunities around individual learners to positively impact their digital skill building and confidence.

3.3 Provide more individualized digital training and support interventions for older adults and people with disabilities, including in-home service options.

3.4 Increase training and programming to lower barriers to digital health access in partnership with healthcare providers and affordable housing communities.

3.5 Integrate digital literacy and skills training into workforce development programs for older adults and adults with disabilities.

3.6 Support citywide initiatives that focus on increasing awareness of and training on the use of assistive technologies at both the organizational- and consumer-levels.

4.0 Design for Inclusion

4.1 Implement public access customer service points throughout the city to provide human support with online navigation of essential services.

4.2 Cultivate cultural empathy in the design of digital resources, services, and programs to accommodate language and culture differences (i.e., websites, online forms, labs, classes, etc.).

4.3 Promote the adoption by non-governmental organizations of San Francisco's existing accessibility policies and regulations to ensure that all digital content, programs, and service formats are accessible regardless of age and disability, and across languages.

5.0 Advocacy and Awareness

5.1 Develop a comprehensive set of City-wide policies, strategies, and accountability measures to make digital equity a reality for all San Francisco residents.

5.2 Increase public awareness around the digital inclusion needs and barriers of San Francisco's large and growing populations of older adults and people with disabilities.

5.3 Establish an accountability dashboard for measurable change through creating a framework to benchmark actual performance against digital equity goals.

6.0. Information

6.1 Create a centralized hub or directory of digital inclusion resources and programs (internet access, devices, classes, support, labs, assistive technologies) accessible to consumers and organizations for information, referrals, and assistance.

6.2 Strengthen referral pathways to digital inclusion services, programs, and activities both within and outside the traditional service model.

6.3 Increase multi-modal, multi-lingual outreach and public service announcements around internet access, digital inclusion resources, and programming.

7.0. Collaboration and Partnerships

7.1 Foster and incentivize closer collaboration and coordination of programming and services around shared goals among CBOs, service providers, government agencies.

7.2 Establish public-private partnerships that leverage private sector resources and expertise for expanding access to Internet services and/or device provision.

7.3 Strengthen and expand the work of community network efforts like the SF Tech Council to centralize coordination for digital inclusion service organizations.

8.0. Funding for Capacity and Impact

8.1 Create sustainable, flexible digital equity funding mechanisms that support investments made by community organizations in building organizational capacity.

8.2 Invest in multi-lingual staffing and volunteers to meet the diverse technology needs and demand among older adults and people with disabilities.

8.3 Support up-to-date technology infrastructures and digital skill building initiatives for staff within organizations that serve vulnerable populations to increase equity impact.

8.4 Support hybrid-service models that accommodate all clients' needs.

8.5 Invest in shared spaces (digital equity tech hubs) and human resources (digital navigators, tech trainers, volunteers) that can work across organizations

9.0. Leverage Existing System-wide Assets

9.1 Expand and train existing human services infrastructure with lived experience and trust (e.g., ADRCs, promotoras) as digital navigators.

9.2 Promote and increase access to digital inclusion programming at SF Public Libraries, SF Connected Labs, and affordable housing sites.

9.3 Incorporate digital equity into wrap-around case management and community-based services that recognize the digital divide as a social determinant of health.

San Francisco is a city where people with disabilities and older adults have full and equitable access to digital technology and its benefits so that all can participate and thrive in the City's connected community.

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Appendices

APPENDIX A: Core Planning Group

Last Name	First	Organization	Role
Alvarado	Aurora	Mission Neighborhood Centers, Inc. (MNC)	Healthy Aging & Disability Services Director
Bryant, Jr.	Joseph	Calvary Hill Community Church	Pastor; President and CEO of Calvary Hill Social Services
Burns	Mark	Homebridge, Inc.	Executive Director
Doyle	Brittney	WISE Health SF	Founder, Health Equity Strategist
Eppler	Katherine	SF Public Library	Digital Equity Manager
Gray	Kari	Community Tech Network (CTN)	Digital Equity Program Director
Hinton	Anne	AARP	Board Member; Retired
Hinze	Fiona	Independent Living Resource Center-SF (ILRC)	Director of Public Policy
Hua	Jennie	Department of Public Health (DPH)	Vocational Programs Manager at San Francisco Community Behavioral Health Services
Jobling	Marie	Community Living Campaign (CLC)	Co-Executive Director
Kaplan	Debby	Mayor's Office on Disability (MOD)	Deputy Director
Khoong	Elaine	UC-San Francisco (UCSF)	Assistant Professor
LaChaux	Rey	Mayor's Office of Housing and Community Development (MOHCD)	Digital Equity Manager
Ramirez-Forcier	Joe	PRC	Managing Director of Workforce Development
Salta	Paolo	SF Department of Disability and Aging Services (DAS)	Acting Program Manager, Office of Community Partnerships
Spensley	Cathy	Felton Institute	Senior Division Director
Sullivan	Kathleen	Open House	Executive Director
Tran	Jin	Self-Help for the Elderly	Program Supervisor
Woo	Theresa	CA Department of Rehabilitation (DOR)	Regional Director

APPENDIX B: Participating Organizations

AARP (Norcal)
Bayview Senior Services
Bernal Heights Neighborhood Center
Booker T. Washington Community
Service Center
California Department of Rehabilitation
Catholic Charities
Chinatown Community Development Center
Community Living Campaign
Community Tech Network
Conard House
Curry Senior Center
Family Caregiver Alliance
Felton Institute
Front Porch
Golden Gate Senior Services - Richmond
Senior Center
Goodwill
Homebridge
HomeRise
Independent Living Resource Center SF
Institute on Aging
Jewish Vocational Service (JVS)
Kimochi, Inc.
Little Brothers Friends of the Elderly
Mayor's Office on Disability
Mayor's Office of Housing and Community
Development
Mental Health Association of San Francisco
Mission Neighborhood Centers
On Lok 30th Street Senior Center
Openhouse
PRC

SF Department of Public Health
SF Community Clinic Consortium
Self-Help for the Elderly
Senior and Disability Action
Sequoia Living- Downtown and Aquatic Park
Senior Centers
SF African American Faith Based Coalition
SF Community Music Center
SF Department of Disability and Aging
Services
SF Public Library
SF Department of Technology
Shanti Project
Southwest Community Corporation
St. Anthony Foundation
St. Francis Living Room
SteppingStone Mabini Adult Day Health
Swords to Plowshares
The Arc SF
Toolworks
University of California San Francisco
Urban Equity Group
Wise Health, Inc.
YMCA of San Francisco

APPENDIX C: Interviews & Surveys

A. Key Interview Questions

Digital Equity Gaps and Barriers: What digital inclusion barriers exist for the older adults and/or individuals with disabilities you serve?

Needs: What resources or supports does your organization need to more effectively provide digital access, programming and services for your clients?

Strengths and Successes: What programs (that your organization offers) have been successful in eliminating digital equity barriers for the populations you serve?

B. Survey Questions

1. How important are digital inclusion/equity efforts to the MISSION of your organization? Rate on a scale of 1-5.

2. Does your organization provide digital inclusion programming and services for older adults and/or individuals with disabilities?

3. Which types of digital inclusion programming does your organization provide? Select ALL that apply.
   - Free or affordable internet access (i.e., hotspot, subsidized Internet subscription)
   - Digital literacy or skills training
   - Free or affordable devices
   - Tech Support (not hardware related)
   - Hardware (device repair or refurbishment)
   - Other

4. Which of the following populations does your organization serve with its digital inclusion programming? Select ALL that apply.
   - Older adults (60+)
   - Individuals with disabilities
   - Low-income individuals
   - Veterans
   - Individuals with limited English language proficiency
   - Formerly incarcerated individuals
   - Members of a racial or ethnic minority group

5. Which of the following languages are supported by your digital inclusion programs for clients with limited English proficiency? Select ALL that apply.
   - Spanish
   - Cantonese
   - Mandarin
   - Tagalog
   - Vietnamese
   - Korean
   - Russian
   - Arabic
   - Other

6. How does your organization deliver its digital inclusion programming to clients? Select ALL that apply.
   - In-person at my organization
   - In-person at remote site (e.g. local library, computer lab, school, etc)
   - Online (e.g. classes, help desk, etc.)
   - By phone
   - Other

7. Which outcome area is the biggest priority for clients receiving your digital inclusion programs and services? Select ONE.
   - Digital Literacy
   - Access to essential services and civic participation
   - Health
   - Workforce
   - Education
   - Social engagement and inclusion
   - Other

The path to digital equity starts *here.*

Ortega Branch Library

Thank you for taking the time to read this report. If you have any questions or would like to discuss our findings further, please don't hesitate to contact to us.

SF TECH COUNCIL

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